

**SAMSUNG**

# COLOR MONITOR

**SyncMaster 753DF (DF17K\*)**

**SyncMaster 755DF (DF17J\*)**

# ***SERVICE*** Manual

## COLOR MONITOR



## CONTENTS

1. Precautions
2. Product Specifications
3. Disassembly & Reassembly
4. Alignment & Adjustments
5. Troubleshooting
6. Exploded View & Parts List
7. Electrical Parts List
8. Block Diagram
9. Wiring Diagram
10. Schematic Diagrams



Samsung Electronics Co., Ltd. May 2000  
Printed in Korea  
P/N : BH68-00129G-01

# 1 Precautions

## 1-1 Safety Precautions

### WARNINGS

1. For continued safety, do not attempt to modify the circuit board.
2. Disconnect the AC power before servicing.
3. When the chassis is operating, semiconductor heatsinks are potential shock hazards.

### 1-1-1 Servicing the High Voltage VR and CRT :

**WARNING:** A high voltage VR replaced in the wrong direction may cause excessive X-ray emissions.

**Caution:** When replacing the high voltage adjustment VR, it must be fixed by a soldering iron after it is properly set.

1. When servicing the high voltage system, remove the static charge by connecting a 10 kohm resistor in series with an insulated wire (such as a test probe) between the chassis and the anode lead.
2. If the HV VR requires adjustment, (a) Replace the VR and adjust the high voltage to the specification. (b) Use a soldering iron to melt the adjustment cap on the HV VR to prevent any movement.
3. When troubleshooting a monitor with excessively HV, avoid being unnecessarily close to the monitor. Do not operate the monitor for longer than is necessary to locate the cause of excessive voltage.
4. High voltage should always be kept at the rated value, no higher. Only when high voltage is excessive are X-rays capable of penetrating the shell of the CRT, including the lead in glass material. Operation at high voltages may also cause failure of the CRT or high voltage circuitry.
5. When the HV regulator is operating properly, there is no possibility of an X-ray problem. Make sure the HV does not exceed its specified value and that it is regulating correctly.
6. The CRT is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the CRT only with one that is the same or equivalent type as the original.
7. Handle the CRT only when wearing shatterproof goggles and after completely discharging the high voltage anode.
8. Do not lift the CRT by the neck.

### 1-1-2 Fire and Shock Hazard :

Before returning the monitor to the user, perform the following safety checks:

1. Inspect each lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the monitor.

2. Inspect all protective devices such as nonmetallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacitor networks, mechanical insulators, etc.
3. Leakage Current Hot Check (Figure 1-1):  
**WARNING: Do not use an isolation transformer during this test.**

Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (UL Publication UL1410, 59.7).

4. With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

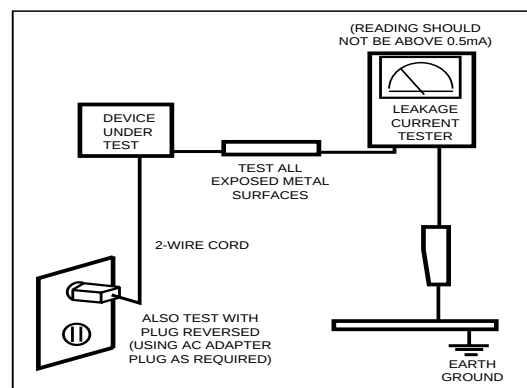


Figure 1-1. Leakage Current Test Circuit

### 1-1-4 Product Safety Notices

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection. The protection they give may not be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by ⚠ on schematics and parts lists. A substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and / or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

Components identified by ⚡ on schematics and parts lists must be sealed by a soldering iron after replacement and adjustment.

## 1-2 Servicing Precautions

---

**WARNING1:** First read the “Safety Precautions” section of this manual. If unforeseen circumstances create conflict between the servicing precautions and safety precautions, always follow the safety precautions.

**WARNING2:** A high voltage VR replaced in the wrong direction may cause excessive X-ray emissions.

**WARNING3:** An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet, and should be followed closely.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) remove or reinstall any component or assembly, (b) disconnect PCB plugs or connectors, (c) connect all test components in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the area around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500 V) to the blades of the AC plug.  
The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the +B voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

## 1-3 Electrostatically Sensitive Devices (ESD) Precautions

---

Some semiconductor (solid state) devices can be easily damaged by static electricity. Such components are commonly called Electrostatically Sensitive Devices (ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors. The following techniques will reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. To avoid a shock hazard, be sure to remove the wrist strap before applying power to the monitor.
2. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of an electrostatic charge.
3. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESDs.
4. Use only a grounded-tip soldering iron to solder or desolder ESDs.
5. Use only an anti-static solder removal device. Some solder removal devices not classified as “anti-static” can generate electrical charges sufficient to damage ESDs.
6. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
7. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.  
**Caution:** Be sure no power is applied to the chassis or circuit and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting your foot from a carpeted floor can generate enough static electricity to damage an ESD.
9.  Indicates ESDs on the Schematic Diagram in this manual.

## 2 Product Specifications

### 2-1 Specifications

| Item                                                                                                                                                                                                                            | Description                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Picture Tube:                                                                                                                                                                                                                   | 17-Inch (43 cm): 16-inch (40.6 cm) viewable,<br>Flat-face, 90° Deflection, 0.20 mm (Horizontal) / 0.24 mm (Diagonal) Dot pitch,<br>Silica coated with anti-electrostatic properties (TCO: Multilayer coating),<br>Medium-short persistence phosphor |
| Scanning Frequency                                                                                                                                                                                                              | Horizontal : S/M 753DF ; 30 kHz to 70 kHz / S/M 755DF ; 30 kHz to 85 kHz<br>Vertical : 50 Hz to 160 Hz                                                                                                                                              |
| Display Colors                                                                                                                                                                                                                  | Unlimited colors                                                                                                                                                                                                                                    |
| Maximum Resolution                                                                                                                                                                                                              | S/M 753DF ; Horizontal : 1280 Dots, Vertical : 1024 Lines<br>S/M 755DF ; Horizontal : 1600 Dots, Vertical : 1200 Lines                                                                                                                              |
| Input Video Signal                                                                                                                                                                                                              | Analog, 0.7 Vp-p positive at 75 $\Omega$ , internally terminated                                                                                                                                                                                    |
| Input Sync Signal                                                                                                                                                                                                               | Separate Sync: TTL level, positive/negative                                                                                                                                                                                                         |
| Maximum Pixel Clock rate                                                                                                                                                                                                        | S/M 753DF ; 110 MHz, S/M 755DF ; 135 MHz                                                                                                                                                                                                            |
| Active Display                                                                                                                                                                                                                  | Horizontal : 312 mm $\pm$ 4 mm, Vertical : 234 mm $\pm$ 4 mm                                                                                                                                                                                        |
| Input Voltage                                                                                                                                                                                                                   | AC 90 to 264 Volts, 60 Hz or 50 Hz $\pm$ 3 Hz                                                                                                                                                                                                       |
| Power Consumption                                                                                                                                                                                                               | S/M 753DF ; 90 Watt (max), S/M 755DF ; 100 Watt (max)                                                                                                                                                                                               |
| Dimensions (W x D x H)                                                                                                                                                                                                          | Unit ; 16.22 x 16.54 x 16.36 Inches (412 x 420 x 415.5 mm)<br>Carton ; 21.02 x 21.73 x 18.39 Inches (534 x 552 x 467 mm)                                                                                                                            |
| Weight (Net/Gross)                                                                                                                                                                                                              | 33.1 lbs (15.0 kg) / 38.6 lbs (17.5 kg)                                                                                                                                                                                                             |
| Environmental Considerations                                                                                                                                                                                                    | Operating Temperature : 32°F to 104°F (0°C to 40°C)<br>Humidity : 10 % to 80 %<br>Storage Temperature : -4°F to 113°F (-20°C to 45°C)<br>Humidity : 5 % to 95 %                                                                                     |
| <ul style="list-style-type: none"><li>• Above models comply with SWEDAC (MPR II) recommendations for reduced electromagnetic fields.</li><li>• Designs and specifications are subject to change without prior notice.</li></ul> |                                                                                                                                                                                                                                                     |

## 2-2 Pin Assignments

| <div>Sync<br/>Type</div> <div>Pin No.</div> | Separate             | Macintosh |
|---------------------------------------------|----------------------|-----------|
| 1                                           | Red                  | GND-R     |
| 2                                           | Green                | Red       |
| 3                                           | Blue                 | H/V Sync  |
| 4                                           | N-C                  | Sense 0   |
| 5                                           | DDC Return           | Green     |
| 6                                           | GND-R                | GND-G     |
| 7                                           | GND-G                | Sense 1   |
| 8                                           | GND-B                | Reserved  |
| 9                                           | N-C                  | Blue      |
| 10                                          | GND-Sync/Self-raster | Sense 2   |
| 11                                          | N-C                  | GND       |
| 12                                          | DDC Data             | V-Sync    |
| 13                                          | H-Sync               | GND-B     |
| 14                                          | V-Sync               | GND       |
| 15                                          | DDC Clock            | H-Sync    |

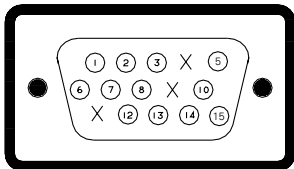


Figure 2-1. Male Type

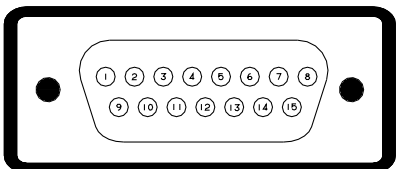


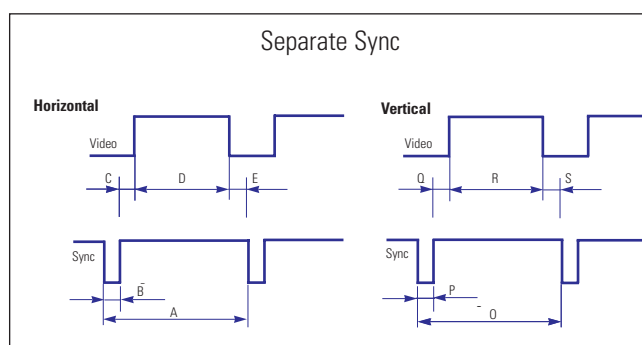
Figure 2-2. Male Type

## 2-3 Timing Chart

This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

Table 2-1. Timing Chart

| Mode<br><br>Timing    | IBM                     |                         | VESA                                 |                        |                        |                        |                          |                          |                                      |
|-----------------------|-------------------------|-------------------------|--------------------------------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|--------------------------------------|
|                       | VGA2/70 Hz<br>720 x 400 | VGA3/60 Hz<br>640 x 480 | 640/75 Hz<br>640 x 480<br>(S/M753DF) | 640/85 Hz<br>640 x 480 | 800/75 Hz<br>800 x 600 | 800/85 Hz<br>800 x 600 | 1024/75 Hz<br>1024 x 768 | 1024/85 Hz<br>1024 x 768 | 1280/75Hz<br>1280x1024<br>(S/M755DF) |
| fH (kHz)              | 31.469                  | 31.469                  | 37.500                               | 43.269                 | 46.875                 | 53.674                 | 60.023                   | 68.677                   | 79.976                               |
| A $\mu$ sec           | 31.778                  | 31.777                  | 26.667                               | 23.111                 | 21.333                 | 18.631                 | 16.660                   | 14.561                   | 12.504                               |
| B $\mu$ sec           | 3.813                   | 3.813                   | 2.032                                | 1.556                  | 1.616                  | 1.138                  | 1.219                    | 1.016                    | 1.067                                |
| C $\mu$ sec           | 1.907                   | 1.907                   | 3.810                                | 2.222                  | 3.232                  | 2.702                  | 2.235                    | 2.201                    | 1.837                                |
| D $\mu$ sec           | 25.422                  | 25.422                  | 20.317                               | 17.778                 | 16.162                 | 14.222                 | 13.003                   | 10.836                   | 9.481                                |
| E $\mu$ sec           | 0.636                   | 0.636                   | 0.508                                | 1.556                  | 0.323                  | 0.569                  | 0.203                    | 0.508                    | 0.119                                |
| fV (Hz)               | 59.940                  | 70.087                  | 75.000                               | 85.008                 | 75.000                 | 85.061                 | 75.029                   | 84.997                   | 75.025                               |
| O msec                | 16.683                  | 14.268                  | 13.333                               | 11.764                 | 13.333                 | 11.756                 | 13.328                   | 11.765                   | 13.329                               |
| P msec                | 0.064                   | 0.064                   | 0.080                                | 0.671                  | 0.064                  | 0.056                  | 0.050                    | 0.044                    | 0.038                                |
| Q msec                | 1.048                   | 1.080                   | 0.427                                | 0.578                  | 0.448                  | 0.503                  | 0.466                    | 0.524                    | 0.475                                |
| R msec                | 15.253                  | 12.711                  | 12.800                               | 11.093                 | 12.800                 | 11.179                 | 12.795                   | 11.183                   | 12.804                               |
| S msec                | 0.318                   | 0.413                   | 0.027                                | 0.023                  | 0.021                  | 0.019                  | 0.017                    | 0.015                    | 0.013                                |
| Clock Frequency (MHz) | 25.175                  | 28.322                  | 31.500                               | 36.000                 | 49.500                 | 56.250                 | 78.750                   | 94.500                   | 135.000                              |
| Polarity<br>H.Sync    | Negative                | Negative                | Negative                             | Negative               | Positive               | Positive               | Positive                 | Positive                 | Positive                             |
| V.Sync                | Negative                | Positive                | Negative                             | Negative               | Positive               | Positive               | Positive                 | Positive                 | Positive                             |
| Remark                | Separate                | Separate                | Separate                             | Separate               | Separate               | Separate               | Separate                 | Separate                 | Separate                             |



A : Line time total

B : Horizontal sync width

O : Frame time total

P : Vertical sync width

C : Back porch

D : Active time

Q : Back porch

R : Active time

E : Front porch

S : Front porch

## **Memo**

---

## 3 Disassembly and Reassembly

---

This section of the service manual describes the disassembly and reassembly procedures for the SyncMaster 753DF / 755DF monitors.

**WARNING:** This monitor contains electrostatically sensitive devices. Use caution when handling these components.

### 3-1 Disassembly

---

**Cautions:** 1. Disconnect the monitor from the power source before disassembly.  
2. To remove the Rear Cover, you must use the special opening jig tool.

#### 3-1-1 Cabinet Disassembly

1. With a pad beneath it, stand the monitor on its front with the screen facing downward and the base closest to you. Make sure nothing will damage the screen.
2. Remove the Stand from the monitor.  
(Refer to Stand manual)
3. Incline the monitor by lifting the rear of the monitor.

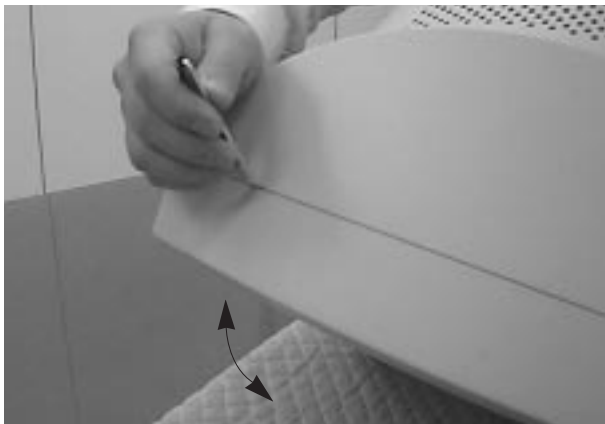


Figure 1

4. Push the Opening jig each groove along the top of the monitor till it makes a “ttak” sound. (2 grooves : Left and Right, Make sure each snap is disengaged.)



Figure 2

5. Squeeze the hold-snap on bottom of the monitor using your hand.



Figure 3

6. Insert the Opening jig into the groove then release the hold-snap.



Figure 4

7. When the hold-snap release, lift the Rear Cover slightly to make sure it doesn't re-engage while you release the snap on the other side.

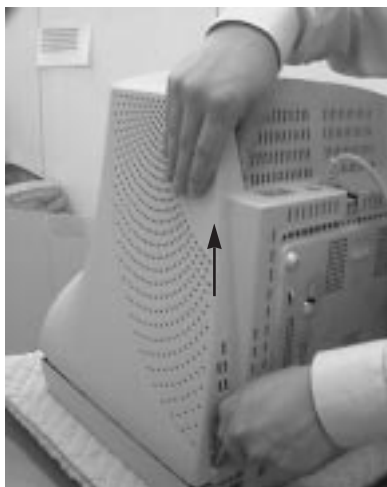


Figure 5

8. In a similar manner, Release the hold-snap on the opposite side.
9. Pull the Rear Cover up off the monitor.

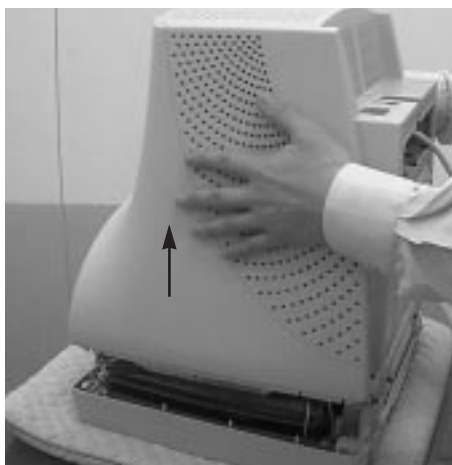


Figure 6

10. Using pinch-nose pliers or ling-nose pliers, carefully disconnect the Anode Cap from the CRT.

**Warning:** Do not touch the Anode contact on the CRT (High Voltage may remain).

**Note :** If the hold-snap on the bottom of the Front Cover is broken, secure the cabinet by applying a 4x16 screw in the extra holes on each side of the cabinet.

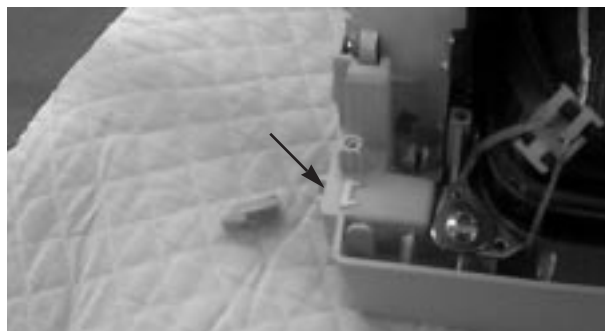


Figure 7



Figure 8

### 3-1-2 Removing the CRT Socket PCB

1. Complete all previous steps.
2. Lift up the Video Spring and remove the CRT Socket PCB from the CRT.

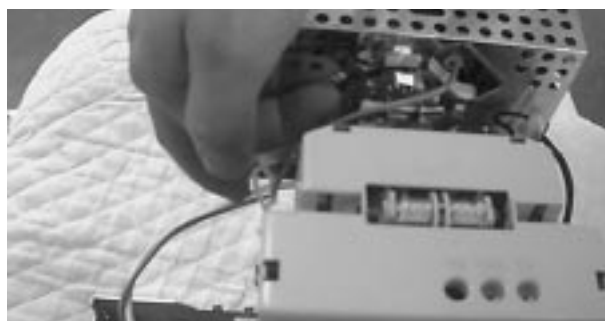


Figure 9

3. Disconnect all connectors on the CRT Socket PCB.
4. Using a solder iron, disconnect Ground (G2) on the back of the Video Shield and remove the Shield Cap.
5. Remove the screw on the front of the Shield Socket.
6. Desolder the 4 tabs on the CRT Socket PCB and remove Shield.
7. Place the Video PCB on a flat, level surface that is protected from static electricity.

### 3-1-3 Removing the Main PCB

1. Complete all previous steps.
2. Disconnect the Degaussing Coil at GT601 and GT602 on the Main PCB.
3. Disconnect all easily accessible ground wires on the Main PCB and Bottom Chassis.
4. Disconnect the DY connector at the CN303 connector on the Main .
5. Using the jig, release the snaps (2) connecting the Front Cover and Main PCB then lift up the Bottom to separate the two Shield.



Figure 10

6. Remove the screws on the back and along each side of the Bottom Chassis.
7. Carefully lift the Main PCB Ass'y and remove the remaining ground wires.
8. Place the Main PCB Ass'y on a flat, level surface that is protected from static electricity.

### 3-1-4 CRT Ass'y Disassembly

1. Complete all previous steps.
2. Straighten the Degaussing Coil Assembly coated metal ties and lift the Coil Ass'y from the CRT.
3. Remove the four corner screws and lift the CRT up and away from the Front Cover Assembly and place it on a padded surface.

**Caution:** Do not lift the CRT by the neck.

If you will be returning this CRT to the monitor, be sure to place the CRT face downward on a protective pad.

## 3-2 Reassembly

---

Reassembly procedures are in the reverse order of Disassembly procedures.

## **Memo**

---

## 4 Alignment and Adjustments

---

This section of the service manual explains how to make permanent adjustments to the monitor. Directions are given for adjustments using the monitor Interface Board Ver. 2.0 and software (Softjig).

### 4-1 Adjustment Conditions

---

**Caution:** Changes made without the Softjig are saved only to the user mode settings. As such, the settings are not permanently stored and may be inadvertently deleted by the user.

#### 4-1-1 Before Making Adjustments

##### 4-1-1 (a) ORIENTATION

When servicing, always face the monitor to the east.

##### 4-1-1 (b) MAGNETIC FIELDS

Whenever possible, use magnetic field isolation equipment such as a Helmholtz field to surround the monitor. If a Helmholtz field is not available, frequently degauss the unit under test.

**Caution:** Other electrical equipment may cause external magnetic fields which may interfere with monitor performance.

Use an external degaussing coil to limit magnetic build up on the monitor. If an external degaussing coil is not available, use the internal degaussing circuit. However, do not use the internal degaussing circuit more than once per 30 minutes.

##### 4-1-1 (c) WARM-UP TIME

The monitor must be on for 30 minutes before starting alignment. Warm-up time is especially critical in color temperature and white balance adjustments.

##### 4-1-1 (d) SIGNAL

Analog, 0.7 Vp-p positive at 75 ohm, internal termination

Sync: Separate  
(TTL level negative / positive)

##### 4-1-1 (e) SCANNING FREQUENCY

Horizontal

S / M 753DF : 30 kHz to 70 kHz (Automatic)

S / M 755DF : 30 kHz to 85 kHz (Automatic)

Vertical : 50 Hz to 160 Hz (Automatic)

Unless otherwise specified, adjust at the  
1024 x 768 mode (68 kHz / 85 Hz),  
Refer to Table 2-1 on page 2-3.

#### 4-1-2 Required Equipment

The following equipment may be necessary for adjustment procedures:

##### 4-1-2 (a) DISPLAY CONTROL ADJUSTMENT

1. Non-metallic (–) screwdriver:  
1.5, 2.5, 3 mm
2. Non-metallic (+) screwdriver:  
1.5, 2.5, 3 mm
3. Digital Multimeter (DMM), or  
Digital Voltmeter
4. Signal generator, or  
DM200 software
5. Software: Softjig or DM200
6. Interface Board Ver. 2.0 Code No.  
BH81-90001K
7. Parallel communications cable (25-pin to  
25-pin); Code No. BH81-90001H
8. Signal cable (15-pin to 15-pin cable with  
additional 3-pin connector); Code No.  
BH81-90001J
9. 5 V DC adapter, not supplied
10. Personal computer

**Note:** Softjig Ass'y (includes items 6, 7 and 9)  
Code No. BH81-90001L

##### 4-1-2 (b) COLOR ADJUSTMENTS

1. All equipment listed in 4-1-2 (a), above
2. Color analyzer, or any luminance  
measurement equipment

### 4-1-3 Connecting the SoftJig

Connect the monitor to the signal generator and / or PC as illustrated in Figures 4-1 and 4-2.

**Note:** The signal cable connector which includes the 3-wire cable must connect to the monitor. If you use Setup 2 (PC only, no signal generator) you can only make adjustments to the signal timing available on that computer system. To make corrections to all factory timings requires the use of an additional signal generator.

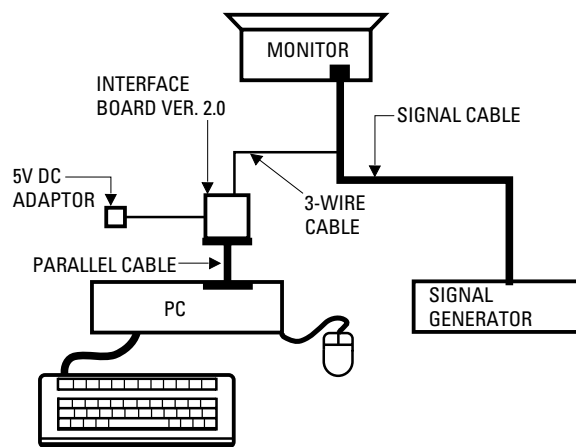


Figure 4-1. Setup 1, With Signal Generator

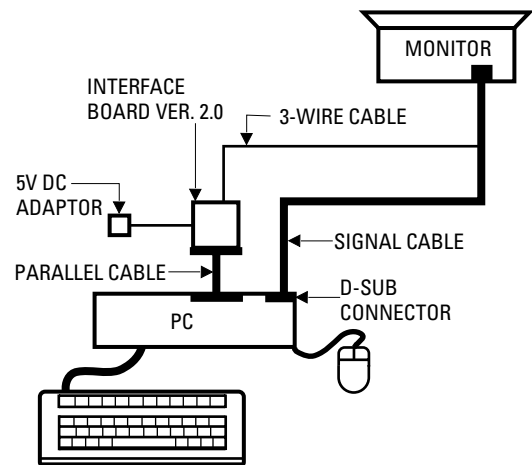


Figure 4-2. Setup 2, Without Signal Generator

## 4-2 Display Control Adjustments

### 4-2-1 HIGH VOLTAGE ADJUSTMENT

Signal: 1024 x 768 (68 kHz / 85 Hz)  
 Display image: Don't care  
 Contrast: Minimum  
 Brightness: Minimum  
 Limit: 26.0 kV  $\pm$  0.3 kV

Measure the high voltage level at the anode cap. High voltage should be within the limit as above. If the high voltage needs adjustment use the following procedure.

