

# **TOSHIBA**

## **SERVICE MANUAL**

### **COLOUR TELEVISION**

### ***29VH14P***

# 1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

## 1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. 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 (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power 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: antennas, handle brackets, 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.

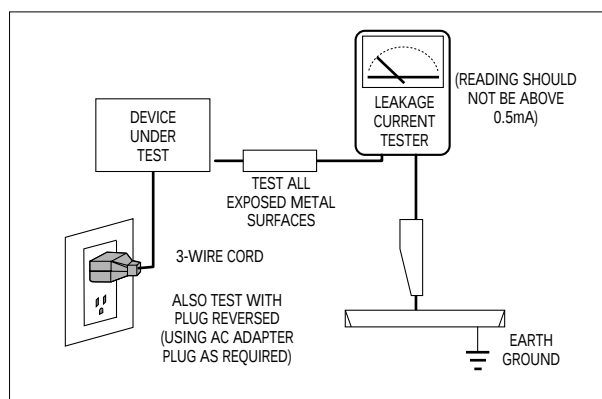


Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:  
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits:  
The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits:  
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced.  
(X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

## 1-1 Safety Precautions (Continued)

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9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
10. Design Alteration Warning:  
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
11. Hot Chassis Warning:  
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.  
  
To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
16. Picture Tube Implosion Warning:  
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
18. Product Safety Notice:  
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.  
  
Components that are critical for safety are indicated in the circuit diagram by shading, (  ) or (  ). Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

## 1-2 Servicing Precautions

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Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
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 an electrical plug or connector, (c) Connect a test component 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 portion 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 (500V) 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 Precautions for Electrostatically Sensitive Devices (ESDs)

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1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. 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. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. 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.
8. 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.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 2. Reference Information

### 2-1 Tables of Abbreviations and Acronyms

**Table 2-1 Abbreviations**

|      |                                        |     |                        |
|------|----------------------------------------|-----|------------------------|
| A    | Ampere                                 | MV  | Megavolt               |
| Ah   | Ampere-hour                            | MW  | Megawatt               |
| Å    | Angstrom                               | MΩ  | Megohm                 |
| dB   | Decibel                                | m   | Meter                  |
| dBm  | Decibel Referenced to One<br>Milliwatt | μA  | Microampere            |
| °C   | Degree Celsius                         | μF  | Microfarad             |
| °F   | Degree Fahrenheit                      | μH  | Microhenry             |
| °K   | degree Kelvin                          | μm  | Micrometer             |
| F    | Farad                                  | μs  | Microsecond            |
| G    | Gauss                                  | μW  | Microwatt              |
| GHz  | Gigahertz                              | mA  | Milliampere            |
| g    | Gram                                   | mg  | Milligram              |
| H    | Henry                                  | mH  | Millihenry             |
| Hz   | Hertz                                  | ml  | Milliliter             |
| h    | Hour                                   | mm  | Millimeter             |
| ips  | Inches Per Second                      | ms  | Millisecond            |
| kWh  | Kilowatt-hour                          | mV  | Millivolt              |
| kg   | Kilogram                               | nF  | Nanofarad              |
| kHz  | Kilohertz                              | Ω   | Ohm                    |
| kΩ   | Kilohm                                 | pF  | Picofarad              |
| km   | Kilometer                              | lb  | Pound                  |
| km/h | Kilometer Per Hour                     | rpm | Revolutions Per Minute |
| kV   | Kilovolt                               | rps | Revolutions Per Second |
| kVA  | Kilovolt-ampere                        | s   | Second (Time)          |
| kW   | Kilowatt                               | V   | Volt                   |
| l    | Liter                                  | VA  | Volt-ampere            |
| MHz  | Megahertz                              | W   | Watt                   |
|      |                                        | Wh  | Watt-hour              |

**Table 2-2 Table of Acronyms**

|       |                                         |        |                                           |
|-------|-----------------------------------------|--------|-------------------------------------------|
| ABL   | Automatic Brightness Limiter            | I/O    | Input/output                              |
| AC    | Alternating Current                     | L      | Left                                      |
| ACC   | Automatic Chroma Control                | L      | Low                                       |
| AF    | Audio Frequency                         | LED    | Light Emitting Diode                      |
| AFC   | Automatic Frequency Control             | LF     | Low Frequency                             |
| AFT   | Automatic Fine Tuning                   | MOSFET | Metal-Oxide-Semiconductor-Field-Effect-Tr |
| AGC   | Automatic Gain Control                  | MTS    | Multi-channel Television Sound            |
| AM    | Amplitude Modulation                    | NAB    | National Association of Broadcasters      |
| ANSI  | American National Standards Institute   | NEC    | National Electric Code                    |
| APC   | Automatic Phase Control                 | NTSC   | National Television Systems Committee     |
| APC   | Automatic Picture Control               | OSD    | On Screen Display                         |
| A/V   | Audio-Video                             | PCB    | Printed Circuit Board                     |
| AVC   | Automatic Volume Control                | PLL    | Phase-Locked Loop                         |
| BAL   | Balance                                 | PWM    | Pulse Width Modulation                    |
| BPF   | Bandpass Filter                         | QIF    | Quadrature Intermediate Frequency         |
| B-Y   | Blue-Y                                  | R      | Right                                     |
| CATV  | Community Antenna Television (Cable TV) | RC     | Resistor & Capacitor                      |
| CB    | Citizens Band                           | RF     | Radio Frequency                           |
| CCD   | Charge Coupled Device                   | R-Y    | Red-Y                                     |
| CCTV  | Closed Circuit Television               | SAP    | Second Audio Program                      |
| Ch    | Channel                                 | SAW    | Surface Acoustic Wave(Filter)             |
| CRT   | Cathode Ray Tube                        | SIF    | Sound Intermediate Frequency              |
| CW    | Continuous Wave                         | SMPS   | Switching Mode Power Supply               |
| DC    | Direct Current                          | S/N    | Signal/Noise                              |
| DVM   | Digital Volt Meter                      | SW     | Switch                                    |
| EIA   | Electronics Industries Association      | TP     | Test Point                                |
| ESD   | Electrostatic Discharge                 | TTL    | Transistor Transistor Logic               |
| ESD   | Electrostatically Sensitive Device      | TV     | Television                                |
| FBP   | Feedback Pulse                          | UHF    | Ultra High Frequency                      |
| FBT   | Flyback Transformer                     | UL     | Underwriters Laboratories                 |
| FF    | Flip-Flop                               | UV     | Ultraviolet                               |
| FM    | Frequency Modulation                    | VCD    | Variable-Capacitance Diode                |
| FS    | Fail Safe                               | VCO    | Voltage Controlled Oscillator             |
| GND   | Ground                                  | VCXO   | Voltage Controlled Crystal Oscillator     |
| G-Y   | Green-Y                                 | VHF    | Very High Frequency                       |
| H     | High                                    | VIF    | Video Intermediate Frequency              |
| HF    | High-Frequency                          | VR     | Variable Resistor                         |
| HI-FI | High Fidelity                           | VTR    | Video Tape Recorder                       |
| IC    | Inductance-Capacitance                  | VTVM   | Vacuum Tube Voltmeter                     |
| IC    | Integrated Circuit                      | TR     | Transistor                                |
| IF    | Intermediate Frequency                  |        |                                           |

## 2-2 IC Line Up

| Table 2 - 3 IC Line - Up |       |         |           |                                  |                      |
|--------------------------|-------|---------|-----------|----------------------------------|----------------------|
| NO                       | BOARD | LOC. NO | SPEC      | DESCRIPTION                      | REMARK               |
| 1                        | MAIN  | IC201S  | VDP3140   | Video Processor                  | Refer to Table 2-3-1 |
|                          |       |         | DDP3310   | Sipadoss-Module, Video Processor |                      |
|                          |       |         | VPC3230   |                                  |                      |
|                          |       |         | SDA9401   |                                  |                      |
|                          |       | IC601   | MSP3411G  | Multistandard Sound Processor    | Refer to Table 2-3-2 |
|                          |       | IC901   | SDA555X   | MICOM, TTX(MTP)                  |                      |
|                          |       | IC902   | KSL51DC   | EEPROM                           |                      |
|                          |       | IC602   | TDA7297   | Audio AMP                        | Refer to Table 2-3-3 |
|                          |       | HIC201  | DRGB001   | RGB Drive AMP Hybrid IC          | VM Option            |
|                          |       | HIC202  |           |                                  |                      |
|                          |       | HIC203  |           |                                  |                      |
|                          |       | HIC204  |           |                                  |                      |
|                          |       | HIC401  | DDR1001   | 100Hz Horizontal Pulse AMP       | Option               |
|                          |       | IC301   | LA7845    | Vertical IC                      |                      |
|                          |       | Q402    | BUZ73A    | Horizontal Drive IC              | HC401                |
|                          |       | Q401    | 2SC5446   |                                  |                      |
|                          |       | D414    | FMP-3FU   |                                  |                      |
|                          |       | IC401   | LM393     | E/W Drive IC                     |                      |
|                          |       | Q404    | IRF620    |                                  |                      |
|                          |       | IC801S  | 3S1265RD  | SPS Controllor                   |                      |
|                          |       | D801S   | GSIB660   | Bridge Diode                     |                      |
|                          |       | PC801S  | PC123Y    | Photo Coupler                    |                      |
|                          |       | D805    | FML-G12S  | Rectifier Diode                  | HC801                |
|                          |       | D806    |           |                                  |                      |
|                          |       | D807    |           |                                  |                      |
|                          |       | D802    | FMG-G2CS  |                                  |                      |
|                          |       | IC202   | KA78RM33  | 3.3V Regulator                   |                      |
|                          |       | IC804   | KA7806    | 6V Regulator                     | VDPY                 |
|                          |       | IC803   | KA78R08   | 8V Controlled Regulator          |                      |
|                          |       | IC903   | KA78RM33  | 3.3V Regulator                   |                      |
|                          |       | IC904   | KIA7025AP | MICOM Reset IC                   |                      |
|                          |       | Q909    | 2N7000    | IIC Level Shifter                |                      |
|                          |       | Q910    |           |                                  |                      |

**Table 2 - 3 IC Line - Up**

| NO | BOARD | LOC. NO | SPEC          | DESCRIPTION                          | REMARK               |
|----|-------|---------|---------------|--------------------------------------|----------------------|
| 1  | MAIN  | TU01S   | TCPW3001PD16A | Main Tuner with IF Block             | Refer to Table 2-3-4 |
|    |       | T801S   | AA26-00046A   | Trans Switching                      | Refer to Table 2-3-6 |
|    |       | T444S   | 1372, 0079A   | Trans FBT(ELDOR)                     | Refer to Table 2-3-7 |
| 2  | CRT   | IC501   | TDA6111Q      | Video Output AMP R.G.B Drive         | Option               |
|    |       | QF04    | 2SC2344       | Push-Pull (VM)                       |                      |
|    |       | QF05    | 2SA1011       |                                      |                      |
|    |       | QG02    | KSA940        | TR-Power (TILT)                      |                      |
|    |       | QG03    | KSD2073-H2    |                                      |                      |
|    |       | ICG01   | KA4558        | OP-AMP (TILT)                        |                      |
| 3  | V-S/W | ICS01   | TEA6425       | Video Switching IC with Adder Output | Option               |

**Table 2-3-1 VIDEO IC (IC201S)**

| SPEC    | FUNCTION                                     | REMARK |
|---------|----------------------------------------------|--------|
| DDP3310 | Sipadoss Module<br>AA98-00134B(with SDA9401) |        |
| VPC3230 |                                              |        |
| SDA9401 |                                              |        |

**Table 2-3-2 SOUND IC (IC601)**

| SPEC     | FUNCTION                                       | REMARK |
|----------|------------------------------------------------|--------|
| MSP3411G | Multistandard, A2 Stereo, Nicam, Virtual Dolby |        |
| MSP3410D | Multistandard, A2 Stereo, Nicam                |        |

**Table 2-3-3 SOUND AMP (IC602)**

| SPEC    | FUNCTION             | REMARK |
|---------|----------------------|--------|
| TDA7297 | 15W x 2CH, 10W x 2CH |        |

**Table 2-3-4 1'st TUNER (TU01S)**

| SPEC          | FUNCTION | REMARK |
|---------------|----------|--------|
| TCPW3001PD16A | CW       | Main   |

### 3. Specifications

|                          |                     |                              |                                                                    |
|--------------------------|---------------------|------------------------------|--------------------------------------------------------------------|
| <b>Television System</b> | <b>CW</b>           | PAL / SECAM-B / G,D / K,L,I  |                                                                    |
| <b>Antena Input</b>      |                     | 75ohms, Coaxial Cable        |                                                                    |
| <b>Power</b>             | <b>Consumption</b>  | 130W (Applied When 29" Flat) |                                                                    |
|                          | <b>Requirements</b> | 220V Only                    |                                                                    |
|                          | <b>Frequency</b>    | 50Hz                         |                                                                    |
|                          | <b>Output</b>       | 15W x 2CH                    |                                                                    |
| <b>Sound</b>             | <b>Effect</b>       | Vitural Dolby                | Option                                                             |
|                          |                     | Turbo Sound                  |                                                                    |
|                          |                     | Pseudo Stereo                |                                                                    |
| <b>Jacks</b>             | <b>Front (AV2)</b>  | RCA Input                    |                                                                    |
|                          |                     | S-VHS                        | Option                                                             |
|                          |                     | Head-Phone                   |                                                                    |
|                          | <b>Back</b>         | 2Scart Input/ Output         | AV1 : Scart I/O, RGB Input, RF Out<br>AV2 : Scart I/O, Monitor Out |
|                          |                     | AV2 Monitor Audio Output     | Option                                                             |

Specifications are subject to change.

# MEMO

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## 4. Alignment and Adjustments

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### 4-1 General Alignment Instructions

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1. Usually, a color TV-VCR needs only slight touch-up adjustment upon installation. Check the basic characteristics such as height, horizontal and vertical sync and focus.
2. Observe the picture for good black and white details. There should be objectionable color shading; if color shading is present, demagnetize, perform purity and convergence adjustments described below.
3. Use the specified test equipment or its equivalent.
4. Correct impedance matching is essential.
5. Avoid overload. Excessive signal from a sweep generator might overload the front-end of the TV. When inserting signal markers, do not allow the marker generator to distort test results.
6. Connect the TV only to an AC power source with voltage and frequency as specified on the backcover nameplate.
7. Do not attempt to connect or disconnect any wires while the TV is turned on. Make sure that the power cord is disconnected before replacing any parts.
8. To protect against shock hazard, use an isolation transformer.

### 4-2 Automatic Degaussing

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A degaussing coil is mounted around the picture tube, so that external degaussing after moving the TV should be unnecessary. But the receiver must be properly degaussed upon installation.

The degaussing coil operates for about 1 second after the power is switched ON. If the set is moved or turned in a different direction, the power should be OFF for at least 10 minutes.

If the chassis or parts of the cabinet become magnetized, poor color purity will result. If this happens, use an external degaussing coil. Slowly move the degaussing coil around the faceplate of the picture tube and the sides and front of the receiver. Slowly withdraw the coil to a distance of about 6 feet before turning power OFF.

If color shading persists, perform the following Color purity and Convergence adjustments.

### 4-3 High voltage Check

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**CAUTION : There is no high voltage adjustment on this chassis. The B+ power supply should be +135 volts (with full color- bar input and normal picture level).**

1. Connect a digital voltmeter to the second anode of the picture tube.
2. Turn on the TV. Set the Brightness and Contrast controls to minimum (zero beam current).
3. Adjust the Brightness and contrast controls to both extremes. Ensure that the high voltage does not exceed 32 KV under any conditions.

## 4-4 SCREEN Adjustment

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1. Input Toshiba Pattern
2. Enter "Service Mode".(Refer to "Service Mode")
3. Select "G2-Adjust".
4. Set the values as below.

| 29 Inch                                                                                                        |
|----------------------------------------------------------------------------------------------------------------|
| <b>IBRM = 215</b><br><b>WDRV = 44 -&gt; 47</b><br><b>CDL = 235 -&gt; 210</b><br><b>COLR G B = 122 -&gt; 45</b> |

5. Turn the SCREEN VR until "MRCR G B" and "MRWDG" are green and those value are about 100.  
(The incorrect SCREEN Voltage may result that "MRCR G B" and "MRWDG" should be red)

**Note 1.** When you do not have Toshiba Pattern, follow this method.

1. Set the TV on the condition that AV mode no signal(black)
2. Enter the "Menu" and set the mode to blue screen off.
3. Enter the "Service Mode".
4. Select " G2-Adjust".
5. Set the values as below.

**IBRM = 215**  
**WDRV = 47**  
**CDL = 210**  
**COLR G B = 45**

6. Turn the SCREEN VR until the value of " MRCR G B" is about 120. Do not mind that the "OSD" Color is red.

◆ After completing G2-Adjust, follow this procedure.

- ① Enter the "Video Adjust 1".
- ② Choose any item in menu. (ex. Select "Red Cutoff")
- ③ Change the value of item you select, and recover the value.

For example, when the value of "Red Cutoff" is 127, change the value to 128 and restore the value to 127.

If you do not follow this procedure, the picture may be abnormal.

For example, when the TV set is on, the picture becomes brighter gradually.

## 4-5 E<sup>2</sup>PROM (IC902) Replacement

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1. When IC902 is replaced, all adjustment data revert to the initial values.  
So, all adjustment values when servicing should be readjusted.
2. After IC902 is replaced, connect the AC power supply cord.
3. Turn the power switch ON.
4. In stand-by, warm up the TV for at least 10 seconds.
5. Power on the TV.

## 4-6 White Balance Adjustment

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■ Equipment : Color-Analyzer (CA-100)

■ Input Signal : Pattern signal (Toshiba pattern)

1. Select STANDARD from the menu.
2. Input an 100% White pattern.
3. Enter the "Service Mode". (Refer to "4-8 Service Mode")
4. Warm up the TV set at least for 30 minutes.
5. Input a Toshiba pattern signal.
6. Enter the "Video Adjust1".
  - Adjust "Sub Contrast" so that Y (luminance) becomes  $34 \text{ ft} \pm 3$ .
  - Use "Red Drive" and "Blue Drive" to adjust High-Light (x : 290, y : 300)
  - Adjust "Sub Bright" so that Y (luminance) becomes  $1.3 \text{ ft} \pm 0.3$ .
  - Use "Red Cutoff" and "Blue Cutoff" to adjust Low-Light (x : 290, y : 300).
7. Adjust CA-100 so that the final adjustment value can be fixed.
8. Use the Channel Up / Down (▲ / ▼) buttons to move the cursor on the adjustment modes.
9. Use the Volume +/- buttons to change the adjustment value.

**Note 2. 29V1 CHANGE****ASSY-MAIN**

| BEFORE |          |                            | AFTER  |          |                             | CAUSE                                                | MODEL                   |
|--------|----------|----------------------------|--------|----------|-----------------------------|------------------------------------------------------|-------------------------|
| LOC NO | CODE NO  | SPEC                       | LOC NO | CODE NO  | SPEC                        |                                                      |                         |
| R226   | AZ261102 | 1KOHM,5%,1/8W              | R226   | AZ261471 | 470 OHM,5%,1/8W             | A Improvement of TTX Error                           | All Model               |
| J221   | AZ664147 | WIRE-NO SHEATH CU          | C203   | AZ164009 | C-AL;50V 10uF               |                                                      |                         |
| J908   | AZ664147 | WIRE-NO SHEATH CU          | R944   | AZ261392 | 3.9 KOHM,5%,1/8W            |                                                      |                         |
| NONE   | NONE     | NONE                       | R954   | AZ261473 | 47 KOHM,5%,1/8W             |                                                      |                         |
| NONE   | NONE     | NONE                       | R910   | AZ261223 | 22 KOHM,5%,1/8W             |                                                      |                         |
| NONE   | NONE     | NONE                       | R955   | AZ261101 | 100 OHM,5%,1/8W             |                                                      |                         |
| R910   | AZ261102 | 1KOHM,5%,1/8W              | R956   | AZ261471 | 470 OHM,5%,1/8W             |                                                      |                         |
| R911   | AZ261301 | 300 OHM,5%,1/8W            | R911   | AZ261331 | 330 OHM,5%,1/8W             |                                                      |                         |
| R912   | AZ261301 | 300 OHM,5%,1/8W            | R912   | AZ261103 | 10 KOHM,5%,1/8W             |                                                      |                         |
| C923   | AZ161102 | C-C,AXIAL;50V 1NF          | L910   | AZ363067 | 8.2uH AL02                  |                                                      |                         |
| C926   | DELETE   | DELETE                     | C926   | AZ664147 | C-C,AXIAL;150 PF            |                                                      |                         |
| J204   | AZ664147 | JUMPER                     | J204   | DELETE   | DELETE                      |                                                      |                         |
| NONE   | NONE     | NONE                       | J913   | AZ664147 | JUMPER                      |                                                      |                         |
| L210   | AZ361008 | AL02 3.3uH                 | L210   | AZ664147 | JUMPER                      |                                                      |                         |
| J406   | AZ362003 | F/BEAD ,6MM                | J406   | AZ664147 | JUMPER                      |                                                      |                         |
| L222   | NONE     | NONE                       | L222   | AZ361010 | 4.7uH AL02                  |                                                      |                         |
| C410   | DELETE   | DELETE                     | C410   | AZ162005 | C-FILM,PEF;220nF,5%,250V,TP |                                                      |                         |
| J239   | AZ664147 | JUMPER                     | J239   | DELETE   | DELETE                      |                                                      |                         |
| J817   | NONE     | NONE                       | J817   | AZ664147 | JUMPER                      | Against 2H-Noise                                     | 100Hz Model             |
| L413   | NONE     | NONE                       | L413   | AZ664147 | JUMPER                      |                                                      |                         |
| J709   | AZ664147 | JUMPER                     | DELETE | DELETE   | DELETE                      |                                                      |                         |
| J701   | NONE     | NONE                       | J701   | AZ664147 | JUMPER                      |                                                      |                         |
| L412   | NONE     | NONE                       | L412   | AZ362003 | F/BEAD ,6MM                 |                                                      |                         |
|        |          |                            | R403   | AZ263070 | 2W 10 ohm                   |                                                      |                         |
|        |          |                            | D403   | AZ462005 | DIODE 1N4004                |                                                      |                         |
| NONE   | NONE     | NONE                       | CN701A | AZ760241 | ASSY-LEAD CONNECTOR;3P      |                                                      |                         |
| J226   | DELETE   | DELETE                     | J226   | AZ664147 | WIRE-NO SHEATH CU           | V-SIZE DRIFT                                         | 100Hz Model             |
| J231   | AZ261222 | 2.2KOHM,5%,1/8W            | J231   | DELETE   | DELETE                      |                                                      |                         |
| R301   | AZ268057 | 1.6KOHM,5%,1/2W            | R301   | AZ264003 | 4.7Kohm,1%,1/2W             |                                                      |                         |
| R302   | AZ268058 | 7.5Kohm,1%,1/2W            | R302   | AZ264007 | 22Kohm,1%,1/2W              |                                                      |                         |
| R304   | AZ268059 | 0.68ohm,5%,2W,AG           | R304   | AZ263061 | 1.2ohm,5%,2W,AG             |                                                      |                         |
| TOP    | DELETE   | DELETE                     | R307   | AZ263061 | 1.2ohm,5%,2W,AG             |                                                      |                         |
| R314   | AZ268048 | 22Kohm,1%,1/2W             | R314   | AZ268048 | 22Kohm,1%,1/2W              |                                                      |                         |
| R315   | DELETE   | DELETE                     | R315   | AZ268041 | 51Kohm,1%,1/2W              |                                                      |                         |
| C303   | AZ166050 | O.O15nF,5%,50V             | C303   | AZ166032 | O.O05nF,5%,500V             |                                                      |                         |
| R926   | NONE     | NONE                       | R926   | AZ664147 | JUMPER                      | A Improvement of OSD JITTER<br>(Added H-Sync Buffer) | All Model               |
| Q907   | NONE     | NONE                       | Q907   | AZ561003 | KSC815,NPN,400mW,TO-92,TP   |                                                      |                         |
| R902   | NONE     | NONE                       | R902   | AZ261102 | 1KOHM,5%,1/8W,AA,           |                                                      |                         |
| R952   | NONE     | NONE                       | R952   | AZ261103 | 10KOHM,5%,1/8W              |                                                      |                         |
| J902   | NONE     | NONE                       | J902   | AZ664147 | JUMPER                      |                                                      |                         |
| R919   | AZ261103 | 10KOHM,5%,1/8W             | R919   | AZ261471 | 470 OHM,5%,1/8W             |                                                      | Model adapted ELDOR FBT |
| TOP    | AZ166023 | C-C;400V 103               | C830   | AZ166023 | C-C;400V 103                |                                                      |                         |
| TOP    | AZ263076 | 2W 27                      | R826   | AZ263076 | 2W 27                       |                                                      | Model adapted ELDOR FBT |
| J630   | NONE     | NONE                       | J630   | AZ664147 | JUMPER                      | Delete, If VIDEO S/W MODULE                          |                         |
| D405   | AZ462001 | 1N4148                     | D405   | AZ664147 | JUMPER                      | Linearity                                            | 100Hz Model             |
| C415   | AZ162031 | POLY 50V 222               | C415   | AZ162031 | POLY 50V 272                |                                                      |                         |
| C416   | AZ166022 | POLY 100V 103              | C416   | AZ162012 | POLY 50V 472                |                                                      |                         |
| C411   | AZ166034 | POLY 50V 332               | C411   | AZ162031 | POLY 50V 222                |                                                      |                         |
| C212   | AZ162006 | POLY 50V 223               | C212   | AZ166022 | POLY 100V 103               |                                                      |                         |
| R241   | AZ664147 | JUMPER                     | R241   | AZ261680 | 68ohm,5%,1/8W               | AV- CROSSTALK                                        | 100Hz Model             |
| R242   | DELETE   | DELETE                     | R242   | AZ261750 | 75ohm,5%,1/8W               |                                                      |                         |
| L208   | AZ664147 | JUMPER                     | L208   | AZ363060 | INDUCTOR-AXIAL;2.2uH,5%     |                                                      |                         |
| C246   | DELETE   | DELETE                     | C246   | AZ161271 | C-C,-AXIAL;270PF,10%,50V    |                                                      |                         |
| C247   | DELETE   | DELETE                     | C247   | AZ161999 | C-C,-AXIAL;18PF,10%,50V     |                                                      |                         |
| C248   | DELETE   | DELETE                     | C248   | AZ161271 | C-C,-AXIAL;270PF,10%,50V    | 50Hz : 800mA<br>100Hz : 1 A                          | All Model               |
| J829   | AZ664147 | JUMPER                     | J829   | DELETE   | DELETE                      |                                                      |                         |
| J830   | AZ664147 | JUMPER                     | J830   | DELETE   | DELETE                      |                                                      |                         |
| F802A  | DELETE   | DELETE                     | F802A  | AZ664014 | FUSE-HOLDER;-,-,30MOHM      |                                                      |                         |
| F802B  | DELETE   | DELETE                     | F802B  | AZ664014 | FUSE-HOLDER;-,-,30MOHM      |                                                      |                         |
| FD802S | DELETE   | DELETE                     | FD802S | AZ760242 | FUSE;800mA                  | Against Conduction                                   |                         |
| FD802S | DELETE   | DELETE                     | FD802S | AZ760243 | FUSE;1A                     |                                                      |                         |
| LX801S | AZ363064 | 28-20MH 1.5A,+2.0,1.5K     | LX801S | AZ363064 | 28-20MH 1.5A,+2.0,1.5K      |                                                      |                         |
| LX802S | DELETE   | DELETE                     | LX802S | AZ363064 | 28-20MH 1.5A,+2.0,1.5K      |                                                      |                         |
| CX801S | AZ166013 | 220nF,20%,250V,TP,-,22.5mm | CX801S | AZ166013 | 220nF,20%,250V,TP,-,22.5mm  |                                                      |                         |
| CX802S | AZ166013 | 220nF,20%,250V,TP,-,22.5mm | CX802S | AZ166013 | 220nF,20%,250V,TP,-,22.5mm  |                                                      |                         |

## ASSY-SIPADOS(9401)

| BEFORE |          |                             | AFTER  |          |                          | CAUSE                | MODEL                |
|--------|----------|-----------------------------|--------|----------|--------------------------|----------------------|----------------------|
| LOC NO | CODE NO  | SPEC                        | LOC NO | CODE NO  | SPEC                     |                      |                      |
| IC201S | AZ760240 | Assy-sipados,SDA9401,F5     | IC201S | AZ760244 | Assy-sipados,SDA9401,F6  | A Improvement of TTX | ASSY-SIPADOSS MODULE |
| IC3    | AZ760222 | DDP3310B-E4,PLCC,68P,-,5V,- | IC3    | AZ760245 | DDP3310B-F6,PLCC,68P,5V, |                      |                      |
| C29    | AZ166044 | 0.27nF,5%,50V,NP0,TP,1608   | C29    | DELETE   | DELETE                   |                      |                      |
| C30    | AZ166041 | 0.018nF,5%,50V,NP0,TP,1608  | C30    | AZ268050 | 0ohm,5%,1/16W,DA,TP,1608 |                      |                      |
| C31    | AZ166044 | 0.27nF,5%,50V,NP0,TP,1608   | C31    | DELETE   | DELETE                   |                      |                      |
| R8     | AZ268055 | 75ohm,5%,1/16W,DA,TP,1608   | R8     | DELETE   | DELETE                   |                      |                      |
| R7     | AZ268053 | 68ohm,5%,1/16W,DA,TP,1608   | R7     | AZ268050 | 0ohm,5%,1/16W,DA,TP,1608 |                      |                      |
| L1     | AZ363074 | 2.2uH,10%,6x4mm             | L1     | DELETE   | DELETE                   |                      |                      |

**Note 3. PCB CORRECTION CONTENTS**

| LOC    | PCB correction contents            | Remark                                     |
|--------|------------------------------------|--------------------------------------------|
| C242   | DELETE                             | Delete unnecessary materials and locations |
| C410   | DELETE                             |                                            |
| J220   | DELETE                             |                                            |
| J221   | DELETE                             |                                            |
| J231   | delete only material(LOC exist)    |                                            |
| J913   | JUMPER added                       | A Improvement of TTX ERROR                 |
| C203   | 16V 10uF added                     |                                            |
| R944   | 1/8W 3.9K                          |                                            |
| R956   | 1/8W 470 added                     |                                            |
| R954   | 1/8W 47K added                     |                                            |
| R955   | 1/8W 100 added                     |                                            |
| C926   | C-AXIAL;150P                       |                                            |
| L222   | JUMPER added                       | H-OUT LINE                                 |
| J701   | JUMPER added                       | 2H-Noise                                   |
| CN701A | 3P WIRE OPTION(AA39-00306A)        | 2H-Noise (TO CN702A)                       |
| CN702  | Polarity changed.(Pattern changed) | Against 2H-Noise                           |
| J817   | JUMPER added                       | Against 2H-Noise                           |
| J204   | JUMPER added                       | GND JUMPER                                 |
| CN302  | DELETE                             | Delete if R307 add.                        |
| R307   | 2W 1.2ohm(AG) added                | Process changed(E -> V)                    |
| L910   | 8.2uH AL02                         |                                            |

## 4-7 Factory Adjustment

### 4-7-1 Service Mode

1. To enter the “Service Mode”, Press the remote-control keys in this sequence :

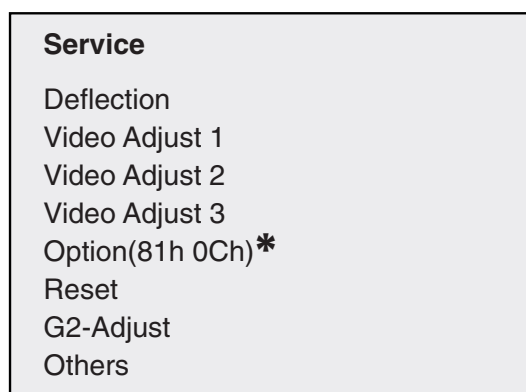
- If you do not have Factory remote-control



- If you have Factory remote-control



2. After the Service Mode is entered, the initial screen is as shown in the figure below.



\* These hexa digits are check sum value which depends on the MICOM.  
 If check sum value is changed, the value of E<sup>2</sup>PROM Data newly initialed.