#### PROCEDURE

1. Turn the power off and disconnect the AC line cord from the power source.
2. Turn the power on after connecting high voltage Probe.
3. Using the jig, adjust the high voltage to the specification.

\* High Voltage Adjustment PROCEDURE using Softjig

- ① Select matching model name in "Model" field.
- ② Select "@7: Zero Beam" in menu after selecting "Extra 1"
- ③ Adjust high voltage using control bar after selecting "HV MIN"
- ④ Turn the power off/on after adjustment finished.
- ⑤ Check the high voltage has been fixed with adjusted value after reselecting "@7: Zero Beam".

### 4-2-2 SCREEN VOLTAGE ADJUSTMENT

#### CONDITIONS

Signal: 1024 x 768 (68 kHz / 85 Hz)  
 Display image: Don't care  
 Contrast: Minimum  
 Brightness: Minimum  
 Limit: 520 V  $\pm$  10 V

Screen Voltage adjustment procedure using softjig is all the same as 4-2-1 but selecting "G2 CONT" on the contrary to "HV MIN".

### 4-2-3 CENTER RASTER

Adjust SW401 so that the back raster comes to the center when you apply basic mode for 17".

### 4-2-4 Centering

Centering means to position the center point of the display in the middle of the display area. Horizontal size and position and vertical size and position control the centering of the display.

Adjust the horizontal size and vertical size to their optimal settings: 312 mm (H) x 234 mm (V).

Adjust the horizontal position and vertical position to  $\leq 4.0$  mm of the center point of the screen.

$$|A-B| \leq 4.0 \text{ mm.} \quad |C-D| \leq 4.0 \text{ mm.}$$

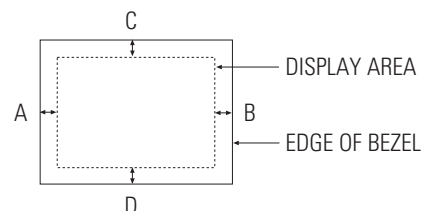


Figure 4-3. Centering

\* In Softjig window, "Geometry" has to be selected for GD adjustment.

#### 4-2-4 (a) HORIZONTAL SIZE ADJUSTMENT

##### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern  
 Brightness: Maximum  
 Contrast: Maximum

Use control bar after selecting "H-SIZE" in left menu to adjust the horizontal size of the display pattern to 312 mm.(Tolerance:  $\pm$  3 mm.)

If "H-SIZE" is not enough to adjust it, select "SIZE B+" by turns.

#### 4-2-4 (b) VERTICAL SIZE ADJUSTMENT

##### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern  
 Brightness: Maximum  
 Contrast: Maximum

Use control bar after selecting "V-SIZE" in left menu to adjust the vertical size of the display pattern to 234 mm.(Tolerance:  $\pm$  3 mm.)

## 4 Alignment and Adjustments

### 4-2-4 (c) HORIZONTAL POSITION ADJUSTMENT

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
Display image: Crosshatch pattern

Use control bar after selecting **“H-POSITION”** in left menu to center the horizontal image on the raster.

### 4-2-4 (d) VERTICAL POSITION ADJUSTMENT

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
Display image: Crosshatch pattern

Use control bar after selecting **“V-POSITION”** in left menu to center the vertical image on the raster.

## 4-2-5 Linearity

Linearity affects the symmetry of images as they appear on the screen. Unless each row or column of blocks in a crosshatch pattern is of equal size, or within the tolerances shown in Tables 4-2 and 4-3, an image appears distorted, elongated or squashed.

Table 4-1. Standard Modes Linearity: 640x480/85Hz, 800x600/85Hz and 1024x768/85Hz

|       | Standard Modes Linearity                        |                                                               |
|-------|-------------------------------------------------|---------------------------------------------------------------|
|       | Each block (10 %)                               | Difference between adjacent blocks (4 %)                      |
| 4 : 3 | Horizontal: 20.9~23.1<br>Vertical : 20.9~23.1   | Horizontal: Less than 0.88 mm<br>Vertical : Less than 0.88 mm |
| 5 : 4 | Horizontal: 19.60~21.65<br>Vertical : 20.9~23.1 | Horizontal: Less than 0.82 mm<br>Vertical : Less than 0.88 mm |

Table 4-2. Other Modes Linearity: VGA, SVGA, XGA, MAC, etc.

|       | Supported Timing Mode                           |                                                               |
|-------|-------------------------------------------------|---------------------------------------------------------------|
|       | Each block (14 %)                               | Difference between adjacent blocks (5 %)                      |
| 4 : 3 | Horizontal: 20.5~23.5<br>Vertical : 20.5~23.5   | Horizontal: Less than 1.10 mm<br>Vertical : Less than 1.10 mm |
| 5 : 4 | Horizontal: 19.18~22.07<br>Vertical : 20.5~23.5 | Horizontal: Less than 1.03 mm<br>Vertical : Less than 1.10 mm |

### 4-2-5 (a) HORIZONTAL LINEARITY ADJUSTMENT

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
Display image: Crosshatch pattern  
Brightness: Maximum  
Contrast: Maximum

To adjust the Horizontal Linearity, refer to Tables 4-2 and 4-3 for the tolerance range.

Increase or decrease **H\_LIN** to optimize the image.

### 4-2-5 (b) VERTICAL LINEARITY ADJUSTMENT

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
Display image: Crosshatch pattern  
Brightness: Maximum  
Contrast: Maximum

To adjust the Vertical Linearity, refer to Tables 4-2 and 4-3 for the tolerance range.

Use control bar after selecting **“V-LINEARITY BAL”** in left menu to optimize the image.

## 4-2-6 Trapezoid Adjustment

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
Display image: Crosshatch pattern  
Brightness: Maximum  
Contrast: Maximum

Use control bar after selecting **“TRAPEZOID”** in left menu to make the image area rectangular.

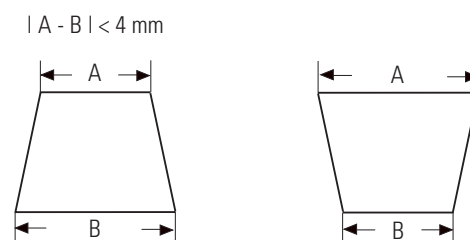


Figure 4-4. Trapezoid

### 4-2-7 Pinbalance Adjustment

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern  
 Brightness: Maximum  
 Contrast: Maximum

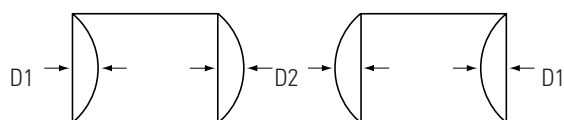


Figure 4-5. Pinbalance

Use control bar after selecting **"PINBALANCE"** in left menu to optimize the image.

### 4-2-8 Parallelogram Adjustment

#### CONDITIONS

Scanning Frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern  
 Brightness: Maximum  
 Contrast: Maximum

Use control bar after selecting **"PARALLEL"** in left menu to make the image area rectangular.

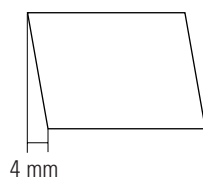


Figure 4-6. Parallelogram

### 4-2-9 Side Pincushion Adjustment

#### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern

Use control bar after selecting **"PINCUSHION"** in left menu to straighten the sides of the image area.

$|C1|, |C2| \leq 2.0 \text{ mm}, |D1|, |D2| \leq 2.0 \text{ mm}.$

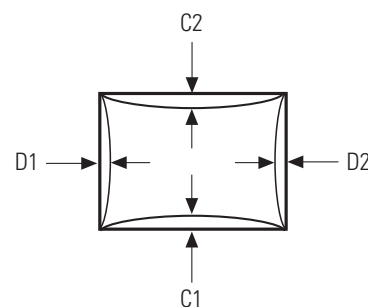


Figure 4-7. Pincushion

### 4-2-10 Tilt Adjustment

#### CONDITIONS

Scanning Frequency: 68 kHz / 85 Hz  
 Display image: Crosshatch pattern  
 Brightness: Maximum  
 Contrast: Maximum

Use control bar after selecting **"ROTATION"** in left menu to correct the tilt of the display.

### 4-2-11 Degauss

No adjustments are available for the degaussing circuit. The degaussing circuit can effectively function only once per 30 minutes.

### 4-2-12 To Delete the User Mode Data

To delete the adjustment data from the user modes, click **"@4: USER DELETE"** in right ment.

### 4-2-13 Save the Data

To save the adjustment data for a mode, press **"@3: ALL MODE SAVE"** in right ment.

## 4-3 Color Adjustments

**CAUTION:** Check below condition before color adjustment  
 Video signal : Analog 0.7 Vp-p (at 75  $\Omega$ )  
 Sync : TTL level (H, V separate signal)

\* Select "Color" in Softjig menu for color adjustment.

### 4-3-1 Color Coordinates (Temperature)

Color temperature is a measurement of the radiant energy transmitted by a color. For computer monitors, the color temperature refers to the radiant energy transmitted by white. Color coordinates are the X and Y coordinates on the chromaticity diagram of wavelengths for the visible spectrum.

#### CONDITIONS

Measurement instrument: Color analyzer  
 Scanning frequency: 68 kHz / 85 Hz  
 Display image: White flat field at center of display area  
 Luminance: Maximum

#### PROCEDURE

Use the directions in sections 4-3-2 through 4-3-3 to adjust the color coordinates for:

9300K to  $x = 0.283 \pm 0.02$ ,  $y = 0.298 \pm 0.02$

6500K to  $x = 0.313 \pm 0.02$ ,  $y = 0.329 \pm 0.02$

### 4-3-2 Color Adjustments for 9300K

#### 4-3-2 (a) BACK RASTER COLOR ADJUSTMENT

##### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Back raster pattern  
 Brightness: Maximum  
 Contrast: Maximum

1. Select "**@1: CHANNEL 1**" in right menu to control the color for 9300K.
2. Adjust the luminance of the back raster to between 0.5 to 0.7 ft-L using contron bar after selecting "**GREEN CUTOFF**" in the menu.
3. Use control bar after selecting "**BLUE CUTOFF**" in left menu to set the "y" coordinate to  $0.298 \pm 0.02$ .
4. Use control bar after selecting "**RED CUTOFF**" in left menu to  $0.283 \pm 0.02$ .

\* If color values would not be matched desirable values, repeat sequence 3 and 4 after readjusting "GREEN CUTOFF" control a little different.

#### 4-3-2 (b) WHITE BALANCE ADJUSTMENT

##### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: White box pattern  
 Brightness: 0.06ft-L at Back Raster  
 Pattern Display  
 Contrast: Maximum

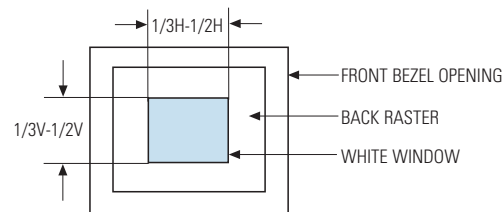


Figure 4-8. White Box Pattern

1. Use control bar after selecting "RED GAIN", "GREEN GAIN" and "BLUE GAIN" to adjust the luminance to 40 ft-L with the color coordinates ranged for 9300K to  $x = 0.283 \pm 0.02$ ,  $y = 0.298 \pm 0.02$ .

#### 4-3-2 (c) ABL ADJUSTMENT

##### CONDITIONS

Scanning frequency: 68 kHz / 85 Hz  
 Display image: Full white pattern  
 Brightness: Maximum  
 Contrast: Maximum

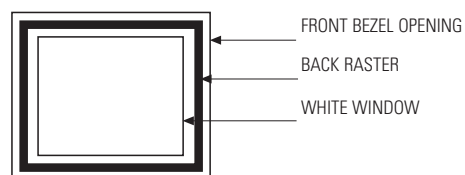


Figure 4-9. Full White Pattern

1. Check the ABL. If it is not within the specifications, use the ABL controls to adjust it. ( $29 \pm 1$  ft-L )
2. Select "**@4: COLOR SAVE**" to save the data.
3. Select "**@6: ALL COLOR SAVE**" to save the CH2.

## 4-3-2 (d) WHITE BALANCE ADJUSTMENT VERIFICATION

## CONDITIONS

|                     |                                                |
|---------------------|------------------------------------------------|
| Scanning frequency: | 68 kHz / 85 Hz                                 |
| Display image:      | Back raster pattern<br>Full White Pattern      |
| X-Y Coordinates:    | $x = 0.283 \pm 0.02$ ,<br>$y = 0.298 \pm 0.02$ |
| ABL Luminance       | Refer to 4-3-2(c)                              |
| Brightness:         | Maximum                                        |
| Contrast:           | 5 ft-L, 24 ft-L                                |

1. Check whether the color coordinates of the back raster satisfy the above spec.  
If they do not, return to 4-3-2 (a) and readjust all settings.
2. Display a full white pattern.
3. Select "Geometry" in softjig menu.
4. Select "@7: 5-ft " in right menu.
5. Check whether the white coordinates of the video meet the above coordinates spec.
6. Select "@8: 24-ft " in right menu.
7. Check whether the white coordinates of the video satisfies the above spec.  
If they do not, return to 4-3-2 (a) and readjust all settings.

Select "Color" and click "@2: CHANNEL 2" for color adjustment for 6500K  
Repeat the sequence of 9300K adjustment.  
The luminance values the same as 9300K, but the color coordinated of back raster and white box are :  $x = 0.313 \pm 0.02$   $y = 0.329 \pm 0.02$

**4-3-3 Luminance Uniformity Check**

Luminance is considered uniform only if the ratio of lowest to highest brightness areas on the screen is not less than 7.5:10.

## CONDITIONS

|                     |                                |
|---------------------|--------------------------------|
| Scanning frequency: | 68 kHz / 85 Hz<br>(1024 x 768) |
| Display image:      | White flat field               |
| Brightness:         | Cut off point at 24 ft-L       |
| Contrast:           | Maximum                        |

## PROCEDURE

Measure luminance at nine points on the display screen (see figure below).

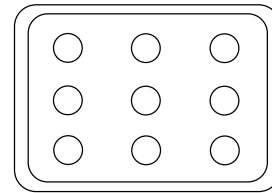


Figure 4-10. Luminance Uniformity Check Locations

**4-3-4 Focus Adjustment**

## CONDITIONS

|                     |                                |
|---------------------|--------------------------------|
| Scanning frequency: | 68 kHz / 85 Hz<br>(1024 x 768) |
| Display image:      | "H" character pattern          |
| Brightness:         | Cut off point                  |
| Contrast:           | Maximum                        |

## PROCEDURE

1. Adjust the Focus VR on the FBT to display the sharpest image possible.
2. Use Locktite to seal the Focus VR in position.

**4-3-5 Color Purity Adjustment**

Color purity is the absence of undesired color. Conspicuous mislanding (unexpected color in a uniform field) within the display area shall not be visible at a distance of 50 cm from the CRT surface.

## CONDITIONS

|                     |                                                 |
|---------------------|-------------------------------------------------|
| Orientation:        | Monitor facing east                             |
| Scanning frequency: | 68 kHz / 85 Hz                                  |
| Display image:      | White flat field                                |
| Luminance:          | Cut off point at the center of the display area |

**Note:** Color purity adjustments should only be attempted by qualified personnel.

# PROCEDURE

## **For trained and experienced service technicians only.**

Use the following procedure to correct minor color purity problems:

1. Make sure the display is not affected by external magnetic fields.
2. Make sure the spacing between the PCM assembly and the CRT stem is  $29\text{ mm} \pm 1\text{ mm}$ .
3. Display a green pattern over the entire display area.
4. Adjust the purity magnet rings on the PCM assembly to display a pure green pattern.  
(Optimum setting:  $x = 0.295 \pm 0.015$ ,  
 $y = 0.594 \pm 0.015$ )
5. Repeat steps 4 and 5 using a red pattern and then again, using a blue pattern.

Table 4-4. Color Purity Tolerances

|        |                       |                       |
|--------|-----------------------|-----------------------|
| Red:   | $x = 0.640 \pm 0.015$ | $y = 0.323 \pm 0.015$ |
| Green: | $x = 0.295 \pm 0.015$ | $y = 0.594 \pm 0.015$ |
| Blue:  | $x = 0.142 \pm 0.015$ | $y = 0.066 \pm 0.015$ |

(For 9300K color adjustment:  $x = 0.283 \pm 0.02$ ,  $y = 0.298 \pm 0.02$ )

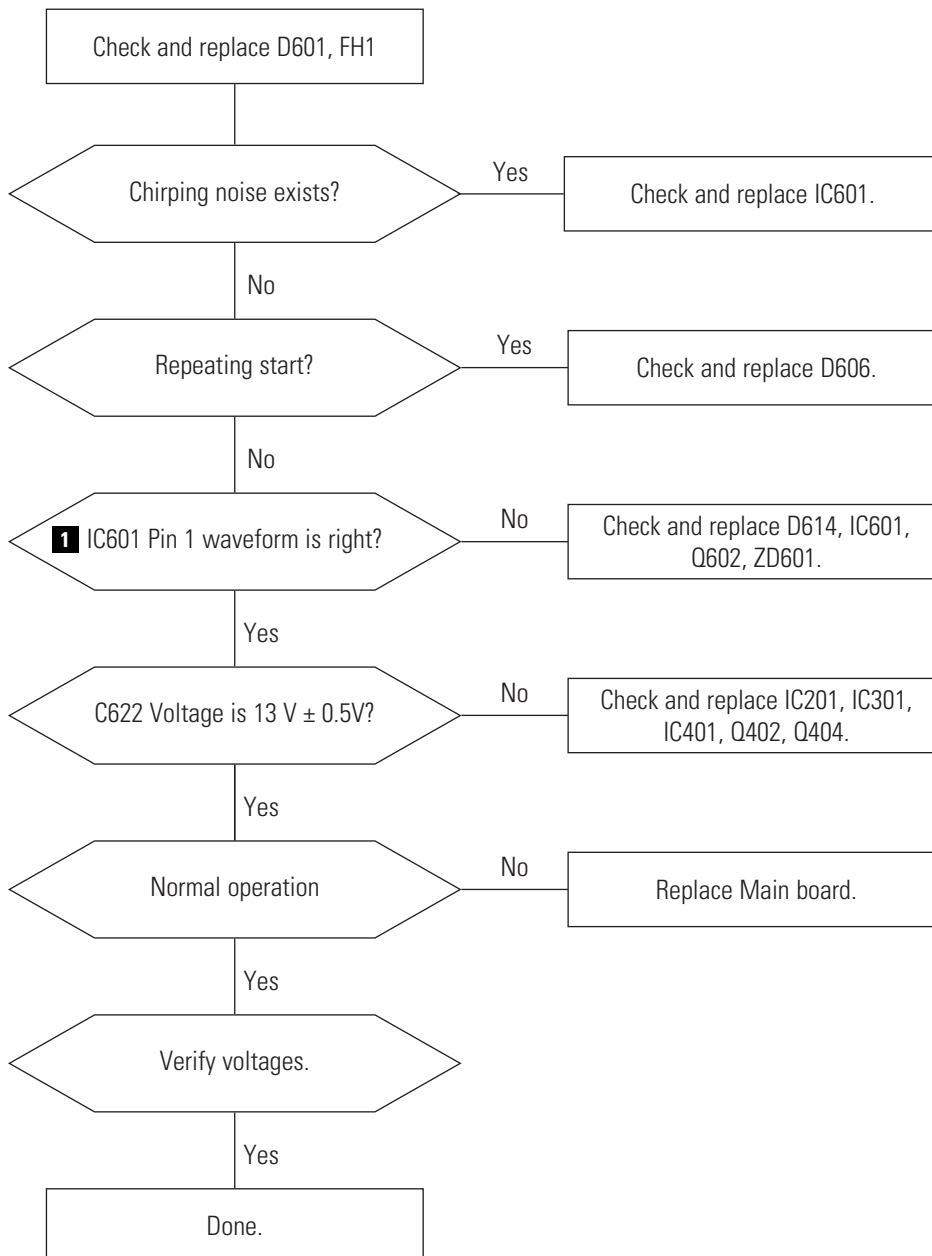
6. When you have the PCMs properly adjusted, carefully glue them together to prevent their movement during shipping.

## 5 Troubleshooting

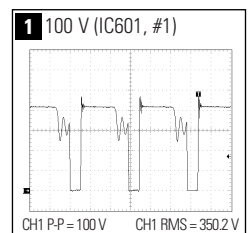
### 5-1 Parts Level Troubleshooting

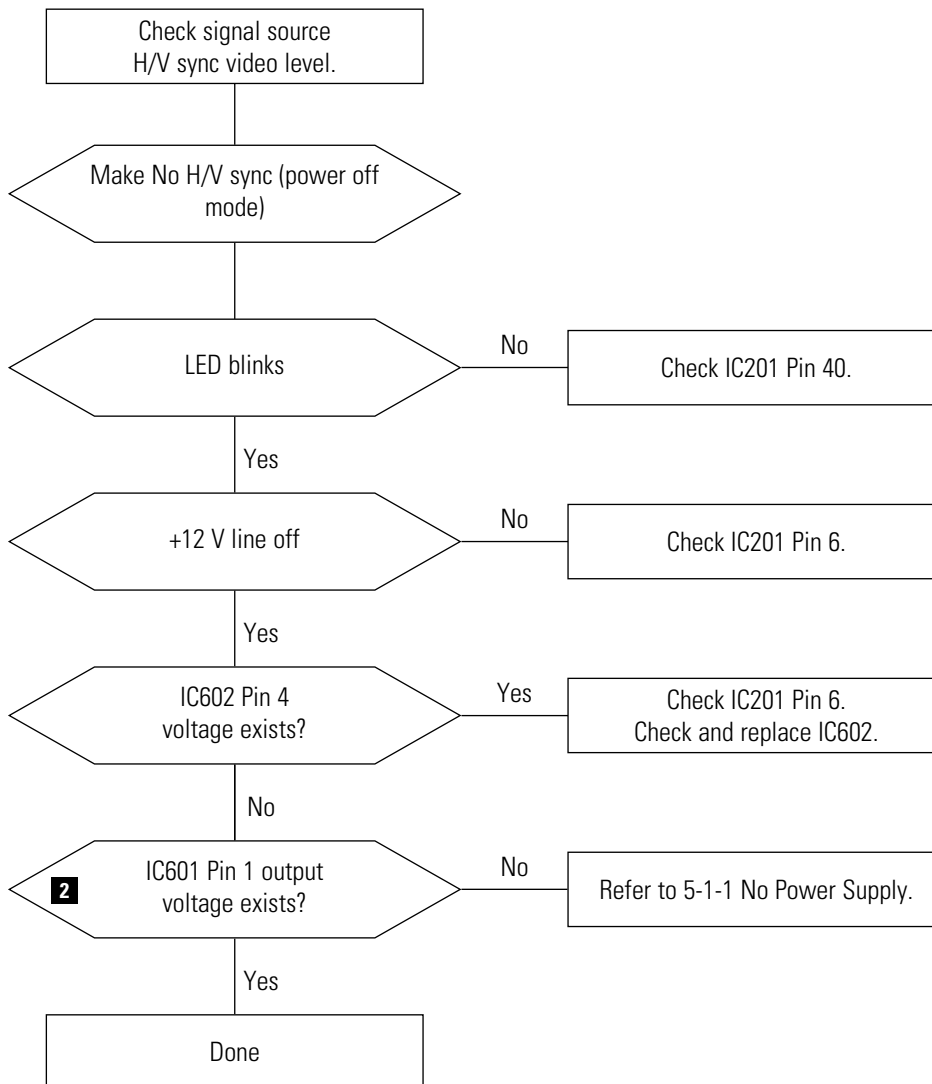
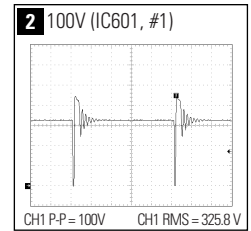
- Notes:** 1. If a picture does not appear, fully rotate the brightness and contrast controls clockwise and reinspect.
2. Check the following circuits.
- No raster appears: Power circuit, Horizontal output circuit.
  - High voltage develops but no raster appears: Video output circuits.
  - High voltage does not develop: Horizontal output circuits.

#### 5-1-1 No Power Supply

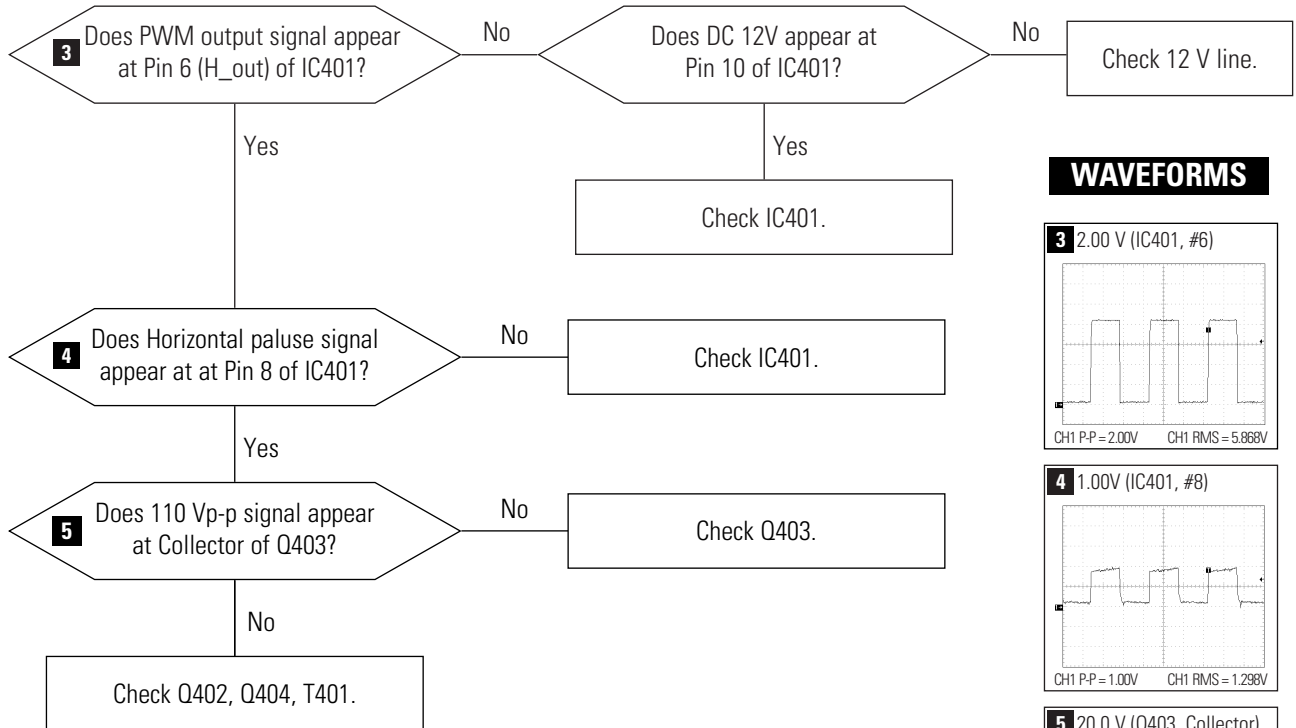


#### WAVEFORMS

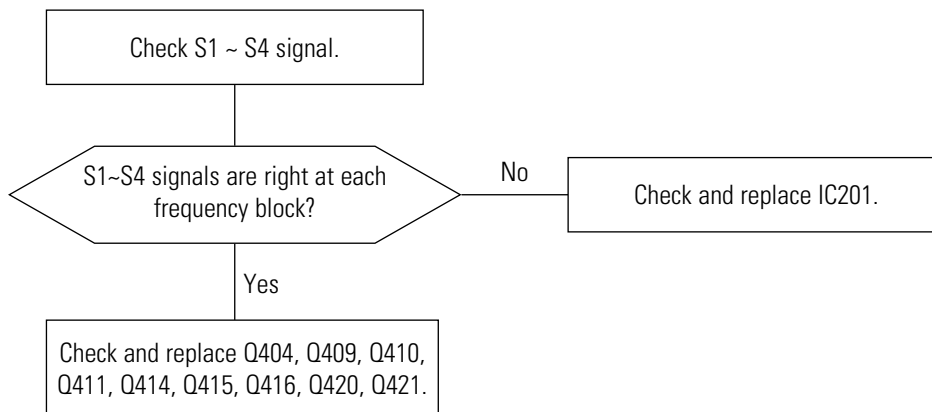


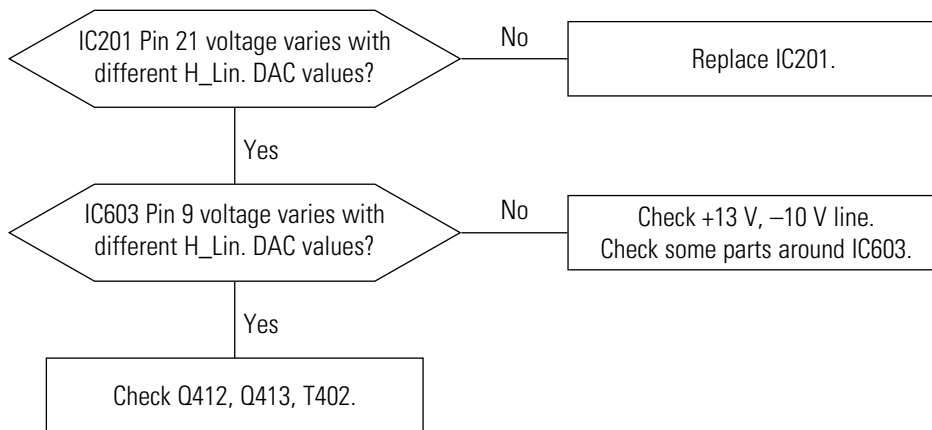
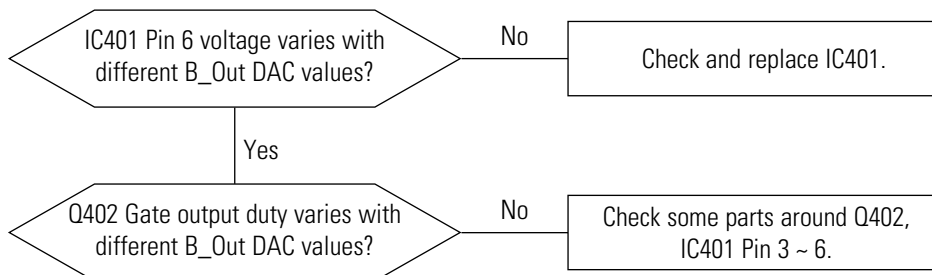
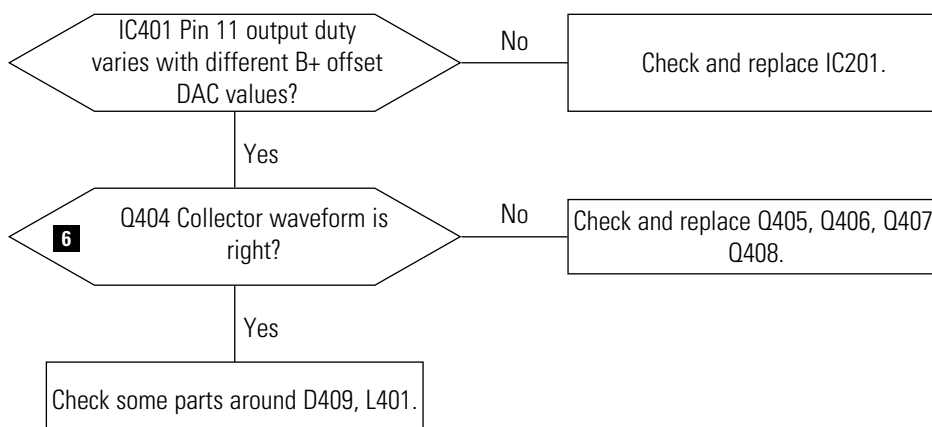
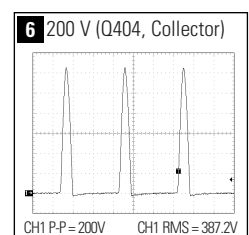
**5-1-2 DPMS Failure****WAVEFORMS**

### 5-1-3 H\_Deflection Failure

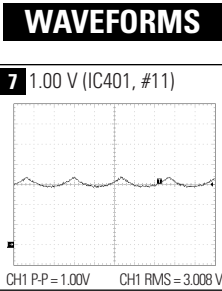
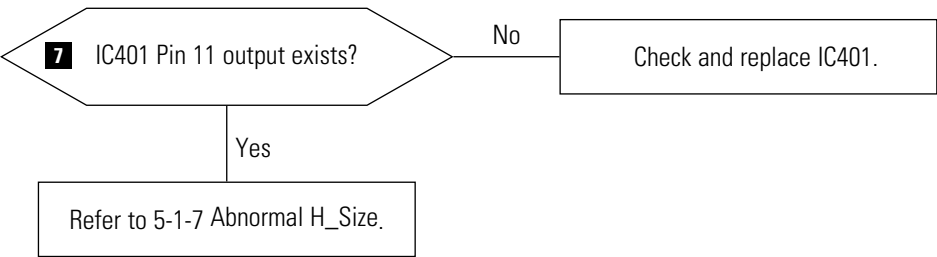


### 5-1-4 S Correction Failure

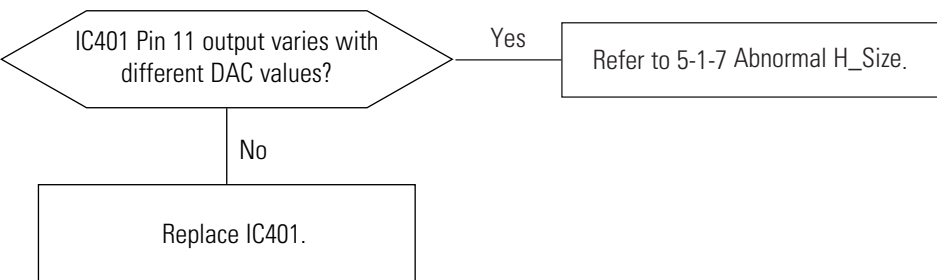


**5-1-5 H\_Lin. Failure****5-1-6 Invariable H\_Size****5-1-7 Abnormal H\_Size****WAVEFORMS**

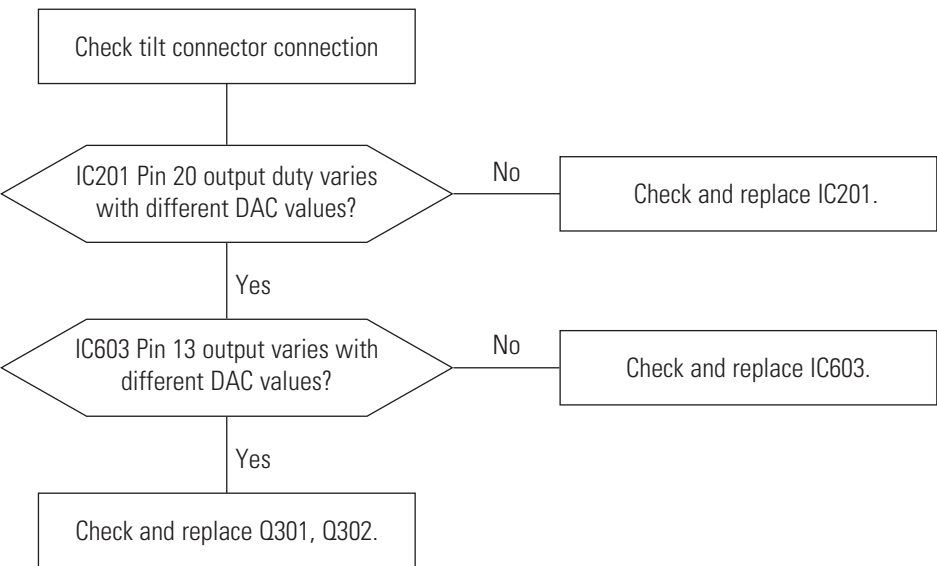
### 5-1-8 Side Pin or Trap Failure

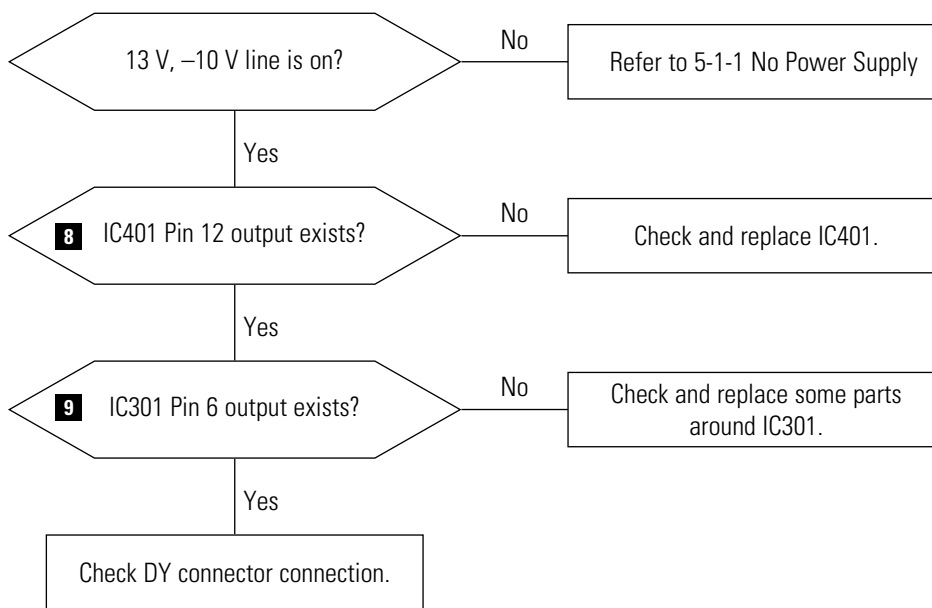
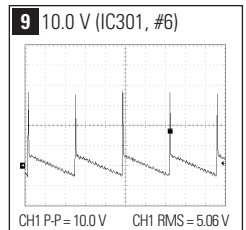
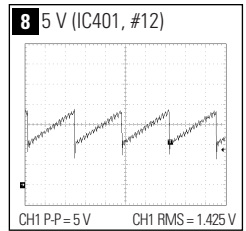
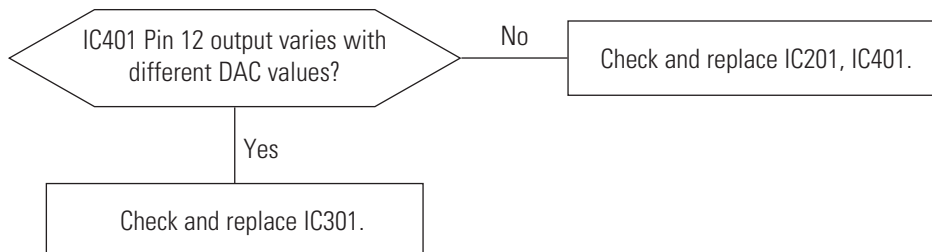


### 5-1-9 Para. or Pin Balance Failure

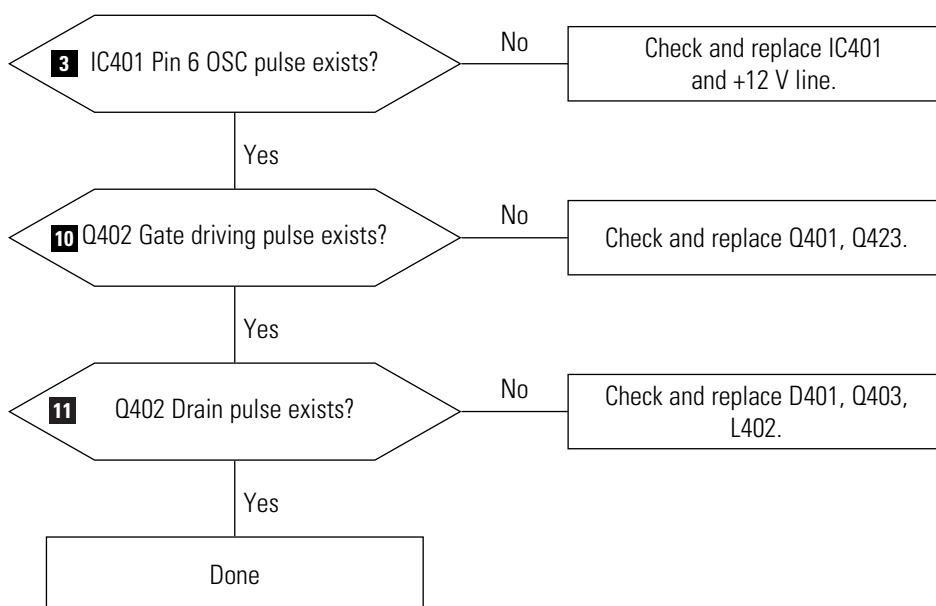


### 5-1-10 Tilt Failure

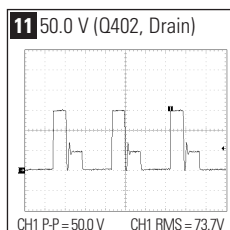
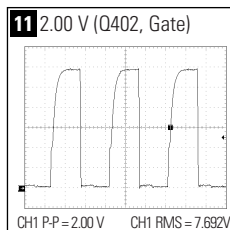
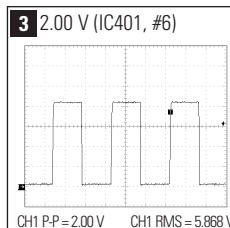


**5-1-11 V Deflection Failure****WAVEFORMS****5-1-12 V Size or Pos. Variation Failure**

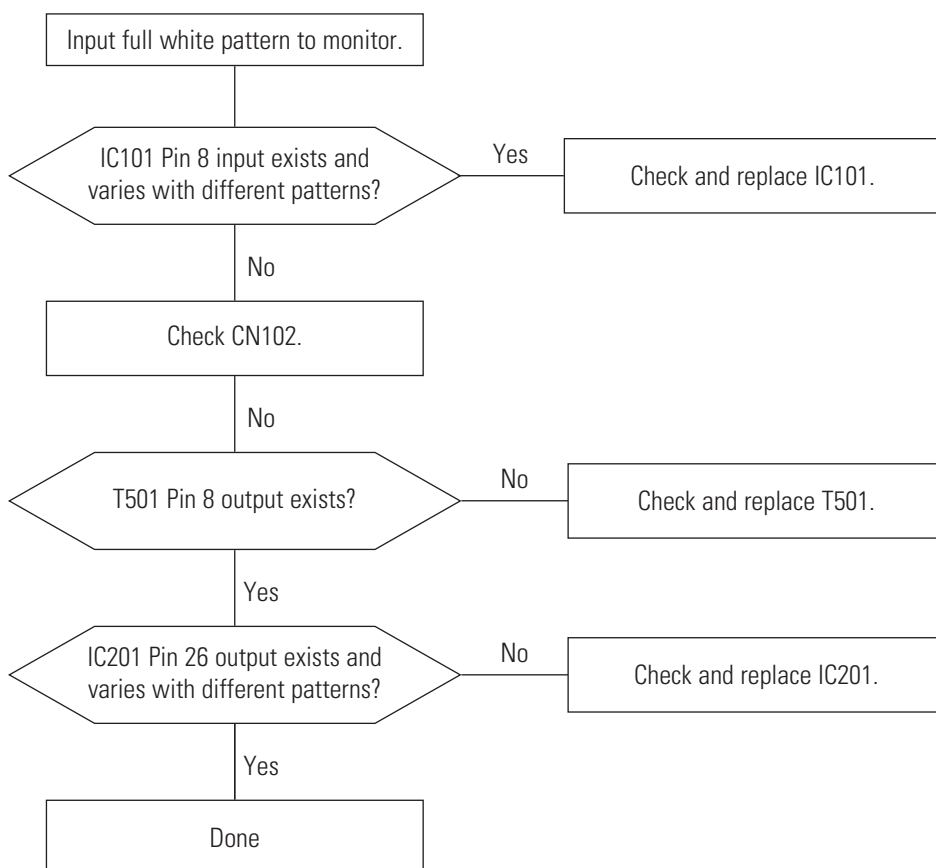
### 5-1-13 High Voltage Failure

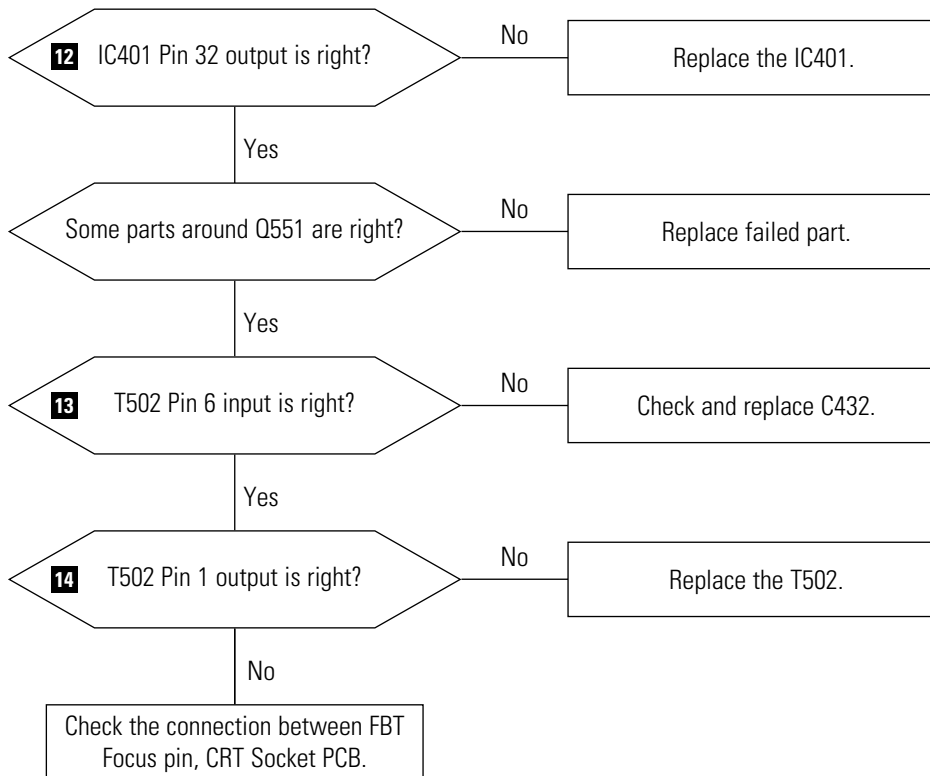
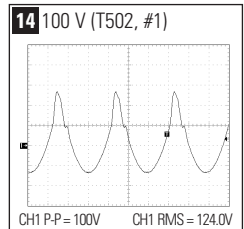
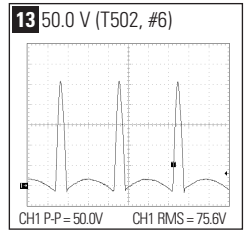
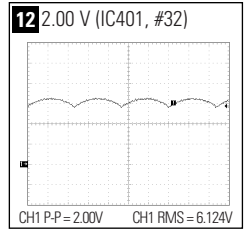


#### WAVEFORMS

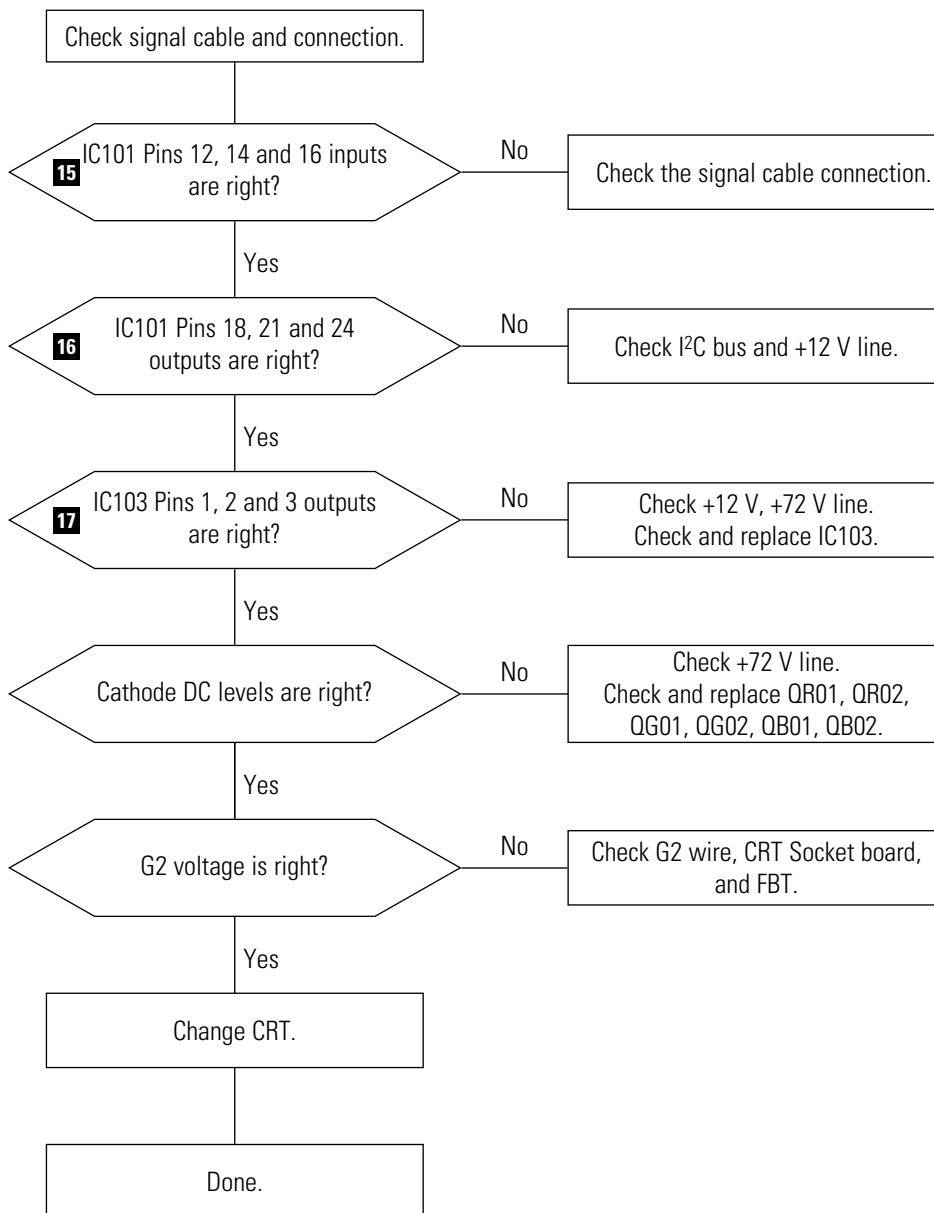


### 5-1-14 ABL Failure

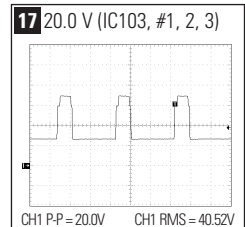
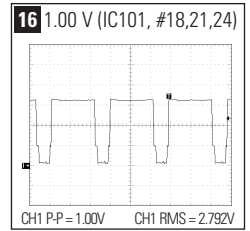
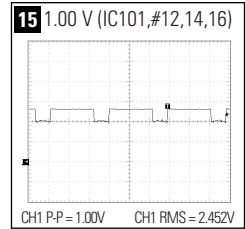