3. Use the Channel Up / Down buttons to move the cursor in the adjustment parameters.

#### Note 2.

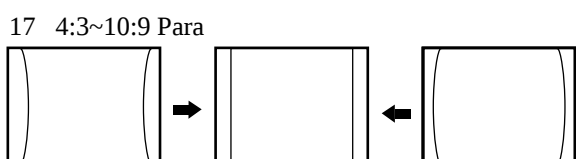
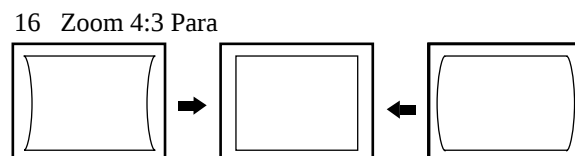
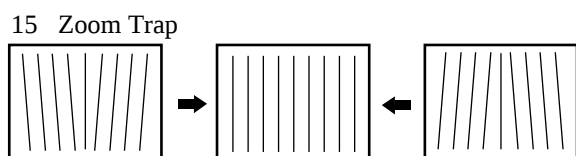
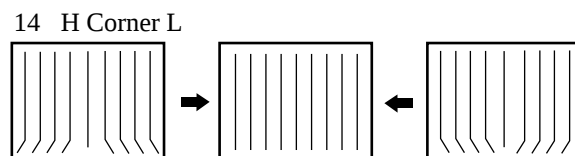
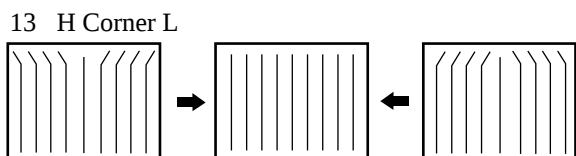
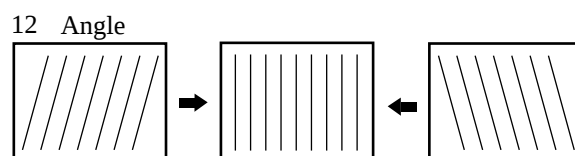
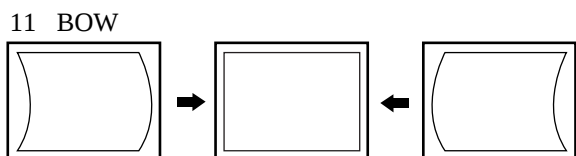
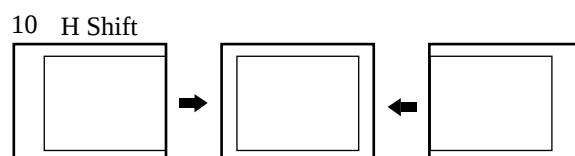
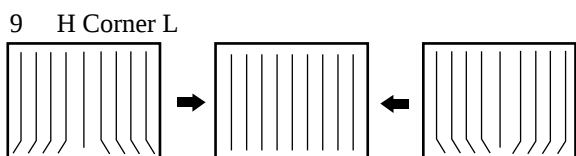
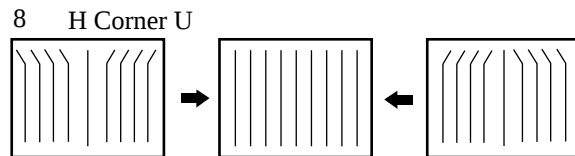
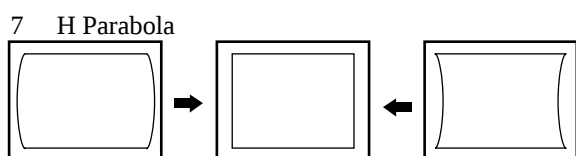
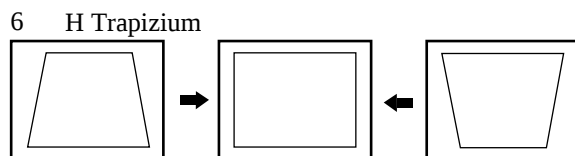
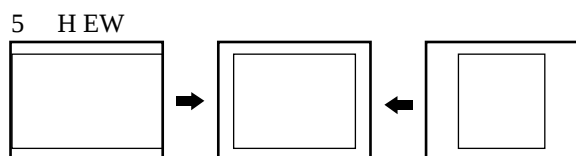
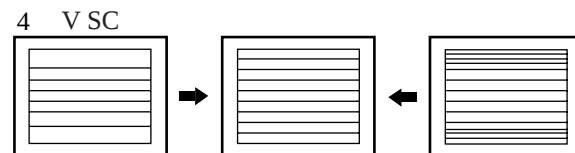
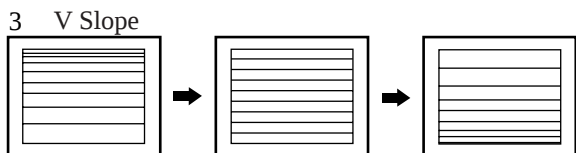
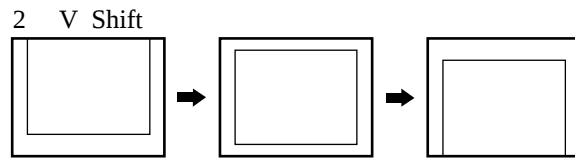
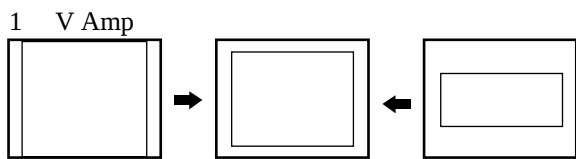
- When CRT, CRT PCB, FBT, E<sup>2</sup>PROM (sometimes MICOM) is replaced, the adjustment values should be controlled.
- After the Service adjustment is completed, Do not select “Reset” in the service mode menu. (After above procedure is done, power is on initially and the “Plug and Play” will be operated.)

## 4-7-2 Memory Data

### 4-7-2(A) DEFLECTION (GEOMETRIC ADJUSTMENT VALUE)

| No. | OSD           | Initial Value | Function                                                                                                   | Remark |
|-----|---------------|---------------|------------------------------------------------------------------------------------------------------------|--------|
| 1   | V Amp         | 98            | Adjusts Vertical picture size. Adjusts 4:4 upper and lower picture size in a lion head pattern at factory. | GEOM   |
| 2   | V Shift       | 143           | Adjusts Vertical picture position.                                                                         | GEOM   |
| 3   | V Slope       | 125           | Adjusts Vertical Slope Correction.                                                                         | FIX    |
| 4   | V SC          | 230           | Adjusts Vertical s-correction.                                                                             | FIX    |
| 5   | H EW          | 193           | Horizontal east west width. Adjusts 5:5 left and right picture size in a lion head pattern at factory.     | GEOM   |
| 6   | H Trapizium   | 72            | Adjusts horizontal Trapezium.                                                                              | GEOM   |
| 7   | H Parabola    | 75            | Adjusts Horizontal Parabola.                                                                               | GEOM   |
| 8   | H Corner U    | 112           | Adjusts the top horizontal corner of picture.<br>Adjusts so that the top of H corner can be linear.        | FIX    |
| 9   | H Corner L    | 138           | Adjusts the bottom horizontal corner of picture.<br>Adjusts so that the bottom of H corner can be linear.  | FIX    |
| 10  | H Shift       | 161           | Adjusts Horizontal Position.                                                                               | GEOM   |
| 11  | BOW           | 128           | Adjusts Horizontal BOW.                                                                                    | GEOM   |
| 12  | Amgle         | 128           | Adjusts Horizontal Angle.                                                                                  | GEOM   |
| 13  | H Corner U6   | 140           | Adjusts so that the top horizontal corner of picture can be linear.                                        | GEOM   |
| 14  | H Corner L6   | 141           | Adjusts so that the bottom horizontal corner of picture can be linear.                                     | GEOM   |
| 15  | V Max         | 200           | Adjusts Max value of vertical amplitude                                                                    | FIX    |
| 16  | Zoom1 Amp     | 175           | Adjusts vertical amplitude in zoom1.                                                                       | FIX    |
| 17  | Zoom2 Amp     | 202           | SIM-806HEW only.                                                                                           | FIX    |
| 18  | Zoom Trap     | 128           | Adjusts horizontal Trapezium in Zoom                                                                       | FIX    |
| 19  | Zoom 4:3 Para | 125           | Corrects the vertical linearity in Zoom mode of P-SIZE.<br>The data depends on CRT (see data above).       | FIX    |
| 20  | 4:3~16:9 Para | 138           | Corrects the vertical linearity in 16:9 mode of P-SIZE.<br>The data depends on CRT (see data above).       | FIX    |

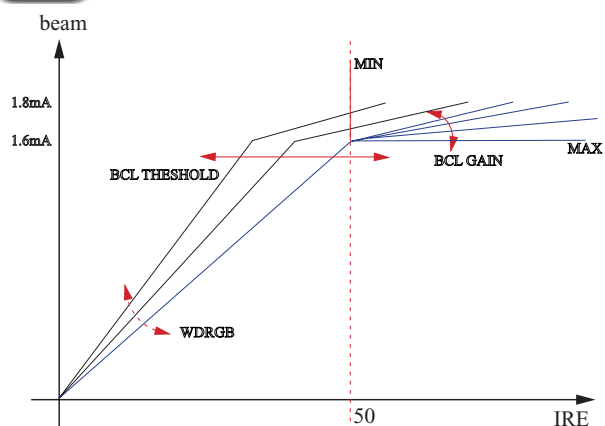
4-7-2(B) SCREEN CHANGE (I2C BUS GEOMETRIC ADJUSTMENT)



## 4-7-2(C) VIDEO ADJUST 1

| No. | OSD               | Initial Value | Function                                                                                                                                                                                                                                                                           | Remark |
|-----|-------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | Red Cutoff        | 127           | Adjusts the gain of red output from low light.                                                                                                                                                                                                                                     | W/B    |
| 2   | Green Cutoff      | 127           | Adjusts the gain of green output from low light.<br>Fix this gain to 127.                                                                                                                                                                                                          | FIX    |
| 3   | Blue Cutoff       | 127           | Adjusts the gain of blue output from low light.                                                                                                                                                                                                                                    | W/B    |
| 4   | Red Drive         | 127           | Adjusts the gain of red output from high light.                                                                                                                                                                                                                                    | W/B    |
| 5   | Green Drive       | 127           | Adjusts the gain of green output from high light. After "G2-Adjustment" and White Balance adjustments are complete, this data is fixed to 127."                                                                                                                                    | FIX    |
| 6   | Blue Drive        | 127           | Adjusts the gain of blue output from high light.                                                                                                                                                                                                                                   | W/B    |
| 7   | Sub Bright        | 90            | Adjust sub brightness level to set the low light luminance in Picture Standard mode.                                                                                                                                                                                               | W/B    |
| 8   | Sub Contrast      | 52            | Adjust sub brightness level to set the low light luminance in Picture Standard mode. Set the value of sub contrast to near 50. The user control "contrast" depends on this value.<br>User contrast=[sub cont*2/100]If sub contrast data is 10, user contrast changes into 1/5step. | W/B    |
| 9   | Sub Color         | 2             | Adjusts sub color level to set the gain for color in Picture Standard mode.                                                                                                                                                                                                        | FIX    |
| 10  | Sub Tint          | 17            | Adjusts the sub tint level of NTSC color system.                                                                                                                                                                                                                                   | FIX    |
| 11  | Sub Threshold     | 128           | Beam Current Limit threshold current if SENSE input used 0...-2048 BCL threshold current if RSW1 input used(max. ADC output ~2047)                                                                                                                                                 | FIX    |
| 12  | BCL Gain          | 59            | Beam Current Limit loop Gain                                                                                                                                                                                                                                                       | FIX    |
| 13  | BCL Time          | 144           | BCL time constant; 0 = off                                                                                                                                                                                                                                                         | FIX    |
| 14  | BCL Time2         | 1             | Teletext Contrast Level                                                                                                                                                                                                                                                            | FIX    |
| 15  | BCL Bri Reduction | 125           | BCL Brightness Reduction                                                                                                                                                                                                                                                           | FIX    |
| 16  | P.DK.YC Delay     | 5             | PAL-D/K Y/C Delay                                                                                                                                                                                                                                                                  | FIX    |
| 17  | P.I.YC Delay      | 7             | PAL-I Y/C Delay                                                                                                                                                                                                                                                                    | FIX    |
| 18  | P.L.YC Delay      | 6             | PAL-L Y/C Delay                                                                                                                                                                                                                                                                    | FIX    |
| 19  | S.BG.YC Delay     | 7             | SECAM-B/G Y/C Delay                                                                                                                                                                                                                                                                | FIX    |
| 20  | S.DK.YC Delay     | 2             | SECAM-D/K Y/C Delay                                                                                                                                                                                                                                                                | FIX    |
| 21  | S.L.YC Delay      | 5             | SECAM-L Y/C Delay                                                                                                                                                                                                                                                                  | FIX    |
| 22  | P.BG.YC Delay     | 7             | PAL-B/G Y/C Delay                                                                                                                                                                                                                                                                  | FIX    |
| 23  | P.YC Delay        | 6             | External PAL Y/C Delay                                                                                                                                                                                                                                                             | FIX    |
| 24  | S.YC. Delay       | 2             | SExternal SECAM Y/C Delay                                                                                                                                                                                                                                                          | FIX    |
| 25  | N.YC. Delay       | 3             | External NTSC Y/C Delay                                                                                                                                                                                                                                                            | FIX    |

**Note 3. Beam Control Limit Characteristic**



**Table 1. YC Delay Adjustment Table**

| YC Delay | PAL  |    |    |   |   | SECAM |    |    |   |   | NTSC |   |
|----------|------|----|----|---|---|-------|----|----|---|---|------|---|
|          | Def. | BG | DK | I | L | Def.  | BG | DK | I | L | Def. | M |
| Value    | 4    | 3  | 6  | 6 | 7 | 1     | 1  | 5  | 8 | 5 | 4    | 3 |

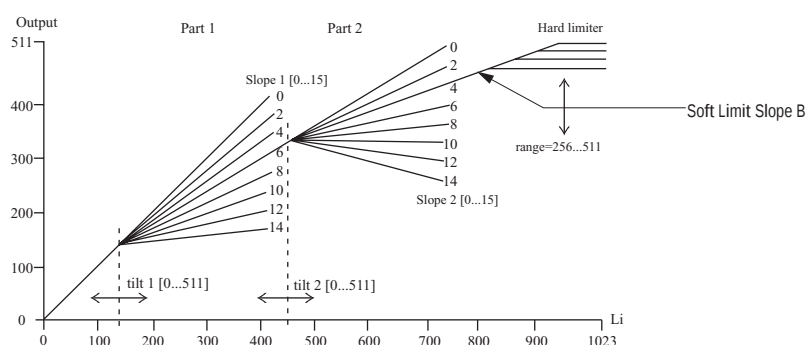
The "Def." means that TV is in AV mode.

## 4-7-2(D) VIDEO 2 ADJUST

| No. | OSD           | Initial Value | Function                                                                                                                                                                                                                                                                                                                                                                                                                        | Remark     |
|-----|---------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1   | Coring        | 0             | Luminance peaking filter, coring level                                                                                                                                                                                                                                                                                                                                                                                          | <b>FIX</b> |
| 2   | NR Off Value  | 5             | Luminance peaking filter coring.                                                                                                                                                                                                                                                                                                                                                                                                | <b>FIX</b> |
| 3   | Melody Volume | 6             | Sets the level of melody volume in Picture ON. Differently controlled according to buyer and area.                                                                                                                                                                                                                                                                                                                              | <b>FIX</b> |
| 4   | RGB BRIGHT    | 68            | Adjusts RGB input signal brightness                                                                                                                                                                                                                                                                                                                                                                                             | <b>FIX</b> |
| 5   | RGB CONTRAST  | 29            | Adjusts RGB input signal contrast                                                                                                                                                                                                                                                                                                                                                                                               | <b>FIX</b> |
| 6   | EHT H Time    | 0             | EHT time constant for horizontal phase compensation 0 = off                                                                                                                                                                                                                                                                                                                                                                     | <b>FIX</b> |
| 7   | EHT H Phase   | 133           | EHT compensation coefficient for horizontal phase ( $\approx 1.5\text{ms}$ )                                                                                                                                                                                                                                                                                                                                                    | <b>FIX</b> |
| 8   | EHT H         | 100           | EHT compensation coefficient for horizontal amplitude( $\approx 100\%$ )                                                                                                                                                                                                                                                                                                                                                        | <b>FIX</b> |
| 9   | EHT V         | 70            | EHT compensation coefficient for vertical amplitude ( $\approx 25\%$ )                                                                                                                                                                                                                                                                                                                                                          | <b>FIX</b> |
| 10  | EHT V TIME    | 10            | time constant for control of vertical and horizontal amplitude<br>EHT compensation 0 = off                                                                                                                                                                                                                                                                                                                                      | <b>FIX</b> |
| 11  | EHT V THRES   | 10            | threshold for vertical & horizontal ampli-tude EHT compensation                                                                                                                                                                                                                                                                                                                                                                 | <b>FIX</b> |
| 12  | EHT V2        | 60            | EHT compensation coeff for vertical ampli-tude valid if beamcurrent > EHTV_THRES"                                                                                                                                                                                                                                                                                                                                               | <b>FIX</b> |
| 13  | EHT H2        | 100           | EHT compensation coeff for horizontal amplitude valid if beamcurrent >EHTV_THRES"                                                                                                                                                                                                                                                                                                                                               | <b>FIX</b> |
| 14  | TTX Position  | 5             | Adjusts Horizontal Position the TTX                                                                                                                                                                                                                                                                                                                                                                                             | <b>FIX</b> |
| 15  | TTX Contrast  | 160           | Adjusts contrast on TTX picture.                                                                                                                                                                                                                                                                                                                                                                                                | <b>FIX</b> |
| 16  | VSU           | 96            | Vertical Setup Time. Delays the vertical sync to solve the jitter of OSD and TTX . Check OSD while varying 96 ~ 111 step by step and then an 1H line moves at two points. If the value is set at the first point or second point, an OSD jitter may happen. Also, if the value is set between the first and second points, a TTX jitter may happen. So, the value of VSU should be set after giving some magines (three steps). | <b>FIX</b> |

## 4-7-2(E) VIDEO 3 ADJUST

| No. | OSD                | Initial Value | Function                                                                                                                                                                                                                                       | Remark |
|-----|--------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | Peak White Max     | 190           | Sets Peak White Limit point.                                                                                                                                                                                                                   | FIX    |
| 2   | Peak White Tilt    | 50            |                                                                                                                                                                                                                                                | FIX    |
| 3   | VBST               | 184           | Vertical blanking start<br>Picture the bottom position SAG or cut problem countermeasure                                                                                                                                                       | FIX    |
| 4   | VBSOB              | 25            | Vertical blanking stop<br>Picture upside position SAG or cut problem countermeasure                                                                                                                                                            | FIX    |
| 5   | Soft Limit Slope B | 29            |                                                                                                                                                                                                                                                | FIX    |
| 6   | V Peaking          | 3             | Controls the size of shoot about the horizontal line of Luminance                                                                                                                                                                              | FIX    |
| 7   | HBST               | 24            | Horizontal blanking start<br>Picture right edge position SAG or cut problem countermeasure"                                                                                                                                                    | FIX    |
| 8   | Gain1(Video)       | 63            | Velocity video gain                                                                                                                                                                                                                            | FIX    |
| 9   | Delay1(Video)      | 1             | Velocity video delay                                                                                                                                                                                                                           | FIX    |
| 10  | Velocity Limit     | 126           | Velocity limit                                                                                                                                                                                                                                 | FIX    |
| 11  | Velocity Delay     | 7             | Velocity delay                                                                                                                                                                                                                                 | FIX    |
| 12  | Velocity Coring    | 3             | Velocity frequency coring                                                                                                                                                                                                                      | FIX    |
| 13  | V Slice Level      | 1             | Allows the sync slice level of sync separate block to be changed.<br>This item corresponds to the case where a vertical bouncing happens according to signal conditions by area (overmodulation, especially).<br>0: 100% 1: 90% 2: 75% 3: 60%" | FIX    |

**Note 4. Soft Limit & Hard Limit**

"Soft Limit" is that Limiting the peak white without feed-back, but "Peak Limit" is that with feed-back for white peak level

## 4-7-2(F) OPTION

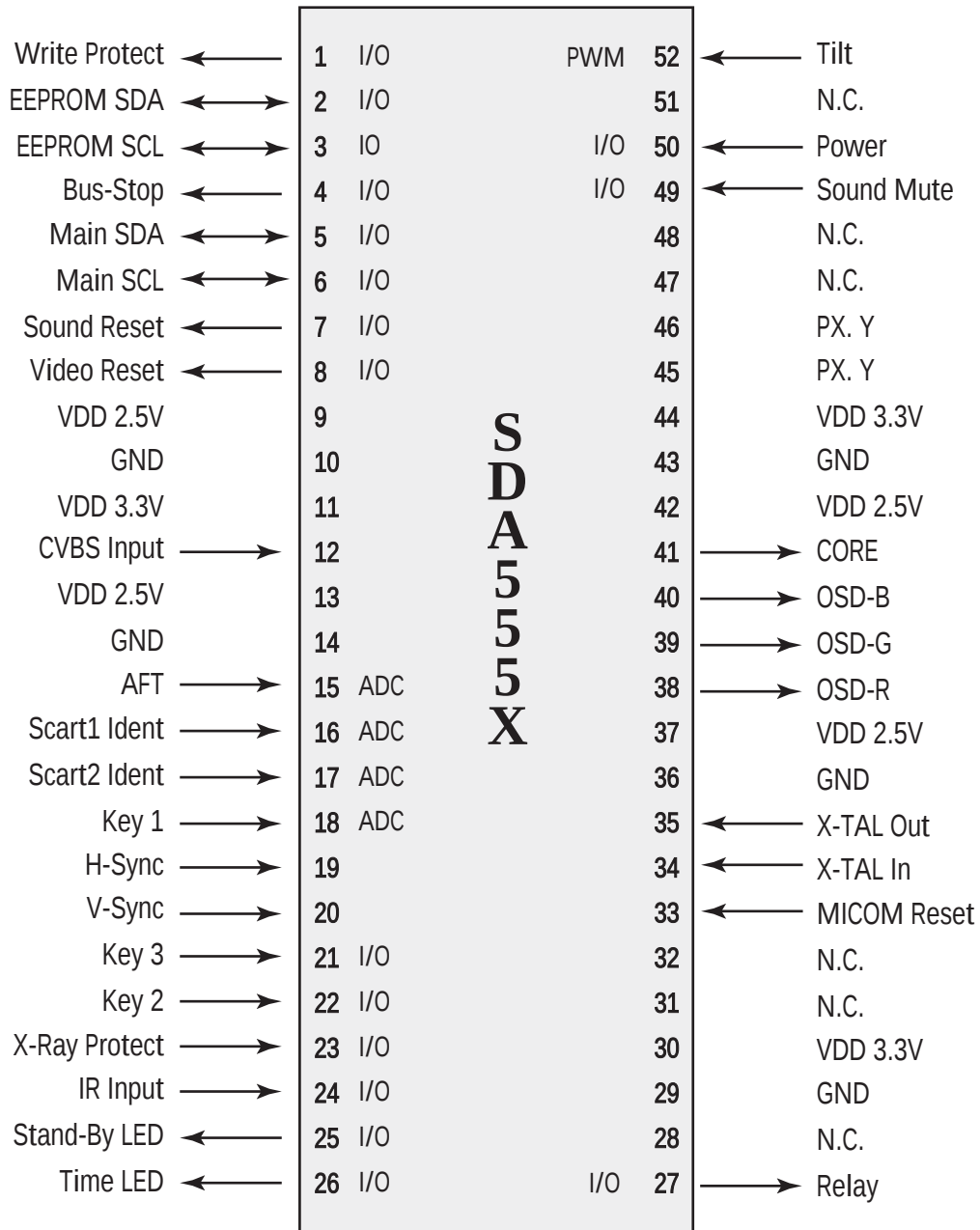
| No. | OSD           | Initial Value | Function                                                                                                                                                                                                                                                                                                                                                                                                                     | Remark |
|-----|---------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1   | System CW     | CW            | Select the Broadcasting System - CZ : PAL/SECAM-B/G,D/K,I,L<br>CW : It is added SECAM-L function in CZ                                                                                                                                                                                                                                                                                                                       | FIX    |
| 2   | AV by CH Key  | ON            | On : It can select AV Mode for CH key when the number of Pannel key is 5.<br>Off : In case AV key is on the panel                                                                                                                                                                                                                                                                                                            | FIX    |
| 3   | Sound         | V-DOLBY       | Select the sound system, for example A2-Stereo/Nicam,V-dolby,Mono, L-Stereo<br>When using MSP3411G and V-Dolby MSP3400D/MSP3410, select A2-Stereo/Nicam                                                                                                                                                                                                                                                                      | FIX    |
| 4   | CRT           | WIDE          | Select P-Size Mode                                                                                                                                                                                                                                                                                                                                                                                                           | FIX    |
| 5   | AV Mode       | 2SCART+S      | Select EXT Jack (RCA/SCARTS-1,2,S-VIDEO,DVD)                                                                                                                                                                                                                                                                                                                                                                                 | FIX    |
| 6   | Speaker       | NON           | Select the Speaker .<br>If Dome speaker, Select 'Dome Spk'. If Non Dome speaker, select 'Non Dome Spk'                                                                                                                                                                                                                                                                                                                       | FIX    |
| 7   | X-RAY         | OFF           | Select X-Ray On/Off (On : USA, Of f: Other )                                                                                                                                                                                                                                                                                                                                                                                 | FIX    |
| 8   | TTX TOP       | OFF           | Sets TOP TTX On/Off                                                                                                                                                                                                                                                                                                                                                                                                          | FIX    |
| 9   | Tilt Control  | ON            | Select Tilt On/Off                                                                                                                                                                                                                                                                                                                                                                                                           | FIX    |
| 10  | Auto FM       | ON            | On : In Nicam Broadcasting Channel, If it happened 'Nicam Ident check bits error'or 'Sound Noise', Set Auto FM Mode.<br>Of f :In Nicam Broadcasting Channel, Keep Nicam Mode till Nicam Ident Check bits are perfectly Off .                                                                                                                                                                                                 | FIX    |
| 11  | Text Language | WEST          | West Europe : English/German/Skandinavian/Italian/French/Spainsh/Czech<br>East Europe : Polish/Czech/Rumanian/Slovenian/Croatian//French/Skandinavian/German/Italian<br>Russian : Russian/Ukranian/Estonian/Czech/German/Lettish/English<br>Greek-Turkey : English/Turkey/Greek/French/Skandinavian/German/Spainsh/Italian/<br>Arabic : English/Arabic/French<br>Farsi : English/Farsi/French<br>Arab-Hebrew : Arabic/Hebrew | FIX    |