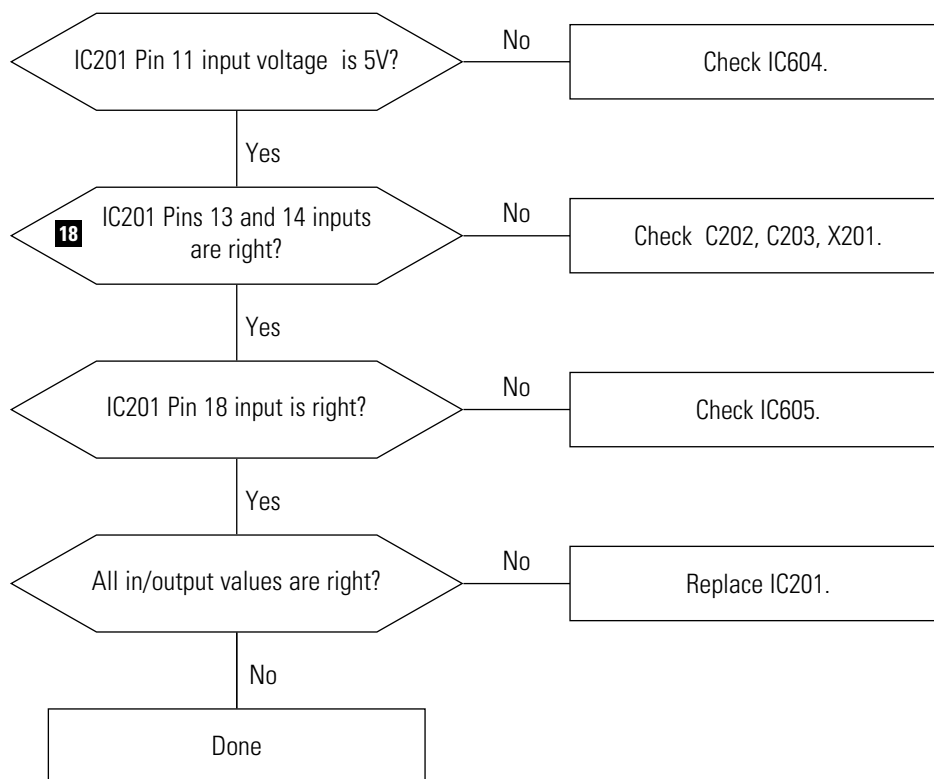
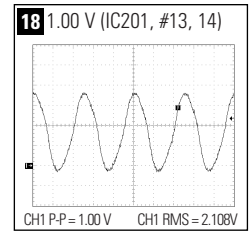
**5-1-15 Dynamic Focus Failure****WAVEFORMS**

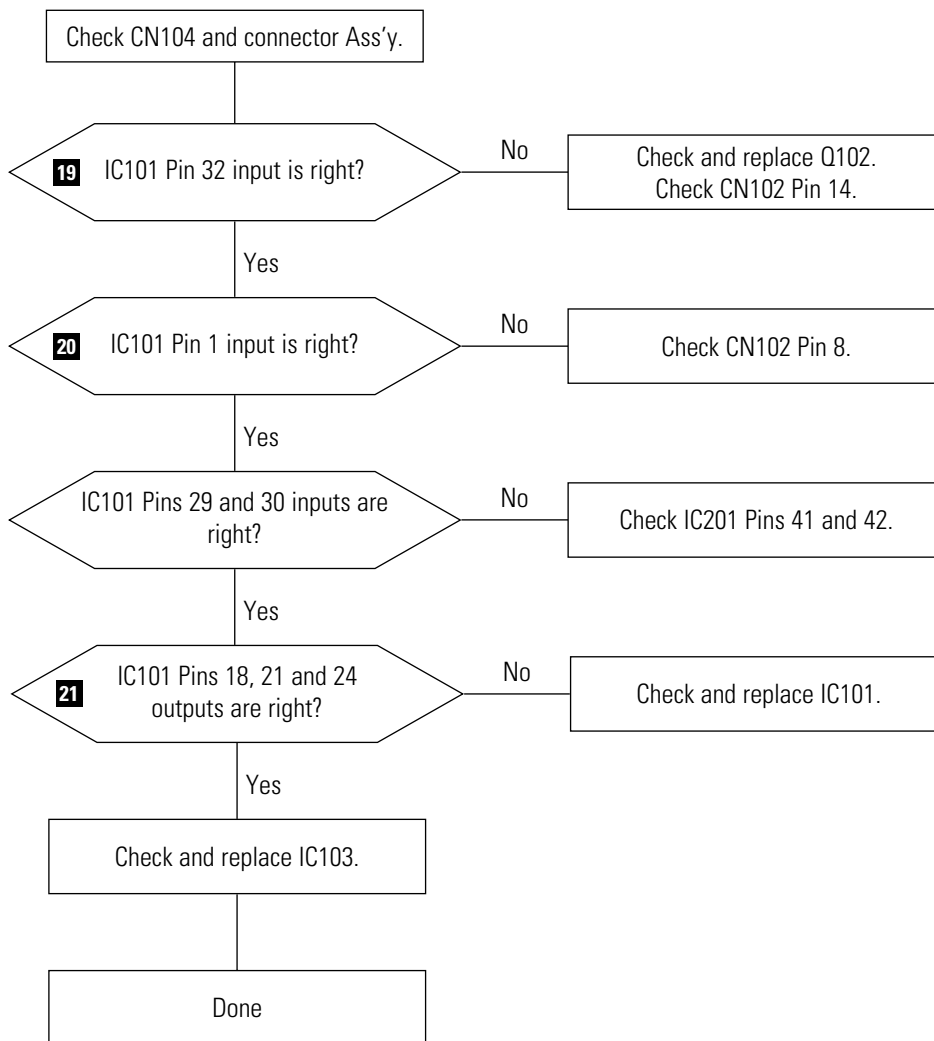
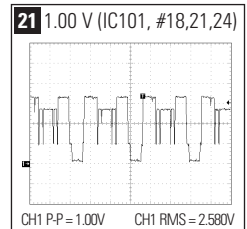
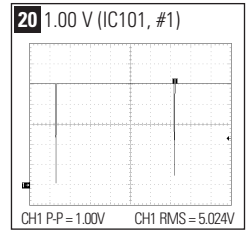
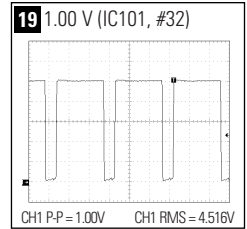
## 5-1-16 No Video

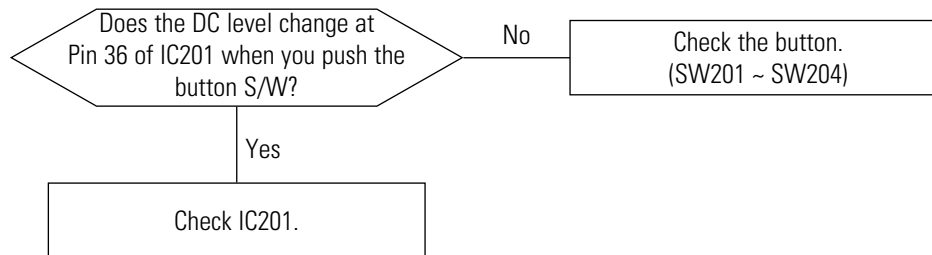
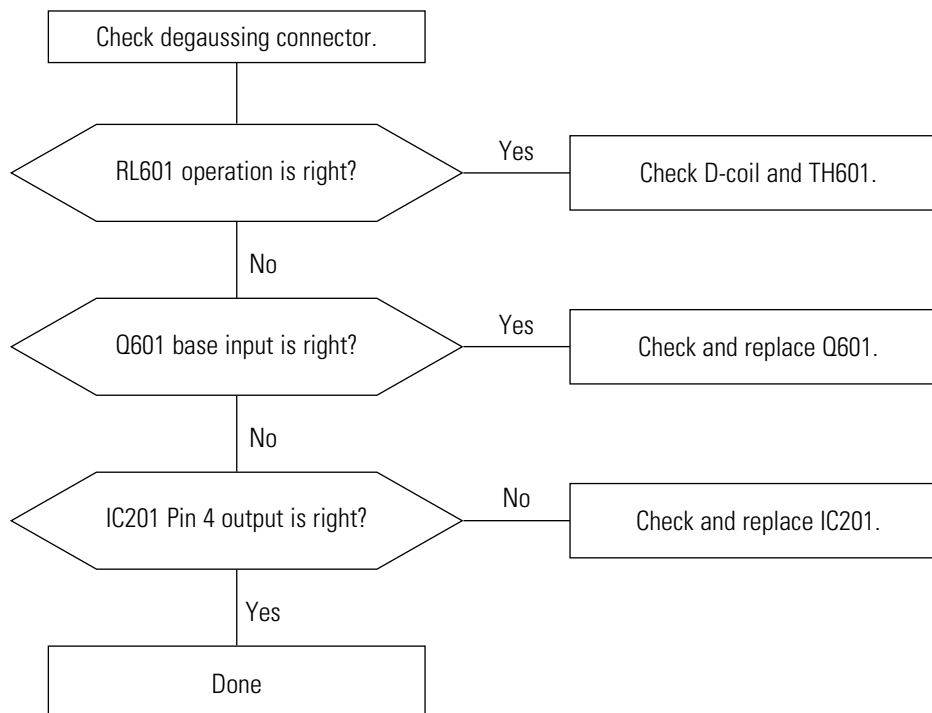


## WAVEFORMS



**5-1-17 Micom Failure****WAVEFORMS**

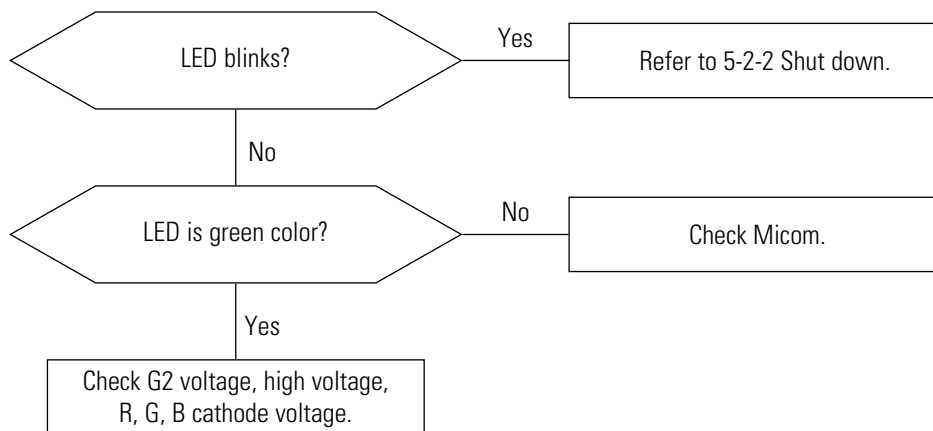
**5-1-18 OSD Failure****WAVEFORMS**

**5-1-19 User Control Failure****5-1-20 Degaussing Failure**

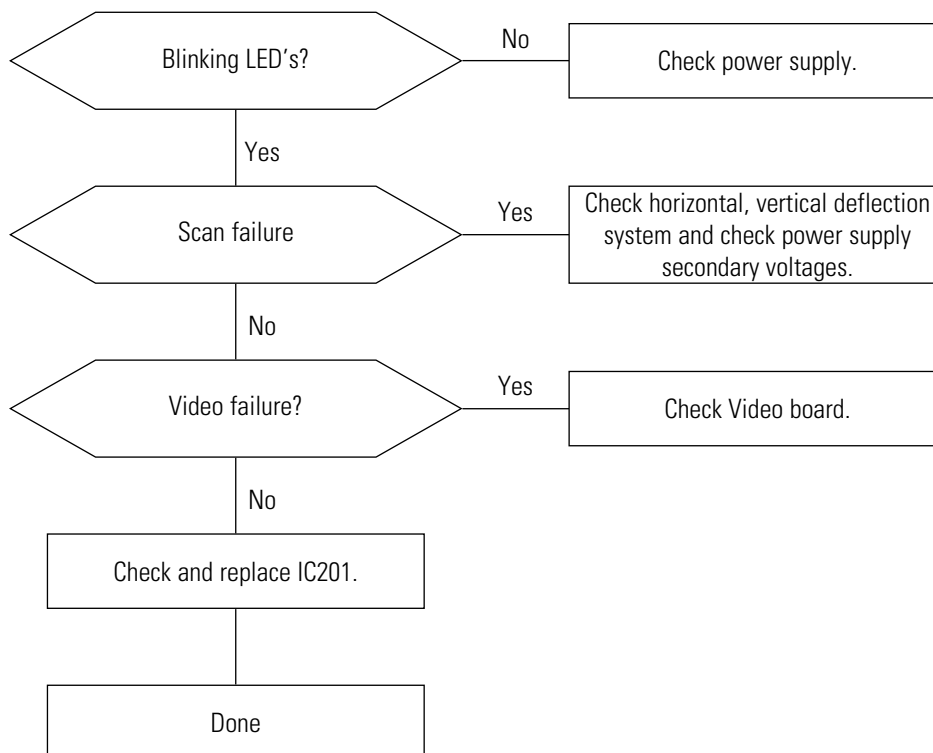
## 5-2 General Troubleshooting

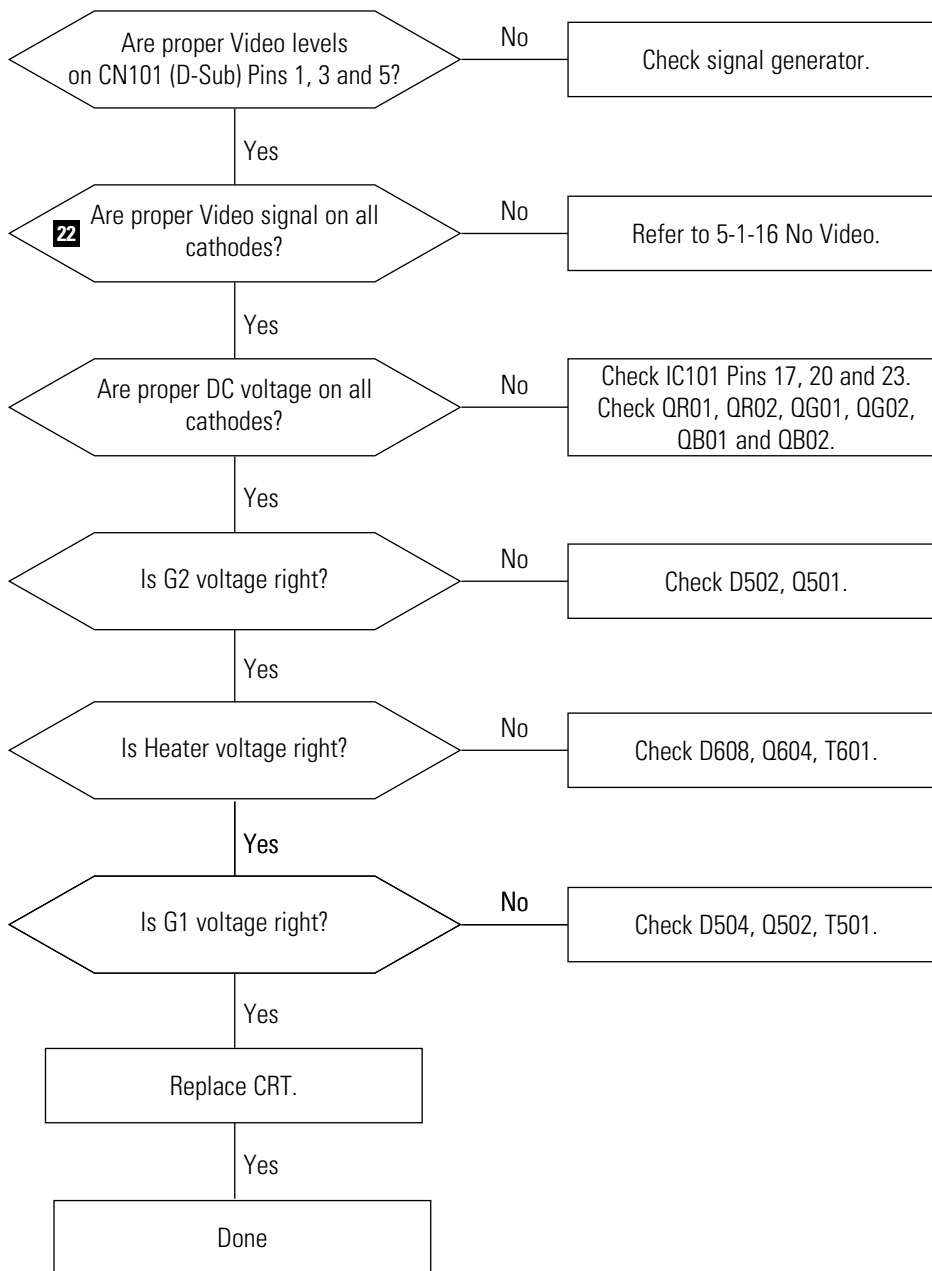
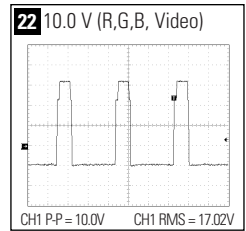
---

### 5-2-1 No Picture

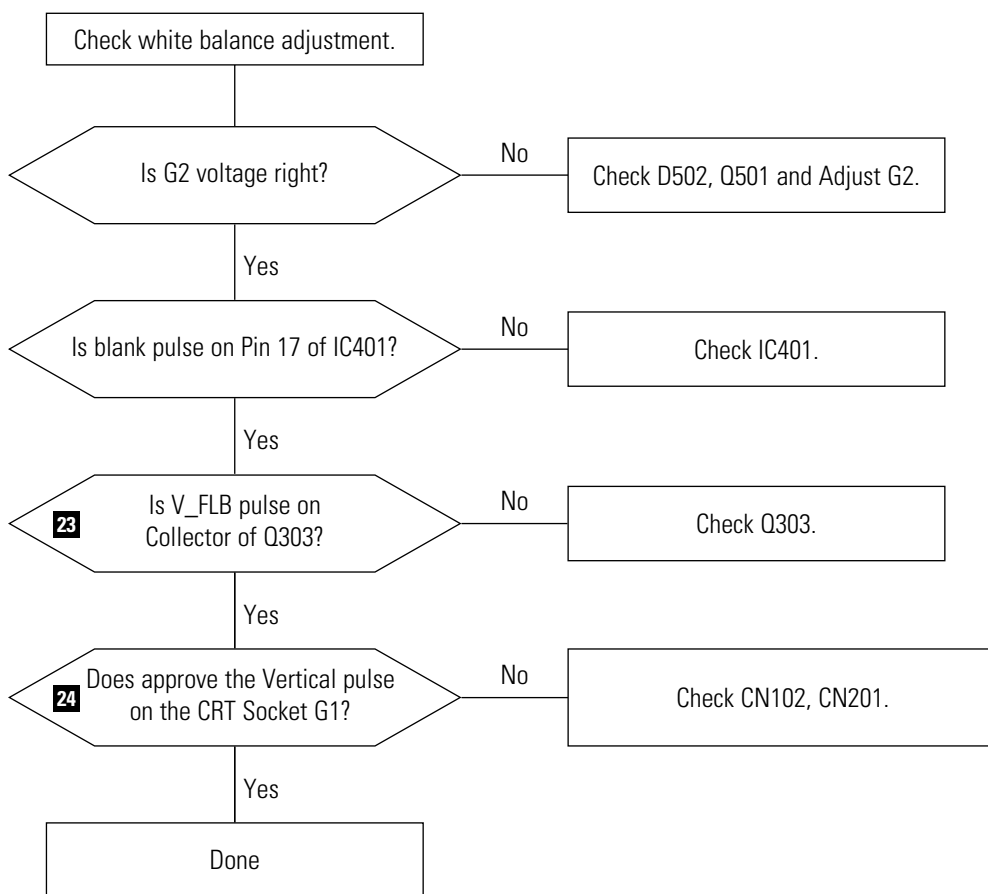


### 5-2-2 Shut Down



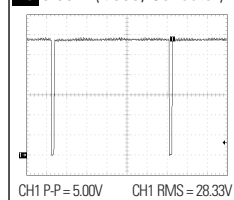
**5-2-3 Missing Color****WAVEFORMS**

## 5-2-4 Visible Retrace

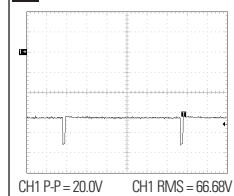


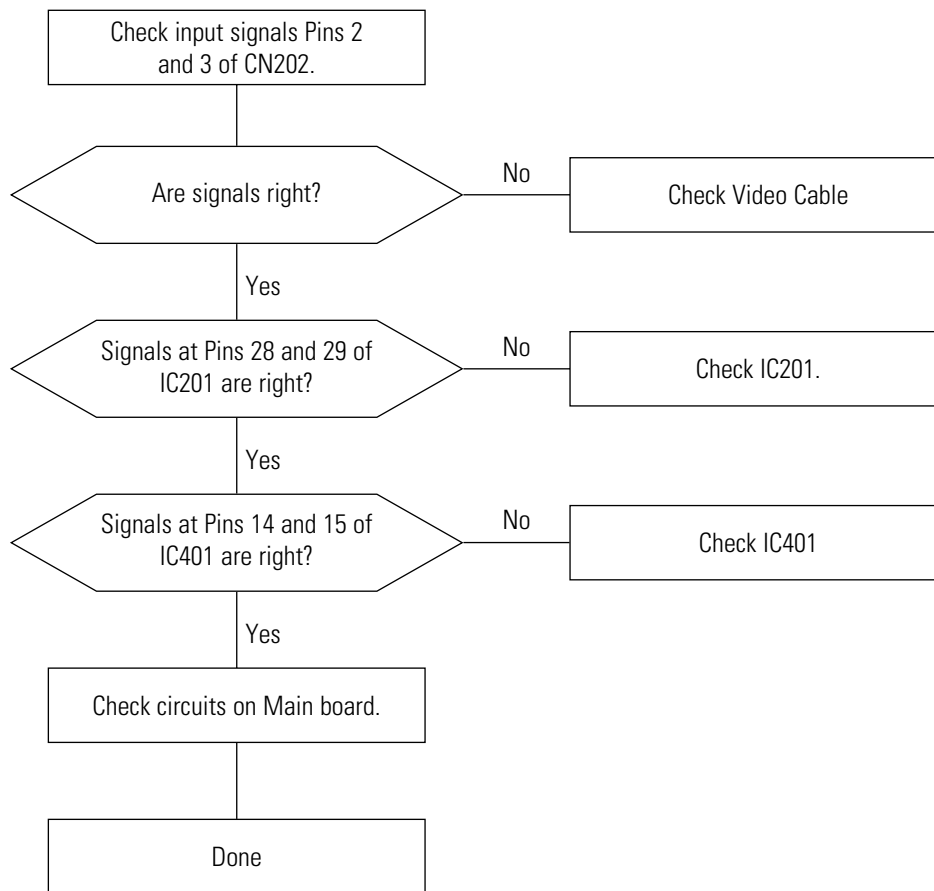
### WAVEFORMS

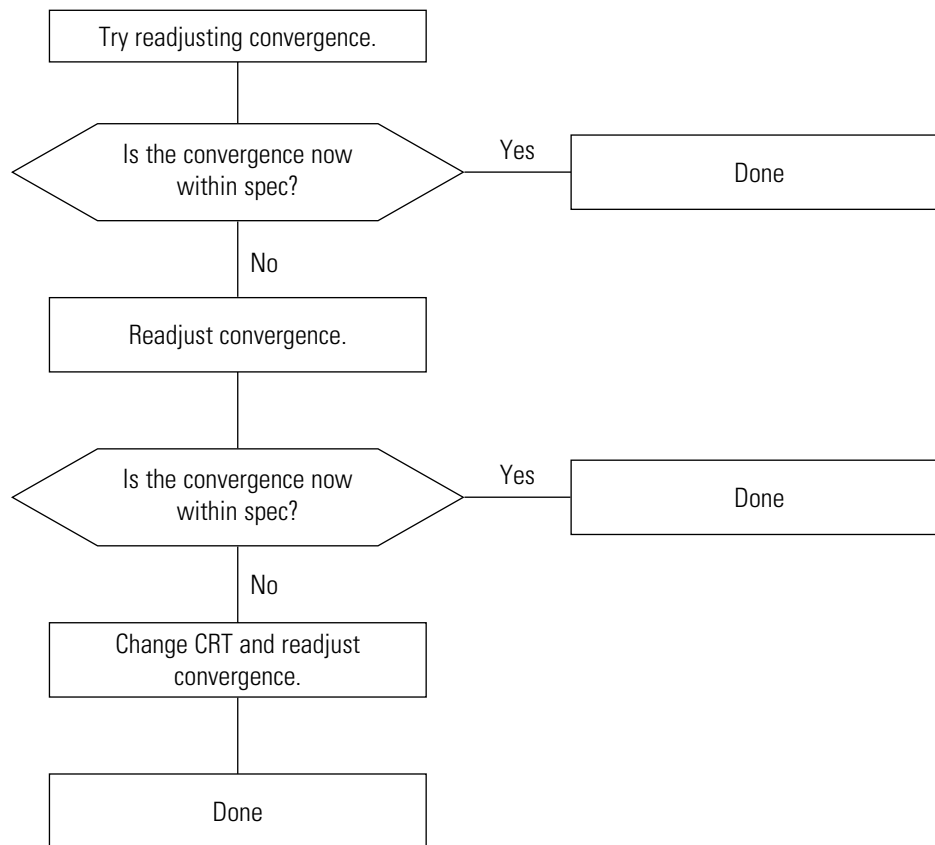
23 5.00 V (Q303, Collector)