## Note 5.

|          |                    |
|----------|--------------------|
| Sound    | IC601              |
| A2/NICAM | MSP3400D, MSP3410D |
| V-DOLBY  | MSP3411G           |

## 4-7-2(F) RESET

| No. | OSD    | Initial Value | Function                                                                                                                                                                                                            | Remark                    |
|-----|--------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1   | MRCR   |               | Measurement Result Resisters; Cutoff/Leakage Red                                                                                                                                                                    | Read Only (110 +/- 10)114 |
| 2   | MRCG   |               | Measurement Result Resisters; Cutoff/Leakage Green                                                                                                                                                                  | Read Only (110 +/- 10)    |
| 3   | MRCB   |               | Measurement Result Resisters; Cutoff/Leakage Blue                                                                                                                                                                   | Read Only (110 +/- 10)    |
| 4   | MRWDG  |               | Measurement Result Resisters; White Drive                                                                                                                                                                           | Read Only (110 +/- 10)120 |
| 5   | BRM    |               |                                                                                                                                                                                                                     | Vcut-off= 160V            |
|     |        | 215           | Internal Brightness, Measurement (0 .. 511), the center value is 256, the brightness for measurement can be set to measure at higher cutoff current. The measurement brightness is independent of the drive values. | FIX                       |
| 6   | WDRV   | 47            | White Drive Measurement Control; RGB Values for White Drive Beam Current Measurement                                                                                                                                | FIX                       |
| 7   | CDL    | 210           | Cathode Drive Level<br>Uses the same register as the RGB drive in Video adjust-1.                                                                                                                                   | FIX                       |
| 8   | COL(R) | 45            | Cutoff Level Red<br>Uses the same register as the RED cutoff in Video adjust-1.                                                                                                                                     | FIX                       |
| 9   | COL(G) | 45            | Cutoff Level Green<br>Uses the same register as the GREEN cutoff in Video adjust-1.                                                                                                                                 | FIX                       |
| 10  | COL(B) | 45            | Cutoff Level Blue<br>Uses the same register as the BLUE cutoff in Video adjust-1.                                                                                                                                   | FIX                       |

**4-8 MICOM**

**4-8-2 Pin Assignment Specification**

| PIN NO | FUNCTION | ASSIGN        | IN/OUT | ACTIVE H/L | DESCRIPTION                     |
|--------|----------|---------------|--------|------------|---------------------------------|
| 1      | I/O      | Write Protect | Out    | Low        | EEPROM Write Protection         |
| 2      | I/O      | ROM SDA       | I/O    |            | EEPROM Serial Data Line         |
| 3      | I/O      | ROM SCL       | I/O    |            | EEPROM Serial Clock Line        |
| 4      | I/O      | Bus Stop      | In     | Low        | Disable Micom IIC               |
| 5      | I/O      | Main SDA      | I/O    |            | Peripheral IC Serial Data Line  |
| 6      | I/O      | Main SCL      | I/O    | Low        | Peripheral IC Serial Clock Line |
| 7      | I/O      | Sound Reset   | Out    | Low        | MSP IC Initial Control          |
| 8      | I/O      | Video Reset   | Out    |            | VDP IC Initial Control          |
| 9      | Vdd      | VDD 2.5V      |        |            |                                 |
| 10     | GND      |               |        |            |                                 |
| 11     | Vdd      | VDD 3.3V      |        |            |                                 |
| 12     | CVBS     | CVBS Input    | In     |            | TTX CVBS Input                  |
| 13     | Vdd      | VDD 2.5V      |        |            | Analog B+                       |
| 14     | GND      |               |        |            | Analog Ground                   |
| 15     | ADC      | AFT           | In     |            | Auto Fine Tuning Control        |
| 16     | ADC      | SC1-ID        | In     |            | Scart1 Ident                    |
| 17     | ADC      | SC2-ID        | In     |            | Scart2 Ident                    |
| 18     | ADC      | Key1          | In     |            | Key1 Input                      |
| 19     | HS       | H-Sync        | In     |            | Horizontal Sync Input           |
| 20     | VS       | V-Sync        | In     |            | Vertical Sync Input             |
| 21     | I/O      | Key3          | In     |            | Key3 Input                      |
| 22     | I/O      | Key2          | In     |            | Key2 Input                      |
| 23     | I/O      | X-Ray         | In     |            | X-Ray Protection                |
| 24     | I/O      | IR-In         | In     |            | Remocon Signal Input            |
| 25     | I/O      | STD-LED       | Out    |            | LED Drive Output(Red)           |
| 26     | I/O      | TIM-LED       | Out    |            | LED Drive Output(Green)         |

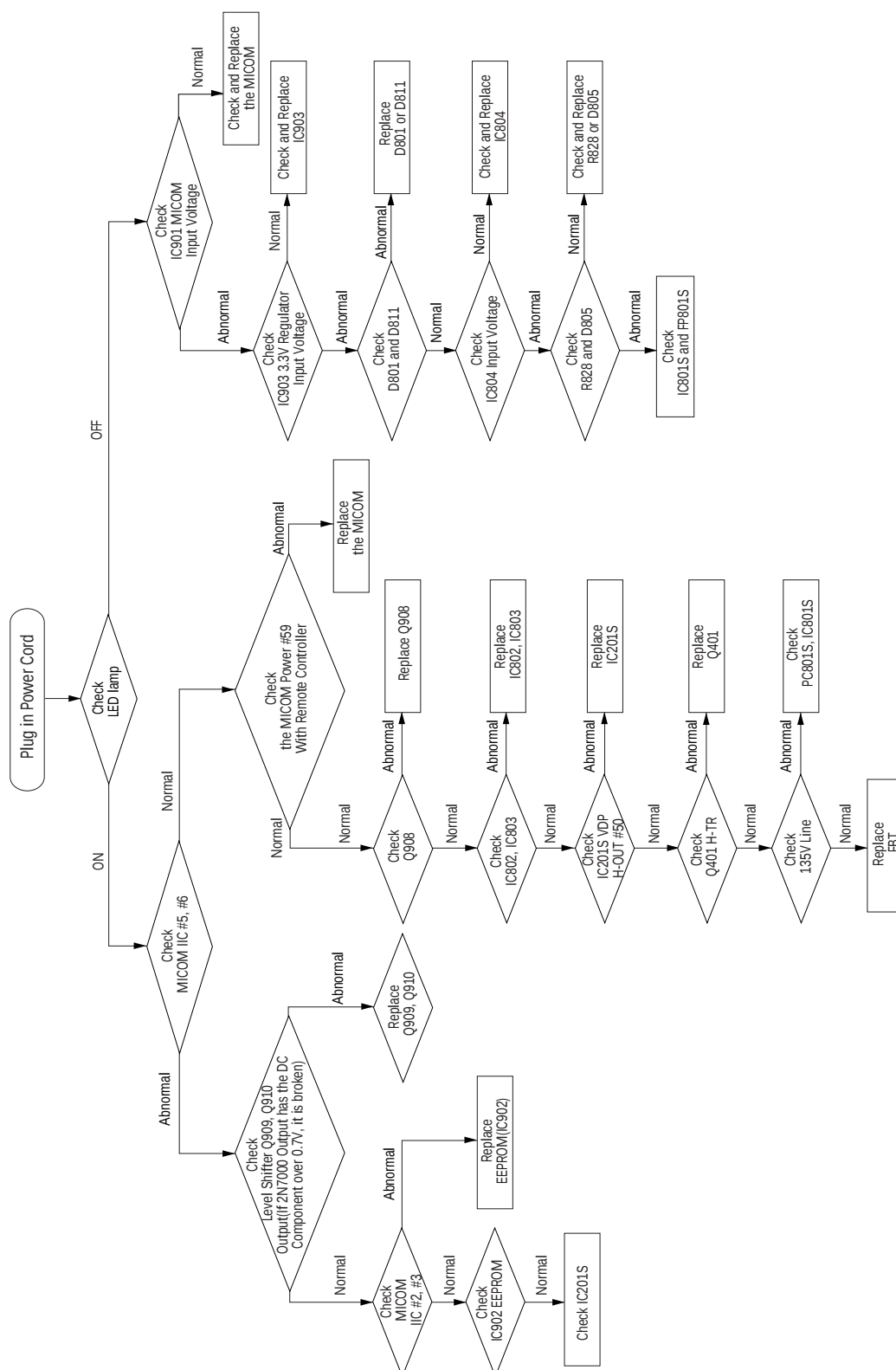
**4-8-2 Pin Assignment Specification (Continued)**

| PIN NO | FUNCTION | ASSIGN    | IN/OUT | ACTIVE H/L | DESCRIPTION                              |
|--------|----------|-----------|--------|------------|------------------------------------------|
| 27     | I/O      | Relay     | Out    | Low        | Activate Degaussing Coil                 |
| 28     | N.C.     |           |        |            | Not Used (Programmed Gound Level)        |
| 29     | GND      |           |        |            | Analog Ground                            |
| 30     | Vdd      | VDD 3.3V  |        |            | Not Used (Programmed Gound Level)        |
| 31     | N.C.     |           |        |            | Not Used (Programmed Gound Level)        |
| 32     | N.C.     |           |        |            | Micom Hardware Reset                     |
| 33     | Reset    | Reset     | In     | Low        | Crystal Oscillation Input                |
| 34     | X-In     | X-TAL In  | In     | 6MHz       | Crystal Oscillation Output               |
| 35     | X-Out    | X-TAL Out | Out    | 6MHz       | Analog Ground                            |
| 36     | GND      |           |        |            | Analog B+                                |
| 37     | Vdd      | VDD 2.5V  |        |            | OSD/TTX Output (Red)                     |
| 38     | R        | OSD-R     | Out    |            | OSD/TTX Output (Green)                   |
| 39     | G        | OSD-G     | Out    |            | OSD/TTX Output (Blue)                    |
| 40     | B        | OSD-B     | Out    |            | Fast Blank/Half Contrast Output          |
| 41     | COR      | CORE      | Out    |            |                                          |
| 42     | Vdd      | VDD 2.5V  |        |            |                                          |
| 43     | GND      |           |        |            |                                          |
| 44     | Vdd      | VDD 3.3V  |        |            |                                          |
| 45     | I/O      | PX.Y      | In     |            | When The Caption Function Adopted, Used. |
| 46     | I/O      | PX.Y      | Out    |            |                                          |
| 47     | N.C.     |           |        |            | Not Used (Programmed Gound Level)        |
| 48     | N.C.     |           |        |            |                                          |
| 49     | I/O      | S-Mute    | Out    | High       | Sound Amp Mute                           |
| 50     | I/O      | Power     | Out    | Low        | Picture On/Off Control                   |
| 51     | N.C.     |           |        |            | Not Used (Programmed Gound Level)        |
| 52     | I/O      | Tilt      | Out    | PWM        | Tilt Control Output                      |

# MEMO

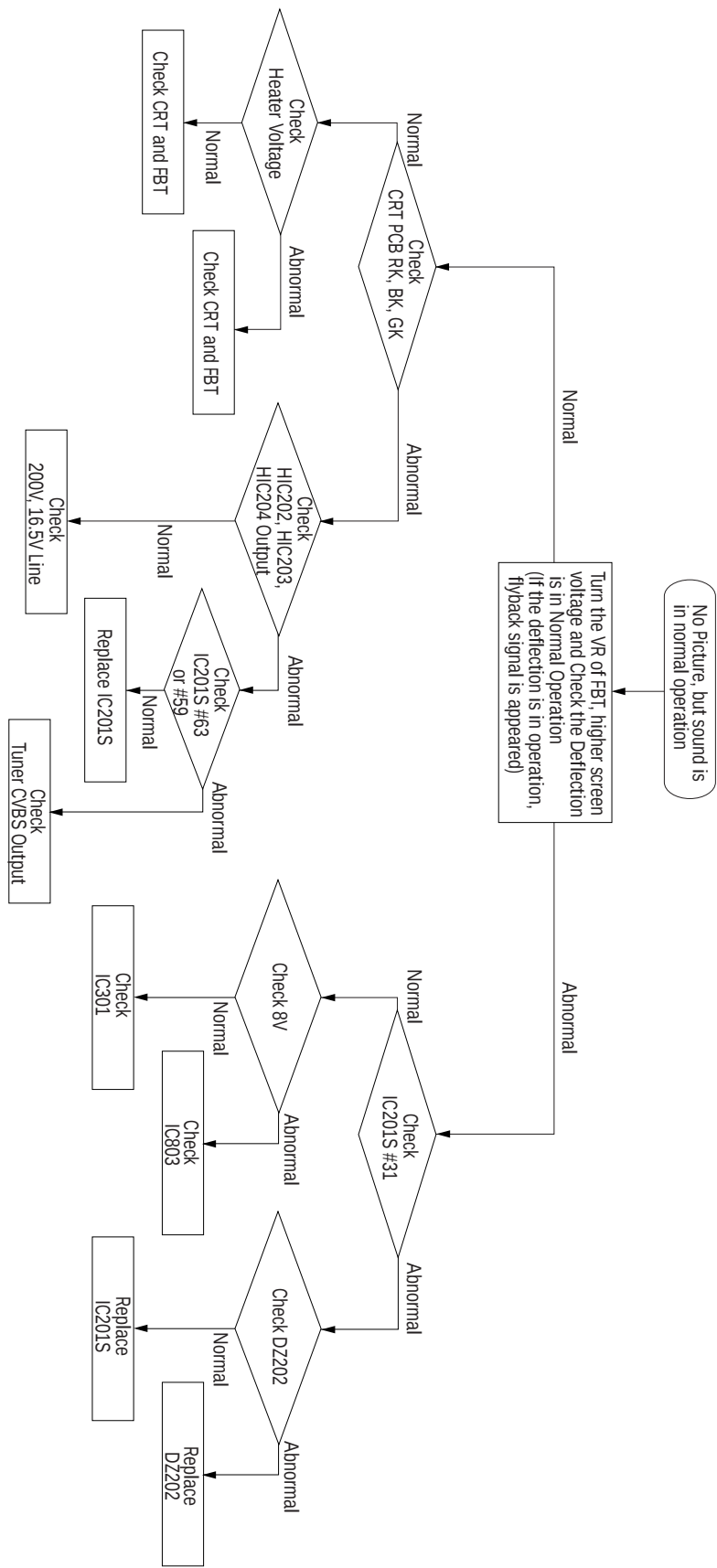
# 5. Troubleshooting

## 5-1 No Power

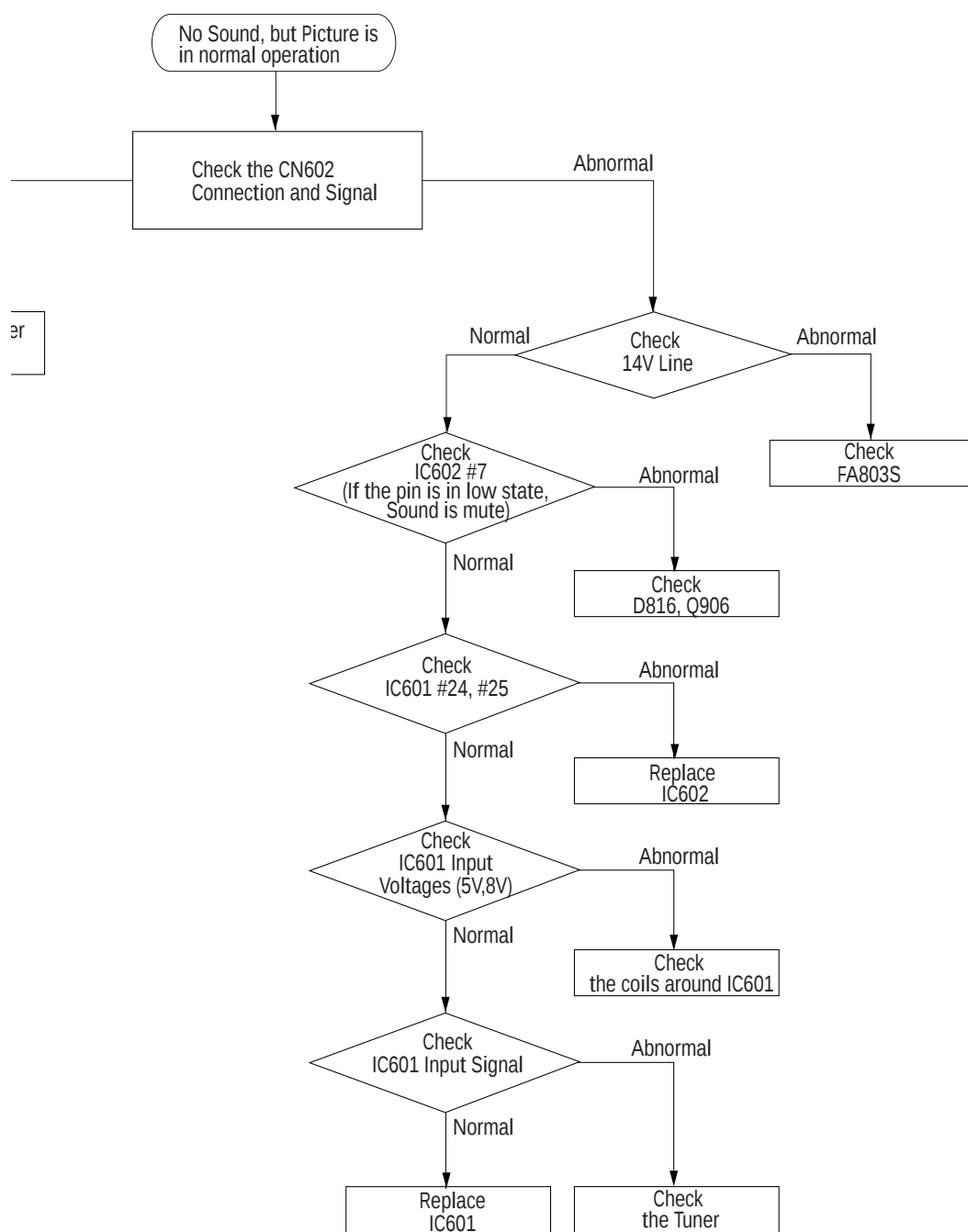


**Note :** When you check whether any component is normal, you must let the output pin be open in order not to be affected by the side of output.

5-2 No Picture



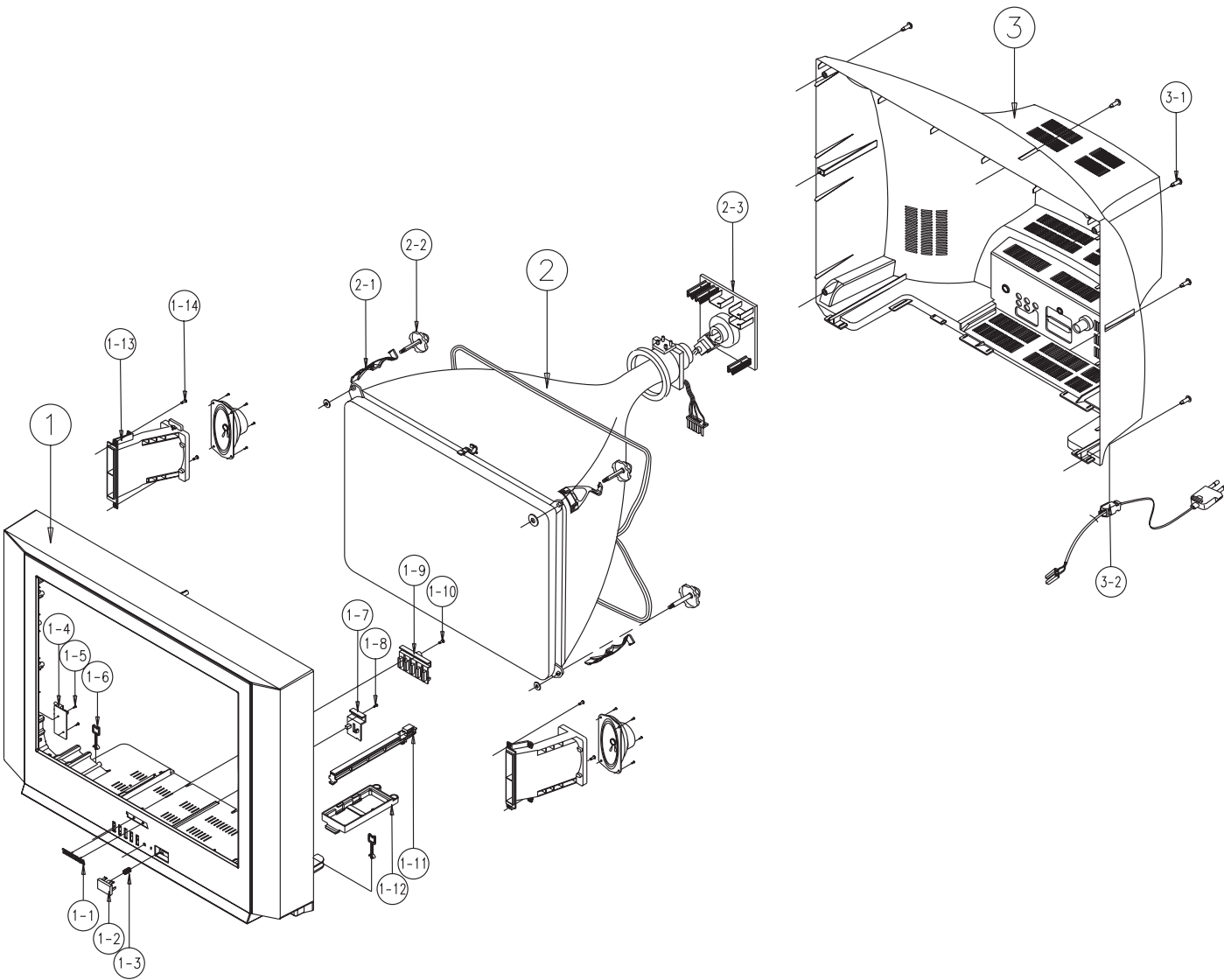
## 5-3 No Sound



# MEMO

6. Exploded View & Parts List

6-1 29VH14P



| No.  | Code No.    | Replacement No. | Description;Specification                | Q'ty | Remark |
|------|-------------|-----------------|------------------------------------------|------|--------|
| 1*   | HA91-00829A | AZ760162        | ASSY CABINET FRONT;29V1,KS2A,FLAT,HIPS   | 1    |        |
| 1    | AA64-02437B | AZ760166        | CABINET-FRONT;29V1,HIPS,HB,KTSA112,WHITE | 1    |        |
| 1-1  | AA64-01972A | AZ760128        | BADGE BRAND;TOOL,29 TOSHIBA,-,-,-,-,-    | 1    |        |
| 1-2  | AA64-01970B | AA64-01970B     | KNOB POWER;29V1,HIPS,HB,PW-001P,PEARL-WH | 1    |        |
| 1-3  | AA61-60003J | AZ760018        | SPRING-CS;-SUS304,-,-,OD6,N7,OD6,-,-,-   | 1    |        |
| 1-4  | AA95-01513A | AZ760234        | ASSY-PCB A/V BOARD;29K8,KS3A,100HZ       | 1    |        |
| 1-5  | 6003-001135 | AZ760119        | SCREW-TAPTITE;TH,+,B,M4.0,L15,BLK,SWRCH1 | 2    | CF+AV  |
| 1-6  | AA65-30105A | AZ760035        | CLAMP-WIRE;ALL MODEL,NYLON 66,V2,-,NTR,1 | 2    |        |
| 1-7  | HA64-01971A | AZ760122        | WINDOW RMC.LED;SPACE                     | 1    |        |
| 1-8  | 6002-000515 | AZ760117        | SCREW-TAPPING;RH,+,2,M4,L15,ZPC,SWRCH18  | 2    |        |
| 1-9  | AA64-01969B | AZ760135        | KNOB CONTROL;29V1,HIPS,HB,PLANTING-SILVE | 1    |        |
| 1-10 | 6002-000515 | AZ760117        | SCREW-TAPPING;RH,+,2,M4,L15,ZPC,SWRCH18  | 2    | CF+KC  |
| 1-11 | HA61-00711C | AZ760137        | HOLDER-PCB;SPACE                         | 1    |        |
| 1-12 | HA61-00987A | AZ760159        | HOLDER-PFC;32W8,29A8,28W8,HIPS,ALLFLAT   | 1    |        |
| 1-13 | AA91-00150B | AZ760228        | ASSY-HOLDER,SPK;DP,-,8OHM/15W,-,AA91-001 | 1    |        |
| 1-14 | AA60-10050A | AZ760111        | SCREW-ASSY;-SWRCH18A,M4,L25,RH,+,WP,-,Z  | 4    | CF+SPK |
| 2    | AA94-05837A | AZ760200        | ASSY CRT;A68QCP893X004,+380MG,29,4:3,Y   | 1    |        |
| 2-1  | AA65-30113A | AZ760107        | CLAMP-D,COIL;NYLON 66,V2,BLK,TVI 25-29,- | 4    |        |
| 2-2  | AA60-10050V | AZ760110        | SCREW-ASSY;-SWRCH18A,M6,L30,HH,+,WC,-,Z  | 4    | CRT+CF |
| 2-3  | 3704-000114 | AZ760188        | SOCKET-CRT;14P,29.1,35.5,SN,ISH09SK      | 1    | VA999  |
| 3    | HA64-02448B | AZ760104        | CABINET BACK;29K8,HIPS,V0,GRY            | 1    |        |
| 3-1  | 6003-001025 | AZ760109        | SCREW-TAPTITE;RH,M4,L20,BLK              | 5    | CB+CF  |
| 3-2  | AA96-00094A | AZ760177        | ASSY-POWER,CORD;DP,CP2/NO(4.0),H/C350MM, | 1    |        |

## 7. Electric Parts List

### 7-1 29VH14P

| LOC NO                    | PARTS NO    | Description & Specification                | REPLACEMENT NO | Q'ty    | REMARKS |
|---------------------------|-------------|--------------------------------------------|----------------|---------|---------|
| <b>ASSY PCB MAIN(OPT)</b> |             |                                            |                |         |         |
|                           | AA94-05920A | ASSY PCB MAIN(OPT);CW29V1DH,KS3A/F,SEB,I   | AZ760202       | 1       |         |
| C815                      | 2401-003602 | C-AL;220uF,20%,160V,GP,BK,22x25mm,1        | AZ166018       | 1       |         |
| CN501                     | 3711-002641 | CONNECTOR-HEADER;BOX,10P,1R,2.54MM,STRAI   | AZ664184       | 1       |         |
| △ CX801S                  | 2306-000318 | C-FILM,MPPF;220nF,20%,250V,TP,-,22.5mm     | AZ166013       | 1       |         |
| IC301                     | HA96-50406B | ASSY-H/S;-,-,AA62-30180B,LA7845            | AZ664185       | 1       |         |
|                           | 1204-000517 | IC-VERTICAL DEF;LA7845,SIP,7P,-,PLASTIC    | AZ661018       | 1       |         |
|                           | AA62-30180B | HEAT SINK-ES;-,-,A6063 EXTR.,2,WHT,70MM,-, | AZ664186       | 1       |         |
|                           | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YELYEL)   | AZ760146       | 1       |         |
|                           | 0205-000129 | GREASE-SILICON;SC102,JAPAN                 | AZ760065       | 0.00005 |         |
| △ IC401                   | 1202-000103 | IC-VOLTAGE COMP;393,DIP,8P,300MIL,DUAL,    | AZ661033       | 1       |         |
| △ IC801S                  | HA96-50371C | ASSY-H/S;-,-,AA62-30181H,KA3A1265R,-       | AZ664187       | 1       |         |
|                           | AA13-00101A | IC HYBRID;KA3S1265RD,CN5039,5PIN,-,50T012  | AZ664188       | 1       |         |
|                           | AA61-10386A | BRACKET-IC;-,-,SECC 100,T1.0,-,KA2S0680,   | AZ760147       | 1       |         |
|                           | AA62-30197D | HEAT SINK-ES;DP;-,-,AA62-30181H,-,-,-      | AZ760148       | 1       |         |
|                           | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YELYEL)   | AZ760146       | 1       |         |
|                           | HA68-02189A | LABEL-WARNING;SPACE                        | AZ760147       | 1       |         |
|                           | 0205-000129 | GREASE-SILICON;SC102,JAPAN                 | AZ760065       | 0.00005 |         |
| JA701                     | 3722-000195 | JACK-SCART;42P,-,SN,BLK,NO                 | AZ664029       | 1       |         |
| △ NT802S                  | 1404-001045 | THERMISTOR-NTC;4.7OHM,15%,2900K,35.0MW,T   | AZ664112       | 1       |         |
| △ PC801S                  | 0604-001038 | PHOTO-COUPLER;TR,130-260%,200MW,DIP-4,ST   | AZ661001       | 1       |         |
| △ PT801S                  | 1404-000002 | THERMISTOR-PTC 9ohm,20%,--,-,TR,RECT,-     | AZ760203       | 1       |         |
| △ RL801S                  | 3501-001040 | RELAY-POWER;12VDC,500mW,10A,1FormA,15mS,   | AZ760204       | 1       |         |
| HC801                     | HA96-00274B | ASSY-H/S;-,-,COMPLEX,AA62-00066B,FMLG12S   | AZ760205       | 1       |         |
|                           | 6003-000334 | SCREW-TAPTITE;RH,+,2S,M3,L6,ZPC(YE),SWR    | AZ760148       | 5       |         |
|                           | AA62-00066B | HEAT SINK;D2,D3,AL,T1.0,89,70,-,AA62-00    | AZ760206       | 1       |         |
| △ D802                    | 0402-001230 | DIODE-RECTIFIER;FMG-G2CS,1000V,3A,TO-220   | AZ462020       | 1       |         |
| △ D805                    | 0402-000233 | DIODE-RECTIFIER;FML-G12S,200V,5A,-,-       | AZ462008       | 1       |         |
| △ D806                    | 0402-000233 | DIODE-RECTIFIER;FML-G12S,200V,5A,-,-       | AZ462008       | 1       |         |
| △ D807                    | 0402-000233 | DIODE-RECTIFIER;FML-G12S,200V,5A,-,-       | AZ462008       | 1       |         |
| △ IC805                   | 1203-001006 | IC-VOLTAGE REGULATOR;78R05,TO-220F,4P,-,   | AZ661012       | 1       |         |
|                           | 0205-000129 | GREASE-SILICON;SC102,JAPAN                 | AZ760065       | 0.00025 |         |
| HC401                     | HA96-00275E | ASSY-H/S;-,-,COMPLEX,HA62-00051C,2SC5446   | AZ760207       | 1       |         |
|                           | HA62-00051C | HEAT SINK-PS;-,-,SILVER,HOLE 34mm,29A8     | AZ760208       | 1       |         |
| △ D414                    | 0402-001296 | DIODE-RECTIFIER;FMP-3FU,1.5KV,5A,TO-3PF,   | AZ462021       | 1       |         |
| Q401                      | 0502-001175 | TR-POWER;2SC5446,NPN,200000mW,TO-3PL,BK    | AZ561021       | 1       |         |
|                           | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YELYEL)   | AZ760146       | 2       |         |
|                           | AA60-30001A | WASHER-PLATE;M3,ID3.5,15X8.5,T1.0,-,SBHG   | AZ760149       | 2       |         |
|                           | AA62-00092A | HEAT SINK;DP;-,-,AA62-30177A,-,-,-,-       | AZ760209       | 3       |         |
| Q401                      | AA02-00007A | MICA;DPM-04,MICA,22x29x0.15mm              | AZ760168       | 1       |         |
|                           | 6003-000334 | SCREW-TAPTITE;RH,+,2S,M3,L6,ZPC(YE),SWR    | AZ760148       | 3       |         |
|                           | 0205-000129 | GREASE-SILICON;SC102,JAPAN                 | AZ760065       | 0.0001  |         |
| △ D801S                   | 0402-001399 | DIODE-BRIDGE;GSIB660,600V,6A,SIP-4,BK      | AZ462044       | 1       |         |
| IC602                     | HA96-50369B | ASSY-H/S;-,-,AA62-30181F,TDA7297,-         | AZ760154       | 1       |         |
|                           | 1201-001064 | IC-POWER AMP;7297,ZIP,15P,-,DUAL,32DB,PL   | AZ661005       | 1       |         |
|                           | AA62-30181F | HEAT SINK-ES;-,-,AL6063 EXTR.,2,WHT,50MM,- | AZ760155       | 1       |         |
|                           | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YELYEL)   | AZ760146       | 1       |         |
|                           | 0205-000129 | GREASE-SILICON;SC102,JAPAN                 | AZ760065       | 0.00005 |         |
| IC902                     | 1103-001171 | IC-EEPROM;L51DC,16KBit,DIP,8P,300MIL,10m   | AZ661031       | 1       |         |
|                           | HA99-100825 | ASSY-PCB,MAIN(ACI);CW29V1,100HZ,KS3A/F     | AZ760210       | 1       |         |
| C105                      | 2301-000383 | C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm    | AZ162012       | 1       |         |
| C103                      | 2301-000383 | C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm    | AZ162012       | 1       |         |
| C101                      | 2301-000383 | C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm    | AZ162012       | 1       |         |
| C909                      | 2301-000383 | C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm    | AZ162012       | 1       |         |
| C228                      | 2301-000356 | C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m   | AZ162011       | 1       |         |
| C230                      | 2301-000356 | C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m   | AZ162011       | 1       |         |
| C809                      | 2301-000356 | C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m   | AZ162011       | 1       |         |
| C810                      | 2301-000356 | C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m   | AZ162011       | 1       |         |
| C811                      | 2301-000356 | C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m   | AZ162011       | 1       |         |
| C202                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C205                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C920                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C231                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C215                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C630                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |
| C631                      | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM         | AZ164031       | 1       |         |

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| C645   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C652   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C603   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C207   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C708   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C239   | 2401-002235 | C-AL;10UF,20%,16V,GP,TP,5X11MM,5MM       | AZ164031       | 1    |         |
| C214   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C605   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C620   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C635   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C646   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C829   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C837   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C839   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C916   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C914   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C831   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C825   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C240   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1    |         |
| C208   | 2401-001026 | C-AL;3.3uF,20%,50V,GP,TP,5x11mm,5mm      | AZ164018       | 1    |         |
| C636   | 2401-001026 | C-AL;3.3uF,20%,50V,GP,TP,5x11mm,5mm      | AZ164018       | 1    |         |
| C905   | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | AZ161102       | 1    |         |
| C607   | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | AZ161102       | 1    |         |
| C608   | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | AZ161102       | 1    |         |
| C211   | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | AZ161102       | 1    |         |
| C923   | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | AZ161102       | 1    |         |
| C212   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C213   | 2301-000247 | C-FILM,PEF;33nF,5%,50V,TP,8.1x4.5x13mm,5 | AZ162007       | 1    |         |
| C218   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C219   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C220   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C901   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C921   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C922   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C919   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C924   | 2202-000632 | C-CERAMIC,MLC-AXIAL;100nF,20%,50V,Z5U,TP | AZ161703       | 1    |         |
| C907   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1    |         |
| C308   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1    |         |
| C237   | 2401-000914 | C-AL;22uF,20%,16V,GP,TP,5x11,5           | AZ164043       | 1    |         |
| C604   | 2401-000603 | C-AL;1uF,20%,50V,GP,TP,5x11,5            | AZ164011       | 1    |         |
| C201   | 2401-000603 | C-AL;1uF,20%,50V,GP,TP,5x11,5            | AZ164011       | 1    |         |
| C841   | 2401-000603 | C-AL;1uF,20%,50V,GP,TP,5x11,5            | AZ164011       | 1    |         |
| C304   | 2305-000285 | C-FILM,MPEF;220nF,5%,100V,TP,20x18x11.5  | AZ162020       | 1    |         |
| C305   | 2305-000149 | C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5 | AZ162016       | 1    |         |
| C821   | 2301-000192 | C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm    | AZ162003       | 1    |         |
| C902   | 2301-000192 | C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm    | AZ162003       | 1    |         |
| C307   | 2401-000360 | C-AL;100uF,20%,50V,GP,TP,8x11.5,5        | AZ164006       | 1    |         |
| C302   | 2401-000360 | C-AL;100uF,20%,50V,GP,TP,8x11.5,5        | AZ164006       | 1    |         |
| C401   | 2201-000556 | C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5. | AZ163011       | 1    |         |
| C403   | 2201-000556 | C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5. | AZ163011       | 1    |         |
| C421   | 2201-000556 | C-CERAMIC,DISC;0.47nF,10%,500V,Y5P,TP,5. | AZ163011       | 1    |         |
| C402   | 2401-001397 | C-AL;470uF,20%,25V,GP,TP,10x16,5         | AZ164024       | 1    |         |
| C404   | 2401-001397 | C-AL;470uF,20%,25V,GP,TP,10x16,5         | AZ164024       | 1    |         |
| C408   | 2305-000382 | C-FILM,MPEF;4.7nF,5%,400V,TP,-,5MM       | AZ162023       | 1    |         |
| C414   | 2401-002597 | C-AL;220uF,20%,35V,GP,TP,10x12.5,5       | AZ164049       | 1    |         |
| C418   | 2401-002597 | C-AL;220uF,20%,35V,GP,TP,10x12.5,5       | AZ164049       | 1    |         |
| C422   | 2401-001527 | C-AL;47uF,20%,250V,HR,TP,13x25mm,5m      | AZ165010       | 1    |         |
| C424   | 2201-000132 | C-CERAMIC,DISC;0.1nF,10%,500V,Y5P,TP,6.5 | AZ163021       | 1    |         |
| C601   | 2201-000558 | C-CERAMIC,DISC;0.47nF,10%,50V,Y5P,TP,5x3 | AZ163025       | 1    |         |
| C610   | 2301-000445 | C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm | AZ162013       | 1    |         |
| C611   | 2301-000445 | C-FILM,PEF;4.7nF,5%,50V,TP,5.5x7x3mm,5mm | AZ162013       | 1    |         |
| C612   | 2401-001914 | C-AL;1uF,20%,50V,BP,TP,5x11,5            | AZ164040       | 1    |         |
| C613   | 2401-001914 | C-AL;1uF,20%,50V,BP,TP,5x11,5            | AZ164040       | 1    |         |
| C209   | 2401-001914 | C-AL;1uF,20%,50V,BP,TP,5x11,5            | AZ164040       | 1    |         |
| C617   | 2401-000493 | C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm       | AZ164010       | 1    |         |
| C917   | 2401-000493 | C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm       | AZ164010       | 1    |         |
| C413   | 2401-000493 | C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm       | AZ164010       | 1    |         |
| C623   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C624   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C627   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C629   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C642   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C644   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C638   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C639   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1    |         |
| C632   | 2202-000806 | C-CERAMIC,MLC-AXIAL;220PF,10%,50V,Y5P,TP | AZ161221       | 1    |         |
| C634   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11,5        | AZ164027       | 1    |         |

| LOC NO | PARTS NO    | Description & Specification                | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|--------------------------------------------|----------------|------|---------|
| C832   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11.5          | AZ164027       | 1    |         |
| C838   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11.5          | AZ164027       | 1    |         |
| C826   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11.5          | AZ164027       | 1    |         |
| C637   | 2401-000027 | C-AL;4.7uF,20%,50V,GP,TP,5x11.5            | AZ164001       | 1    |         |
| C640   | 2401-000027 | C-AL;4.7uF,20%,50V,GP,TP,5x11.5            | AZ164001       | 1    |         |
| C641   | 2401-000027 | C-AL;4.7uF,20%,50V,GP,TP,5x11.5            | AZ164001       | 1    |         |
| C643   | 2401-000027 | C-AL;4.7uF,20%,50V,GP,TP,5x11.5            | AZ164001       | 1    |         |
| C912   | 2401-000027 | C-AL;4.7uF,20%,50V,GP,TP,5x11.5            | AZ164001       | 1    |         |
| C647   | 2202-000286 | C-CERAMIC,MLC-AXIAL;56pF,5%,50V,SL,TP,1.   | AZ161560       | 1    |         |
| C649   | 2301-000108 | C-FILM,PEF;1.5nF,5%,50V,TP,6.5x3.0x5.5mm   | AZ162001       | 1    |         |
| C804   | 2201-000332 | C-CERAMIC,DISC;2.2nF,20%,250VAC,Y5U,TP,1   | AZ163008       | 1    |         |
| C805   | 2201-000332 | C-CERAMIC,DISC;2.2nF,20%,250VAC,Y5U,TP,1   | AZ163008       | 1    |         |
| C807   | 2301-001397 | C-FILM,PPF;2.2nF,5%,1.2kV,TP,15x8.5x13.5   | AZ166019       | 1    |         |
| C814   | 2201-000406 | C-CERAMIC,DISC;0.27nF,10%,2kV,Y5P,TP,6.3   | AZ163023       | 1    |         |
| C817   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.   | AZ163013       | 1    |         |
| C819   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.   | AZ163013       | 1    |         |
| C822   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5.   | AZ163013       | 1    |         |
| C818   | 2401-000722 | C-AL;2200uF,20%,25V,WT,TP,16x25,7.5        | AZ164014       | 1    |         |
| C910   | 2201-000980 | C-CERAMIC,DISC;30pF,5%,50V,CH,TP,5.0x3.0   | AZ163015       | 1    |         |
| C911   | 2201-000980 | C-CERAMIC,DISC;30pF,5%,50V,CH,TP,5.0x3.0   | AZ163015       | 1    |         |
| D201   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D202   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D207   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D208   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D209   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D210   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D211   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D602   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D804   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| DZ402  | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D906   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D405   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D604   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35,   | AZ462001       | 1    |         |
| D401   | 0402-000540 | DIODE-RECTIFIER;RU20A,600V,1.5A,-,TP       | AZ462012       | 1    |         |
| D402   | 0402-000534 | DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T   | AZ462011       | 1    |         |
| D404   | 0402-000534 | DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T   | AZ462011       | 1    |         |
| D411   | 0402-000534 | DIODE-RECTIFIER;RG10V,400V,1.2A,DO-201,T   | AZ462011       | 1    |         |
| D406   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D808   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D810   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D811   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D907   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D403   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP    | AZ462005       | 1    |         |
| D801   | 0402-001111 | DIODE-RECTIFIER;1N5397GP,600V,1.5A,DO-20   | AZ462019       | 1    |         |
| DZ201  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ202  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ802  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ902  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ601  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ603  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ806  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ903  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ904  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ905  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ906  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ907  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ909  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ910  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ604  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ605  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ908  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ204  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ205  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| KEZI   | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ901  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500   | AZ462022       | 1    |         |
| DZ203  | 0403-001321 | DIODE-ZENER;MTZJ6.8C,6.66-7.01V,500mW,DO   | AZ462029       | 1    |         |
| DZ302  | 0403-001329 | DIODE-ZENER;MTZJ24B,22.61-23.77V,500mW,D   | AZ462032       | 1    |         |
| DZ303  | 0403-001329 | DIODE-ZENER;MTZJ24B,22.61-23.77V,500mW,D   | AZ462032       | 1    |         |
| DZ304  | 0403-001329 | DIODE-ZENER;MTZJ24B,22.61-23.77V,500mW,D   | AZ462032       | 1    |         |
| DZ305  | 0403-001221 | DIODE-ZENER;UZ39BSB,35.36-37.19V,500mW,D   | AZ462028       | 1    |         |
| DZ306  | 0403-000700 | DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,T   | AZ461013       | 1    |         |
| DZ804  | 0403-000700 | DIODE-ZENER;TZP33A,33V,31-35V,1W,DO-41,T   | AZ461013       | 1    |         |
| DZ401  | 0403-001325 | DIODE-ZENER;MTZJ15C,14.35-15.09V,500mW,D   | AZ462031       | 1    |         |
| DZ801  | 0403-001322 | DIODE-ZENER;MTZJ8.2B,7.78-8.19V,500mW,DO   | AZ462030       | 1    |         |
| DZ808  | 0403-001322 | DIODE-ZENER;MTZJ8.2B,7.78-8.19V,500mW,DO   | AZ462030       | 1    |         |
| DZ805  | 1203-001217 | IC-POS1.ADJ,JUST REG.;431,TO-92,3P,4.58MIL | AZ661013       | 1    |         |
| GT101  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                    | AZ664172       | 1    |         |

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| GT102  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT301  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT302  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT401  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT402  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT801  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT802  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT803  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT804  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT805  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT806  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT404  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT406  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT405  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT410  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT411  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT412  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| J102   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J103   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J105   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J110   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J111   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J112   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J114   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J115   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J116   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J117   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J119   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J122   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J123   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J124   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J203   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J205   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J206   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J207   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J208   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J209   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J210   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J211   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J212   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J213   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J214   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J215   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J216   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J217   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J218   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J219   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J222   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J223   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J224   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J225   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J227   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J228   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J229   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J230   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J232   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J234   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J236   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J237   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J238   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J239   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J241   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J244   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J246   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J247   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J248   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J401   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J402   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J404   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J405   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J409   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J411   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J416   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J418   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J421   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J422   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J424   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |

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## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| J937   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J918   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J907   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J906   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J626   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J121   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J118   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J101   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J253   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J943   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J944   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J705   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J707   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J407   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J605   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J608   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J609   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J419   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J420   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J126   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J108   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J127   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| L107   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R223   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R234   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J221   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J254   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J914   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| L210   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R241   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| C221   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| C222   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| C223   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| L208   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| L204   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J412   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| C232   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J410   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J226   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J430   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J410   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J935   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J829   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J830   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| EY301  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY302  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY303  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY304  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY401  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY402  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY403  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY404  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY405  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY406  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY407  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY408  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY409  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY410  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY411  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY412  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY413  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY414  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY415  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY416  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY417  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY418  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY419  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY420  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY421  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY422  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY423  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY424  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY425  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY426  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY427  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY428  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |
| EY429  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148       | 1    |         |

[illegible]

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification                   | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|-----------------------------------------------|----------------|------|---------|
| EY804  | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-                  | AZ664148       | 1    |         |
| EL401  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL402  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL404  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL406  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL802  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL803  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL805  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL806  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL807  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL808  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL809  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL810  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL811  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL403  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL407  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| EL408  | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-                  | AZ664149       | 1    |         |
| R236   | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261221       | 1    |         |
| R237   | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261221       | 1    |         |
| R238   | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261221       | 1    |         |
| R247   | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261221       | 1    |         |
| R235   | 2001-000515 | R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261221       | 1    |         |
| R622   | 2001-000577 | R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM        | AZ261202       | 1    |         |
| R621   | 2001-000577 | R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM        | AZ261202       | 1    |         |
| R915   | 2001-000577 | R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM        | AZ261202       | 1    |         |
| R935   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R202   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R205   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R243   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R245   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R246   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R310   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R716   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R715   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R606   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R620   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R919   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R629   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R309   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R206   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R609   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R211   | 2001-000290 | R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261103       | 1    |         |
| R940   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R941   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R942   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R947   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R948   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R102   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R103   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R203   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R204   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R231   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R232   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R604   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R605   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R610   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R611   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R612   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R613   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R628   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R627   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R723   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R909   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R907   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| J904   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| R925   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| L211   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| J920   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM       | AZ261101       | 1    |         |
| RY801S | 2002-001011 | R-COMPOSITION;3.3MOHM,10%,1/2W,AA,TP,3.7      | AZ263005       | 1    |         |
| RY802S | 2002-001013 | R-COMPOSITION;4.7MOHM,10%,1/2W,AA,TP,3.7      | AZ263006       | 1    |         |
| VP801S | 1405-000187 | VARIATOR;750V,1250A,12.5x7mm,TP               | AZ664040       | 1    |         |
| VX801S | 1405-000187 | VARIATOR;750V,1250A,12.5x7mm,TP               | AZ664040       | 1    |         |
| X901   | 2801-003728 | CRYSTAL-UNIT;6MHz,30ppm,28-AAAM,20pF,40oh     | AZ663005       | 1    |         |
| L103   | 2701-000115 | INDUCTOR-AXIAL;10uH,10%,3x7mm                 | AZ361002       | 1    |         |
|        | 0203-001123 | TAPE-PAPER;#53131, T0.15, VV6.0, L200000, YEL | AZ760062       | 8,21 |         |
| C707   | 2401-000939 | C-AL;22uF,20%,25V,GP,TP,5x11,5                | AZ164016       | 1    |         |
| L202   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM             | AZ361001       | 1    |         |

| LOC NO | PARTS NO    | Description & Specification               | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|-------------------------------------------|----------------|------|---------|
| L301   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L406   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L907   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L708   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L707   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L711   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L108   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L109   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| R706   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| R707   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| R708   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM         | AZ361001       | 1    |         |
| L902   | 2701-000184 | INDUCTOR-AXIAL;4.7UH,10%,2.5X3.4MM        | AZ361010       | 1    |         |
| L302   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L802   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L803   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L804   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L809   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| J901   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L303   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L207   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| J406   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L412   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500,  | AZ362003       | 1    |         |
| L407   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| L807   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| L601   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| L609   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| R233   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| L201   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| C233   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| C234   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| C235   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| C236   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP-     | AZ362001       | 1    |         |
| L604   | 2701-000169 | INDUCTOR-AXIAL;3.9UH,10%,2.5X3.4MM        | AZ361029       | 1    |         |
| Q201   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q202   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q203   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q901   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q906   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q908   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q701   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q204   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| Q601   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T  | AZ561003       | 1    |         |
| R244   | 2001-000786 | R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261473       | 1    |         |
| R215   | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261223       | 1    |         |
| R823   | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261223       | 1    |         |
| R216   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R603   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R816   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R817   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R924   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R914   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R936   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R607   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R608   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R252   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R726   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R910   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R209   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R254   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R601   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R602   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ261102       | 1    |         |
| R228   | 2001-000117 | R-CARBON(S);680HM,5%,1/2W,AA,TP,2.4X6.4M  | AZ261680       | 1    |         |
| R303   | 2001-000016 | R-CARBON(S);10HM,5%,1/2W,AA,TP,2.4X6.4MM  | AZ262010       | 1    |         |
| R828   | 2008-000266 | R-FUSIBLE(S);10HM,5%,2W,AF,TP,3.9X10MM    | AZ263044       | 1    |         |
| R411   | 2001-000028 | R-CARBON(S);1000HM,5%,1/2W,AA,TP,2.4X6.4  | AZ261913       | 1    |         |
| R412   | 2001-000020 | R-CARBON(S);220HM,5%,1/2W,AA,TP,2.4X6.4M  | AZ262220       | 1    |         |
| R422   | 2001-000020 | R-CARBON(S);220HM,5%,1/2W,AA,TP,2.4X6.4M  | AZ262220       | 1    |         |
| R421   | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ261922       | 1    |         |
| R913   | 2001-000947 | R-CARBON;7.5KOHM,5%,1/8W,AA,TP,1.8X3.2M   | AZ261918       | 1    |         |
| R426   | 2003-000540 | R-METAL OXIDE(S);1KOHM,5%,2W,AF,TP,4X12M  | AZ263011       | 1    |         |
| R614   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R615   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R616   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R617   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R920   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R226   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |
| R224   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261471       | 1    |         |