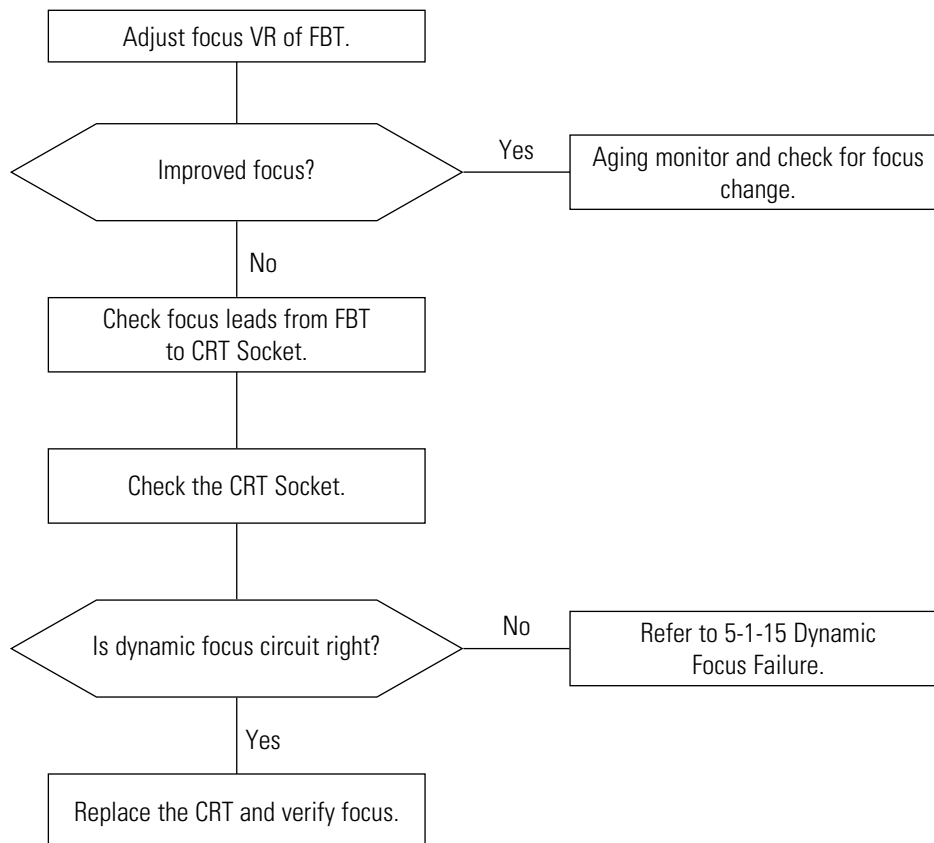
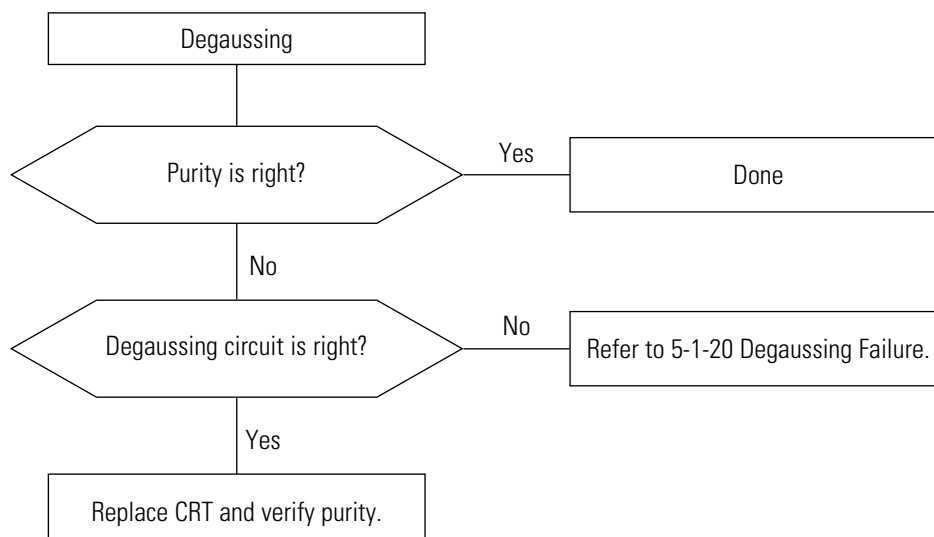


24 20.00 V (CRT, G1)



**5-2-5 Unsynchronized Image**

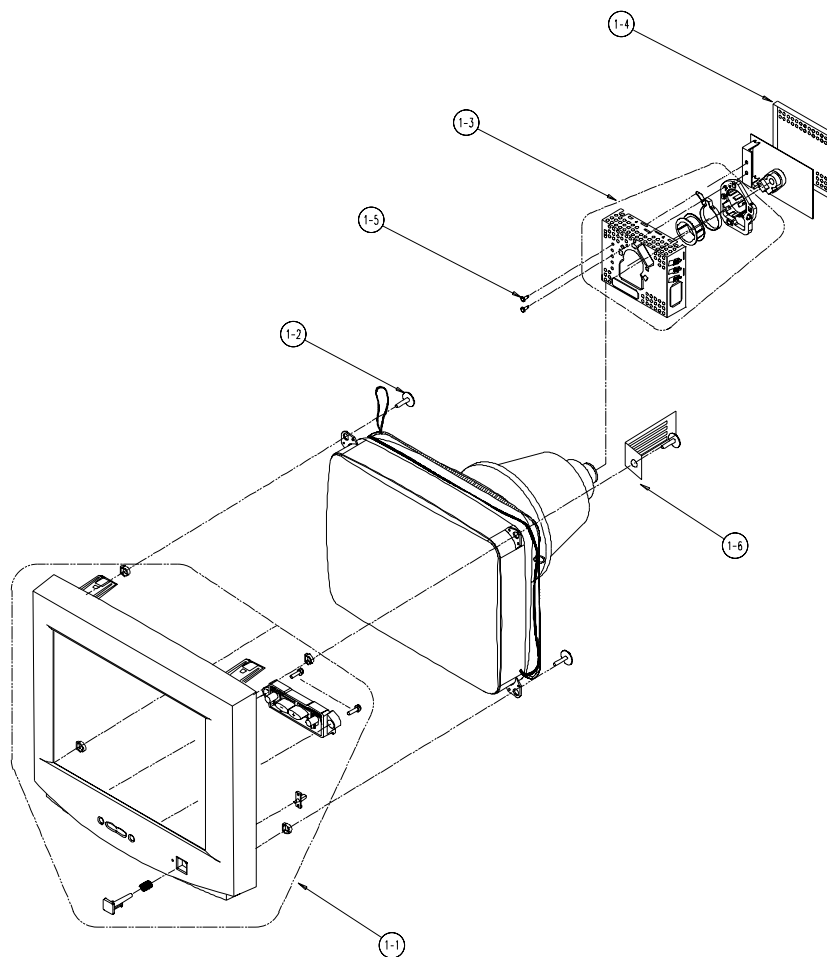
**5-2-6 Misconvergence**

**5-2-7 Poor Focus****5-2-8 Purity Failure**

## 6 Exploded View and Parts List

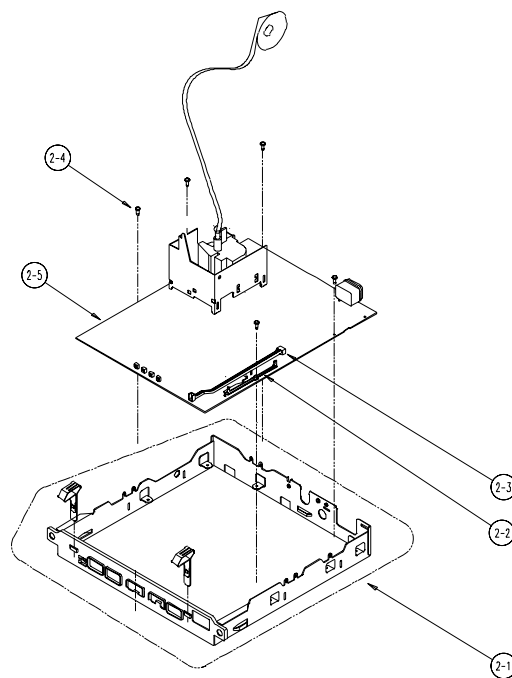
### 6-1 Front Cover & CRT Ass'y

| NO  | DESCRIPTION       | CODE-NO     | SPECIFICATION   | Q'TY | REMARK |
|-----|-------------------|-------------|-----------------|------|--------|
| 1-1 | UNIT/COVER-FRONT  | BH75-00148A | DF17JS          | 1 EA |        |
| 1-2 | SCREW-CRT/TAPTITE | 6006-001010 | NPP,BH,+,D5,L25 | 4 EA |        |
| 1-3 | UNIT/SHIELD-VIDEO | BH75-00033A | DP17L*          | 1 EA |        |
| 1-4 | SHIELD/VIDEO-CAP  | BH71-00006A | DP17L*          | 1 EA |        |
| 1-5 | SCREW             | 6003-000010 | BH M3XL10       | 2 EA |        |
| 1-6 | EARTH-PLATE       | BH71-00060A | PBS3 TO.3       | 1 EA |        |



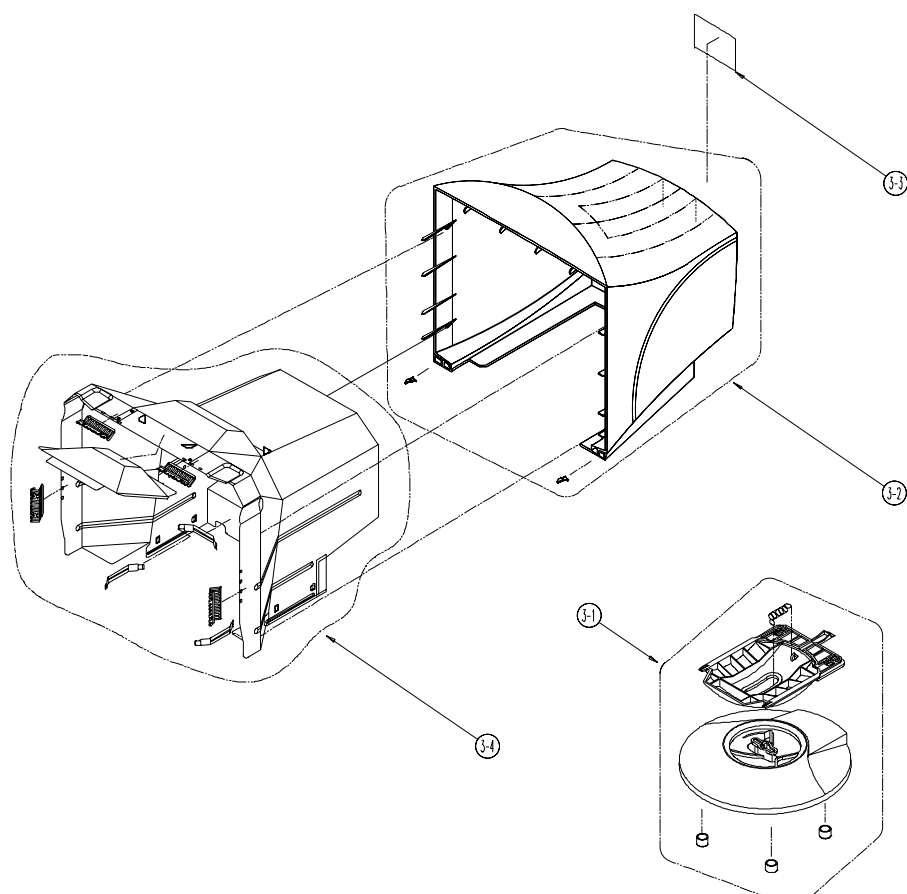
## 6-2 Chassis & Stand Ass'y

| NO  | DESCRIPTION        | CODE-NO     | SPECIFICATION | Q'TY | REMARK |
|-----|--------------------|-------------|---------------|------|--------|
| 2-1 | UNIT/SHIELD-BOTTOM | BH75-00031B | DF17JS/KS     | 1 EA |        |
| 2-2 | GUIDE-POWER        | BH72-00025A | PC ABS 1V16   | 1 EA |        |
| 2-3 | SHAFT-POWER        | BH72-00026A | PC ABS 1V16   | 1 EA |        |
| 2-4 | SCREW              | 6003-000010 | BH M3XL10     | 5 EA |        |
| 2-5 | PCB                |             | DP17LS        | 1 EA |        |



## 6-3 Rear Cover Ass'y

| NO  | DESCRIPTION       | CODE-NO     | SPECIFICATION     | Q'TY | REMARK |
|-----|-------------------|-------------|-------------------|------|--------|
| 3-1 | UNIT/STAND        | BH75-00151A | DF17JS/KS         | 1 EA |        |
| 3-2 | UNIT/COVER-REAR   | BH75-00035A | ABS HB 1V16       | 1 EA |        |
| 3-3 | LABEL RATING      |             | DP17L • PE TO.075 | 1 EA |        |
| 3-4 | UNIT/SHIELD-COVER | BH75-00015A | DP17L •           | 1 EA |        |



## 7 Electrical Parts List

### 7-1 Main PCB Parts

| Loc. No. | Code No.    | Description           | Specification                    | Remarks |
|----------|-------------|-----------------------|----------------------------------|---------|
| BD301    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD401    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD402    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD403    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD555    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD601    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD602    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| BD603    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"    |         |
| C201     | 2401-000025 | C-AL                  | "100uF,20%,16V,GP,TP,6.3x11,5"   |         |
| C202     | 2201-000389 | "C-CERAMIC,DISC"      | "0.022nF,5%,50V,NP0,TP,5x3,5"    |         |
| C203     | 2201-000389 | "C-CERAMIC,DISC"      | "0.022nF,5%,50V,NP0,TP,5x3,5"    |         |
| C204     | 2401-002075 | C-AL                  | "4.7uF,20%,50V,GP,TP,5x11,5"     |         |
| C205     | 2401-000603 | C-AL                  | "1uF,20%,50V,GP,TP,5x11,5"       |         |
| C206     | 2401-000050 | C-AL                  | "10uF,20%,16V,GP,TP,5x11,2.5"    |         |
| C207     | 2401-002075 | C-AL                  | "4.7uF,20%,50V,GP,TP,5x11,5"     |         |
| C209     | 2401-002075 | C-AL                  | "4.7uF,20%,50V,GP,TP,5x11,5"     |         |
| C210     | 2401-002075 | C-AL                  | "4.7uF,20%,50V,GP,TP,5x11,5"     |         |
| C211     | 2201-000146 | "C-CERAMIC,DISC"      | "0.1nF,5%,50V,SL,TP,5x3.5,5"     |         |
| C212     | 2201-000017 | "C-CERAMIC,DISC"      | "1nF,10%,50V,Y5P,TP,5x3.5,5"     |         |
| C213     | 2401-000029 | C-AL                  | "10uF,20%,100V,GP,TP,6.3x11,5"   |         |
| C214     | 2401-000025 | C-AL                  | "100uF,20%,16V,GP,TP,6.3x11,5"   |         |
| C215     | 2201-000146 | "C-CERAMIC,DISC"      | "0.1nF,5%,50V,SL,TP,5x3.5,5"     |         |
| C216     | 2401-000603 | C-AL                  | "1uF,20%,50V,GP,TP,5x11,5"       |         |
| C217     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3" |         |
| C220     | 2401-000025 | C-AL                  | "100uF,20%,16V,GP,TP,6.3x11,5"   |         |
| C225     | 2401-002075 | C-AL                  | "4.7uF,20%,50V,GP,TP,5x11,5"     |         |
| C301     | 2301-000010 | "C-FILM,PEF"          | "100nF,5%,100V,TP,11.5x12.5mm,5" |         |
| C302     | 2305-001041 | "C-FILM,MPEF"         | "220nF,5%,63V,TP,7.5x4.5x13.5,5" |         |
| C305     | 2401-000037 | C-AL                  | "470uF,20%,16V,GP,TP,8x11.5,5"   |         |
| C306     | 2401-000856 | C-AL                  | "220uF,20%,35V,WT,TP,10x20,5"    |         |
| C307     | 2305-000237 | "C-FILM,MPEF"         | "1uF,5%,63V,TP,7.5x15.5mm,5mm"   |         |
| C308     | 2301-000004 | "C-FILM,PEF"          | "2.2nF,5%,100V,TP,5.5X10X2.9,5m" |         |
| C309     | 2202-000252 | "C-CERAMIC,MLC-AXIAL" | "4.7nF,10%,50V,X7R,TP,2.5x4.3,-" |         |
| C310     | 2301-000519 | "C-FILM,PEF"          | "3.3nF,5%,100V,TP,5.8x3x12.5,5m" |         |
| C311     | 2301-001027 | "C-FILM,PEF"          | "15nF,10%,250V,TP,9.5x12x4.5,5m" |         |
| C312     | 2401-001016 | C-AL                  | "3.3UF,20%,50V,BP,TP,5X11,5"     |         |
| C401     | 2301-000312 | "C-FILM,PEF"          | "8.2nF,5%,100V,TP,6x12.5mm,5mm"  |         |
| C402     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5" |         |
| C403     | 2301-000148 | "C-FILM,PEF"          | "10nF,5%,100V,TP,7x3.2x7mm,5mm"  |         |
| C404     | 2301-000004 | "C-FILM,PEF"          | "2.2nF,5%,100V,TP,5.5X10X2.9,5m" |         |
| C405     | 2201-000823 | "C-CERAMIC,DISC"      | "0.27nF,5%,50V,SL,TP,8x3.5,5"    |         |
| C406     | 2301-000013 | "C-FILM,PEF"          | "4.7nF,5%,100V,TP,10.5x12.5x6.5" |         |
| C407     | 2401-000540 | C-AL                  | "150uF,20%,63V,LZ,TP,10x25,5"    |         |

| Loc. No. | Code No.    | Description      | Specification                         | Remarks |
|----------|-------------|------------------|---------------------------------------|---------|
| C408     | 2201-000556 | "C-CERAMIC,DISC" | "0.47nF,10%,500V,Y5P,TP,5.5x3,5"      |         |
| C409     | 2306-000147 | "C-FILM,MPPF"    | "1uF,5%,250V,BK,26x24x15,22.5mm"      |         |
| C410     | 2401-000037 | C-AL             | "470uF,20%,16V,GP,TP,8x11.5,5"        |         |
| C411     | 2301-000174 | "C-FILM,PEF"     | "15nF,5%,100V,TP,7.2x4.0x7.5mm,"      |         |
| C412     | 2301-000519 | "C-FILM,PEF"     | "3.3nF,5%,100V,TP,5.8x3x12.5,5m"      |         |
| C413     | 2401-001012 | C-AL             | "3.3UF,20%,50V,BP,TP,16X25,7.5"       |         |
| C414     | 2401-001334 | C-AL             | "470nF,20%,50V,GP,TP,5x11,2.5"        |         |
| C415     | 2401-001218 | C-AL             | "4.7uF,20%,100V,WT,TP,5x11,5"         |         |
| C416     | 2301-000010 | "C-FILM,PEF"     | "100nF,5%,100V,TP,11.5x12.5mm,5"      |         |
| C417     | 2301-000148 | "C-FILM,PEF"     | "10nF,5%,100V,TP,7x3.2x7mm,5mm"       |         |
| C419     | 2303-000165 | "C-FILM,PPF"     | "2.5nF,5%,1.6kV,TP,21x6.8x12.6mm,7.5" |         |
| C420     | 2301-001305 | "C-FILM,PPF"     | "2.2NF,3%,1.6KV,TP,22X15.5X8.5MM,7.5" |         |
| C421     | 2301-001341 | "C-FILM,PPF"     | "3.3nF,5%,630V,TP,17.4x10x5.4mm,7.5"  |         |
| C423     | 2401-000603 | C-AL             | "1uF,20%,50V,GP,TP,5x11,5"            |         |
| C425     | 2306-000131 | "C-FILM,MPPF"    | "150nF,5%,250V,TP,19x16x7.5,7.5"      |         |
| C426     | 2401-000603 | C-AL             | "1uF,20%,50V,GP,TP,5x11,5"            |         |
| C427     | 2306-000171 | "C-FILM,MPPF"    | "270nF,5%,250V,TP,21.5x12.5mm,7"      |         |
| C429     | 2401-000603 | C-AL             | "1uF,20%,50V,GP,TP,5x11,5"            |         |
| C430     | 2306-000249 | "C-FILM,MPPF"    | "680nF,5%,250V,TP,26x20.5x12,20"      |         |
| C431     | 2306-000179 | "C-FILM,MPPF"    | "300nF,5%,250V,TP,20x18.5x10.5,"      |         |
| C432     | 2305-001033 | "C-FILM,MPEF"    | "15nF,10%,250V,TP,13X9.0X4.5mm,"      |         |
| C433     | 2305-001003 | "C-FILM,MPEF"    | "10nF,5%,250V,TP,13x4.5x9mm,7.5"      |         |
| C434     | 2401-001016 | C-AL             | "3.3UF,20%,50V,BP,TP,5X11,5"          |         |
| C435     | 2201-002079 | "C-CERAMIC,DISC" | "0.15nF,10%,500V,Y5P,TP,6.3x4mm,5"    |         |
| C436     | 2201-000672 | "C-CERAMIC,DISC" | "0.82nF,10%,500V,Y5P,TP,6.5x3,5"      |         |
| C445     | 2201-000019 | "C-CERAMIC,DISC" | "10nF,+80-20%,500V,Y5V,TP,13.5x4mm,5" |         |
| C446     | 2201-000647 | "C-CERAMIC,DISC" | "0.068nF,5%,500V,NP0,TP,8x3.5mm,5"    |         |
| C447     | 2201-000476 | "C-CERAMIC,DISC" | "0.033nF,10%,500V,SL,TP,5.5x3,5"      |         |
| C448     | 2305-000428 | "C-FILM,MPEF"    | "47nF,5%,250V,TP,11x9x4.5,5mm"        |         |
| C450     | 2305-000237 | "C-FILM,MPEF"    | "1uF,5%,63V,TP,7.5x15.5mm,5mm"        |         |
| C501     | 2301-000016 | "C-FILM,PEF"     | "22nF,5%,100V,TP,7.2x4.5x9.0mm,"      |         |
| C502     | 2301-000016 | "C-FILM,PEF"     | "22nF,5%,100V,TP,7.2x4.5x9.0mm,"      |         |
| C503     | 2401-000603 | C-AL             | "1uF,20%,50V,GP,TP,5x11,5"            |         |
| C504     | 2301-000004 | "C-FILM,PEF"     | "2.2nF,5%,100V,TP,5.5X10X2.9,5m"      |         |
| C505     | 2401-000059 | C-AL             | "220nF,20%,50V,GP,-,5x11,5"           |         |
| C506     | 2201-000019 | "C-CERAMIC,DISC" | "10nF,+80-20%,500V,Y5V,TP,13.5x4mm,5" |         |
| C507     | 2201-000291 | "C-CERAMIC,DISC" | "1nF,10%,500V,Y5P,TP,7.5x3.5,5"       |         |
| C508     | 2401-002267 | C-AL             | "2.2uF,20%,250V,GP,TP,8x11.5,5"       |         |
| C509     | 2401-002267 | C-AL             | "2.2uF,20%,250V,GP,TP,8x11.5,5"       |         |
| C510     | 2301-000020 | "C-FILM,PEF"     | "27nF,5%,100V,TP,7.3x4x12.5mm,5"      |         |
| C511     | 2301-000519 | "C-FILM,PEF"     | "3.3nF,5%,100V,TP,5.8x3x12.5,5m"      |         |
| C512     | 2301-000148 | "C-FILM,PEF"     | "10nF,5%,100V,TP,7x3.2x7mm,5mm"       |         |
| C513     | 2201-000291 | "C-CERAMIC,DISC" | "1nF,10%,500V,Y5P,TP,7.5x3.5,5"       |         |
| C514     | 2401-001334 | C-AL             | "470nF,20%,50V,GP,TP,5x11,2.5"        |         |
| C530     | 2201-000291 | "C-CERAMIC,DISC" | "1nF,10%,500V,Y5P,TP,7.5x3.5,5"       |         |
| C551     | 2401-000050 | C-AL             | "10uF,20%,16V,GP,TP,5x11,2.5"         |         |
| C552     | 2201-000132 | "C-CERAMIC,DISC" | "0.1nF,10%,500V,Y5P,TP,6.5x3,5"       |         |