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| R225   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261471       | 1    |         |
| R812   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261471       | 1    |         |
| R831   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261471       | 1    |         |
| R931   | 2001-000780 | R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261471       | 1    |         |
| R214   | 2001-000411 | R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261914       | 1    |         |
| R704   | 2001-000969 | R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261750       | 1    |         |
| R802   | 2003-001025 | R-METAL OXIDE(S);15Kohm,5%,2W,AF,TP,3.9x | AZ263017       | 1    |         |
| R803   | 2003-001025 | R-METAL OXIDE(S);15Kohm,5%,2W,AF,TP,3.9x | AZ263017       | 1    |         |
| R804   | 2003-001025 | R-METAL OXIDE(S);15Kohm,5%,2W,AF,TP,3.9x | AZ263017       | 1    |         |
| R805   | 2001-001150 | R-CARBON(S);470KOHM,5%,1/2W,AA,TP,2.4X6. | AZ262474       | 1    |         |
| R806   | 2001-001150 | R-CARBON(S);470KOHM,5%,1/2W,AA,TP,2.4X6. | AZ262474       | 1    |         |
| R813   | 2001-001153 | R-CARBON(S);470HM,5%,1/2W,AA,TP,2.4X6.4M | AZ262470       | 1    |         |
| R832   | 2001-001153 | R-CARBON(S);470HM,5%,1/2W,AA,TP,2.4X6.4M | AZ262470       | 1    |         |
| R810   | 2001-001178 | R-CARBON(S);680OHM,5%,1/2W,AA,TP,2.4X6.4 | AZ262681       | 1    |         |
| R418   | 2001-001178 | R-CARBON(S);680OHM,5%,1/2W,AA,TP,2.4X6.4 | AZ262681       | 1    |         |
| R819   | 2004-001983 | R-METAL;2.49KOHM,1%,1/2W,AA,TP,2.4X6.4   | AZ263034       | 1    |         |
| R415   | 2004-001983 | R-METAL;2.49KOHM,1%,1/2W,AA,TP,2.4X6.4   | AZ263034       | 1    |         |
| R820   | 2001-001096 | R-CARBON(S);2.2ohm,5%,1/2W,AA,TP,2.4x6.4 | AZ261923       | 1    |         |
| R822   | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261104       | 1    |         |
| R824   | 2001-000273 | R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261104       | 1    |         |
| R825   | 2001-000066 | R-CARBON(S);10KOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ262103       | 1    |         |
| R901   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R903   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R904   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R905   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R906   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R908   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R921   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R927   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R928   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R937   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R938   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R833   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R724   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R725   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R253   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| R248   | 2001-000003 | R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261331       | 1    |         |
| R249   | 2001-000003 | R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261331       | 1    |         |
| R250   | 2001-000003 | R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261331       | 1    |         |
| R922   | 2001-000924 | R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261681       | 1    |         |
| R923   | 2001-000924 | R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261681       | 1    |         |
| C833   | 2401-002619 | C-AL;47uF,20%,25V,GP,TP,5x11,5           | AZ164037       | 1    |         |
| C229   | 2401-002619 | C-AL;47uF,20%,25V,GP,TP,5x11,5           | AZ164037       | 1    |         |
| CN602  | 3711-002644 | CONNECTOR-HEADER;BOX,5P,1R,2.5mm,STRSTRA | AZ664019       | 1    |         |
| CW901  | 2503-000156 | C-NETWORK;100pF,4,20%,50V                | AZ166005       | 1    |         |
| D203   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D204   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D205   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D206   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D901   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D902   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D903   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| D904   | 0404-000156 | DIODE-SCHOTTKY;RB441Q,10V,100mA,DO-34,TP | AZ462033       | 1    |         |
| DZ803  | 0403-001167 | DIODE-ZENER;MTZJ30D,30V,29.02-30.51V,500 | AZ462026       | 1    |         |
| FA802S | 3601-001086 | FUSE-AXIAL LEAD;125V,5A,FAST-ACTING,GLAS | AZ664013       | 1    |         |
| HIC201 | AA13-00093A | IC-HYBRID;-,DRGB001A,SIP,5P,-,TP         | AZ661042       | 1    |         |
| HIC202 | AA13-00093A | IC-HYBRID;-,DRGB001A,SIP,5P,-,TP         | AZ661042       | 1    |         |
| HIC203 | AA13-00093A | IC-HYBRID;-,DRGB001A,SIP,5P,-,TP         | AZ661042       | 1    |         |
| HIC204 | AA13-00093A | IC-HYBRID;-,DRGB001A,SIP,5P,-,TP         | AZ661042       | 1    |         |
| R409   | 2003-001018 | R-METAL OXIDE(S);220OHM,5%,2W,AF,TP,3.9X | AZ268023       | 1    |         |
| R410   | 2003-001018 | R-METAL OXIDE(S);220OHM,5%,2W,AF,TP,3.9X | AZ268023       | 1    |         |
| R413   | 2008-001018 | R-FUSIBLE(S);0.47OHM,10%,2W,AF,TP,3.9X10 | AZ268023       | 1    |         |
| R424   | 2008-001018 | R-FUSIBLE(S);0.47OHM,10%,2W,AF,TP,3.9X10 | AZ268023       | 1    |         |
| R827   | 2008-000284 | R-FUSIBLE(S);0.1OHM,10%,2W,AF,TP,3.9X10M | AZ268002       | 1    |         |
| R829   | 2008-001029 | R-FUSIBLE(S);5.6ohm,5%,2W,AF,TP,3.9x10mm | AZ268004       | 1    |         |
| R433   | 2003-001042 | R-METAL OXIDE(S);5.6Kohm,5%,2W,AF,TP,3.9 | AZ263069       | 1    |         |
| R717   | 2001-000702 | R-CARBON;39Kohm,5%,1/8W,AA,TP,1.8x3.2mm  | AZ261916       | 1    |         |
| R718   | 2001-000702 | R-CARBON;39Kohm,5%,1/8W,AA,TP,1.8x3.2mm  | AZ261916       | 1    |         |
| R105   | 2001-000702 | R-CARBON;39Kohm,5%,1/8W,AA,TP,1.8x3.2mm  | AZ261916       | 1    |         |
| X601   | 2801-003903 | CRYSTAL-UNIT;18.432MHz,25ppm,28-AAM,12pF | AZ663008       | 1    |         |
| IC904  | 1203-001943 | IC-VOL. DETECTOR;7025,TO-92,3P,-,PLASTIC | AZ661037       | 1    |         |
| PCB    | AA41-00168F | PCB-MAIN;CS29A6,FR-1,1L,F,1.6T,330x245,  | AZ760157       | 1    |         |
| Q802   | 0501-000369 | TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L, | AZ561002       | 1    |         |
| Q909   | 0505-000109 | FET-SILICON;2N7000,N,60V,200mA,5ohm,400m | AZ561015       | 1    |         |
| Q910   | 0505-000109 | FET-SILICON;2N7000,N,60V,200mA,5ohm,400m | AZ561015       | 1    |         |
| R434   | 2003-002064 | R-METAL OXIDE;7.5ohm,5%,2W,AF,TP,10x3.9m | AZ268046       | 1    |         |
| L605   | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM         | AZ361009       | 1    |         |

| LOC NO   | PARTS NO    | Description & Specification               | REPLACEMENT NO | Q'ty | REMARKS |
|----------|-------------|-------------------------------------------|----------------|------|---------|
| L606     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L607     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L608     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L701     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L702     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L705     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| L706     | 2701-000180 | INDUCTOR-AXIAL;33UH,5%,2.5X3.4MM          | AZ361009       | 1    |         |
| R106     | 2001-000864 | R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261563       | 1    |         |
| R313     | 2004-001137 | R-METAL;6.8Kohm,1%,1/8W,AA,TP,1.8x3.2mm   | AZ264001       | 1    |         |
| R710     | 2001-000938 | R-CARBON;68ohm,5%,1/8W,AA,TP,1.8x3.2mm    | AZ261680       | 1    |         |
| R709     | 2001-000938 | R-CARBON;68ohm,5%,1/8W,AA,TP,1.8x3.2mm    | AZ261680       | 1    |         |
| R811     | 2004-001408 | R-METAL(S);91KOHM,1%,1/2W,AA,TP,2.4X6.4M  | AZ264006       | 1    |         |
| R809     | 2001-000022 | R-CARBON(S);33OHM,5%,1/2W,AA,TP,2.4X6.4M  | AZ261330       | 1    |         |
| L901     | 2702-001094 | INDUCTOR-RADIAL;10uH,10%,6x4mm            | AZ361032       | 1    |         |
| L903     | 2702-001094 | INDUCTOR-RADIAL;10uH,10%,6x4mm            | AZ361032       | 1    |         |
| L904     | 2702-001094 | INDUCTOR-RADIAL;10uH,10%,6x4mm            | AZ361032       | 1    |         |
| L909     | 2701-000191 | INDUCTOR-AXIAL;47uH,10%,2.5x3.4mm         | AZ361031       | 1    |         |
| L908     | 2701-000191 | INDUCTOR-AXIAL;47uH,10%,2.5x3.4mm         | AZ361031       | 1    |         |
| R818     | 2001-001113 | R-CARBON(S);270Kohm,5%,1/2W,AA,TP,2.4x6.  | AZ261925       | 1    |         |
| CN702    | 3711-002647 | CONNECTOR-HEADER;BOX,8P,1R,2.5mm,STRAIGH  | AZ664020       | 1    |         |
| C656     | 2201-000304 | C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP  | AZ163022       | 1    |         |
| C657     | 2201-000304 | C-CERAMIC,DISC;0.001nF,0.25pF,50V,NP0,TP  | AZ163022       | 1    |         |
| C306     | 2301-000342 | C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,  | AZ162031       | 1    |         |
| C415     | 2301-000342 | C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,  | AZ162031       | 1    |         |
| C621     | 2401-002458 | C-AL;1000uF,20%,35V,GP,TP,16x25,7.5       | AZ164048       | 1    |         |
| C824     | 2401-003046 | C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5        | AZ164051       | 1    |         |
| C823     | 2401-003046 | C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5        | AZ164051       | 1    |         |
| C115     | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP  | AZ161101       | 1    |         |
| C116     | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP  | AZ161101       | 1    |         |
| C701     | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP  | AZ161101       | 1    |         |
| L209     | 2701-000168 | INDUCTOR-AXIAL;3.3 UH 5% 2.5X3.4 MM       | AZ361008       | 1    |         |
| L212     | 2701-000168 | INDUCTOR-AXIAL;3.3 UH 5% 2.5X3.4 MM       | AZ361008       | 1    |         |
| L801     | 3301-001223 | CORE-FERRITE BEAD;AA,62ohm,3.5x0.8x5mm,-  | AZ362014       | 1    |         |
| L806     | 3301-001223 | CORE-FERRITE BEAD;AA,62ohm,3.5x0.8x5mm,-  | AZ362014       | 1    |         |
| R945     | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M   | AZ261222       | 1    |         |
| R946     | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M   | AZ261222       | 1    |         |
| ⚠ RX801S | 2002-001010 | R-COMPOSITION;1.8Mohm,10%,1/2W,AA,TP,3.7  | AZ262753       | 1    |         |
| R821     | 2004-001891 | R-METAL(S);133Kohm,1%,1/2W,AA,TP,2.5x6.5  | AZ268025       | 1    |         |
| R210     | 2001-000812 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M   | AZ261562       | 1    |         |
| ⚠ FP801S | 3601-000297 | FUSE-CARTRIDGE;250V,5A,TIME-LAG,GLASS,5.  | AZ664114       | 1    |         |
| F801A    | 3602-000114 | FUSE-HOLDER;-,-,30MOHM                    | AZ664014       | 1    |         |
| F801B    | 3602-000114 | FUSE-HOLDER;-,-,30MOHM                    | AZ664014       | 1    |         |
| C835     | 2401-002289 | C-AL;470uF,20%,35V,WT,TP,10x20,5          | AZ164047       | 1    |         |
| C840     | 2401-002212 | C-AL;10uF,20%,25V,WT,TP,5x11,5            | AZ164045       | 1    |         |
| C827     | 2401-002212 | C-AL;10uF,20%,25V,WT,TP,5x11,5            | AZ164045       | 1    |         |
| R417     | 2004-001397 | R-METAL(S);4.7Kohm,1%,1/2W,AA,TP,2.4x6.4  | AZ264003       | 1    |         |
| R301     | 2004-001397 | R-METAL(S);4.7Kohm,1%,1/2W,AA,TP,2.4x6.4  | AZ264003       | 1    |         |
| CN704    | 3711-002646 | CONNECTOR-HEADER;BOX,7P,1R,2.5mm,STRAIGH  | AZ760158       | 1    |         |
| CN502    | 3711-002646 | CONNECTOR-HEADER;BOX,7P,1R,2.5mm,STRAIGH  | AZ760158       | 1    |         |
| R808     | 2001-001079 | R-CARBON(S);15OHM,5%,1/2W,AA,TP,2.4X6.4M  | AZ261920       | 1    |         |
| R425     | 2008-001011 | R-FUSIBLE(S);0.18ohm,10%,2W,AF,TP,3.9x10  | AZ263049       | 1    |         |
|          | HA68-02176A | LABEL;SPACE                               | AZ760150       | 1    |         |
| R423     | 2001-001122 | R-CARBON(S);3.9KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ268021       | 1    |         |
| C654     | 2201-000611 | C-CERAMIC,DISC;56pF,5%,50V,CH,TP,6.5x3,5  | AZ163026       | 1    |         |
| C425     | 2301-001259 | C-FILM,MPPF;100nF,5%,400V,TP,19x8x16,7.5  | AZ166020       | 1    |         |
| C622     | 2401-001264 | C-AL;4.7uF,20%,50V,BP,TP,5x11,5           | AZ164020       | 1    |         |
| C625     | 2401-001264 | C-AL;4.7uF,20%,50V,BP,TP,5x11,5           | AZ164020       | 1    |         |
| C626     | 2401-001264 | C-AL;4.7uF,20%,50V,BP,TP,5x11,5           | AZ164020       | 1    |         |
| C628     | 2401-001264 | C-AL;4.7uF,20%,50V,BP,TP,5x11,5           | AZ164020       | 1    |         |
| C104     | 2401-002463 | C-AL;470uF,20%,16V,GP,TP,8x11.5,5         | AZ164035       | 1    |         |
| C808     | 2401-003046 | C-AL;47uF,20%,50V,WT,TP,6.3x11,2.5        | AZ164051       | 1    |         |
| D301     | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,  | AZ462014       | 1    |         |
| ⚠ D803   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,  | AZ462014       | 1    |         |
| ⚠ D816   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-,  | AZ462014       | 1    |         |
| DZ602    | 0403-000720 | DIODE-ZENER;MTZJ9.1B,9.1V,8.57-9.01V,500  | AZ462025       | 1    |         |
| R207     | 2001-000221 | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M   | AZ261122       | 1    |         |
| R208     | 2001-000405 | R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261181       | 1    |         |
| R414     | 2008-000253 | R-FUSIBLE(S);0.47ohm,5%,1W,AF,TP,3.9x10mm | AZ268017       | 1    |         |
| HIC401   | AA13-00094A | IC HYBRID;-,-,DDR1001A,SIP,5P;-,-,TP      | AZ760211       | 1    |         |
| C102     | 2401-001513 | C-AL;47uF,20%,16V,WT,TP,5x11,5            | AZ164044       | 1    |         |
| C913     | 2401-000287 | C-AL;100uF,20%,16V,WT,TP,6.3x11,5         | AZ164041       | 1    |         |
| C915     | 2401-000287 | C-AL;100uF,20%,16V,WT,TP,6.3x11,5         | AZ164041       | 1    |         |
| C918     | 2401-000287 | C-AL;100uF,20%,16V,WT,TP,6.3x11,5         | AZ164041       | 1    |         |
| C210     | 2401-000287 | C-AL;100uF,20%,16V,WT,TP,6.3x11,5         | AZ164041       | 1    |         |
| L102     | 2701-000159 | INDUCTOR-AXIAL;22UH,10%,4.2X9.8MM         | AZ361007       | 1    |         |
| R420     | 2004-004015 | R-METAL(S);9.1Kohm,1%,1/2W,AA,TP,2.5x6.5  | AZ268047       | 1    |         |
| R911     | 2001-000628 | R-CARBON;300OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261301       | 1    |         |

## Electric Parts List

| LOC NO   | PARTS NO    | Description & Specification               | REPLACEMENT NO | Q'ty    | REMARKS |
|----------|-------------|-------------------------------------------|----------------|---------|---------|
| R912     | 2001-000628 | R-CARBON;300OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261301       | 1       |         |
| C106     | 2401-000611 | C-AL;1uF,20%,50V,WT,TP,5x11,5             | AZ164042       | 1       |         |
| C303     | 2201-002022 | C-CERAMIC,DISC;0.005nF,0.25pF,500V,NP0,T  | AZ166032       | 1       |         |
| C409     | 2301-001385 | C-FILM,PPF;30nF,5%,630V,TP,20x15.5x10.5,  | AZ166033       | 1       |         |
| C412     | 2301-000148 | C-FILM,PEF;10nF,5%,100V,TP,7x3.2x7mm,5mm  | AZ166022       | 1       |         |
| L905     | 2001-000995 | R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261821       | 1       |         |
| R305     | 2003-002157 | R-METAL OXIDE;220OHM,5%,2W,AG,TP,6X16MM   | AZ268024       | 1       |         |
| R306     | 2003-002157 | R-METAL OXIDE;220OHM,5%,2W,AG,TP,6X16MM   | AZ268024       | 1       |         |
| C411     | 2301-000232 | C-FILM,PEF;3.3nF,5%,50V,TP,8.1x4.5x13mm,  | AZ166034       | 1       |         |
| C416     | 2301-000254 | C-FILM,PEF;39nF,5%,50V,TP,7.5x3.5x6.5mm,  | AZ162008       | 1       |         |
| L401     | 2001-001038 | R-CARBON(S);0.56OHM,5%,1/2W,AA,TP,2.4X6.  | AZ268026       | 1       |         |
| R404     | 2001-001038 | R-CARBON(S);0.56OHM,5%,1/2W,AA,TP,2.4X6.  | AZ268026       | 1       |         |
| R212     | 2004-000218 | R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM    | AZ263025       | 1       |         |
| △ FA803S | 3601-001228 | FUSE-AXIAL LEAD;125V,10A,FAST-ACTING,EPO  | AZ664115       | 1       |         |
| R314     | 2004-001893 | R-METAL(S);22Kohm,1%,1/2W,AA,TP,2.5x6.5m  | AZ268048       | 1       |         |
| R302     | 2004-001984 | R-METAL(S);26.7Kohm,1%,1/2W,AA,TP,2.4x6.  | AZ264007       | 1       |         |
| R401     | 2003-000586 | R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12  | AZ263067       | 1       |         |
| R402     | 2003-000586 | R-METAL OXIDE(S);22Kohm,5%,2W,AF,TP,4x12  | AZ263067       | 1       |         |
| △ D408   | 0402-000493 | DIODE-RECTIFIER;1R5GU41,400V,1.5A,DO-15L  | AZ462010       | 1       |         |
| R407     | 2001-001114 | R-CARBON(S);270OHM,5%,1/2W,AA,TP,2.4X6.4  | AZ262271       | 1       |         |
| C925     | 2202-000127 | C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V  | AZ161103       | 1       |         |
| C113     | 2202-000127 | C-CERAMIC,MLC-AXIAL;10nF,+80-20%,25V,Y5V  | AZ161103       | 1       |         |
| KEZI     | 2001-001035 | R-CARBON;91ohm,5%,1/8W,AA,TP,1.8x3.2mm    | AZ268006       | 1       |         |
| KEZI     | 2201-000472 | C-CERAMIC,DISC;0.33nF,5%,50V,SL,TP,8.5x3  | AZ163024       | 1       |         |
| C828     | 2201-000376 | C-CERAMIC,DISC;0.22nF,5%,50V,SL,TP,6.3x3  | AZ166021       | 1       |         |
| R403     | 2003-000664 | R-METAL OXIDE(S);33OHM,5%,2W,AF,TP,4X12M  | AZ263002       | 1       |         |
| KEZI     | 2701-000183 | INDUCTOR-AXIAL;39uH,5%,2.5x3.4mm          | AZ363061       | 1       |         |
| C410     | 2301-000213 | C-FILM,PEF;220nF,5%,250V,TP,21.5x11.7.5   | AZ162005       | 1       |         |
| R304     | 2008-001013 | R-FUSIBLE(S);1.2ohm,5%,2W,AF,TP,3.9x10mm  | AZ263061       | 1       |         |
| KEZI     | 2008-001013 | R-FUSIBLE(S);1.2ohm,5%,2W,AF,TP,3.9x10mm  | AZ263061       | 1       |         |
| R315     | 2004-002022 | R-METAL(S);51KOHM,1%,1/2W,AA,TP,2.4X6.4M  | AZ268041       | 1       |         |
| KEZI     | 2003-002193 | R-METAL OXIDE(S);33Kohm,5%,2W,AG,TP,3.9X  | AZ268028       | 1       |         |
| KEZI     | 2003-001035 | R-METAL OXIDE(S);27ohm,5%,2W,AF,TP,3.9x1  | AZ263076       | 1       |         |
| KEZI     | 2201-000795 | C-CERAMIC,DISC;10nF,10%,400V,Y5P,15x10mm  | AZ166023       | 1       |         |
| C427     | 2401-002267 | C-AL;2.2uF,20%,250V,GP,TP,8x11.5,5        | AZ164046       | 1       |         |
| D413     | 0402-000537 | DIODE-RECTIFIER;RH1A,600V,0.6A,DO-204AC   | AZ462017       | 1       |         |
| R405     | 2008-001076 | R-FUSIBLE(S);1.8ohm,5%,2W,AF,TP,3.9x10mm  | AZ268049       | 1       |         |
| R436     | 2003-002008 | R-METAL OXIDE(S);18Kohm,5%,2W,AF,TP,3.9x  | AZ263022       | 1       |         |
| SW901    | 3404-000244 | SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP  | AZ662002       | 1       |         |
| SW902    | 3404-000244 | SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP  | AZ662002       | 1       |         |
| SW903    | 3404-000244 | SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP  | AZ662002       | 1       |         |
| SW904    | 3404-000244 | SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP  | AZ662002       | 1       |         |
| SW905    | 3404-000244 | SWITCH-TACT;15V,20mA,90-170gf,7.5x7mm,SP  | AZ662002       | 1       |         |
| R916     | 2001-000007 | R-CARBON;3KOHM,5%,1/8W,AA,TP,1.8X3.2MM    | AZ161302       | 1       |         |
| R917     | 2001-000878 | R-CARBON;6.2Kohm,5%,1/8W,AA,TP,1.8x3.2m   | AZ261917       | 1       |         |
| R918     | 2001-000009 | R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261203       | 1       |         |
| C904     | 2401-001495 | C-AL;47uF,20%,16V,GP,TP,5x11,5            | AZ164025       | 1       |         |
| IC901    | AA09-00041A | IC-MCU;SDA555X-OTP,SDA555X-OTP,-,52,SD    | AZ661041       | 1       |         |
| IC601    | 1204-001661 | IC-SOUND PROCESSOR;MSP3411G-A2,DIP,52P,-  | AZ760212       | 1       |         |
| △ T401   | AA26-50001S | TRANS-HORIZ.DRIVE;-,-,6.0mH,-,-,44uH,-    | AZ363070       | 1       |         |
| △ TU01S  | AA40-00079A | TUNER-F/S;TCPW3001PD16A(S),PAL,181CH,38.  | AZ760160       | 1       |         |
|          | HA98-600010 | ASSY-SUB,PART;S51A,PCB-MAIN               | AZ760151       | 1       |         |
|          | 0202-000008 | SOLDER-WIRE;S63S-W3.0,S63S,D3,SN63/PB37   | AZ760060       | 0.03    |         |
|          | 0202-000187 | SOLDER-WIRE FLUX;-RS60S,D1.2,63SN/37PB    | AZ760061       | 0.001   |         |
|          | 0204-001024 | FLUX;DF-98TVS,-,20%,-                     | AZ760064       | 0.00628 |         |
|          | 0204-000442 | SOLVENT;1M-1000,C3H7OH,96,-               | AZ760063       | 0.00837 |         |
| △ T801S  | AA26-00046A | TRANS-SWITCHING;-,-,AC90-260V,DC135/16    | AZ363056       | 1       |         |
| △ IC804  | HA96-00243C | ASSY-H/S;-REGULATOR,AA62-00045A,KA7806    | AZ760161       | 1       |         |
|          | 1203-000284 | IC-POSI.FIXED REG.;7806,TO-220,3P,-PLAS   | AZ661034       | 1       |         |
|          | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL YEL) | AZ760146       | 1       |         |
|          | AA62-00065A | HEAT SINK-PS;DP;-,-,AA62-00045A,-,-,-,    | AZ760162       | 1       |         |
|          | 0205-000129 | GREASE-SILICON;SC102,JAPAN                | AZ760065       | 0.00005 |         |
| L408     | AA27-40003P | COIL-HORIZ.WIDTH;-;120uH/180uH,Th8x20,US  | AZ363071       | 1       |         |
| △ LX801S | AA29-00015A | FILTER-LINE NOISE;WS32W8,28-20MH 1.5A,+   | AZ363064       | 1       |         |
| L405     | AA27-00057A | COIL-HORIZ.WIDTH;-;10mH,YL-9N 15x27.5 C:  | AZ362015       | 1       |         |
| △ IC803  | 1203-001697 | IC-VOLTAGE REGULATOR;78R08,TO-220,4P,-P   | AZ661036       | 1       |         |
| Q404     | HA96-00437A | ASSY-H/S;AA62-00076A,IRF620               | AZ760163       | 1       |         |
|          | 0505-000156 | FET-SILICON;IRF620,N,200V,5A,0.8ohm,50W,  | AZ561016       | 1       |         |
|          | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL YEL) | AZ760146       | 1       |         |
|          | AA62-00076A | HEAT SINK;100Hz,AL ,T1.0,10,40,-,-,-      | AZ760164       | 1       |         |
| Q402     | 0505-001116 | FET-SILICON;BUZ73A,N,200V,22A,0.6ohm,40W  | AZ561022       | 1       |         |
| △ CY802S | 2201-002002 | C-CERAMIC,DISC;4.7nF,20%,400V,Y5U,TP,16x  | AZ163027       | 1       |         |
| C407     | 2301-001338 | C-FILM,MPE-PPF;0.68nF,5%,1.6kV,TP,28x7x1  | AZ162684       | 1       |         |
| C405     | 2303-001015 | C-FILM,PPF;5.5nF,5%,1.6kV,TP,29x9.5x17.2  | AZ162686       | 1       |         |
| C406     | 2303-001015 | C-FILM,PPF;5.5nF,5%,1.6kV,TP,29x9.5x17.2  | AZ162686       | 1       |         |
| C426     | 2301-001185 | C-FILM,MPPF;620nF,5%,400V,TP,14.5x26x24,  | AZ166035       | 1       |         |
| IC903    | 1203-001944 | IC-POSI.FIXED REG.;78RM33,TO-220,3P,-PL   | AZ661038       | 1       |         |

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty    | REMARKS |
|--------|-------------|------------------------------------------|----------------|---------|---------|
| IC202  | 1203-001944 | IC-POSIFIXED REG.;78RM33,TO-220,3P,-,PL  | AZ661038       | 1       |         |
| C806   | 2401-003031 | C-AL;470uF,20%,450V,GP,BK,35x45mm,1      | AZ164050       | 1       |         |
| S/W    | AA95-01553A | ASSY-PCB SVHS BOARD; ALL WITH SVHS,KS3A  | AZ760213       | 1       |         |
| ICS01  | 1001-001114 | IC-VIDEO SWITCH;TEA6425,VIDEO SWITCH ,DI | AZ760214       | 1       |         |
| CNS01  | 3711-002704 | CONNECTOR-HEADER;NOWALL,6P,1R,2.5mm,ANGL | AZ664024       | 1       |         |
| CNS02  | 3711-002706 | CONNECTOR-HEADER;NOWALL,8P,1R,2.5mm,ANGL | AZ664026       | 1       |         |
|        | HA99-500031 | ASSY-PCB,VIDEO-S/W(ACI);50Hz,32W8,KS3A,F | AZ760215       | 1       |         |
| CS01   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS03   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS04   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS05   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS06   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS02   | 2305-000412 | C-FILM,MPEF;470nF,5%,63V,TP,-,5mm        | AZ162025       | 1       |         |
| CS07   | 2401-002009 | C-AL;100UF,20%,16V,GP,TP,6.3*7.5         | AZ166017       | 1       |         |
| JS01   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| JS02   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| JS03   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| JS04   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| RS08   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| RS09   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1       |         |
| QS01   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T | AZ561003       | 1       |         |
| QS02   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T | AZ561003       | 1       |         |
| QS03   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T | AZ561003       | 1       |         |
| RS01   | 2001-000281 | R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261101       | 1       |         |
| RS03   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1       |         |
| RS05   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1       |         |
| RS07   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1       |         |
| RS10   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1       |         |
| RS11   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1       |         |
| RS02   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1       |         |
| RS04   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1       |         |
| RS06   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1       |         |
| LS01   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM        | AZ361001       | 1       |         |
| PCB    | AA41-00153E | PCB-VIDEO SWITCH;CS29A6,FR-1,1L,D,1.6T,2 | AZ760216       | 1       |         |
| CS08   | 2305-000665 | C-FILM,MPEF;100nF,5%,63V,TP,7.5x4.0x5.0m | AZ162027       | 1       |         |
| DZS01  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500 | AZ462022       | 1       |         |
| DZS02  | 0403-000508 | DIODE-ZENER;MTZJ5.6B,5.6V,5.45-5.73V,500 | AZ462022       | 1       |         |
| RS12   | 2001-000969 | R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261750       | 1       |         |
| RS13   | 2001-000969 | R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261750       | 1       |         |
|        | HA98-600012 | ASSY-SUB,PART;PCB-WIDE,S51A,WIDE         | AZ760169       | 1       |         |
|        | 0202-000008 | SOLDER-WIRE;S63S-W3.0,S63S,D3,SN63/PB37  | AZ760060       | 0.007   |         |
|        | 0202-000187 | SOLDER-WIRE FLUX;-RS60S,D1.2,63SN/37PB   | AZ760061       | 0.0001  |         |
|        | 0204-001024 | FLUX;DF-98TVS,-,20%,-                    | AZ760064       | 0.00322 |         |
|        | 0204-000442 | SOLVENT;1M-1000,C3H7OH,96,-              | AZ760063       | 0.006   |         |
| C820   | 2401-003076 | C-AL;3300uF,20%,50V,WBP,BK,18x35.5mm     | AZ164052       | 1       |         |
| R807   | 2006-001083 | R-CEMENT;120ohm,5%,5W,CJ,TP,14x10x27mm   | AZ266001       | 1       |         |
| C423   | 2306-000235 | C-FILM,MPPF;560nF,5%,400V,TP,26*22.5*14, | AZ166036       | 1       |         |
| JA702  | 3722-001425 | JACK-RCA;2P,3.4mm,Ni,BLK,-               | AZ760165       | 1       |         |
| TOP    | AA39-20010B | LEAD CONNECTOR-ASSY;-1P,YFH800-01,S,500, | AZ660001       | 1       |         |
| L808   | AA27-10002L | COIL-CHOKE;-24UH,K,-,2A,-,24UH-K,10X10M  | AZ362016       | 1       |         |
| L402   | AA27-10004F | COIL-CHOKE;-56uH,K,-,2.5A,BK,-,DR12x15,  | AZ363072       | 1       |         |
| T444S  | AA26-00147A | TRANS FBT;1372.0079A,CT29A5P,3.5MH,135V  | AZ363073       | 1       |         |
| IC201S | AA95-01194A | ASSY-SCAN MODULE;-29A7,KS3A,100HZ        | AZ760217       | 1       |         |
|        | AA95-00989A | ASSY-CHROMA. BODY;DP,-,KS3A,-,100HZ      | AZ760218       | 1       |         |
| P1     | 3711-004782 | CONNECTOR-HEADER;NOWALL,32P,1R,1.778mm,S | AZ760219       | 1       |         |
| P2     | 3711-004782 | CONNECTOR-HEADER;NOWALL,32P,1R,1.778mm,S | AZ760219       | 1       |         |
| PCB    | AA41-00411A | PCB-SIPADOS BODY;CS29A5,FR-4,2L,A,1.6T,1 | AZ760220       | 1       |         |
|        | AA95-01163A | ASSY-SIPADOS TOP MODULE;-KS3A,CS29A5     | AZ760221       | 1       |         |
| IC3    | 1204-001599 | IC-VIDEO PROCESS;DDP3310B-E4,PLCC,68P,-, | AZ760222       | 1       |         |
| IC1    | 1204-001789 | IC-VIDEO PROCESS;VPC3230D-B3,QFP,80P,787 | AZ760223       | 1       |         |
| IC2    | 1204-001858 | IC-PICTURE PROCESS;SDA9401,QFP,64P,-,PLA | AZ760224       | 1       |         |
| JP1    | 2007-000070 | R-CHIP;0OHM,5%,1/16W,DA,TP,1608          | AZ268050       | 1       |         |
| R17    | 2007-000070 | R-CHIP;0OHM,5%,1/16W,DA,TP,1608          | AZ268050       | 1       |         |
| R19    | 2007-000070 | R-CHIP;0OHM,5%,1/16W,DA,TP,1608          | AZ268050       | 1       |         |
| R10    | 2007-000084 | R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1608       | AZ268051       | 1       |         |
| R1     | 2007-000090 | R-CHIP;10Kohm,5%,1/16W,DA,TP,1608        | AZ268052       | 1       |         |
| R2     | 2007-000090 | R-CHIP;10Kohm,5%,1/16W,DA,TP,1608        | AZ268052       | 1       |         |
| R3     | 2007-000090 | R-CHIP;10Kohm,5%,1/16W,DA,TP,1608        | AZ268052       | 1       |         |
| R4     | 2007-000090 | R-CHIP;10Kohm,5%,1/16W,DA,TP,1608        | AZ268052       | 1       |         |
| R5     | 2007-000090 | R-CHIP;10Kohm,5%,1/16W,DA,TP,1608        | AZ268052       | 1       |         |
| R7     | 2007-001134 | R-CHIP;68ohm,5%,1/16W,DA,TP,1608         | AZ268053       | 1       |         |
| R13    | 2007-001166 | R-CHIP;75ohm,5%,1/10W,DA,TP,2012         | AZ268054       | 1       |         |
| R14    | 2007-001166 | R-CHIP;75ohm,5%,1/10W,DA,TP,2012         | AZ268054       | 1       |         |
| R15    | 2007-001166 | R-CHIP;75ohm,5%,1/10W,DA,TP,2012         | AZ268054       | 1       |         |
| R6     | 2007-001167 | R-CHIP;75ohm,5%,1/16W,DA,TP,1608         | AZ268055       | 1       |         |
| R8     | 2007-001167 | R-CHIP;75ohm,5%,1/16W,DA,TP,1608         | AZ268055       | 1       |         |
| R9     | 2007-001167 | R-CHIP;75ohm,5%,1/16W,DA,TP,1608         | AZ268055       | 1       |         |

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| CD3    | 2203-000041 | C-CERAMIC,CHIP;0.01nF,0.25pF,50V,NP0,TP, | AZ166037       | 1    |         |
| CD4    | 2203-000041 | C-CERAMIC,CHIP;0.01nF,0.25pF,50V,NP0,TP, | AZ166037       | 1    |         |
| C21    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C39    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C42    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C43    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C44    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C51    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C52    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C53    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C54    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C55    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C56    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C57    | 2203-000181 | C-CERAMIC,CHIP;100nF,+80-20%,25V,Y5V,TP, | AZ166038       | 1    |         |
| C27    | 2203-000236 | C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1608T | AZ166039       | 1    |         |
| C33    | 2203-000236 | C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1608T | AZ166039       | 1    |         |
| C37    | 2203-000236 | C-CERAMIC,CHIP;0.1nF,5%,50V,NP0,TP,1608T | AZ166039       | 1    |         |
| C16    | 2203-000257 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,1608,-,T | AZ166040       | 1    |         |
| C30    | 2203-000426 | C-CERAMIC,CHIP;0.018nF,5%,50V,NP0,TP,160 | AZ166041       | 1    |         |
| C1     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C13    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C17    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C18    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C2     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C24    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C25    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C26    | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C5     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C7     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C8     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C9     | 2203-000491 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,1608,-, | AZ166042       | 1    |         |
| C20    | 2203-000552 | C-CERAMIC,CHIP;0.02nF,5%,50V,NP0,TP,1608 | AZ166043       | 1    |         |
| C29    | 2203-000659 | C-CERAMIC,CHIP;0.27nF,5%,50V,NP0,TP,1608 | AZ166044       | 1    |         |
| C31    | 2203-000659 | C-CERAMIC,CHIP;0.27nF,5%,50V,NP0,TP,1608 | AZ166044       | 1    |         |
| C6     | 2203-000659 | C-CERAMIC,CHIP;0.27nF,5%,50V,NP0,TP,1608 | AZ166044       | 1    |         |
| C23    | 2203-000975 | C-CERAMIC,CHIP;47nF,10%,25V,X7R,TP,1608, | AZ166045       | 1    |         |
| C3     | 2203-000975 | C-CERAMIC,CHIP;47nF,10%,25V,X7R,TP,1608, | AZ166045       | 1    |         |
| C11    | 2203-001052 | C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,160 | AZ166046       | 1    |         |
| C14    | 2203-001052 | C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,160 | AZ166046       | 1    |         |
| C19    | 2203-001052 | C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,160 | AZ166046       | 1    |         |
| C4     | 2203-001052 | C-CERAMIC,CHIP;0.56nF,10%,50V,X7R,TP,160 | AZ166046       | 1    |         |
| C22    | 2203-001256 | C-CERAMIC,CHIP;0.008nF,0.25pF,50V,NP0,TP | AZ166047       | 1    |         |
| C38    | 2203-001603 | C-CERAMIC,CHIP;220nF,10%,16V,X7R,2012,2m | AZ166048       | 1    |         |
| C28    | 2203-002494 | C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012 | AZ166049       | 1    |         |
| C32    | 2203-002494 | C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012 | AZ166049       | 1    |         |
| C34    | 2203-002494 | C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012 | AZ166049       | 1    |         |
| C36    | 2203-002494 | C-CERAMIC,CHIP;470nF,10%,16V,X7R,TP,2012 | AZ166049       | 1    |         |
| CE1    | 2401-000480 | C-AL;10uF,20%,50V,GP,TP,5x11,5           | AZ164009       | 1    |         |
| CE2    | 2401-000480 | C-AL;10uF,20%,50V,GP,TP,5x11,5           | AZ164009       | 1    |         |
| CE4    | 2401-000480 | C-AL;10uF,20%,50V,GP,TP,5x11,5           | AZ164009       | 1    |         |
| CE5    | 2401-000480 | C-AL;10uF,20%,50V,GP,TP,5x11,5           | AZ164009       | 1    |         |
| CE3    | 2401-001026 | C-AL;3.3uF,20%,50V,GP,TP,5x11mm,5mm      | AZ164018       | 1    |         |
| L1     | 2702-001092 | INDUCTOR-RADIAL;2.2uH,10%,6x4mm          | AZ363074       | 1    |         |
| L2     | 2702-001092 | INDUCTOR-RADIAL;2.2uH,10%,6x4mm          | AZ363074       | 1    |         |
| X2     | 2801-003432 | CRYSTAL-UNIT;20.25MHz,30ppm,28-AAA,13pF  | AZ663007       | 1    |         |
| L3     | 3301-001324 | CORE-FERRITE BEAD;AB,15OHM,2X1.25X0.9MM, | AZ760225       | 1    |         |
| L4     | 3301-001324 | CORE-FERRITE BEAD;AB,15OHM,2X1.25X0.9MM, | AZ760225       | 1    |         |
| CN64   | 3711-004778 | CONNECTOR-HEADER;NOWALL,64P,2R,2.0mm,ANG | AZ760226       | 1    |         |
| PCB    | AA41-00475A | PCB-SIPADOS TOP;CS29A5,FR-4,4L,A,1.6T,18 | AZ760227       | 1    |         |
| L403   | AA27-30003Q | COIL-LINEARLITY;-8.8uH,YL81 15x18,USTCO  | AZ363075       | 1    |         |
| CN801  | 3711-004721 | CONNECTOR-HEADER;3WALL,2P,1R,12.5mm,STRA | AZ760166       | 1    |         |
| CN802  | 3711-004720 | CONNECTOR-HEADER;3WALL,2P,1R,12.5mm,STRA | AZ760167       | 1    |         |
| BOT    | AA39-20010A | LEAD CONNECTOR-ASSY;1P,YFH800-01,S,200,  | AZ760168       | 1    |         |
| SW801S | 3403-000179 | SWITCH-PUSH;250V,5A,DPST,-,JPW-2104B     | AZ662001       | 1    |         |
| RM901  | AA32-00001A | MODULE REMOCON;-ORC-195VF,38KHZ,940nm,M  | AZ664153       | 1    |         |
| LD901  | AA96-00461A | ASSY LED GUIDE;-,-,SL-255D,RED/GRN       | AZ760169       | 1    |         |

## ASSY PCB CRT

|        |             |                                          |          |   |  |
|--------|-------------|------------------------------------------|----------|---|--|
| *      | AA95-01540A | ASSY PCB CRT;KS3A,28,A8-K8,W8-Z4,100HZ   | AZ760229 | 1 |  |
|        | AA63-10002A | BAND-TIE;-NYLON66 V2,-,-,L100,NTR,-,-    | AZ760068 | 1 |  |
| CN501A | 3711-002641 | CONNECTOR-HEADER;BOX,10P,1R,2.54MM,STRAI | AZ664184 | 1 |  |
| CN501A | AA39-00225A | LEAD CONNECTOR ASSY;10P,67096-010,S,600  | AZ760184 | 1 |  |
| CN502A | 3711-002646 | CONNECTOR-HEADER;BOX,7P,1R,2.5mm,STRAIGH | AZ760158 | 1 |  |

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| CN502E | AA39-20029K | LEAD CONNECTOR-ASSY;7P,67096-007,S,400,  | AZ760185       | 1    |         |
| CNF01  | 3711-002642 | CONNECTOR-HEADER;BOX,3P,1R,2.5MM,STRAIGH | AZ664017       | 1    |         |
| CNG01  | 3711-002643 | CONNECTOR-HEADER;BOX,4P,1R,2.5mm,STRAIGH | AZ664018       | 1    |         |
| IC501  | HA96-50151B | ASSY-H/S;-AMP,AA61-10060A,TDA6111Q,-     | AZ760230       | 1    |         |
| IC502  | HA96-50151B | ASSY-H/S;-AMP,AA61-10060A,TDA6111Q,-     | AZ760230       | 1    |         |
| IC503  | HA96-50151B | ASSY-H/S;-AMP,AA61-10060A,TDA6111Q,-     | AZ760230       | 1    |         |
|        | 1201-001131 | IC-VIDEO AMP;6111,SIP,9P,-,SINGLE,-,PLAS | AZ760231       | 3    |         |
|        | 6001-000057 | SCREW-MACHINE;RH,+M3,L6,ZPC(BLK),SWRCHW  | AZ760154       | 3    |         |
|        | 6021-000154 | NUT-HEXAGON;2C,M3,ZPC(YEL),SM20C         | AZ760155       | 3    |         |
|        | AA61-10060A | BRACKET-TR;W3220,CUS-1 1/2H,T0.5,-,-,-,- | AZ760156       | 3    |         |
| ICG01  | 1201-000191 | IC-OP AMP;4558,DIP,8P,300MIL,DUAL,20V/mV | AZ760187       | 1    |         |
| QG03   | 0502-001007 | TR-POWER;KSC2073-H2,NPN,25W,TO-220,ST,6  | AZ561013       | 1    |         |
| VA999  | 3704-000114 | SOCKET-CRT;14P,29.1,35.5,SN,ISH09SK      | AZ760188       | 1    |         |
|        | HA99-200051 | ASSY-PCB,CRT(ACI);28W8,KS3A,100HZ,SEB    | AZ760232       | 1    |         |
| C502   | 2305-000704 | C-FILM,MPEF;100nF,5%,250V,TP,16.5x10.3x5 | AZ162685       | 1    |         |
| C505   | 2305-000704 | C-FILM,MPEF;100nF,5%,250V,TP,16.5x10.3x5 | AZ162685       | 1    |         |
| C508   | 2305-000704 | C-FILM,MPEF;100nF,5%,250V,TP,16.5x10.3x5 | AZ162685       | 1    |         |
| CF07   | 2305-000704 | C-FILM,MPEF;100nF,5%,250V,TP,16.5x10.3x5 | AZ162685       | 1    |         |
| C503   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5. | AZ163013       | 1    |         |
| C506   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5. | AZ163013       | 1    |         |
| C509   | 2201-000599 | C-CERAMIC,DISC;0.56nF,10%,500V,Y5P,TP,5. | AZ163013       | 1    |         |
| C511   | 2401-001232 | C-AL;4.7uF,20%,250V,GP,TP,10x12.5,5      | AZ165009       | 1    |         |
| C512   | 2401-000914 | C-AL;22uF,20%,16V,GP,TP,5x11.5           | AZ164043       | 1    |         |
| C515   | 2401-000914 | C-AL;22uF,20%,16V,GP,TP,5x11.5           | AZ164043       | 1    |         |
| C526   | 2401-000914 | C-AL;22uF,20%,16V,GP,TP,5x11.5           | AZ164043       | 1    |         |
| C514   | 2401-000430 | C-AL;10uF,20%,250V,GP,TP,10X16MM,5M      | AZ165004       | 1    |         |
| C518   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C519   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C520   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C521   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C522   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| C523   | 2301-000224 | C-FILM,PEF;22nF,5%,50V,TP,7.4x3.9x13mm   | AZ162006       | 1    |         |
| CF01   | 2201-000180 | C-CERAMIC,DISC;10NF,10%,50V,Y5V,TP,6.5*3 | AZ163029       | 1    |         |
| CF02   | 2301-000192 | C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm    | AZ162003       | 1    |         |
| C516   | 2301-000192 | C-FILM,PEF;1nF,5%,50V,TP,5.3x10mm,5mm    | AZ162003       | 1    |         |
| CF03   | 2201-000376 | C-CERAMIC,DISC;0.22nF,5%,50V,SL,TP,6.3x3 | AZ166021       | 1    |         |
| CF04   | 2201-000653 | C-CERAMIC,DISC;68pF,5%,50V,SL,TP,4.0X3.5 | AZ166026       | 1    |         |
| CF05   | 2301-000261 | C-FILM,PEF;4.7nF,5%,100V,TP,10.5x12.5x6. | AZ166027       | 1    |         |
| CF06   | 2201-000516 | C-CERAMIC,DISC;4.7nF,+100-0%,500V,Y5U,TP | AZ166028       | 1    |         |
| CF08   | 2201-000604 | C-CERAMIC,DISC;0.056nF,+100-0%,500V,SL,T | AZ166029       | 1    |         |
| CF10   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11.5        | AZ164027       | 1    |         |
| CF12   | 2401-001840 | C-AL;100uF,20%,16V,GP,TP,6.3x11.5        | AZ164027       | 1    |         |
| CF14   | 2401-000832 | C-AL;220uF,20%,25V,GP,TP,8x11.5,5        | AZ166030       | 1    |         |
| CG01   | 2401-000832 | C-AL;220uF,20%,25V,GP,TP,8x11.5,5        | AZ166030       | 1    |         |
| CG04   | 2401-000832 | C-AL;220uF,20%,25V,GP,TP,8x11.5,5        | AZ166030       | 1    |         |
| CG02   | 2305-000149 | C-FILM,MPEF;100nF,5%,100V,TP,12x12.5x6.5 | AZ162016       | 1    |         |
| CG03   | 2401-000493 | C-AL;10uF,20%,50V,LZ,TP,5x11mm,5mm       | AZ164010       | 1    |         |
| D502   | 0402-000132 | DIODE-RECTIFIER;1N4004,400V,1A,DO-41,TP  | AZ462005       | 1    |         |
| D507   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| D508   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| D509   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| D510   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| D511   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| D512   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| DF02   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| DF03   | 0402-001105 | DIODE-RECTIFIER;ERB43-04SV1,400V,1.0A,-, | AZ462014       | 1    |         |
| DF01   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35, | AZ462001       | 1    |         |
| DF04   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35, | AZ462001       | 1    |         |
| DG01   | 0401-000005 | DIODE-SWITCHING;1N4148,100V,200mA,DO-35, | AZ462001       | 1    |         |
| DZ503  | 0403-001211 | DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D | AZ462027       | 1    |         |
| KEZ1   | 0403-001211 | DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D | AZ462027       | 1    |         |
| DZF01  | 0403-001039 | DIODE-ZENER;MA2560,56V,52-60V,1W,DO-41,T | AZ461014       | 1    |         |
| DZF02  | 0403-001039 | DIODE-ZENER;MA2560,56V,52-60V,1W,DO-41,T | AZ461014       | 1    |         |
| EL81   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL82   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL83   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL84   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL85   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL86   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL87   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL88   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL89   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL91   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| EL92   | AA60-40011B | EYELET;ID2.2,OD3.2,-,-,BSP,-             | AZ664149       | 1    |         |
| GT504  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| GT505  | AA60-40014A | PIN-GT,ASSY;1P,-,-,AUTO                  | AZ664172       | 1    |         |
| J501   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |

## Electric Parts List

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty | REMARKS |
|--------|-------------|------------------------------------------|----------------|------|---------|
| J503   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J505   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J506   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J507   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J508   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J509   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J510   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J511   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF01   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF02   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF03   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF04   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF05   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JG01   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J512   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J513   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J514   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J515   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J516   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J517   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J518   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J519   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J520   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J524   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J526   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J527   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J528   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF06   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| JF07   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J529   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J530   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J521   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J523   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| J531   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R504   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R509   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| R539   | 3812-000219 | WIRE-NO SHEATH CU;TCWA,300V,52mm(TAPING) | AZ664147       | 1    |         |
| LF02   | 2701-000112 | INDUCTOR-AXIAL;100uH,10%,3x7mm           | AZ363066       | 1    |         |
| LF01   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1    |         |
| L505   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1    |         |
| L506   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1    |         |
| LF03   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1    |         |
| PCB    | AA41-00210D | PCB-CRT;CS29A6,FR-1,1L,D.1.6T,330x245,   | AZ760190       | 1    |         |
| Q502   | 0501-000283 | TR-SMALL SIGNAL;KSA539,PNP,400MW,TO-92,T | AZ561001       | 1    |         |
| QG01   | 0501-000283 | TR-SMALL SIGNAL;KSA539,PNP,400MW,TO-92,T | AZ561001       | 1    |         |
| Q503   | 0501-000283 | TR-SMALL SIGNAL;KSA539,PNP,400MW,TO-92,T | AZ561001       | 1    |         |
| Q504   | 0501-000283 | TR-SMALL SIGNAL;KSA539,PNP,400MW,TO-92,T | AZ561001       | 1    |         |
| QF01   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T | AZ561003       | 1    |         |
| QF02   | 0501-000389 | TR-SMALL SIGNAL;KSC815,NPN,400MW,TO-92,T | AZ561003       | 1    |         |
| QF03   | 0501-000369 | TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L, | AZ561003       | 1    |         |
| RF10   | 2001-000241 | R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261152       | 1    |         |
| RF11   | 2001-000241 | R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261152       | 1    |         |
| R505   | 2002-001017 | R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m | AZ268031       | 1    |         |
| R510   | 2002-001017 | R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m | AZ268031       | 1    |         |
| R515   | 2002-001017 | R-COMPOSITION;1K,10%,1/2W,AA,TP,3.7x9.0m | AZ268031       | 1    |         |
| R517   | 2001-001062 | R-CARBON(S);10MOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ262106       | 1    |         |
| RF18   | 2003-000458 | R-METAL OXIDE(S);100ohm,5%,2W,AF,TP,4x12 | AZ263007       | 1    |         |
| R519   | 2002-001009 | R-COMPOSITION;2.7KOHM,10%,1/2W,AA,TP,3.7 | AZ263004       | 1    |         |
| R501   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1    |         |
| R506   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1    |         |
| R511   | 2001-000429 | R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261102       | 1    |         |
| RF02   | 2001-000734 | R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261472       | 1    |         |
| RF03   | 2001-000362 | R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261151       | 1    |         |
| RF04   | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261222       | 1    |         |
| R522   | 2001-000449 | R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261222       | 1    |         |
| RF05   | 2001-000522 | R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ261223       | 1    |         |
| RF06   | 2001-000989 | R-CARBON;820KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ268032       | 1    |         |
| RF07   | 2004-001989 | R-METAL;620OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ268033       | 1    |         |
| RF08   | 2001-000313 | R-CARBON;11KOHM,5%,1/8W,AA,TP,1.8X3.2MM  | AZ268034       | 1    |         |
| RF09   | 2001-000221 | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261122       | 1    |         |
| RF12   | 2001-000221 | R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M  | AZ261122       | 1    |         |
| RF13   | 2001-001179 | R-CARBON(S);68KOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268035       | 1    |         |
| RF16   | 2001-001179 | R-CARBON(S);68KOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268035       | 1    |         |
| RF14   | 2001-001071 | R-CARBON(S);12KOHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268036       | 1    |         |
| RF15   | 2001-001100 | R-CARBON(S);2.7OHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268037       | 1    |         |
| RF17   | 2001-001100 | R-CARBON(S);2.7OHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268037       | 1    |         |
| RG06   | 2001-001100 | R-CARBON(S);2.7OHM,5%,1/2W,AA,TP,2.4X6.4 | AZ268037       | 1    |         |

| LOC NO | PARTS NO    | Description & Specification               | REPLACEMENT NO | Q'ty    | REMARKS |
|--------|-------------|-------------------------------------------|----------------|---------|---------|
| RG07   | 2001-001100 | R-CARBON(S);2.7OHM,5%,1/2W,AA,TP,2.4X6.4  | AZ268037       | 1       |         |
| RF19   | 2003-001023 | R-METAL OXIDE(S);120ohm,5%,2W,AF,TP,3.9x  | AZ268038       | 1       |         |
| RF20   | 2003-002214 | R-METAL OXIDE(S);680ohm,5%,2W,AG,TP,3.9x  | AZ268039       | 1       |         |
| RF21   | 2003-002214 | R-METAL OXIDE(S);680ohm,5%,2W,AG,TP,3.9x  | AZ268039       | 1       |         |
| RF22   | 2003-002214 | R-METAL OXIDE(S);680ohm,5%,2W,AG,TP,3.9x  | AZ268039       | 1       |         |
| RF23   | 2003-000746 | R-METAL OXIDE(S);560HM,5%,2W,AF,TP,4X12M  | AZ268040       | 1       |         |
| RF24   | 2003-000746 | R-METAL OXIDE(S);560HM,5%,2W,AF,TP,4X12M  | AZ268040       | 1       |         |
| RF25   | 2003-002009 | R-METAL OXIDE(S);390ohm,5%,2W,AF,TP,3.9x  | AZ263023       | 1       |         |
| RG02   | 2004-002022 | R-METAL(S);51KOHM,1%,1/2W,AA,TP,2.4X6.4M  | AZ268041       | 1       |         |
| RG04   | 2004-002022 | R-METAL(S);51KOHM,1%,1/2W,AA,TP,2.4X6.4M  | AZ268041       | 1       |         |
| RG05   | 2001-001163 | R-CARBON(S);560OHM,5%,1/2W,AA,TP,2.4X6.4  | AZ268043       | 1       |         |
| RG08   | 2001-001163 | R-CARBON(S);560OHM,5%,1/2W,AA,TP,2.4X6.4  | AZ268043       | 1       |         |
| L503   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP,-    | AZ362001       | 1       |         |
| L504   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP,-    | AZ362001       | 1       |         |
| LF04   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP,-    | AZ362001       | 1       |         |
| LF05   | 2901-000297 | FILTER-EMI ON BOARD;-3A,-,-,3.5X5,TP,-    | AZ362001       | 1       |         |
| R502   | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ261922       | 1       |         |
| R507   | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ261922       | 1       |         |
| R512   | 2001-001093 | R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ261922       | 1       |         |
| R503   | 2001-000085 | R-CARBON(S);100KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ268030       | 1       |         |
| R508   | 2001-000085 | R-CARBON(S);100KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ268030       | 1       |         |
| R513   | 2001-000085 | R-CARBON(S);100KOHM,5%,1/2W,AA,TP,2.4X6.  | AZ268030       | 1       |         |
| R526   | 2004-000500 | R-METAL;2.7KOHM,1%,1/8W,AA,TP,1.8X3.2MM   | AZ268044       | 1       |         |
| R527   | 2004-000433 | R-METAL;1Kohm,1%,1/8W,AA,TP,1.8x3.2mm     | AZ268045       | 1       |         |
| R518   | 2003-002171 | R-METAL OXIDE(S);150ohm,5%,2W,AG,TP,3.9x  | AZ268013       | 1       |         |
| R542   | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261511       | 1       |         |
| R543   | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261511       | 1       |         |
| R544   | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261511       | 1       |         |
| R546   | 2001-000832 | R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261511       | 1       |         |
| L501   | 2701-000178 | INDUCTOR-AXIAL;33uH,10%,3x7mm             | AZ363076       | 1       |         |
| R521   | 2001-000660 | R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM   | AZ261333       | 1       |         |
| RG01   | 2004-001397 | R-METAL(S);4.7Kohm,1%,1/2W,AA,TP,2.4x6.4  | AZ264003       | 1       |         |
| RG03   | 2004-001987 | R-METAL;4.3Kohm,1%,1/2W,AA,TP,2.4x6.4m    | AZ268042       | 1       |         |
| DZG501 | 0403-001328 | DIODE-ZENER;MTZJ22A,20.15-21.20V,500mW,D  | AZ462039       | 1       |         |
| L507   | 2701-000215 | INDUCTOR-AXIAL;8.2UH,10%,2.5X3.4MM        | AZ363067       | 1       |         |
| SG501  | AA27-00084A | COIL;S-23,-,-,-,-,-,S-23,5000Mohm         | AZ363068       | 1       |         |
| SG502  | AA27-00084A | COIL;S-23,-,-,-,-,-,S-23,5000Mohm         | AZ363068       | 1       |         |
| SG503  | AA27-00084A | COIL;S-23,-,-,-,-,-,S-23,5000Mohm         | AZ363068       | 1       |         |
| SG504  | AA27-00084A | COIL;S-23,-,-,-,-,-,S-23,5000Mohm         | AZ363068       | 1       |         |
| SG505  | AA27-00084A | COIL;S-23,-,-,-,-,-,S-23,5000Mohm         | AZ363068       | 1       |         |
| KEZI   | 2008-001079 | R-FUSIBLE;4.7OHM,5%,2W,AF,TP,3.9X10MM     | AZ268056       | 1       |         |
|        | HA98-00054A | ASSY SUB PART;KS3A,PCB,CRT,ALL,-          | AZ760157       | 1       |         |
|        | 0202-000008 | SOLDER-WIRE;S63S-W3.0,S63S,D3,SN63/PB37   | AZ760060       | 0.0064  |         |
|        | 0202-000187 | SOLDER-WIRE FLUX;-RS60S,D1.2,63SN/37PB    | AZ760061       | 0.00012 |         |
|        | 0204-000442 | SOLVENT;1M-1000,C3H7OH,96,-               | AZ760063       | 0.00092 |         |
|        | 0204-001024 | FLUX;DF-98TVS,-,20%,-                     | AZ760064       | 0.0007  |         |
| QF04   | HA96-50149A | ASSY-H/S;-AA62-30013A,2SC2344,-           | AZ760191       | 1       |         |
|        | 0502-000153 | TR-POWER;2SC2344-D,NPN,1.2W,T0-220,-,60   | AZ561018       | 1       |         |
| SCR09  | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL YEL) | AZ760146       | 1       |         |
| H/S09  | AA62-30013A | HEAT SINK-ES;-A6063 EXTR,-,-,45(21) T02   | AZ760192       | 1       |         |
| QF05   | HA96-50149B | ASSY-H/S;-TR,AA62-30013A,2SA1011,-        | AZ760193       | 1       |         |
| QV10   | 0502-000131 | TR-POWER;2SA1011-D,PNP,1.2W,T0-220,-,60   | AZ561019       | 1       |         |
| SCR10  | 6003-000333 | SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL YEL) | AZ760146       | 1       |         |
| H/S10  | AA62-30013A | HEAT SINK-ES;-A6063 EXTR,-,-,45(21) T02   | AZ760192       | 1       |         |
| C510   | 2401-001525 | C-AL;47uF,20%,250V,GPBK,16x25mm,7,        | AZ166031       | 1       |         |
| CF11   | 2401-000927 | C-AL;22uF,20%,250V,GP,TP,13X20MM,5M       | AZ165008       | 1       |         |
| JA501  | 3722-001503 | JACK-PIN;1P,1PI,NI,RED,SCR-JACK           | AZ760194       | 1       |         |
| CNF01  | AA39-20033C | LEAD CONNECTOR-ASSY;-3(2)P,67096-003,S,2  | AZ760233       | 1       |         |
| QG02   | 0502-000244 | TR-POWER;KSA940,PNP,1.5W,T0-220,-,40-14   | AZ561020       | 1       |         |
| C513   | 2201-000723 | C-CERAMIC,DISC;4.7nF,20%,3KV,Y5U,TP,16x5  | AZ163033       | 1       |         |