| Loc. No. | Code No.    | Description           | Specification                                                       | Remarks |
|----------|-------------|-----------------------|---------------------------------------------------------------------|---------|
| C557     | 2401-001643 | C-AL                  | "0.68uF,20%,50V,GP,TP,5x11mm,5"                                     |         |
| C601     | 2301-001195 | "C-FILM,MPPF"         | "150nF,10%,275VAC,BK,26x16.5x7,"                                    |         |
| C602     | 2301-001195 | "C-FILM,MPPF"         | "150nF,10%,275VAC,BK,26x16.5x7,"                                    |         |
| C603     | 2201-000024 | "C-CERAMIC,DISC"      | "4.7nF,20%,250VAC,Y5U,TP,16x7,7"                                    |         |
| C604     | 2201-000024 | "C-CERAMIC,DISC"      | "4.7nF,20%,250VAC,Y5U,TP,16x7,7"                                    |         |
| C607     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"                                    |         |
| C608     | 2401-003391 | C-AL                  | "220uF,20%,450V,GP,BK,25x50,10"                                     |         |
| C609     | 2401-000971 | C-AL                  | "22uF,20%,50V,WT,TP,6x11mm,5mm"                                     |         |
| C610     | 2301-000284 | "C-FILM,PEF"          | "47nF,5%,100V,TP,8.5x12.5mm,5mm"                                    |         |
| C611     | 2401-000613 | C-AL                  | "1uF,20%,50V,WT,TP,5x11,5"                                          |         |
| C612     | 2401-000613 | C-AL                  | "1uF,20%,50V,WT,TP,5x11,5"                                          |         |
| C613     | 2201-000129 | "C-CERAMIC,DISC"      | "0.1nF,10%,1kV,Y5P,TP,7x4,5"                                        |         |
| C614     | 2201-000019 | "C-CERAMIC,DISC"      | "10nF,+80-20%,500V,Y5V,TP,13.5x4mm,5"                               |         |
| C615     | 2201-000291 | "C-CERAMIC,DISC"      | "1nF,10%,500V,Y5P,TP,7.5x3.5,5"                                     |         |
| C616     | 2201-000023 | "C-CERAMIC,DISC"      | "2.2nF,20%,125V,Y5U,TP,11x7,5"                                      |         |
| C617     | 2201-000023 | "C-CERAMIC,DISC"      | "2.2nF,20%,125V,Y5U,TP,11x7,5"                                      |         |
| C618     | 2401-000039 | C-AL                  | "1000uF,20%,16V,GP,TP,10x16,5"                                      |         |
| C619     | 2201-000469 | "C-CERAMIC,DISC"      | "0.33nF,10%,500V,Y5P,TP,5.5x3,5"                                    |         |
| C620     | 2401-000540 | C-AL                  | "150uF,20%,63V,LZ,TP,10x25,5"                                       |         |
| C621     | 2401-001585 | C-AL                  | "47uF,20%,50V,WT,TP,8x11.5,5"                                       |         |
| C622     | 2401-000039 | C-AL                  | "1000uF,20%,16V,GP,TP,10x16,5"                                      |         |
| C623     | 2401-000039 | C-AL                  | "1000uF,20%,16V,GP,TP,10x16,5"                                      |         |
| C624     | 2201-000210 | "C-CERAMIC,DISC"      | "0.12NF,10%,1KV,Y5P,TP,6.3X4MM,5"                                   |         |
| C625     | 2305-001041 | "C-FILM,MPEF"         | "220nF,5%,63V,TP,7.5x4.5x13.5,5"                                    |         |
| C626     | 2401-000037 | C-AL                  | "470uF,20%,16V,GP,TP,8x11.5,5"                                      |         |
| C627     | 2401-000142 | C-AL                  | "1000uF,20%,16V,WT,TP,10x20,5"                                      |         |
| C630     | 2401-001561 | C-AL                  | "47uF,20%,35V,WT,TP,8x11.5,5"                                       |         |
| C631     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"                                    |         |
| C635     | 2201-000019 | "C-CERAMIC,DISC"      | "10nF,+80-20%,500V,Y5V,TP,13.5x4mm,5"                               |         |
| CIS      | BH39-00014A | CBF-HARNESS           | "1P,280MM,RED,UL1032,AWG22,YFH800-1,BS201R"                         |         |
| CIS      | BH39-00145A | CBF SIGNAL            | "ATT,1500MM,15P/6P,7P,IVORY(IV01),-,D-SUB/MALE"                     |         |
| CIS      | BH68-00001A | LABEL/MARK-CDT        | "ART-PAPER 100G,-,WHT,BLK,-,ALL,CDT"                                |         |
| CIS      | BH72-00025A | GUIDE-POWER           | "CDA4507,ABS+PC,5V,IV16,-,-"                                        |         |
| CIS      | BH72-00026A | SHAFT-POWER           | "CDA4507,ABS+PC,5V,IV16,-,-"                                        |         |
| CIS      | BH72-00078A | SHEET-LMF             | "DP17L,AL+PC,-,-,0.5,-"                                             |         |
| CIS      | BH73-60304C | RUBBER-SUPPORT        | "DP15LT,CR V0,GRAY,-,14*7*10,-,-"                                   |         |
| CIS      | BH75-00031B | UNIT/FRAME-BOTTOM     | "DF17JS,SECC T1.0,-,-,-"                                            |         |
| CIS      | BH71-00008A | SHIELD-BOTTOM         | "CDA4507,SECC ,T1.0,-,-,-"                                          |         |
| CIS      | BH71-00059A | EARTH-PLATE/FRONT     | "DF17JS,STS 301,T0.15,-,-,-"                                        |         |
| CIS      | BH46-00001P | "MICOM-S/W,DF17KS"    | "DP-FLAT(70KHz),-,-,-"                                              |         |
| CIS      | 0205-001027 | OIL-SILICON           | "G746,-,-"                                                          |         |
| CIS      | 1204-001508 | IC-VERTICAL DEF.      | "KA2142,SIP,10P,-,PLASTIC,35V,15W,-20TO+70C,ST,VERTICAL DEFLECTION" |         |
| CIS      | 6006-001008 | SCREW-ASS'Y MACH      | "WSP,BH,+,M3,L10,ZPC(YEL),SWRCH"                                    |         |
| CIS      | 6021-000118 | NUT-HEXAGON           | "1C,M3,ZPC(YEL),SM20C"                                              |         |
| CIS      | BH62-00003A | HEAT/SINK-V.IC        | "-,T1,-,A1050S,DA/DB"                                               |         |
| CIS      | BH13-00004A | IC-HYBRID             | "-,DP104C,TO-220-5L,5P,POWER SWITCH,-,-,-"                          |         |
| CIS      | BH61-00004A | SPRING-TR             | "CDA,CDB,SUS304,T0.5,-,-,-,-"                                       |         |

| Loc. No. | Code No.    | Description      | Specification                          | Remarks |
|----------|-------------|------------------|----------------------------------------|---------|
| CIS      | BH62-00004A | HEAT/SINK-POWER  | "-,T1,-,A1050S,DA/DB"                  |         |
| CIS      | BH62-20001B | RUBBER           | "CSQ4357,W25*L20*T0.45,-,-,-,-"        |         |
| CIS      | 0205-001027 | OIL-SILICON      | "G746,-,-"                             |         |
| CIS      | 0505-001309 | FET-SILICON      | "IRF630,N,200V,10A,0.40HM,100W,TO-220" |         |
| CIS      | 6006-001008 | SCREW-ASS'Y MACH | "WSP,BH,+,M3,L10,ZPC(YEL),SWRCH"       |         |
| CIS      | 6021-000118 | NUT-HEXAGON      | "1C,M3,ZPC(YEL),SM20C"                 |         |
| CIS      | BH62-30024A | HEAT/SINK-TR     | "SPC,T1,SN,CFX1577L"                   |         |
| CIS      | 0205-001027 | OIL-SILICON      | "G746,-,-"                             |         |
| CIS      | 0402-001255 | DIODE-RECTIFIER  | "DTV56F,1.5KV,10A,TO-220AC,BK"         |         |
| CIS      | 0502-000465 | TR-POWER         | "KTD2058-Y,NPN,25W,TO-220IS,ST,"       |         |
| CIS      | 0502-001170 | TR-POWER         | "2SC5440,NPN,60000mW,TOP-3E,ST,-8"     |         |
| CIS      | BH61-00004A | SPRING-TR        | "CDA,CDB,SUS304,T0.5,-,-,-,-"          |         |
| CIS      | BH61-70003A | SPRING           | "CVT4857,STS304-W1/2H,T0.5,W3.8"       |         |
| CIS      | BH62-00015A | HEAT SINK-FBT    | "A1050S,T1.0,T1.0,-,-"                 |         |
| CIS      | 0205-001027 | OIL-SILICON      | "G746,-,-"                             |         |
| CIS      | 0505-001181 | FET-SILICON      | "IRF634A,N,250V,8.1A,450mohm,74"       |         |
| CIS      | BH61-00004A | SPRING-TR        | "CDA,CDB,SUS304,T0.5,-,-,-,-"          |         |
| CIS      | BH62-00016A | HEAT SINK-TR     | "A1050S,T1.0,-,DP17MO"                 |         |
| CN201    | 3711-003895 | CONNECTOR-HEADER | "BOX,13P,1R,2mm,STRAIGHT,SN"           |         |
| CN202    | 3711-003873 | CONNECTOR-HEADER | "BOX,7P,1R,2mm,STRAIGHT,SN"            |         |
| CN304    | 3711-000197 | CONNECTOR-HEADER | "1WALL,3P,1R,2.5mm,STRAIGHT,SN"        |         |
| CN403    | 3711-003989 | CONNECTOR-HEADER | "NOWALL,4P,1R,8mm,STRAIGHT,SN"         |         |
| CN501    | BH71-40300A | PIN-HINGE        | "-,BRASS,D2.36,SN,HEAT/SINK"           |         |
| CN601    | 3721-001028 | PLUG-AC POWER    | "3P,-,-,NI"                            |         |
| CN603    | 3711-000217 | CONNECTOR-HEADER | "1WALL,3P,1R,3.96mm,STRAIGHT,SN"       |         |
| D301     | 0402-000274 | DIODE-RECTIFIER  | "UF4004,400V,1A,DO-41,TP"              |         |
| D401     | 0402-000274 | DIODE-RECTIFIER  | "UF4004,400V,1A,DO-41,TP"              |         |
| D402     | 0402-000006 | DIODE-RECTIFIER  | "1N4007GP,1000V,1A,DO-41,TP"           |         |
| D403     | 0402-000006 | DIODE-RECTIFIER  | "1N4007GP,1000V,1A,DO-41,TP"           |         |
| D404     | 0402-000006 | DIODE-RECTIFIER  | "1N4007GP,1000V,1A,DO-41,TP"           |         |
| D405     | 0402-000208 | DIODE-RECTIFIER  | "EK-04,40V,1.5A,DO-41"                 |         |
| D406     | 0402-001025 | DIODE-RECTIFIER  | "ERD07-15,1.5KV,1.5A,-,TP"             |         |
| D407     | 0402-001118 | DIODE-RECTIFIER  | "UF1G,400V,1.2A,DO-204AL,TP"           |         |
| D409     | 0402-001295 | DIODE-RECTIFIER  | "GUR460L-5700,600V,4A,DO-201AD,BK"     |         |
| D410     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D411     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D412     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D413     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D420     | 0401-000005 | DIODE-SWITCHING  | "1N4148,100V,200MA,DO-35,TP"           |         |
| D421     | 0401-000005 | DIODE-SWITCHING  | "1N4148,100V,200MA,DO-35,TP"           |         |
| D422     | 0401-000004 | DIODE-SWITCHING  | "1SS244,250V,200mA,DO-34,TP"           |         |
| D431     | 0401-000005 | DIODE-SWITCHING  | "1N4148,100V,200MA,DO-35,TP"           |         |
| D432     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D501     | 0401-000005 | DIODE-SWITCHING  | "1N4148,100V,200MA,DO-35,TP"           |         |
| D502     | 0402-000017 | DIODE-RECTIFIER  | "RGP02-12,1200V,0.5A,DO-204AL,T"       |         |
| D503     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |
| D504     | 0402-000546 | DIODE-RECTIFIER  | "TVR10G,400V,1.0A,DO-41,TP"            |         |

| Loc. No. | Code No.    | Description     | Specification                   | Remarks |
|----------|-------------|-----------------|---------------------------------|---------|
| D505     | 0401-000004 | DIODE-SWITCHING | "1SS244,250V,200mA,DO-34,TP"    |         |
| D506     | 0402-000546 | DIODE-RECTIFIER | "TVR10G,400V,1.0A,DO-41,TP"     |         |
| D507     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D508     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D509     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D510     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D511     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D512     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D513     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D515     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D516     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D601     | 0402-000103 | DIODE-BRIDGE    | "D2SBA60,600V,1.5A,SIP-4,ST"    |         |
| D602     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D604     | 0402-000012 | DIODE-RECTIFIER | "UF4007,1KV,1A,DO-41,TP"        |         |
| D605     | 0402-000012 | DIODE-RECTIFIER | "UF4007,1KV,1A,DO-41,TP"        |         |
| D606     | 0402-000546 | DIODE-RECTIFIER | "TVR10G,400V,1.0A,DO-41,TP"     |         |
| D607     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D608     | 0402-000274 | DIODE-RECTIFIER | "UF4004,400V,1A,DO-41,TP"       |         |
| D609     | 0402-000005 | DIODE-RECTIFIER | "31DF4,400V,3A,DO-201AD,BK"     |         |
| D610     | 0402-000012 | DIODE-RECTIFIER | "UF4007,1KV,1A,DO-41,TP"        |         |
| D611     | 0402-001118 | DIODE-RECTIFIER | "UF1G,400V,1.2A,DO-204AL,TP"    |         |
| D612     | 0402-000274 | DIODE-RECTIFIER | "UF4004,400V,1A,DO-41,TP"       |         |
| D614     | 0402-000546 | DIODE-RECTIFIER | "TVR10G,400V,1.0A,DO-41,TP"     |         |
| D615     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D616     | 0401-000005 | DIODE-SWITCHING | "1N4148,100V,200MA,DO-35,TP"    |         |
| D617     | 0402-001039 | DIODE-RECTIFIER | "SB020,20V,600mA,MPG06,TP"      |         |
| EY301    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY302    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY401    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY501    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY502    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY503    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY504    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY505    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY506    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY507    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY508    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY509    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY601    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY602    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY603    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY604    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY605    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY606    | 6042-000001 | EYELET          | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH" |         |
| EY607    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY608    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |
| EY609    | 6042-000002 | EYELET          | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"   |         |

| Loc. No.   | Code No.    | Description          | Specification                                                                     | Remarks |
|------------|-------------|----------------------|-----------------------------------------------------------------------------------|---------|
| EY610      | 6042-000002 | EYELET               | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"                                                     |         |
| FBT        | 6502-000001 | CABLE CLAMP          | "DAWH-5NB,D15,L35,NTR,NYLON66"                                                    |         |
| FH1        | 3602-000001 | FUSE-CLIP            | "-,30mohm"                                                                        |         |
| FUSE       | 3601-000004 | FUSE-CARTRIDGE       | "250V,3.15A,SLOW-BLOW,CERAMIC,5x20mm"                                             |         |
| GT501      | BH71-40300A | PIN-HINGE            | "-,BRASS,D2.36,SN,HEAT/SINK"                                                      |         |
| GT603      | BH71-40300A | PIN-HINGE            | "-,BRASS,D2.36,SN,HEAT/SINK"                                                      |         |
| GT604      | BH71-40300A | PIN-HINGE            | "-,BRASS,D2.36,SN,HEAT/SINK"                                                      |         |
| HS301      | BH99-00002A | "ASSY,HEAT/SINK"     | "H/S V.IC,SCREW+NUT,KA2142,-,-,OIL SILICON,-,-"                                   |         |
| HS401      | BH99-00006A | "ASSY,HEAT/SINK"     | "H/S,SCREW+NUT,IRF630,-,-,OIL SILICON,-,-"                                        |         |
| HS402      | BH99-00010A | "ASSY,HEAT/SINK"     | "HS TR,SPRING,IRF634A,-,-,OIL SILICON,-,-"                                        |         |
| HS501      | BH99-00009B | ASSY HEAT/SINK       | "HS FBT,SPRING,2SC5440,DTV56F,KTD2058,OIL SILICON,-,-"                            |         |
| HS601      | BH99-00003A | "ASSY,HEAT/SINK"     | "H/S POWER,SPRING,DP104,-,-,RUBBER,-,-"                                           |         |
| IC201      | 0903-001166 | IC-MICROCONTROLLER   | "88P6232,8BIT,DIP,42P,600MIL,12MHZ,ST,CMOS,PLASTIC,5V,-,40TO+85C,464BYTE,32K,8BI" |         |
| IC201 SOCK | 3704-001071 | SOCKET-IC            | "42P,DIP,SN,1.778mm"                                                              |         |
| IC202      | 1103-001149 | IC-EEPROM            | "24C041,4KBIT,DIP,8P,300MIL,10MS,5V,10%,PLASTIC,-25TO+70C,10UA,CMOS,ST"           |         |
| IC401      | 1204-001509 | IC-HOR./VER.PROCESSO | "TDA4859,DIP,32P,400MIL,PLASTIC,16V,-,20TO+70CC,ST,H/V DEF. PROCESSOR"            |         |
| IC602      | 1203-000165 | IC-POS1.ADJUST REG.  | "78R12,TO-220,3P,-,12V,-,0to+"                                                    |         |
| IC603      | 1201-000229 | IC-OP AMP            | "324,DIP,14P,300MIL,QUAD,100V/m"                                                  |         |
| IC604      | 1203-000001 | IC-POS1.FIXED REG.   | "7805,TO-220,3P,-,PLASTIC,4.8/5"                                                  |         |
| IC605      | 1203-000495 | IC-RESET             | "7045,TO-92,3P,-,PLASTIC,4.3/4."                                                  |         |
| JP1        | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP10       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP11       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP13       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP14       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP15       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP16       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP17       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP18       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP19       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP2        | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP20       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP22       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP23       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP24       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP25       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP26       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP27       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP28       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP29       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP3        | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP30       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP31       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP32       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP33       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP34       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |
| JP35       | BH39-40305U | CBF HARNESS          | "52MM,-,-,AWG22(0.6PI),-,-,-"                                                     |         |

| Loc. No. | Code No.    | Description | Specification                    | Remarks |
|----------|-------------|-------------|----------------------------------|---------|
| JP36     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP37     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP38     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP39     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP4      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP40     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP41     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP42     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP43     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP44     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP45     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP46     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP47     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP48     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP49     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP5      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP50     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP51     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP52     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP53     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP54     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP55     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP56     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP57     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP58     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP59     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP6      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP60     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP61     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP62     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP63     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP64     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP65     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP67     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP68     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP7      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP70     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP71     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP72     | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP8      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JP9      | BH39-40305U | CBF HARNESS | “,52MM,-,-,AWG22(0.6PI),-,-,-,”  |         |
| JW1      | BH39-40306C | CBF-HARNESS | “,60MM,BLK,1015,AWG22,-,-,-,-,”  |         |
| JW2      | BH39-40306C | CBF-HARNESS | “,60MM,BLK,1015,AWG22,-,-,-,-,”  |         |
| JW3      | BH39-40305Y | CBF-HARNESS | “,110MM,BLK,1015,AWG22,-,-,-,-,” |         |
| JW4      | BH39-40306C | CBF-HARNESS | “,60MM,BLK,1015,AWG22,-,-,-,-,”  |         |
| L401     | BH27-00005A | COIL-CHOKE  | “,120UH,10%,AR-06*30,BULK,-,-,”  |         |

| Loc. No. | Code No.    | Description      | Specification                           | Remarks |
|----------|-------------|------------------|-----------------------------------------|---------|
| L402     | BH27-00022A | COIL-CHOKE       | "100UH,+/-10%,DR1523(C:9.8),BK,-,-"     |         |
| L403     | BH27-20342U | COIL-CHOKE       | "7.1MH,10%,DR8*11,BULK,-,-"             |         |
| L601     | BH27-00007A | COIL-LINE FILTER | "25MH MIN,-,SQE 2424,BULK,-,-"          |         |
| MP1.1    | BH41-00063A | PCB-MAIN         | "DF17JS,FR-1,1 LAYER,247*247*1.6T,1.6T" |         |
| OP201    | 0601-001147 | LED              | "ROUND,GRN,4.75mm,565nm"                |         |
| Q301     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q302     | 0501-000303 | TR-SMALL SIGNAL  | "KSA733,PNP,250mW,TO-92,TP,120-"        |         |
| Q303     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q401     | 0501-000122 | TR-SMALL SIGNAL  | "2N3904,NPN,625mW,TO-92,TP,100-"        |         |
| Q403     | 0505-001247 | FET-SILICON      | "IRFU210A,N,200V,2.7A,1.5ohm,26"        |         |
| Q405     | 0501-000303 | TR-SMALL SIGNAL  | "KSA733,PNP,250mW,TO-92,TP,120-"        |         |
| Q406     | 0501-000303 | TR-SMALL SIGNAL  | "KSA733,PNP,250mW,TO-92,TP,120-"        |         |
| Q407     | 0501-000140 | TR-SMALL SIGNAL  | "2N5551,NPN,625mW,TO-92,-,80-25"        |         |
| Q409     | 0505-001309 | FET-SILICON      | "IRF630,N,200V,10A,0.4OHM,100W,TO-220"  |         |
| Q410     | 0505-001309 | FET-SILICON      | "IRF630,N,200V,10A,0.4OHM,100W,TO-220"  |         |
| Q412     | 0501-000404 | TR-SMALL SIGNAL  | "KSD1616-Y,NPN,750mW,TO-92,TP,1"        |         |
| Q413     | 0501-000321 | TR-SMALL SIGNAL  | "KSB1116-Y,PNP,0.75W,TO-92,-,13"        |         |
| Q414     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q415     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q416     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q423     | 0501-000303 | TR-SMALL SIGNAL  | "KSA733,PNP,250mW,TO-92,TP,120-"        |         |
| Q501     | 0501-000416 | TR-SMALL SIGNAL  | "KSP92,PNP,625mW,TO-92,TP,25"           |         |
| Q502     | 0501-000143 | TR-SMALL SIGNAL  | "2N6520,PNP,625mW,TO-92,-,30-20"        |         |
| Q503     | 0501-000303 | TR-SMALL SIGNAL  | "KSA733,PNP,250mW,TO-92,TP,120-"        |         |
| Q551     | 0501-000413 | TR-SMALL SIGNAL  | "KSP44,NPN,625mW,TO-92,-,50-200"        |         |
| Q601     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| Q602     | 0501-000122 | TR-SMALL SIGNAL  | "2N3904,NPN,625mW,TO-92,TP,100-"        |         |
| Q604     | 0501-000404 | TR-SMALL SIGNAL  | "KSD1616-Y,NPN,750mW,TO-92,TP,1"        |         |
| Q608     | 0501-000010 | TR-SMALL SIGNAL  | "KSC1008,NPN,800mW,TO-92,TP,120"        |         |
| Q609     | 0501-002228 | TR-SMALL SIGNAL  | "KTA1281,PNP,1000MW,TO-92L,TP,120-240"  |         |
| Q610     | 0501-000586 | TR-SMALL SIGNAL  | "KSC945,NPN,250mW,TO-92,TP,120-"        |         |
| R200     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"         |         |
| R201     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"        |         |
| R202     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"        |         |
| R203     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"       |         |
| R204     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"       |         |
| R206     | 2001-000515 | R-CARBON         | "220OHM,5%,1/8W,AA,TP,1.8X3.2MM"        |         |
| R207     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"         |         |
| R208     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"         |         |
| R209     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"       |         |
| R210     | 2001-000472 | R-CARBON         | "2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM"       |         |
| R211     | 2001-000878 | R-CARBON         | "6.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM"       |         |
| R212     | 2001-000660 | R-CARBON         | "33KOHM,5%,1/8W,AA,TP,1.8X3.2MM"        |         |
| R213     | 2001-000429 | R-CARBON         | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"         |         |
| R214     | 2001-000429 | R-CARBON         | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"         |         |
| R215     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"        |         |

| Loc. No. | Code No.    | Description      | Specification                     | Remarks |
|----------|-------------|------------------|-----------------------------------|---------|
| R216     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R217     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R218     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R220     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R221     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R222     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R223     | 2001-000038 | R-CARBON         | "390OHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| R224     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R225     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R229     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R230     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R231     | 2001-000241 | R-CARBON         | "1.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R232     | 2001-000812 | R-CARBON         | "5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R233     | 2001-000331 | R-CARBON         | "12KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R234     | 2001-000563 | R-CARBON         | "27KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R235     | 2001-000472 | R-CARBON         | "2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R236     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R239     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R301     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R302     | 2004-000580 | R-METAL          | "22Kohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R303     | 2001-000890 | R-CARBON         | "6.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R304     | 2001-000890 | R-CARBON         | "6.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R306     | 2004-001022 | R-METAL          | "5.6Kohm,1%,1/4W,AA,TP,2.4x6.4m"  |         |
| R307     | 2001-001048 | R-CARBON(S)      | "1.2OHM,5%,1/2W,AA,TP,2.4X6.4MM"  |         |
| R308     | 2001-000037 | R-CARBON(S)      | "330OHM,5%,1/2W,AA,TP,2.4X6.4MM"  |         |
| R309     | 2004-004014 | R-METAL          | "2.4ohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R310     | 2004-001136 | R-METAL          | "6.8Kohm,1%,1/4W,AA,TP,2.4x6.4m"  |         |
| R311     | 2001-000890 | R-CARBON         | "6.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R312     | 2001-000812 | R-CARBON         | "5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R315     | 2004-004014 | R-METAL          | "2.4ohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R316     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R317     | 2001-000561 | R-CARBON         | "27KOHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| R318     | 2001-000766 | R-CARBON         | "43KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R319     | 2001-000947 | R-CARBON         | "7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R320     | 2001-000331 | R-CARBON         | "12KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R321     | 2001-000591 | R-CARBON         | "3.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R322     | 2001-000890 | R-CARBON         | "6.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R323     | 2001-000022 | R-CARBON(S)      | "330HM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R324     | 2001-000660 | R-CARBON         | "33KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R325     | 2003-000805 | R-METAL OXIDE(S) | "82ohm,5%,1W,AA,TP,3.3x9mm"       |         |
| R326     | 2003-000805 | R-METAL OXIDE(S) | "82ohm,5%,1W,AA,TP,3.3x9mm"       |         |
| R402     | 2001-000869 | R-CARBON         | "560HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R403     | 2004-001226 | R-METAL          | "750ohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R404     | 2004-000498 | R-METAL          | "2.7Kohm,1%,1/4W,AA,TP,2.4x6.4m"  |         |
| R405     | 2001-000591 | R-CARBON         | "3.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R406     | 2001-000522 | R-CARBON         | "22KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R407     | 2001-000109 | R-CARBON(S)      | "470OHM,5%,1/2W,AA,TP,2.4X6.4MM"  |         |