## ASSY-PCB A/V BOARD

|       |             |                                          |          |   |  |
|-------|-------------|------------------------------------------|----------|---|--|
| *     | AA95-01513A | ASSY-PCB A/V BOARD;-29K8,KS3A,100HZ      | AZ760234 | 1 |  |
| JH701 | 3722-000143 | JACK-PHONE;1P(VER),3.4mm,AG,BLK,NO       | AZ664027 | 1 |  |
| JA701 | 3722-001031 | JACK-RCA;3P,3.6MM,#18,AU                 | AZ664031 | 1 |  |
| JS701 | 3722-001163 | JACK-VHS;4P,12mm,AU,BLK,N                | AZ760235 | 1 |  |
| CN704 | AA39-00070A | LEAD CONNECTOR-ASSY;-4P,YBNH250-04,35184 | AZ664178 | 1 |  |
| CN705 | AA39-20009E | LEAD CONNECTOR-ASSY;-1P,YFH800-01,600,16 | AZ664179 | 1 |  |
| CN701 | AA39-20068G | LEAD CONNECTOR-ASSY;-8P,YBNH025-08,67096 | AZ664180 | 1 |  |
| CN703 | AA39-20069A | LEAD CONNECTOR-ASSY;-5P,YBNH025-05,67096 | AZ664055 | 1 |  |
| CN702 | AA39-20070J | LEAD CONNECTOR-ASSY;-7P,YBNH250-07,67096 | AZ760236 | 1 |  |
|       | AA63-10002A | BAND-TIE;-NYLON66 V2,-,-,L100,NTR,-,-    | AZ760068 | 1 |  |
|       | HA98-600011 | ASSY-SUB,PART;CONTROL,S51A,WIDE          | AZ760145 | 1 |  |

| LOC NO | PARTS NO    | Description & Specification              | REPLACEMENT NO | Q'ty     | REMARKS |
|--------|-------------|------------------------------------------|----------------|----------|---------|
|        | 0202-000008 | SOLDER-WIRE;S63S-W3.0,S63S,D3,SN63/PB37  | AZ760060       | 0.0015   |         |
|        | 0202-000187 | SOLDER-WIRE FLUX;-RS60S,D1.2,63SN/37PB   | AZ760061       | 0.00045  |         |
|        | 0204-001024 | FLUX;DF-98TVS,-,20%,-                    | AZ760064       | 0.000245 |         |
|        | 0204-000442 | SOLVENT;1M-1000,C3H7OH,96,-              | AZ760063       | 0.000352 |         |
|        | HA99-200090 | ASSY-PCB,A/V SIDE(ACI);-,CT-294D,K51A,NT | AZ760237       | 1        |         |
| R701   | 2001-000028 | R-CARBON(S);1000HM,5%,1/2W,AA,TP,2.4X6.4 | AZ261913       | 1        |         |
| R702   | 2001-000028 | R-CARBON(S);1000HM,5%,1/2W,AA,TP,2.4X6.4 | AZ261913       | 1        |         |
| C701   | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP | AZ161101       | 1        |         |
| C702   | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP | AZ161101       | 1        |         |
| C707   | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP | AZ161101       | 1        |         |
| C708   | 2202-000121 | C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP | AZ161101       | 1        |         |
| C703   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1        |         |
| C704   | 2202-000231 | C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP | AZ161331       | 1        |         |
| C705   | 2401-002009 | C-AL;100UF,20%,16V,GP,TP,6.3*7.5         | AZ166017       | 1        |         |
| C706   | 2401-002009 | C-AL;100UF,20%,16V,GP,TP,6.3*7.5         | AZ166017       | 1        |         |
| L701   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM        | AZ361001       | 1        |         |
| L702   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM        | AZ361001       | 1        |         |
| L703   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM        | AZ361001       | 1        |         |
| L704   | 2701-000114 | INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM        | AZ361001       | 1        |         |
| L705   | 2701-000168 | INDUCTOR-AXIAL;3.3 UH 5% 2.5X3.4 MM      | AZ361008       | 1        |         |
| L706   | 2701-000168 | INDUCTOR-AXIAL;3.3 UH 5% 2.5X3.4 MM      | AZ361008       | 1        |         |
| L707   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1        |         |
| L708   | 3301-000287 | CORE-FERRITE BEAD;AA,3.5x1.0x6.0mm,1500, | AZ362003       | 1        |         |
| PCB    | AA41-00345A | PCB-SIDE A/V;CS29K1,FR-1,1L,A,1.6T,245x2 | AZ664182       | 1        |         |
|        | AA65-30018A | CLAMP-WIRE;DONG-A,NYLON-66,-,-,DATL-60   | AZ760050       | 3        |         |

ASSYPCB-PFC

|       |             |                                          |          |          |  |
|-------|-------------|------------------------------------------|----------|----------|--|
| *     | HA94-05783A | ASSYPCB-PFC;32W8/Z4,50HZ,973B            | AZ760238 | 1        |  |
|       | HA99-200068 | ASSY-PCB,PFC(ACI);32W8,KS3A              | AZ760239 | 1        |  |
| EYP07 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP08 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP09 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP10 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP11 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP12 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP13 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP14 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP15 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP16 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP17 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP18 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP19 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP20 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP21 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP22 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP23 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP24 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP25 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| EYP26 | AA60-40011A | EYELET;ID2.0,OD2.8,-,-,BST,-             | AZ664148 | 1        |  |
| PCB   | AA41-00404A | PCB-PFC;CS2539,FR-1,1L,A,1.6T,330x245,5, | AZ760197 | 1        |  |
| CNP02 | AA39-00236A | LEAD CONNECTOR ASSY;,3(2)P,YHL500-03A BL | AZ760198 | 1        |  |
| TOP   | AA39-00235A | LEAD CONNECTOR ASSY;,3(2)P,YHL500-03A BL | AZ760199 | 1        |  |
| PFT01 | AA27-00121A | COIL CHOKE;CODE_NO,SP43J5HP,15mH,-0%,+5% | AZ363077 | 1        |  |
| PFT02 | AA27-00121A | COIL CHOKE;CODE_NO,SP43J5HP,15mH,-0%,+5% | AZ363077 | 1        |  |
|       | HA98-600020 | ASSY-SUB,PART;KS4A,PFC PCB               | AZ760158 | 1        |  |
|       | 0202-000008 | SOLDER-WIRE;S63S-W3.0,S63S,D3,SN63/PB37  | AZ760060 | 0.00282  |  |
|       | 0202-000187 | SOLDER-WIRE FLUX;-RS60S,D1.2,63SN/37PB   | AZ760061 | 0.00005  |  |
|       | 0204-001024 | FLUX;DF-98TVS,-,20%,-                    | AZ760064 | 0.001412 |  |
|       | 0204-000442 | SOLVENT;1M-1000,C3H7OH,96,-              | AZ760063 | 0.001557 |  |
|       | HA61-00987A | HOLDER-PFC;32W8,29A8,28W8,HIPS,ALLFLAT   | AZ760159 | 1        |  |
|       | HA83-00006A | LP-RESIN HIPS;,BASf495F,NTR,HB           | AZ760125 | 0.03344  |  |
|       | HA83-00011A | LP-RESIN;,M BATCH,WILSON 6007-GY-60,GRY  | AZ760160 | 0.00068  |  |
| CNP02 | 3711-004721 | CONNECTOR-HEADER;3WALL,2P,1R,12.5mm,STRA | AZ760166 | 1        |  |
| TOP   | 3711-004720 | CONNECTOR-HEADER;3WALL,2P,1R,12.5mm,STRA | AZ760167 | 1        |  |
|       | 6003-001023 | SCREW-TAPTITE;RWH,+,B,M3,L10,ZPC(YE)JSWR | AZ760161 | 4        |  |

ASSY CABINET FRONT

|   |             |                                        |          |   |  |
|---|-------------|----------------------------------------|----------|---|--|
| * | HA91-00829A | ASSY CABINET FRONT;29V1,KS2A,FLAT,HIPS | AZ760162 | 1 |  |
|   | HA64-01971A | WINDOW RMC.LED;SPACE                   | AZ760122 | 1 |  |

| LOC NO | PARTS NO    | Description & Specification                       | REPLACEMENT NO | Q'ty    | REMARKS |
|--------|-------------|---------------------------------------------------|----------------|---------|---------|
|        | HA83-00010A | LP-RESIN; OROGLAS, VM-100 ZHN 2                   | AZ760123       | 0.001   |         |
|        | AA64-01970B | KNOB POWER; 29V1, HIPS, HB, PW-001P, PEARL-WH     | AZ760163       | 1       |         |
|        | HA83-00042A | LP-MARKING PAINT; K TSA112, PEARL WHITE, TS       | AZ760164       | 0.001   |         |
|        | HA83-00006A | LP-RESIN HIPS; BASF495F, NTR, HB                  | AZ760125       | 0.001   |         |
|        | HA83-00016A | LP-RESIN; M BATCH, WILSON 213-WT-60, WHIT         | AZ760126       | 0.001   |         |
|        | AA64-01972A | BADGE BRAND; TOOL, 29 TOSHIBA, -, -, -, -, -      | AZ760128       | 1       |         |
|        | HA83-00049A | LP-ADHESIVE-HM; SPACE                             | AZ760129       | 0.28    |         |
|        | AA61-60003J | SPRING-CS; -, SUS304, -, -, OD6, N7, OD6, -, -, - | AZ760018       | 1       |         |
|        | AA65-30105A | CLAMP-WIRE; ALL MODEL, NYLON 66, V2, -, NTR, 1    | AZ760035       | 2       |         |
|        | AA64-01510E | INLAY AV; 29V1, PS SHEET, T0.3, KS3A SILVER       | AZ760165       | 1       |         |
|        | AA64-02437B | CABINET-FRONT; 29V1, HIPS, HB, K TSA112, WHITE    | AZ760166       | 1       |         |
|        | HA83-00042A | LP-MARKING PAINT; K TSA112, PEARL WHITE, TS       | AZ760164       | 0.07    |         |
|        | HA83-00018A | LP-MARKING PAINT; LIGHTGRAY, TPC180               | AZ760167       | 0.00008 |         |
|        | HA83-00043A | LP-MARKING PAINT; OXIDIZED SILVER, VPAA52         | AZ760136       | 0.091   |         |
|        | HA83-00006A | LP-RESIN HIPS; BASF495F, NTR, HB                  | AZ760125       | 0.001   |         |
|        | HA83-00016A | LP-RESIN; M BATCH, WILSON 213-WT-60, WHIT         | AZ760126       | 0.001   |         |
|        | AA61-10054A | BRACKET-CRATER; 6277, STS304, T0.5, -, -, -       | AZ760134       | 2       |         |
|        | AA64-01969B | KNOB CONTROL; 29V1, HIPS, HB, PLANTING-SILVE      | AZ760135       | 1       |         |
|        | HA83-00043A | LP-MARKING PAINT; OXIDIZED SILVER, VPAA52         | AZ760136       | 0.001   |         |
|        | HA83-00006A | LP-RESIN HIPS; BASF495F, NTR, HB                  | AZ760125       | 0.001   |         |
|        | HA83-00016A | LP-RESIN; M BATCH, WILSON 213-WT-60, WHIT         | AZ760126       | 0.001   |         |
|        | 6002-000515 | SCREW-TAPPING; RH, +, 2, M4, L15, ZPC, SWRCH18    | AZ760117       | 2       |         |
|        | HA61-00711C | HOLDER-PCB; SPACE                                 | AZ760137       | 1       |         |

## ASSY-CABINET(COM)

|        |             |                                                   |          |       |  |
|--------|-------------|---------------------------------------------------|----------|-------|--|
| *      | AA90-01096A | ASSY-CABINET(COM); KS3A, 29V1, KS3A, FLAT, TS     | AZ760103 | 1     |  |
|        | HA64-02448B | CABINET BACK; 29K8, HIPS, V0, GRY                 | AZ760104 | 1     |  |
|        | HA83-00013A | LP-RESIN HIPS; NTR, HB, DOW A-TECH, IEC65         | AZ760105 | 0.001 |  |
|        | HA83-00012A | LP-RESIN; M BATCH, WILSON 6053-GY-60, GRY         | AZ760106 | 0.001 |  |
|        | AA65-30113A | CLAMP-D, COIL; NYLON 66, V2, BLK, TVI 25-29, -    | AZ760107 | 4     |  |
|        | AA65-30008A | CLAMP-CORD; PE, HB, BLK, -, -, -                  | AZ760108 | 1     |  |
| CB+CF  | 6003-001025 | SCREW-TAPTITE; RH, M4, L20, BLK                   | AZ760109 | 5     |  |
| CB+TBA | 6003-001025 | SCREW-TAPTITE; RH, M4, L20, BLK                   | AZ760109 | 5     |  |
| TB+JAC | 6003-001025 | SCREW-TAPTITE; RH, M4, L20, BLK                   | AZ760109 | 2     |  |
| CRT+CF | AA60-10050V | SCREW-ASSY; -, SWRCH18A, M6, L30, HH, +, WC, -, Z | AZ760110 | 4     |  |
| CF+SPK | AA60-10050A | SCREW-ASSY; -, SWRCH18A, M4, L25, RH, +, WP, -, Z | AZ760111 | 4     |  |
|        | AA65-30009A | CLAMP-FBT; ABS, V0, BLK, -, -, -                  | AZ760070 | 1     |  |
|        | AA65-30110A | CLAMP-WIRE; ALL MODEL, NYLON 66, V2, -, BLK, P    | AZ760112 | 2     |  |
|        | HA68-02177A | LABEL-PQS; SPACE                                  | AZ760113 | 1     |  |
|        | HA83-00046A | LP-TAPE INK; WIDTH 105 MM                         | AZ760114 | 0.23  |  |
|        | HA68-02179A | LABEL-RATING; 58MM, 54MM, WHITE                   | AZ760115 | 1     |  |
|        | HA83-00052A | LP-TAPE-INK; SPACE                                | AZ760116 | 0.06  |  |
| CF+KC  | 6002-000515 | SCREW-TAPPING; RH, +, 2, M4, L15, ZPC, SWRCH18    | AZ760117 | 2     |  |
|        | AA63-10002A | BAND-TIE; -, NYLON66 V2, -, -, L100, NTR, -, -    | AZ760068 | 5     |  |
|        | AA65-30104B | CLAMP-WIRE; ALL MODEL, NYLON 66, V2, -, BLK, W    | AZ760118 | 2     |  |
| CF+AV  | 6003-001135 | SCREW-TAPTITE; TH, +, B, M4.0, L15, BLK, SWRCH1   | AZ760119 | 2     |  |
|        | AA64-00894J | INLAY BACK; KS3A, 29V1, PS SHEET, T0.3, BLK, T    | AZ760120 | 1     |  |

## ASSY PACKING

|   |             |                                                |          |       |  |
|---|-------------|------------------------------------------------|----------|-------|--|
| * | AA90-01137A | ASSY PACKING; 29V1                             | AZ760138 | 1     |  |
|   | AA60-40006A | PIN-STAPLE; -, H18, 33X17.8X2.4, -, AUTO       | AZ760008 | 24    |  |
|   | HA69-00722B | PACKING CASE; 29V1, TSB                        | AZ760139 | 1     |  |
|   | AA69-30032F | BAG-SHEET; HDPE+PE FOAM, -, W1400, H1400, -, - | AZ760140 | 1     |  |
|   | HA68-02178A | LABEL-BOX; 250MM, 90MM, WHITE                  | AZ760141 | 2     |  |
|   | HA83-00046A | LP-TAPE INK; WIDTH 105 MM                      | AZ760142 | 0.5   |  |
|   | HA69-01110A | CUSHION SET; TOOL, 29 TOSHIBA, CASTING         | AZ760143 | 1     |  |
|   | HA01-030006 | RESIN-EPS; CHEIL SF-301V, WHT                  | AZ760072 | 0.001 |  |
|   | HA02-030012 | TAPE-CELLULOSE; —, T0, 046, W75, L990M         | AZ760144 | 2.5   |  |

## ASSY CRT

|   |             |                                                |          |   |  |
|---|-------------|------------------------------------------------|----------|---|--|
| * | AA94-05837A | ASSY CRT; A68QCP893X004, +380MG, 29, 4:3, Y    | AZ760200 | 1 |  |
|   | AA03-00301A | CRT COLOR; A68QCP893X004, +380MG, 0.315MH, 7   | AZ760201 | 1 |  |
|   | AA27-00128A | COIL DEGAUSSING; -, -, -, 50T, 7, -, 29inch, 2 | AZ760180 | 1 |  |
|   | AA98-70011A | ASSY-TBC, WIRE(P); -, 29INCH, NTSC, PAL, 2P-WH | AZ760181 | 1 |  |

## Electric Parts List

| LOC NO                                                                              | PARTS NO    | Description & Specification               | REPLACEMENT NO | Q'ty | REMARKS |
|-------------------------------------------------------------------------------------|-------------|-------------------------------------------|----------------|------|---------|
| <b>REMOCON</b>                                                                      |             |                                           |                |      |         |
| *                                                                                   | AA59-00236A | REMOCON;,,TM57,37,KS3A,TOSHIBA,L/GRAY,G66 | AZ760176       | 1    |         |
| <b>ASSY-POWER,CORD</b>                                                              |             |                                           |                |      |         |
|  * | AA96-00094A | ASSY-POWER,CORD;DP,CP2/NO(4.0),H/C350MM,  | AZ760177       | 1    |         |
| <b>ASSY-HOLDER,SPK</b>                                                              |             |                                           |                |      |         |
| *                                                                                   | AA91-00150B | ASSY-HOLDER,SPK;DP,-,8OHM/15W,-,AA91-001  | AZ760228       | 1    |         |
| <b>ASSY ACCESSORY</b>                                                               |             |                                           |                |      |         |
| *                                                                                   | AA94-05874A | ASSY ACCESSORY;29,50-100HZ,KS3A,P,TSB     | AZ760170       | 1    |         |
|                                                                                     | 4301-000121 | BATTERY-MN;1.5V,-,AAA,10.5x44.5m,HOHOLDE  | AZ760171       | 2    |         |
|                                                                                     | HA83-00047A | LP-TAPEACETATE;SPACE                      | AZ760152       | 0.07 |         |
|                                                                                     | HA69-00276A | VINYL-BAG;HDPE,T0.025,L400,W240,-,W/O LO  | AZ760088       | 1    |         |
|                                                                                     | HA68-02123A | LABEL;,,A/P 120(G),94,45,BLACK,29KV-X     | AZ760153       | 1    |         |
|                                                                                     | HA68-01992B | MANUAL USERS;,,ENG,W/P80(G),,,KS3A,29V1,T | AZ760172       | 1    |         |
|                                                                                     | HA68-01993B | MANUAL USERS;,,GER,W/P80(G),,,KS3A,29V1,T | AZ760173       | 1    |         |
|                                                                                     | HA68-01994B | MANUAL USERS;,,DUT,W/P80(G),,,KS3A,29V1,T | AZ760174       | 1    |         |
|                                                                                     | HA68-01995B | MANUAL USERS;,,FRA,W/P80(G),,,KS3A,29V1,T | AZ760175       | 1    |         |