| Loc. No. | Code No.    | Description      | Specification                     | Remarks |
|----------|-------------|------------------|-----------------------------------|---------|
| R408     | 2001-000429 | R-CARBON         | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R409     | 2001-000812 | R-CARBON         | "5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R410     | 2001-000105 | R-CARBON         | "1.5KOHM,5%,1/4W,AA,TP,2.4X6.4MM" |         |
| R411     | 2001-001096 | R-CARBON(S)      | "2.20HM,5%,1/2W,AA,TP,2.4X6.4MM"  |         |
| R412     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R413     | 2001-001038 | R-CARBON(S)      | "0.560HM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R414     | 2001-001038 | R-CARBON(S)      | "0.560HM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R415     | 2003-000432 | R-METAL OXIDE(S) | "1.5Kohm,5%,3W,AA,TP,6x16mm"      |         |
| R416     | 2001-000107 | R-CARBON(S)      | "150KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R417     | 2001-000331 | R-CARBON         | "12KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R418     | 2001-000221 | R-CARBON         | "1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R419     | 2001-000004 | R-CARBON         | "200KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R420     | 2001-000395 | R-CARBON         | "180KOHM,5%,1/4W,AA,TP,2.4X6.4MM" |         |
| R422     | 2001-001006 | R-CARBON         | "820HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R423     | 2001-000258 | R-CARBON         | "1.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R424     | 2004-000284 | R-METAL          | "12Kohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R425     | 2001-000119 | R-CARBON         | "6800HM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| R426     | 2001-000110 | R-CARBON         | "100HM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| R427     | 2001-000591 | R-CARBON         | "3.3KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R428     | 2003-000505 | R-METAL OXIDE(S) | "150ohm,5%,3W,AA,TP,6x16mm"       |         |
| R429     | 2001-000052 | R-CARBON(S)      | "3.3KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R430     | 2001-001078 | R-CARBON(S)      | "15KOHM,5%,1/2W,AA,TP,2.4X6.4MM"  |         |
| R431     | 2003-000407 | R-METAL OXIDE(S) | "0.6ohm,5%,2W,AA,TP,4x12mm"       |         |
| R432     | 2001-000020 | R-CARBON(S)      | "220HM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R433     | 2003-000769 | R-METAL OXIDE(S) | "680ohm,5%,3W,AA,TP,6x16mm"       |         |
| R434     | 2001-000449 | R-CARBON         | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R435     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R436     | 2001-000449 | R-CARBON         | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R437     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R438     | 2001-000449 | R-CARBON         | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R439     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R440     | 2001-000947 | R-CARBON         | "7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R441     | 2001-000411 | R-CARBON         | "18KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R443     | 2003-000578 | R-METAL OXIDE(S) | "220ohm,5%,2W,AA,TP,4x12mm"       |         |
| R444     | 2001-000739 | R-CARBON         | "4.7MOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R445     | 2001-001079 | R-CARBON(S)      | "150HM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R446     | 2001-000117 | R-CARBON(S)      | "680HM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R447     | 2003-000777 | R-METAL OXIDE(S) | "68ohm,5%,2W,AA,TP,4x12mm"        |         |
| R448     | 2003-000777 | R-METAL OXIDE(S) | "68ohm,5%,2W,AA,TP,4x12mm"        |         |
| R449     | 2001-000211 | R-CARBON         | "10HM,5%,1/4W,AA,TP,2.4X6.4MM"    |         |
| R450     | 2001-000522 | R-CARBON         | "22KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R451     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R452     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R453     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R454     | 2003-000650 | R-METAL OXIDE(S) | "330ohm,5%,2W,AA,TP,4x12mm"       |         |
| R458     | 2003-000650 | R-METAL OXIDE(S) | "330ohm,5%,2W,AA,TP,4x12mm"       |         |
| R459     | 2001-000938 | R-CARBON         | "680HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |

| Loc. No. | Code No.    | Description      | Specification                     | Remarks |
|----------|-------------|------------------|-----------------------------------|---------|
| R460     | 2003-000724 | R-METAL OXIDE(S) | "5.6ohm,5%,3W,AA,TP,6x16mm"       |         |
| R500     | 2001-000435 | R-CARBON         | "1MOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R501     | 2001-000472 | R-CARBON         | "2.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R502     | 2004-000979 | R-METAL          | "47Kohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R503     | 2001-000449 | R-CARBON         | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R504     | 2001-000008 | R-CARBON         | "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R505     | 2001-000008 | R-CARBON         | "15KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R506     | 2004-000643 | R-METAL          | "270Kohm,1%,1/4W,AA,TP,2.4x6.4m"  |         |
| R507     | 2004-000216 | R-METAL          | "10Kohm,1%,1/4W,AA,TP,2.4x6.4mm"  |         |
| R508     | 2002-000121 | R-COMPOSITION    | "1Mohm,10%,1/2W,AA,TP,3.5x9.5mm"  |         |
| R509     | 2002-000121 | R-COMPOSITION    | "1Mohm,10%,1/2W,AA,TP,3.5x9.5mm"  |         |
| R510     | 2001-000837 | R-CARBON         | "51KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R511     | 2001-000478 | R-CARBON         | "2.7OHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| R512     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R513     | 2001-000087 | R-CARBON(S)      | "120KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R514     | 2001-000837 | R-CARBON         | "51KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R515     | 2001-000546 | R-CARBON         | "270KOHM,5%,1/4W,AA,TP,2.4X6.4MM" |         |
| R516     | 2002-001056 | R-COMPOSITION    | "180Kohm,2%,1/4W,AA,TP,2.5x6.5mm" |         |
| R518     | 2001-001031 | R-CARBON         | "91KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R519     | 2001-000356 | R-CARBON         | "150KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R520     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R524     | 2001-000660 | R-CARBON         | "33KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R525     | 2001-000273 | R-CARBON         | "100KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R526     | 2001-000766 | R-CARBON         | "43KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R527     | 2001-000786 | R-CARBON         | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R529     | 2001-000429 | R-CARBON         | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R530     | 2001-000397 | R-CARBON         | "180KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R531     | 2001-000508 | R-CARBON         | "220KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R532     | 2001-000432 | R-CARBON         | "1MOHM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| R551     | 2001-000530 | R-CARBON         | "240KOHM,5%,1/4W,AA,TP,2.4X6.4MM" |         |
| R552     | 2001-000495 | R-CARBON         | "20KOHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| R553     | 2001-000642 | R-CARBON         | "330KOHM,5%,1/2W,AA,TP,3.3X9MM"   |         |
| R554     | 2002-001049 | R-COMPOSITION    | "240Kohm,5%,1/2W,AA,TP,3.9x9mm"   |         |
| R555     | 2001-000042 | R-CARBON         | "1KOHM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| R556     | 2001-000613 | R-CARBON         | "3.9KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R560     | 2002-000121 | R-COMPOSITION    | "1Mohm,10%,1/2W,AA,TP,3.5x9.5mm"  |         |
| R561     | 2001-000432 | R-CARBON         | "1MOHM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| R570     | 2001-000085 | R-CARBON(S)      | "100KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R600     | 2001-001129 | R-CARBON(S)      | "330KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R601     | 2001-001129 | R-CARBON(S)      | "330KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |
| R602     | 2001-000023 | R-CARBON         | "47OHM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| R603     | 2001-000290 | R-CARBON         | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R604     | 2001-000857 | R-CARBON         | "560OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R605     | 2001-000734 | R-CARBON         | "4.7KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| R607     | 2003-000014 | R-METAL OXIDE(S) | "10Kohm,5%,3W,AA,TP,6x16mm"       |         |
| R608     | 2001-000281 | R-CARBON         | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R609     | 2001-000114 | R-CARBON(S)      | "180KOHM,5%,1/2W,AA,TP,2.4X6.4MM" |         |

| Loc. No.  | Code No.    | Description       | Specification                                                    | Remarks |
|-----------|-------------|-------------------|------------------------------------------------------------------|---------|
| R610      | 2001-000114 | R-CARBON(S)       | "180KOHM,5%,1/2W,AA,TP,2.4X6.4MM"                                |         |
| R611      | 2001-001079 | R-CARBON(S)       | "150HM,5%,1/2W,AA,TP,2.4X6.4MM"                                  |         |
| R612      | 2003-000738 | R-METAL OXIDE(S)  | "56Kohm,5%,2W,AA,TP,4x12mm"                                      |         |
| R614      | 2001-001107 | R-CARBON(S)       | "220ohm,5%,1/2W,AA,TP,2.4x6.4mm"                                 |         |
| R615      | 2001-001088 | R-CARBON(S)       | "1KOHM,5%,1/2W,AA,TP,2.4X6.4MM"                                  |         |
| R616      | 2001-001108 | R-CARBON(S)       | "22KOHM,5%,1/2W,AA,TP,2.4X6.4MM"                                 |         |
| R617      | 2001-001037 | R-CARBON(S)       | "0.390HM,5%,1/2W,AA,TP,2.4X6.4MM"                                |         |
| R618      | 2001-000429 | R-CARBON          | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                  |         |
| R619      | 2003-000471 | R-METAL OXIDE(S)  | "10ohm,5%,2W,AA,TP,4x12mm"                                       |         |
| R620      | 2001-000354 | R-CARBON          | "150KOHM,5%,1/4W,AA,TP,2.4X6.4MM"                                |         |
| R621      | 2001-000989 | R-CARBON          | "820KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                |         |
| R625      | 2001-000786 | R-CARBON          | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                 |         |
| R630      | 2001-000786 | R-CARBON          | "47KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                 |         |
| R631      | 2001-000429 | R-CARBON          | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                  |         |
| R632      | 2001-000290 | R-CARBON          | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"                                 |         |
| RL601     | 3501-001111 | RELAY-POWER       | "12Vdc,250mW,5A,1FormA,15mS,5mS"                                 |         |
| S/BTM+PCB | 6003-000010 | SCREW-TAPTITE     | "BWH,+,B,M3,L10,ZPC(YEL),SWRCH1"                                 |         |
| SK501     | 4715-000001 | SURGE ABSORBER    | "1KV,+50-10%,--,"                                                |         |
| SW201     | 3404-000244 | SWITCH-TACT       | "15V,20mA,90-170gf,7.5x7mm,SPST"                                 |         |
| SW202     | 3404-000244 | SWITCH-TACT       | "15V,20mA,90-170gf,7.5x7mm,SPST"                                 |         |
| SW203     | 3404-000244 | SWITCH-TACT       | "15V,20mA,90-170gf,7.5x7mm,SPST"                                 |         |
| SW204     | 3404-000244 | SWITCH-TACT       | "15V,20mA,90-170gf,7.5x7mm,SPST"                                 |         |
| SW401     | 3406-000002 | SWITCH-ROTARY     | "36Vdc,200mA,SP3T,-"                                             |         |
| SW601     | 3403-001050 | SWITCH-PUSH       | "30V,0.3A,SPDT,ON-OFF,PC BORD T"                                 |         |
| T401      | BH26-00027A | TRANS-HOR.DRIVE   | "35.0MH,-,EI 1916,PL-3,-,310UH,-"                                |         |
| T402      | BH26-00028A | TRANS-H.LINEARITY | "5.2UH,6P,DR1425(C:5.0),YL-81,5.2UH/68.0MH,-,HL-1425E"           |         |
| T501      | BH26-00035A | TRANS-FBT         | "1.0MH,13P,FUR3658,HV45,-,-,FM1059,FEA831"                       |         |
| T502      | BH26-00057A | TRANS-FOCUS       | "3.8MH MIN,10P,EI-2218,(SB-5S),SB-5S,3.8MH/225MH MIN,40UH MAX,-" |         |
| T601      | BH26-00059A | TRANS-POWER       | "350UH,18P,EER 3541,PL3,PM2,7.0UH MAX.,0.220HM,-"                |         |
| T602      | BH26-30302S | TRANS-SYNC.       | "3-1(250UH),-,-,SB-5S,UU1116,3-"                                 |         |
| TH601     | 1404-000002 | THERMISTOR-PTC    | "9ohm,20%,--,-,TR,RECT,-"                                        |         |
| TH602     | 1404-001020 | THERMISTOR-NTC    | "8ohm,15%,--,-,17mW/C,BK"                                        |         |
| TP501     | 6042-000002 | EYELET            | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"                                    |         |
| X201      | 2801-000005 | CRYSTAL-UNIT      | "8MHz,50ppm,28-AAM,S,35ohm,TP"                                   |         |
| ZD201     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD202     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD203     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD204     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD205     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD502     | 0403-001068 | DIODE-ZENER       | "UZ4.7BSA,4.7V,4.47-4.65V,500mW"                                 |         |
| ZD601     | 0403-000361 | DIODE-ZENER       | "UZ6.2BSB,6.2V,5.99-6.24V,500mW"                                 |         |
| ZD602     | 0403-001068 | DIODE-ZENER       | "UZ4.7BSA,4.7V,4.47-4.65V,500mW"                                 |         |

## 7-2 Video PCB Parts

| Loc. No. | Code No.    | Description           | Specification                            | Remarks |
|----------|-------------|-----------------------|------------------------------------------|---------|
| BD102    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"            |         |
| BD103    | 3301-000011 | CORE-FERRITE BEAD     | "AA,3.5x1.0x5.7mm,1500,2375G"            |         |
| C102     | 2401-000603 | C-AL                  | "1uF,20%,50V,GP,TP,5x11,5"               |         |
| C103     | 2401-000037 | C-AL                  | "470uF,20%,16V,GP,TP,8x11.5,5"           |         |
| C105     | 2301-000010 | "C-FILM,PEF"          | "100nF,5%,100V,TP,11.5x12.5mm,5"         |         |
| C106     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| C107     | 2401-000010 | C-AL                  | "220uF,20%,16V,GP,-,6.3x11mm,2."         |         |
| C108     | 2401-000049 | C-AL                  | "47uF,20%,100V,WT,TP,10x16,5"            |         |
| C109     | 2201-000177 | "C-CERAMIC,DISC"      | "10nF,10%,50V,Y5P,TP,12x3.5,5"           |         |
| C110     | 2401-000025 | C-AL                  | "100uF,20%,16V,GP,TP,6.3x11,5"           |         |
| C112     | 2401-000603 | C-AL                  | "1uF,20%,50V,GP,TP,5x11,5"               |         |
| C113     | 2301-000287 | "C-FILM,PEF"          | "5.6nF,5%,100V,TP,10.5x12.5x6.5"         |         |
| C116     | 2301-000188 | "C-FILM,PEF"          | "1nF,5%,100V,TP,10.5x12.5x6.5,5"         |         |
| C117     | 2301-000188 | "C-FILM,PEF"          | "1nF,5%,100V,TP,10.5x12.5x6.5,5"         |         |
| C118     | 2201-000471 | "C-CERAMIC,DISC"      | "0.33nF,10%,50V,Y5P,TP,4x3.5,5"          |         |
| C119     | 2201-000291 | "C-CERAMIC,DISC"      | "1nF,10%,500V,Y5P,TP,7.5x3.5,5"          |         |
| C120     | 2201-000285 | "C-CERAMIC,DISC"      | "1nF,10%,1kV,Y5P,TP,8x5,5"               |         |
| C121     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| C123     | 2201-000019 | "C-CERAMIC,DISC"      | "10nF,+80-20%,500V,Y5V,TP,13.5x4mm,5"    |         |
| C124     | 2301-000148 | "C-FILM,PEF"          | "10nF,5%,100V,TP,7x3.2x7mm,5mm"          |         |
| C125     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| C126     | 2201-000117 | "C-CERAMIC,DISC"      | "1.8nF,10%,500V,Y5P,TP,8.5x3,5"          |         |
| C128     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| C151     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| C152     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| C160     | 2401-000031 | C-AL                  | "47uF,20%,16V,GP,TP,5x11,5"              |         |
| CB01     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| CB02     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| CB04     | 2401-000055 | C-AL                  | "1uF,20%,160V,WT,TP,3x11.5mm"            |         |
| CB05     | 2301-000010 | "C-FILM,PEF"          | "100nF,5%,100V,TP,11.5x12.5mm,5"         |         |
| CB06     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| CB07     | 2201-000146 | "C-CERAMIC,DISC"      | "0.1nF,5%,50V,SL,TP,5x3.5,5"             |         |
| CB08     | 2201-000411 | "C-CERAMIC,DISC"      | "0.27nF,10%,50V,Y5P,TP,4x3.5,5"          |         |
| CG01     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| CG02     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"         |         |
| CG04     | 2401-000055 | C-AL                  | "1uF,20%,160V,WT,TP,3x11.5mm"            |         |
| CG05     | 2301-000010 | "C-FILM,PEF"          | "100nF,5%,100V,TP,11.5x12.5mm,5"         |         |
| CG06     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"         |         |
| CG07     | 2201-000146 | "C-CERAMIC,DISC"      | "0.1nF,5%,50V,SL,TP,5x3.5,5"             |         |
| CG08     | 2201-000411 | "C-CERAMIC,DISC"      | "0.27nF,10%,50V,Y5P,TP,4x3.5,5"          |         |
| CIS      | BH75-00047A | UNIT/SHIELD-VIDEO/CAP | "CL17LO,SPTE T0.3,-,-,"                  |         |
| CIS      | BH71-00006B | SHIELD-VIDEO/CAP      | "CL17LO,SPTE,0.2,-,-,"                   |         |
| CIS      | BH71-10311A | EARTH-PLATE           |                                          |         |
| CIS      | BH75-00192H | UNIT/SHIELD-VIDEO     | "DEL,-,SPTE,-,-,14""",15""",17""",-"     |         |
| CIS      | BH61-00002A | SPRING-VIDEO          | "CDB7907,STS H14 ,T1.0,-,-,-,NORMAL CDT" |         |
| CIS      | BH71-00007A | SHIELD-VIDEO          | "CDA4507,SPTE,T0.2,-,-,"                 |         |
| CIS      | BH72-00024A | HOLDER-VIDEO          | "CDA4507,ABS+PC,5V,IV16,-,NORMAL CRT"    |         |

| Loc. No. | Code No.    | Description           | Specification                                                     | Remarks |
|----------|-------------|-----------------------|-------------------------------------------------------------------|---------|
| CIS      | BH73-00014A | HOLDER-RUBBER(NORMAL) | "DEL,SILICON V2,GRAY,-,-,NORMAL"                                  |         |
| CIS      | 0205-001027 | OIL-SILICON           | "G746,-,-"                                                        |         |
| CIS      | 6006-001008 | SCREW-ASS'Y MACH      | "WSP,BH,+,M3,L10,ZPC(YEL),SWRCH"                                  |         |
| CIS      | 6021-000118 | NUT-HEXAGON           | "1C,M3,ZPC(YEL),SM20C"                                            |         |
| CIS      | BH13-00003A | IC-HYBRID             | "-,LM2437,TO-220,9P,CRT DRIVER,0 TO 6.0V,-"                       |         |
| CIS      | BH62-00006A | HEAT SINK-VIDEO       | "-,A1050S T2.0,-,DB"                                              |         |
| CN101    | 3711-004228 | CONNECTOR-HEADER      | "BOX,6P,1R,2MM,ANGLE,SN"                                          |         |
| CN102    | BH39-00015A | CBF-HARNESS           | "13P/14P,200MM,WHT/BLK/RED/BLU,UL1007,AWG26,SMH200-13/YBNH200-14" |         |
| CR01     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"                                  |         |
| CR02     | 2201-000119 | "C-CERAMIC,DISC"      | "100nF,+80-20%,50V,Y5V,TP,8x3,5"                                  |         |
| CR04     | 2401-000055 | C-AL                  | "1uF,20%,160V,WT,TP,3x11,5mm"                                     |         |
| CR05     | 2301-000010 | "C-FILM,PEF"          | "100nF,5%,100V,TP,11.5x12.5mm,5"                                  |         |
| CR06     | 2202-002009 | "C-CERAMIC,MLC-AXIAL" | "100nF,+80-20%,50V,Y5V,TP,2.3X3"                                  |         |
| CR07     | 2201-000146 | "C-CERAMIC,DISC"      | "0.1nF,5%,50V,SL,TP,5x3.5,5"                                      |         |
| CR08     | 2201-000411 | "C-CERAMIC,DISC"      | "0.27nF,10%,50V,Y5P,TP,4x3.5,5"                                   |         |
| D102     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DB01     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DB02     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DB03     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DB04     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DB05     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DG01     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DG02     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DG03     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DG04     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DG05     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DR01     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DR02     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| DR03     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DR04     | 0401-000004 | DIODE-SWITCHING       | "1SS244,250V,200mA,DO-34,TP"                                      |         |
| DR05     | 0401-000005 | DIODE-SWITCHING       | "1N4148,100V,200MA,DO-35,TP"                                      |         |
| EY1      | 6042-000002 | EYELET                | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"                                     |         |
| EY2      | 6042-000001 | EYELET                | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH"                                   |         |
| EY3      | 6042-000001 | EYELET                | "ID2.2,OD2.7,L3.1,SN,BSS3-E/EH"                                   |         |
| EY4      | 6042-000002 | EYELET                | "ID1.5,OD2,L3.1,SN,BSS3-E/EH"                                     |         |
| G2       | BH71-40300A | PIN-HINGE             | "-,BRASS,D2.36,SN,HEAT/SINK"                                      |         |
| GND      | BH71-40300A | PIN-HINGE             | "-,BRASS,D2.36,SN,HEAT/SINK"                                      |         |
| HS103    | BH99-00004B | "ASSY,HEAT/SINK"      | "H/S VIDEO,SCREW+NUT,LM2437,-,-,OIL SILICON,-,-"                  |         |
| IC101    | 1204-001646 | IC-OSD PROCESSOR      | "KB2502,DIP,32P,600MIL,PLASTIC,-,-,-20to75C,ST,-"                 |         |
| JP103    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP109    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP116    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP117    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP119    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP122    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP123    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |
| JP124    | BH39-40305U | CBF HARNESS           | "52MM,-,-,AWG22(0.6PI),-,-,-"                                     |         |

| Loc. No. | Code No.    | Description     | Specification                      | Remarks |
|----------|-------------|-----------------|------------------------------------|---------|
| JP127    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP128    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP133    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP134    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP136    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP137    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP140    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP142    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP146    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP147    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP148    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP150    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP151    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| JP152    | BH39-40305U | CBF HARNESS     | "52MM,-,-,AWG22(0.6PI),-,-,-"      |         |
| L101     | 2701-000112 | INDUCTOR-AXIAL  | "100uH,10%,3x7mm"                  |         |
| L103     | 2701-000164 | INDUCTOR-AXIAL  | "27uH,10%,4.2x9.8mm"               |         |
| LB01     | 2701-000172 | INDUCTOR-AXIAL  | "330nH,10%,3x7mm"                  |         |
| LG01     | 2701-000172 | INDUCTOR-AXIAL  | "330nH,10%,3x7mm"                  |         |
| LJP1     | BH39-40306D | CBF-HARNESS     | "80MM,BLK,1015,AWG22,-,-,-,-"      |         |
| LR01     | 2701-000172 | INDUCTOR-AXIAL  | "330nH,10%,3x7mm"                  |         |
| MP1.2    | BH41-00058A | PCB-VIDEO       | "TP17LT,PHENOL,-,1.6T*247*330MM,-" |         |
| Q102     | 0501-000122 | TR-SMALL SIGNAL | "2N3904,NPN,625mW,TO-92,TP,100-"   |         |
| QB01     | 0501-000140 | TR-SMALL SIGNAL | "2N5551,NPN,625mW,TO-92,-,80-25"   |         |
| QB02     | 0501-000138 | TR-SMALL SIGNAL | "2N5401,PNP,625mW,TO-92,TP,60-2"   |         |
| QG01     | 0501-000140 | TR-SMALL SIGNAL | "2N5551,NPN,625mW,TO-92,-,80-25"   |         |
| QG02     | 0501-000138 | TR-SMALL SIGNAL | "2N5401,PNP,625mW,TO-92,TP,60-2"   |         |
| QR01     | 0501-000140 | TR-SMALL SIGNAL | "2N5551,NPN,625mW,TO-92,-,80-25"   |         |
| QR02     | 0501-000138 | TR-SMALL SIGNAL | "2N5401,PNP,625mW,TO-92,TP,60-2"   |         |
| R101     | 2001-000522 | R-CARBON        | "22KOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R102     | 2001-000281 | R-CARBON        | "100OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R103     | 2001-001138 | R-CARBON(S)     | "390OHM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R104     | 2001-001138 | R-CARBON(S)     | "390OHM,5%,1/2W,AA,TP,2.4X6.4MM"   |         |
| R107     | 2001-000429 | R-CARBON        | "1KOHM,5%,1/8W,AA,TP,1.8X3.2MM"    |         |
| R108     | 2001-000812 | R-CARBON        | "5.6KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| R109     | 2001-000563 | R-CARBON        | "27KOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R114     | 2001-000780 | R-CARBON        | "470OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R115     | 2001-000577 | R-CARBON        | "2KOHM,5%,1/8W,AA,TP,1.8X3.2MM"    |         |
| R116     | 2001-000290 | R-CARBON        | "10KOHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R117     | 2001-000515 | R-CARBON        | "220OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R118     | 2001-000857 | R-CARBON        | "560OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R119     | 2001-000857 | R-CARBON        | "560OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| R120     | 2002-001022 | R-COMPOSITION   | "30MOHM,5%,1/4W,AA,TP,2.5X6.5MM"   |         |
| R123     | 2001-000432 | R-CARBON        | "1MOHM,5%,1/4W,AA,TP,2.4X6.4MM"    |         |
| R124     | 2001-000034 | R-CARBON        | "220OHM,5%,1/4W,AA,TP,2.4X6.4MM"   |         |
| RB01     | 2001-000969 | R-CARBON        | "75OHM,5%,1/8W,AA,TP,1.8X3.2MM"    |         |
| RB02     | 2001-000969 | R-CARBON        | "75OHM,5%,1/8W,AA,TP,1.8X3.2MM"    |         |
| RB03     | 2001-000780 | R-CARBON        | "470OHM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |

| Loc. No.  | Code No.    | Description    | Specification                     | Remarks |
|-----------|-------------|----------------|-----------------------------------|---------|
| RB04      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RB08      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RB09      | 2001-000962 | R-CARBON       | "75KOHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| RB10      | 2001-000705 | R-CARBON       | "390HM,5%,1/2W,AA,TP,3.3X9MM"     |         |
| RB11      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RB12      | 2001-000449 | R-CARBON       | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RB13      | 2001-001000 | R-CARBON       | "82KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RB14      | 2001-000780 | R-CARBON       | "4700HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RB15      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RB20      | 2001-000947 | R-CARBON       | "7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RG01      | 2001-000969 | R-CARBON       | "750HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RG02      | 2001-000969 | R-CARBON       | "750HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RG03      | 2001-000780 | R-CARBON       | "4700HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RG04      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RG08      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RG09      | 2001-000962 | R-CARBON       | "75KOHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| RG10      | 2001-000705 | R-CARBON       | "390HM,5%,1/2W,AA,TP,3.3X9MM"     |         |
| RG11      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RG12      | 2001-000449 | R-CARBON       | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RG13      | 2001-001000 | R-CARBON       | "82KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RG14      | 2001-000221 | R-CARBON       | "1.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RG15      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RG20      | 2001-000947 | R-CARBON       | "7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RR01      | 2001-000969 | R-CARBON       | "750HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RR02      | 2001-000969 | R-CARBON       | "750HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RR03      | 2001-000780 | R-CARBON       | "4700HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RR04      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RR08      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RR09      | 2001-000962 | R-CARBON       | "75KOHM,5%,1/4W,AA,TP,2.4X6.4MM"  |         |
| RR10      | 2001-000705 | R-CARBON       | "390HM,5%,1/2W,AA,TP,3.3X9MM"     |         |
| RR11      | 2001-000281 | R-CARBON       | "1000HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RR12      | 2001-000449 | R-CARBON       | "2.2KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| RR13      | 2001-001000 | R-CARBON       | "82KOHM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RR14      | 2001-000780 | R-CARBON       | "4700HM,5%,1/8W,AA,TP,1.8X3.2MM"  |         |
| RR15      | 2001-000793 | R-CARBON       | "470HM,5%,1/8W,AA,TP,1.8X3.2MM"   |         |
| RR20      | 2001-000947 | R-CARBON       | "7.5KOHM,5%,1/8W,AA,TP,1.8X3.2MM" |         |
| S/VID     | 6502-000001 | CABLE CLAMP    | "DAWH-5NB,D15,L35,NTR,NYLON66"    |         |
| S/VID+H/S | 6003-000010 | SCREW-TAPTITE  | "BWH,+B,M3,L10,ZPC(YEL),SWRCH1"   |         |
| SK01      | 3704-001116 | SOCKET-CRT     | "11P,22.5PI,26.5PI,NI,-"          |         |
| SK101     | 1405-001064 | SURGE ABSORBER | "400V,20%,-,-,AXIAL"              |         |
| SK102     | 4715-000001 | SURGE ABSORBER | "1KV,+50-10%,-,-,"                |         |
| SKB01     | 4715-000102 | SURGE ABSORBER | "200V,20%,1000A,-,RADIAL"         |         |
| SKG01     | 4715-000102 | SURGE ABSORBER | "200V,20%,1000A,-,RADIAL"         |         |
| SKR01     | 4715-000102 | SURGE ABSORBER | "200V,20%,1000A,-,RADIAL"         |         |

### 7-3 Different Parts List (CDT)

| Maker        | SDD 0.28                |             |                          |             | TSB                     |             | Philips                  |             | Remarks |
|--------------|-------------------------|-------------|--------------------------|-------------|-------------------------|-------------|--------------------------|-------------|---------|
| Descriptions | Mini-Neck               |             | Normal (29Ø)             |             | Mini-Neck               |             | Normal (29Ø)             |             |         |
| R516         | MF 1/4W 160K            | 2004-000368 | MF 1/4W 150K             | 2004-000327 | MF 1/4W 150K            | 2004-000327 | MF 1/4W 150K             | 2004-000327 |         |
| R527         | CF 1/8W 27K             | 2001-000563 | CF 1/8W 47K              | 2001-000786 | CF 1/8W 27K             | 2001-000563 | CF 1/8W 47K              | 2001-000786 |         |
| R520         | CF 1/8W 2.7K            | 2001-000472 | CF 1/8W 1.5K             | 2001-000241 | CF 1/8W 2.7K            | 2001-000472 | CF 1/8W 1.5K             | 2001-000241 |         |
| R428         | M.O 3W 270              | 2003-000608 | M.O 3W 390               | 2003-000672 | M.O 3W 270              | 2003-000608 | M.O 3W 430               | 2003-000695 |         |
| R423         | CF 1/8W 2.7K            | 2001-000472 | CF 1/8W 1.8K             | 2001-000258 | CF 1/8W 2.7K            | 2001-000472 | CF 1/8W 1.8K             | 2001-000258 |         |
| R418         | CF 1/8W 2.2K            | 2001-000449 | CF 1/8W 1.2K             | 2001-000221 | CF 1/8W 2.2K            | 2001-000449 | CF 1/8W 1.2K             | 2001-000221 |         |
| R419         | CF 1/8W 180K            | 2001-000397 | CF 1/8W 200K             | 2001-000004 | CF 1/8W 180K            | 2001-000397 | CF 1/8W 200K             | 2001-000004 |         |
| R431         | VW 3W 0.82              | 2005-001071 | M.O 3W 0.6               | 2005-000407 | VW 3W 0.82              | 2005-001071 | VW 3W 0.82               | 2005-001071 |         |
| R425         | CF 1/4W 1K              | 2001-000042 | CF 1/4W 1.2K             | 2001-000044 | CF 1/4W 1K              | 2001-000042 | CF 1/4W 1.2K             | 2001-000044 |         |
| R424         | MF 1/4W 12K             | 2004-000284 | MF 1/4W 12K              | 2004-000284 | MF 1/4W 12K             | 2004-000284 | MF 1/4W 9.1K             | 2004-001329 |         |
| R315, R309   | MF 1/4W 3.3             | 2004-001814 | MF 1/4W 2.4              | 2004-004014 | MF 1/4W 3.3             | 2004-001814 | MF 1/4W 2.4              | 2004-004014 |         |
| R211         | CF 1/8W 680             | 2001-000613 | CF 1/8W 560              | 2001-000857 | CF 1/8W 680             | 2001-000613 | CF 1/8W 560              | 2001-000857 |         |
| C415         | ELE-CAP 160V 1 $\mu$ F  | 2401-000043 | ELE-CAP 100V 4.7 $\mu$ F | 2401-001218 | ELE-CAP 160V 1 $\mu$ F  | 2401-000043 | ELE-CAP 100V 4.7 $\mu$ F | 2401-001218 |         |
| C620, C407   | ELE-CAP 63V 150 $\mu$ F | 2401-000540 | ELE-CAP 100V 120 $\mu$ F | —           | ELE-CAP 63V 150 $\mu$ F | 2401-000540 | ELE-CAP 100V 120 $\mu$ F | —           |         |
| Q402         | IRF640                  | 0505-001309 | IRF634                   | 0505-001181 | IRF640                  | 0505-001309 | IRF634                   | 0505-001181 |         |
| T401         | HDT                     | BH26-00027A | HDT(N)                   | —           | HDT                     | BH26-00027A | HDT(N)                   | —           |         |
| T501         | TRANS FBT(SEMCO)        | BH26-00025A | TRANS FBT(SEMCO)         | BH26-00037A | TRANS FBT(SEMCO)        | BH26-00025A | TRANS FBT(SEMCO)         | BH26-00037A |         |
| T601         | TRANS POWER (45V)       | BH26-00021A | TRANS POWER (52V)        | BH26-00046A | TRANS POWER (45V)       | BH26-00021A | TRANS POWER (52V)        | BH26-00046A |         |
| SK01         | SDD MINI SOCKET         | 3704-001081 | NORMAL SOCKET            | 3704-001014 | TSB MINI SOCKET         | 3704-001042 | NORMAL SOCKET            | 3704-001014 |         |

## 7-4 Comparison Material List

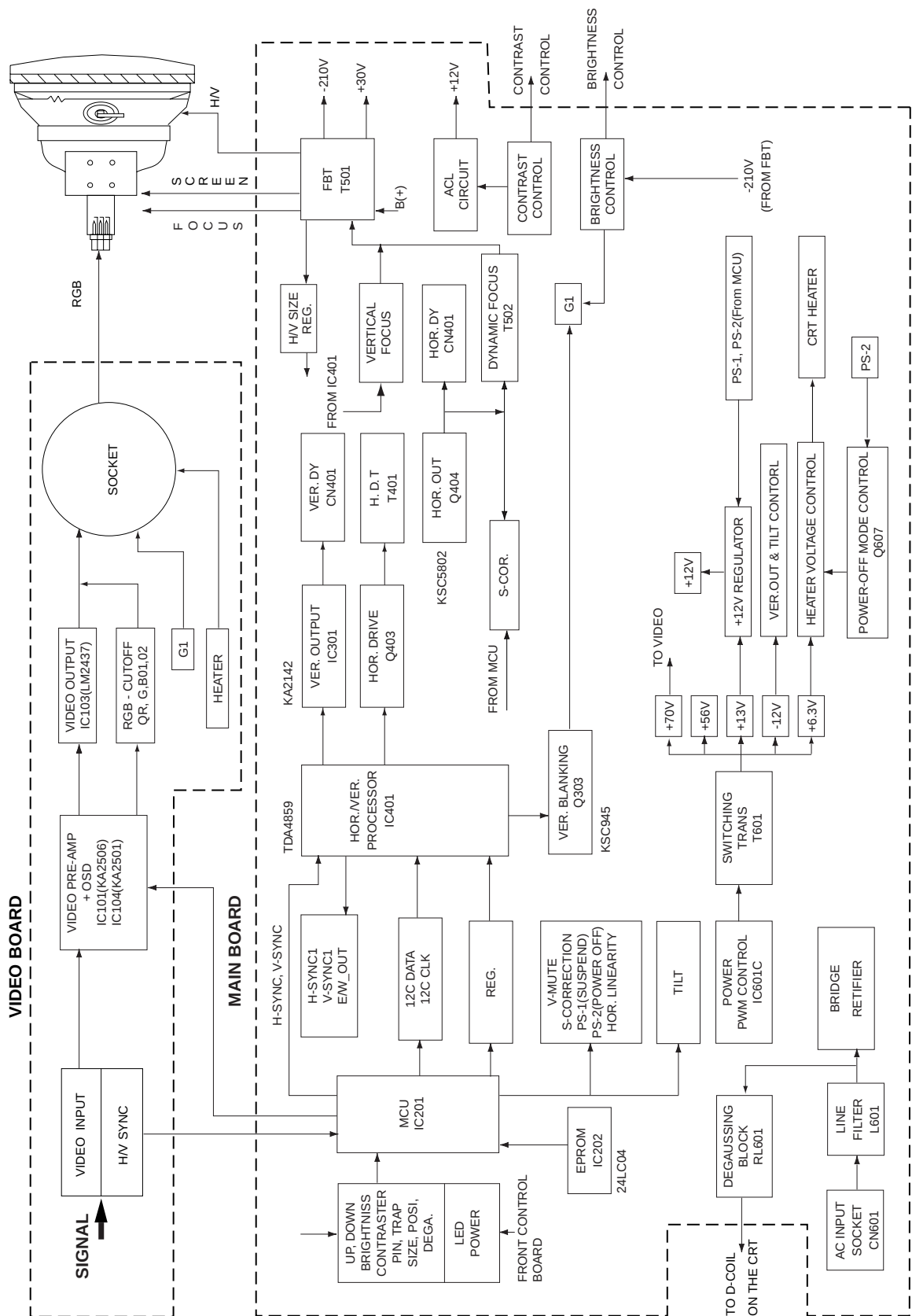
### 7-4-1 Main PCB

| DF17JS (SM755DF) 85K |             |             |                     | DF17KS (SM755DF) 70K |               | Remark                            |
|----------------------|-------------|-------------|---------------------|----------------------|---------------|-----------------------------------|
| NO                   | Loc. No.    | Code No.    | Description         | Code No.             | Description   |                                   |
| 1                    | C443        | 2303-000122 | C-PP 630V 10nf      | -                    | -             | -85K(Model Sel)<br>70K(Model Sel) |
| 2                    | C444        | 2303-000122 | C-PP 630V 10nf      | -                    | -             |                                   |
| 3                    | C442        | 2301-001249 | C-MP 400V 68nf      | -                    | -             |                                   |
| 4                    | C431        | 2306-000164 | C-MP 250V 220nf     | 2306-000179          | C-MP 250V 304 |                                   |
| 5                    | C441        | 2401-000603 | C-AL 50V 1uf        | -                    | -             |                                   |
| 6                    | Q421        | 0505-001309 | IRF630              | -                    | -             |                                   |
| 7                    | HS403(Q422) | BH99-00005G | H/SINK ASS'Y IRF740 | -                    | -             |                                   |
| 8                    | Q420        | 0501-000586 | KSC945              | -                    | -             |                                   |
| 9                    | R457        | 2001-000786 | 47K 1/8W            | -                    | -             |                                   |
| 10                   | R455        | 2001-000290 | 10K 1/8W            | -                    | -             |                                   |
| 11                   | R456        | 2001-000290 | 10K 1/8W            | -                    | -             |                                   |
| 12                   | D430        | 0402-000006 | DIODE 1N4007        | -                    | -             |                                   |
| 13                   | JP66        | BH39-40305U | JUMPER              | -                    | -             |                                   |
| 14                   | JP72        | -           | -                   | BH39-40305U          | JUMPER        |                                   |
| 15                   | -           | BH39-40305U | JUMPER              | -                    | -             |                                   |
| 16                   | -           | -           | -                   | BH39-40305U          | JUMPER        |                                   |
| 17                   | R219        | 2001-000290 | 10K 1/8W            | -                    | -             |                                   |
| 18                   | JP71        | -           | -                   | BH39-40305U          | JUMPER        |                                   |

### 7-4-2 Video PCB

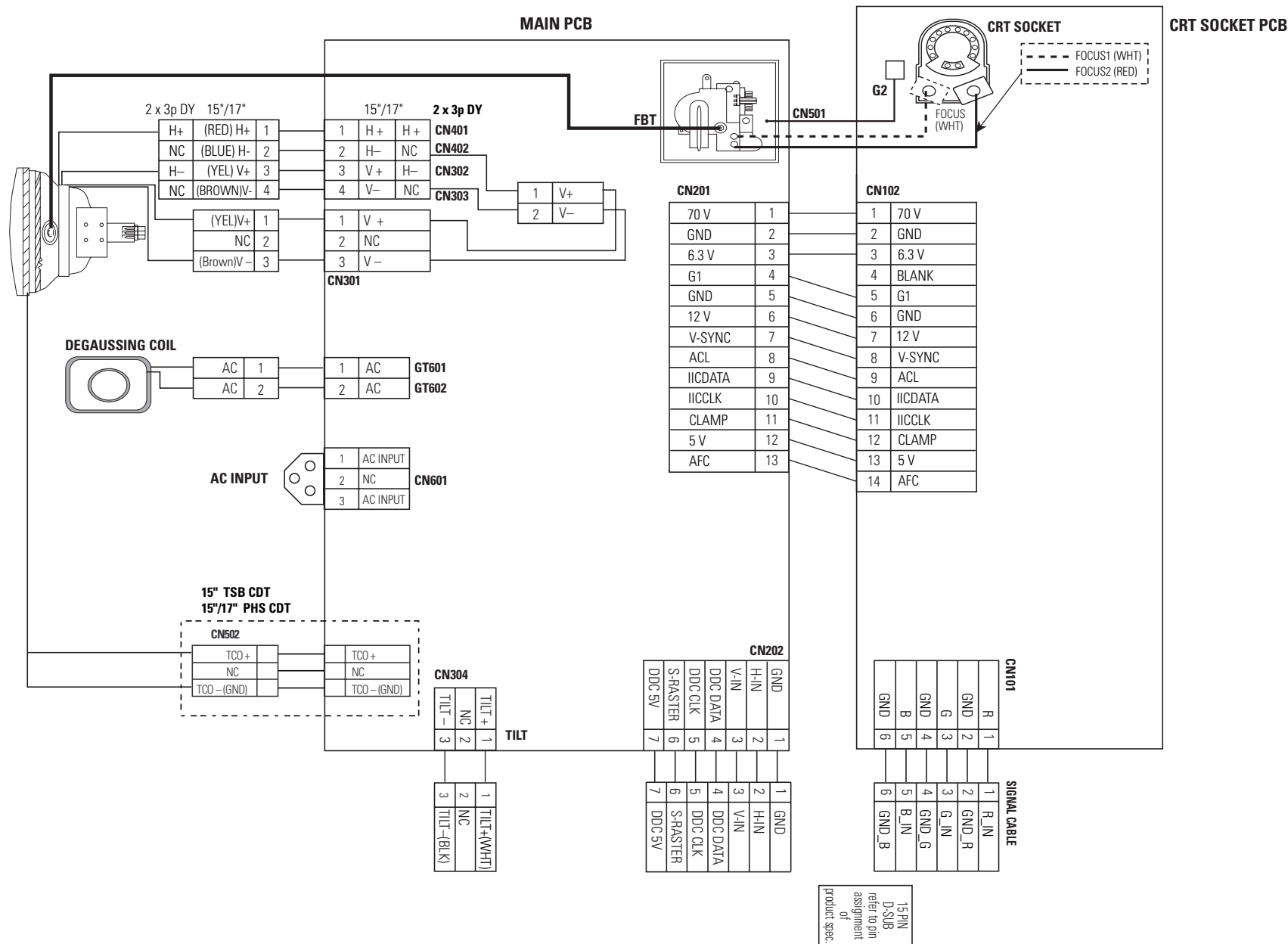
| DF17JS (SM755DF) 85K |                |             |                        | DF17KS (SM755DF) 70K |                        | Remark |
|----------------------|----------------|-------------|------------------------|----------------------|------------------------|--------|
| NO                   | Loc. No.       | Code No.    | Description            | Code No.             | Description            |        |
| 1                    | HS103          | BH99-00004C | ASS'Y HEAT SINK LM2435 | BH99-00004B          | ASS'Y HEAT SINK LM2437 |        |
| 2                    | LR01/LG01/LB01 | 2701-001063 | INDUCTOR AXIAL 0.15UH  | 2701-000172          | INDUCTOR AXIAL 330nH   |        |
| 3                    | RR08/RG08/RB08 | 2001-000019 | 10 ohm 5% 1/2W(S)      | 2001-000793          | 47 ohm 5% 1/8W         |        |
| 4                    | RR13/RG13/RB13 | 2001-000273 | 100K ohm 5% 1/8W       | 2001-001000          | 82K ohm 5% 1/8W AA, TP |        |
| 5                    | RR14/RB14      | 2001-000025 | 75 ohm 5% 1/4W         | 2001-000780          | 470 ohm 5% 1/8W A, TP  |        |

## 8 Block Diagrams



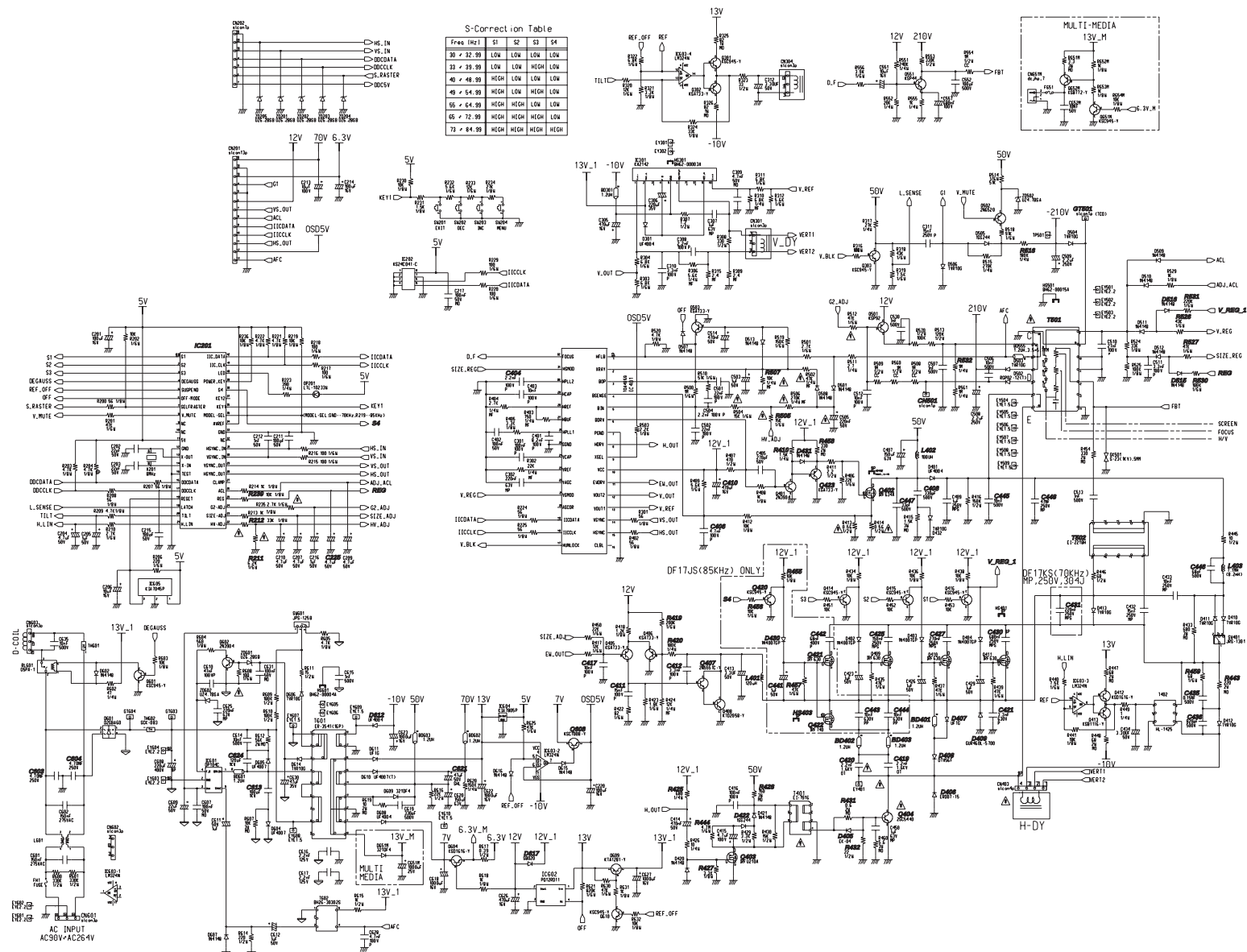
## **Memo**

9 Wiring Diagram

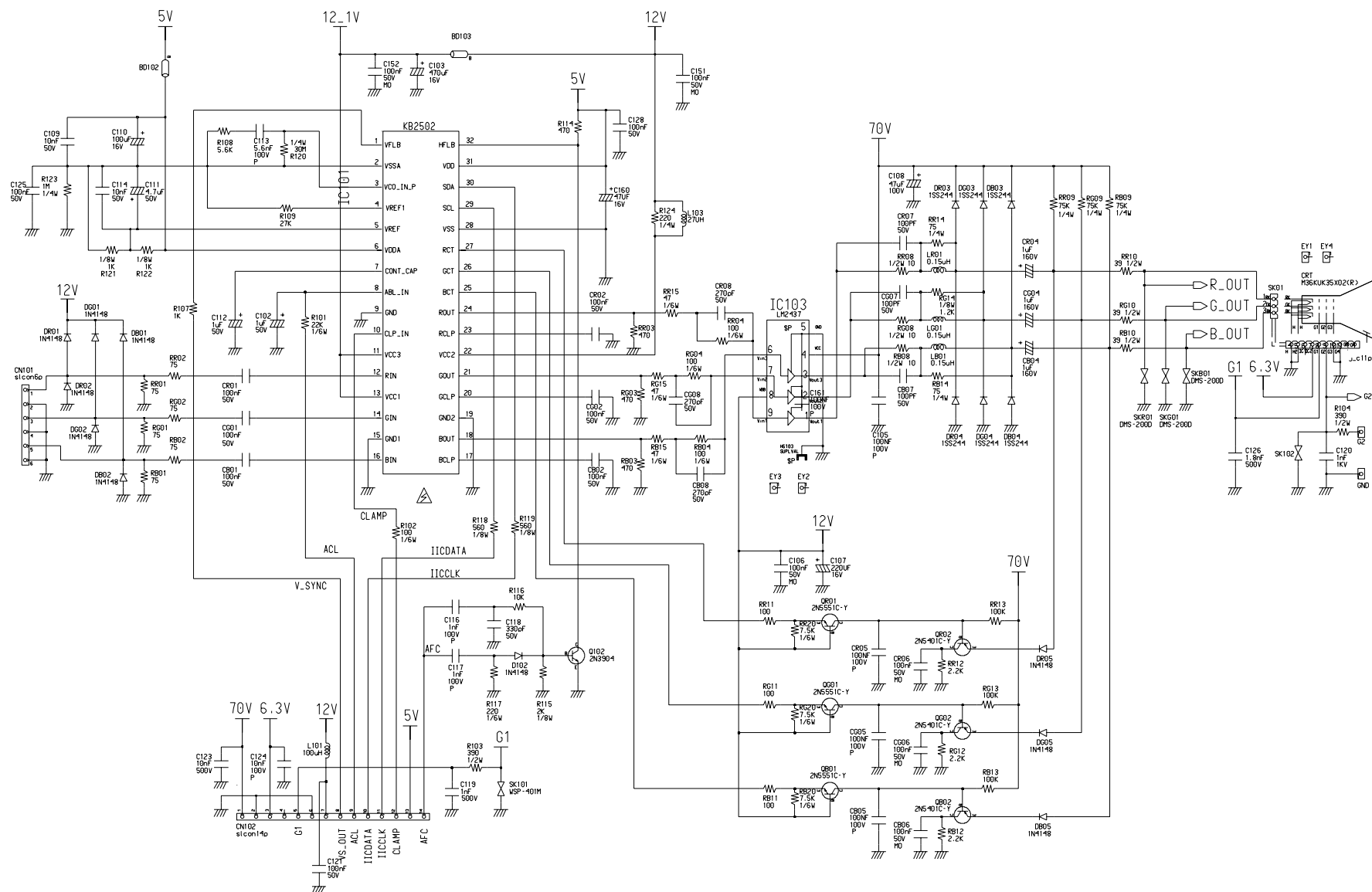


# 10 Schematic Diagrams

## 10-1 Main Part Schematic Diagram



## 10-2 Video Part Schematic Diagram



**Memo**