# **TOSHIBA CORPORATION**

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

# **TOSHIBA**

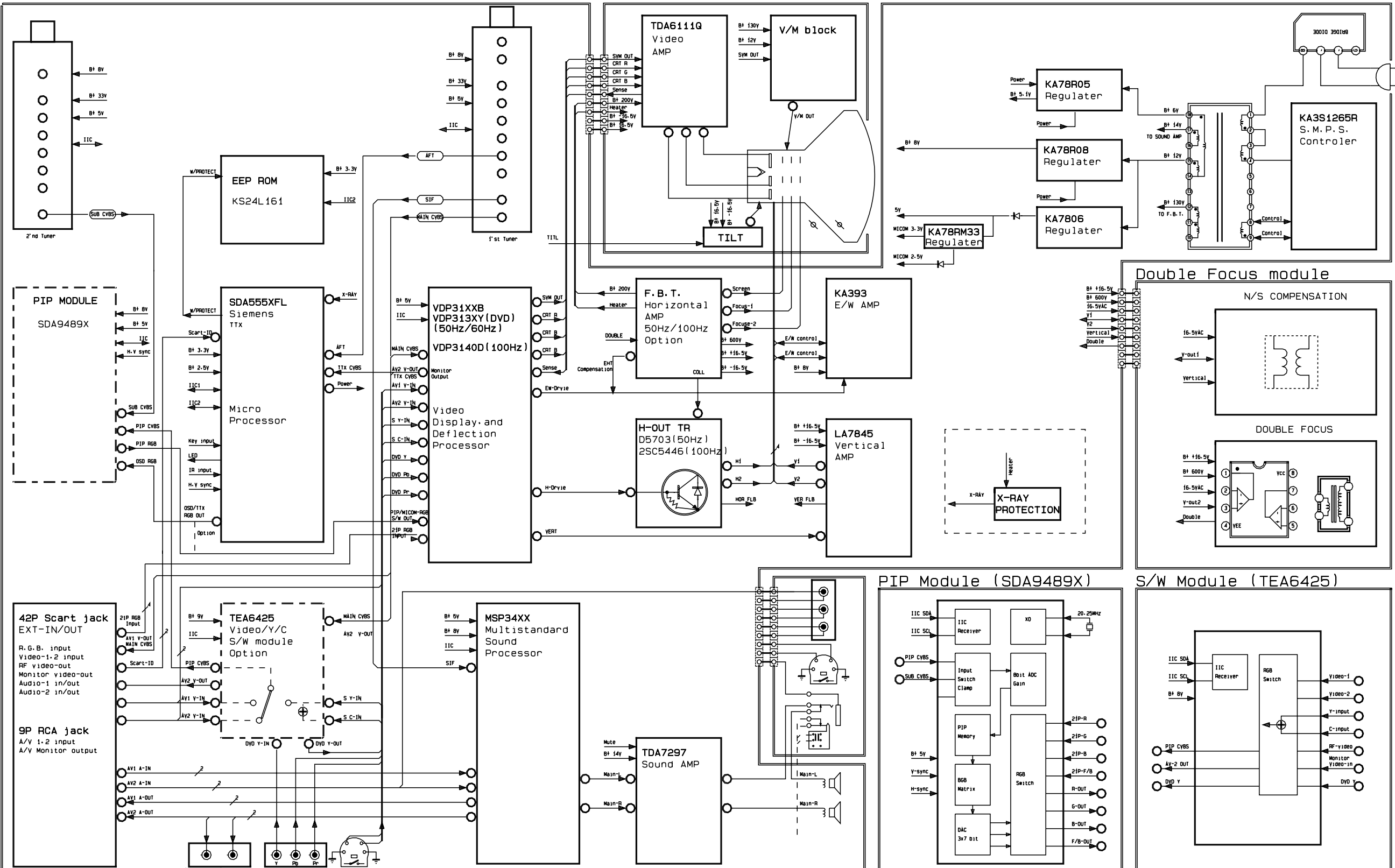
## **SERVICE MANUAL**

### **COLOUR TELEVISION**

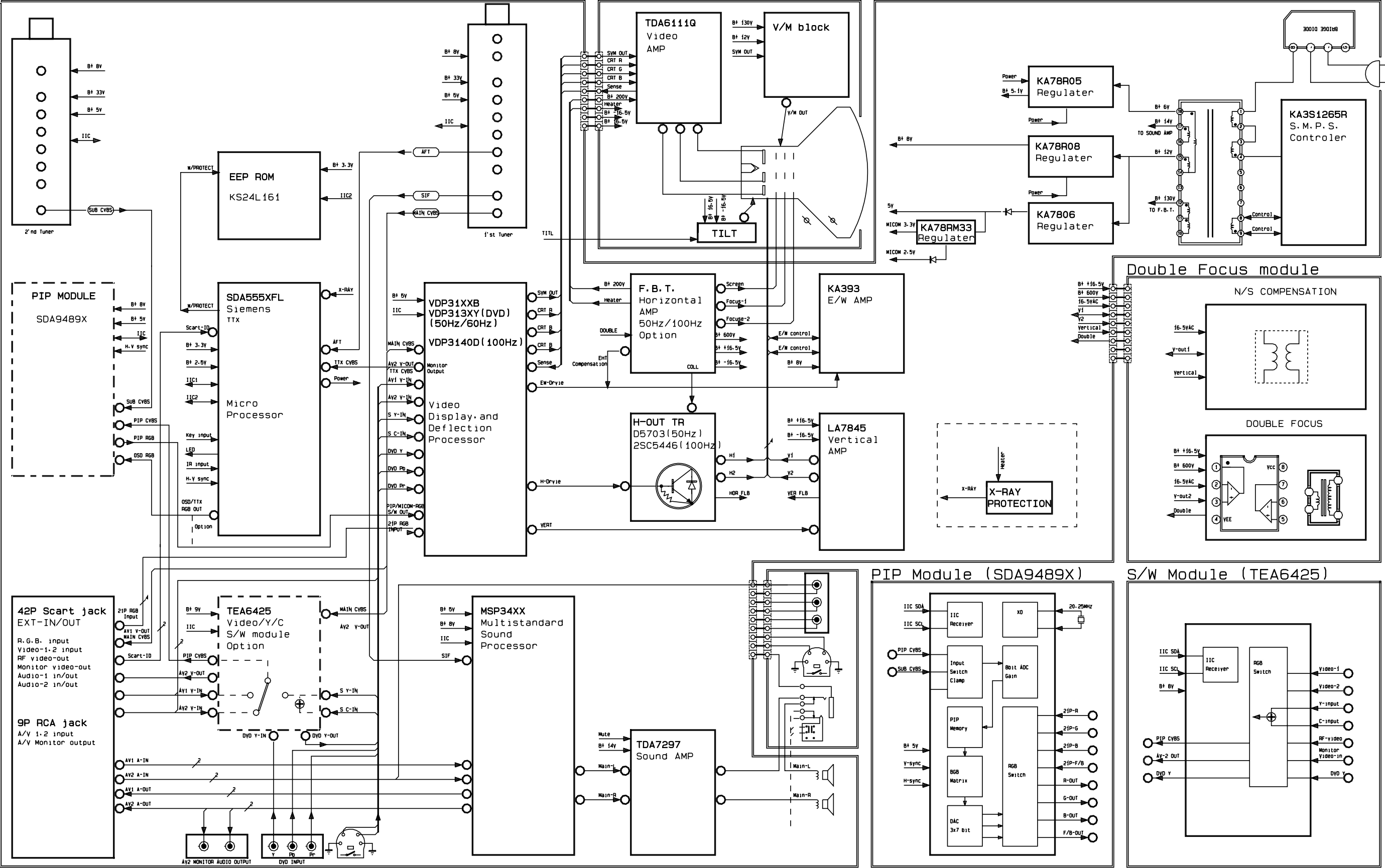
# ***29VH14P***

# 8. Block Diagrams

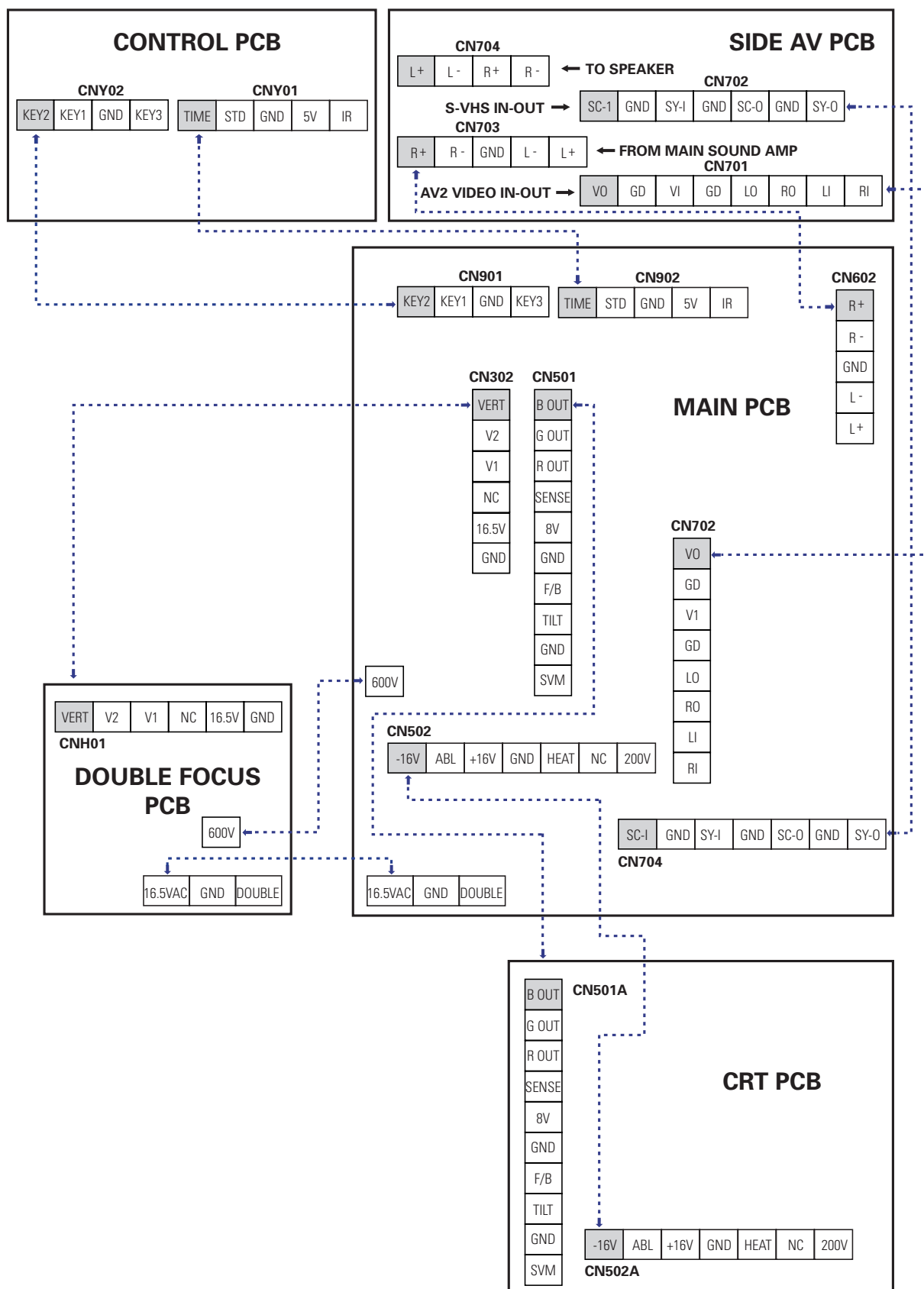
## 8-1 Power Diagram



8-2 Block Diagram



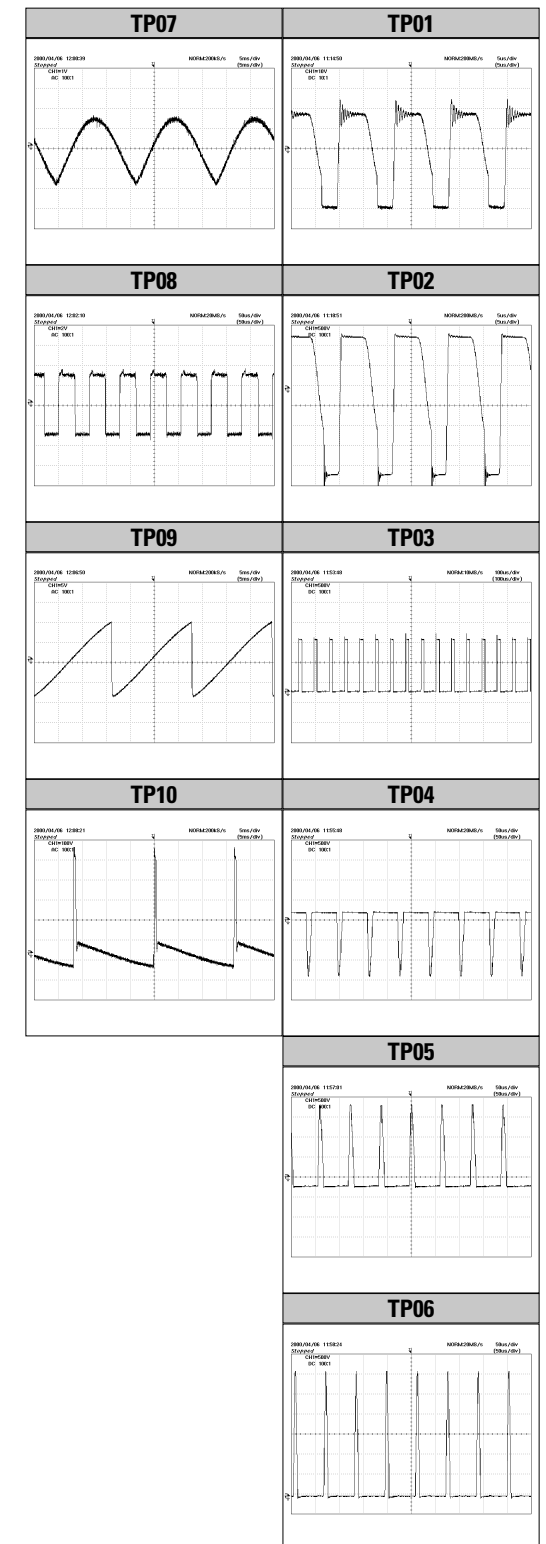
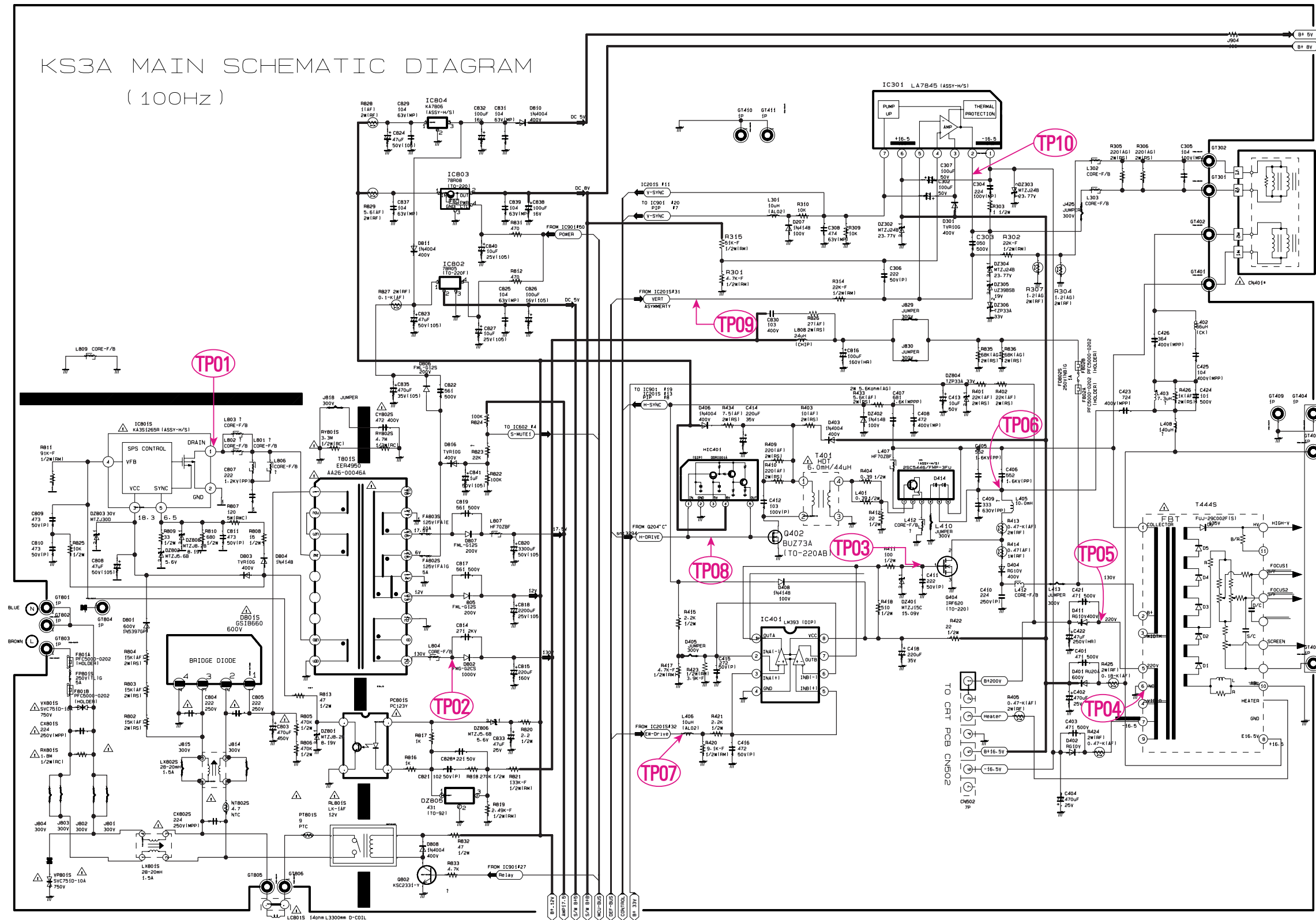
## 9. Wiring Diagram



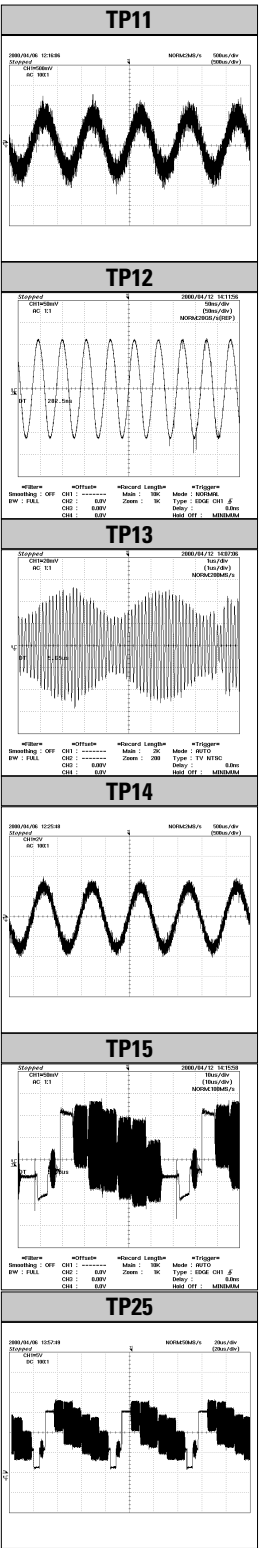
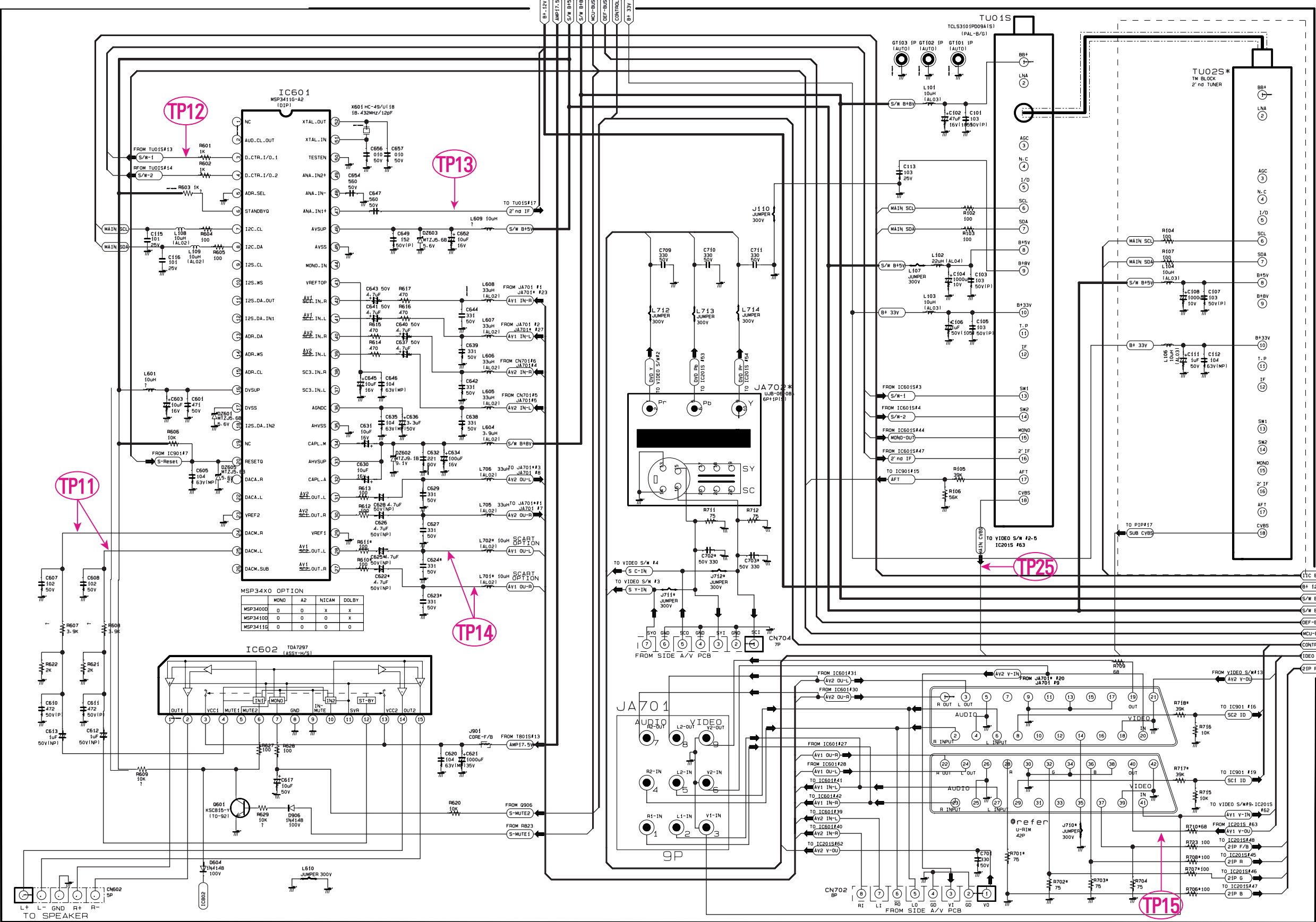
# MEMO

## 10. Schematic Diagrams

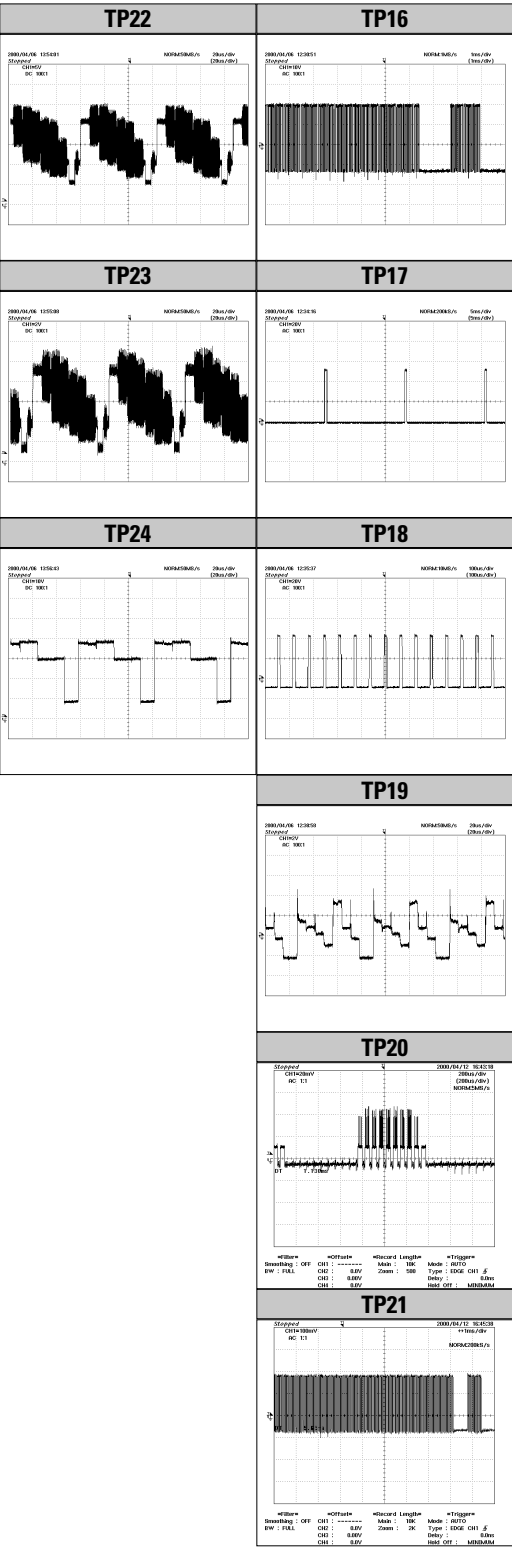
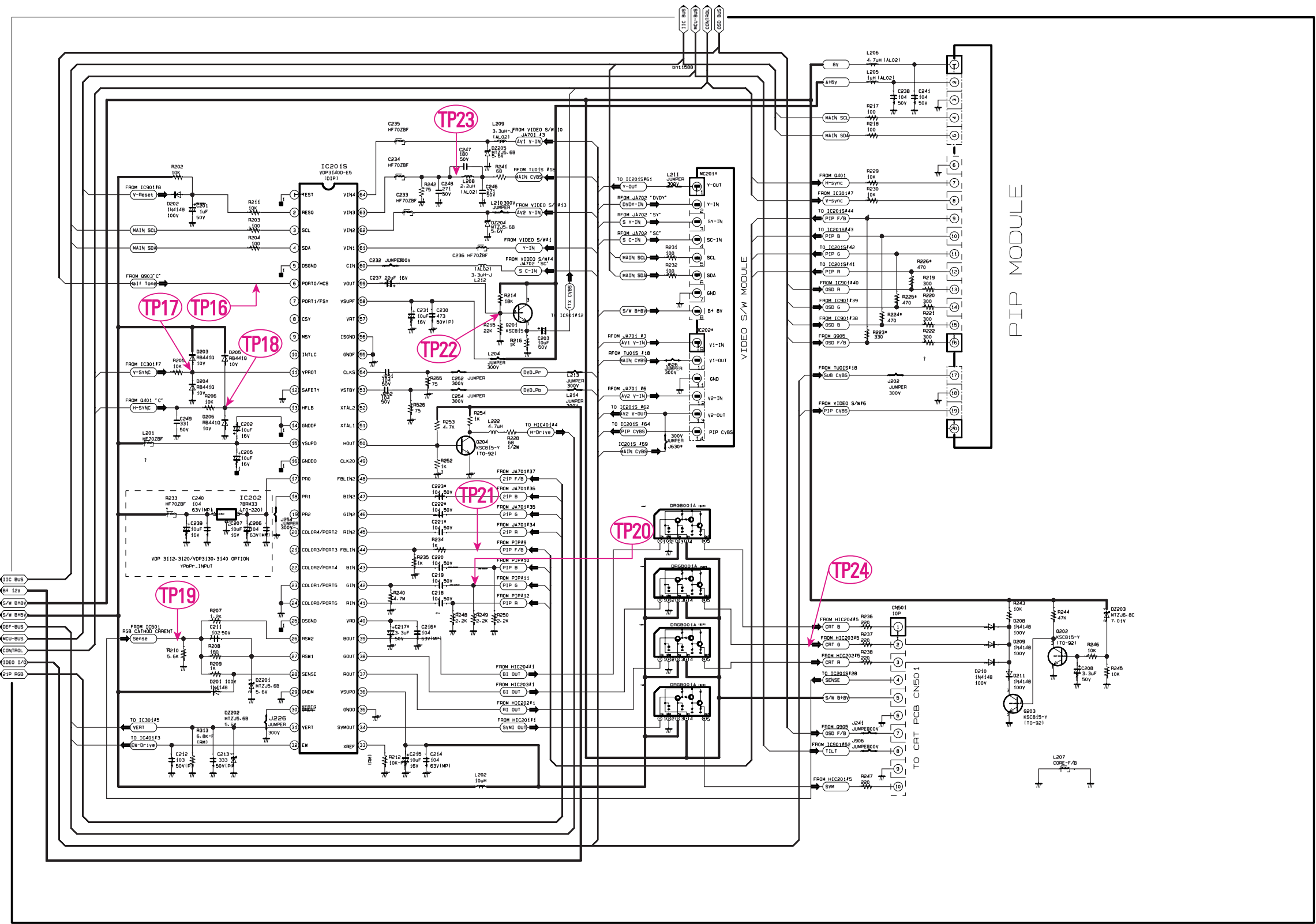
**10-1 MAIN 1**

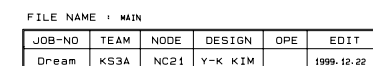


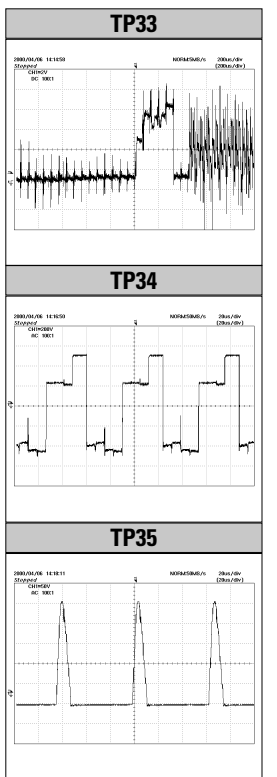
10-2 MAIN 2



10-3 MAIN3

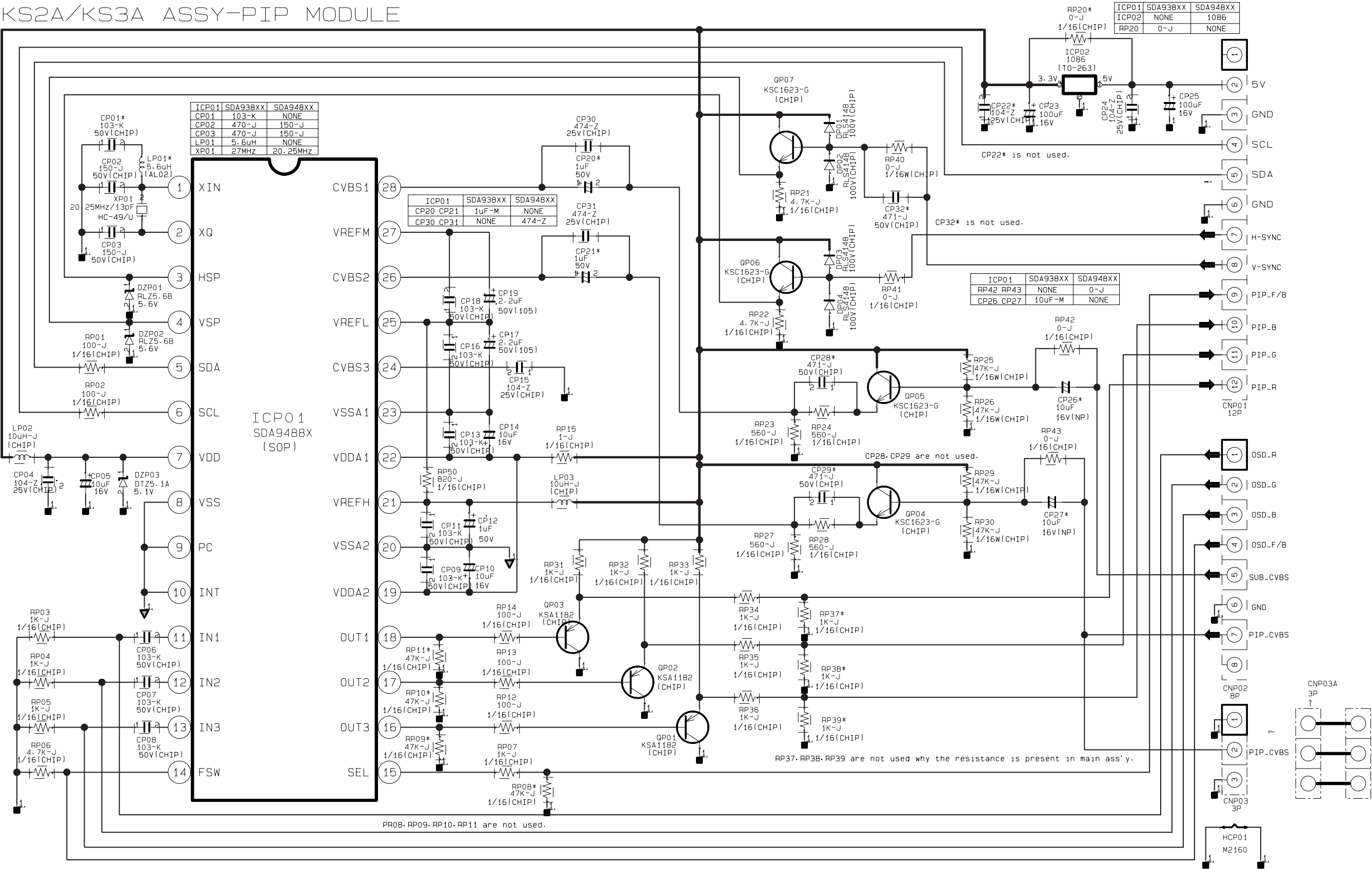




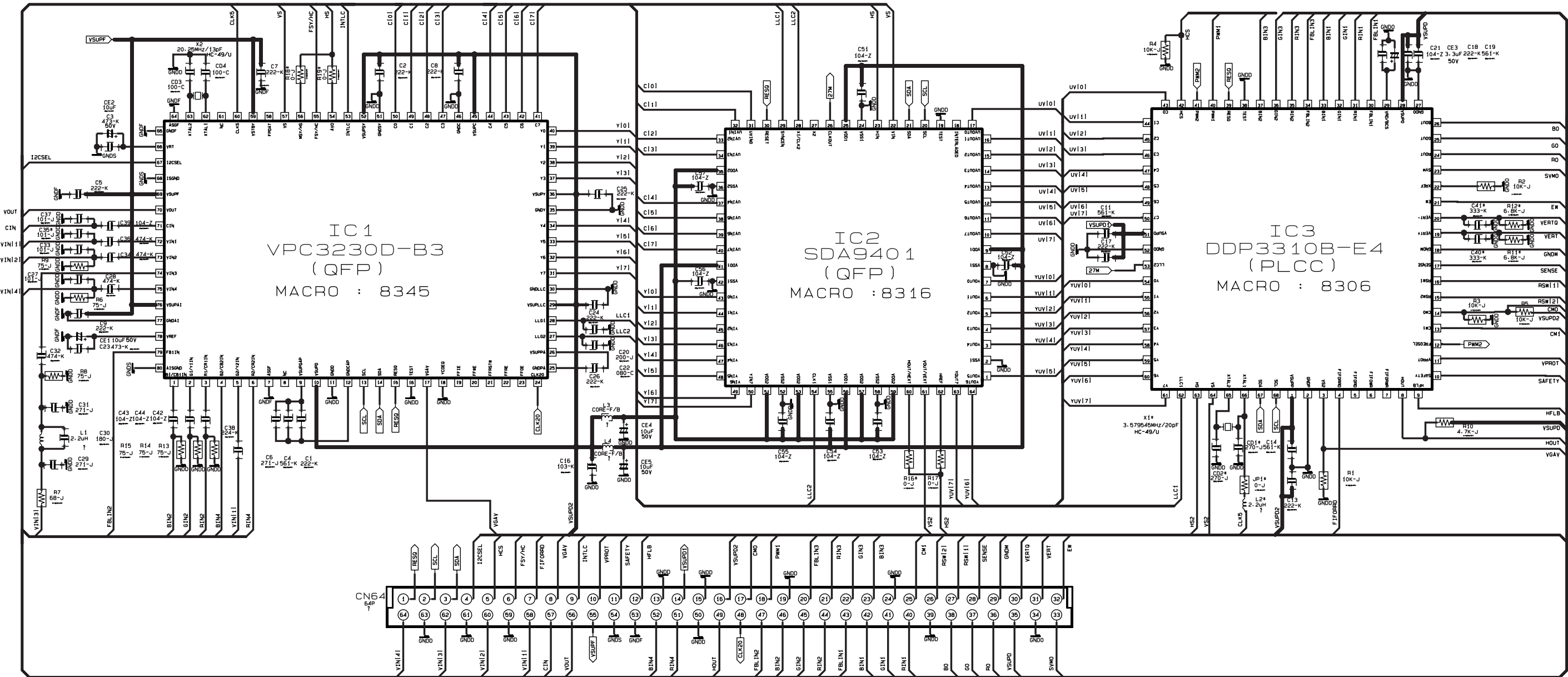


10-6 PIP MODULE

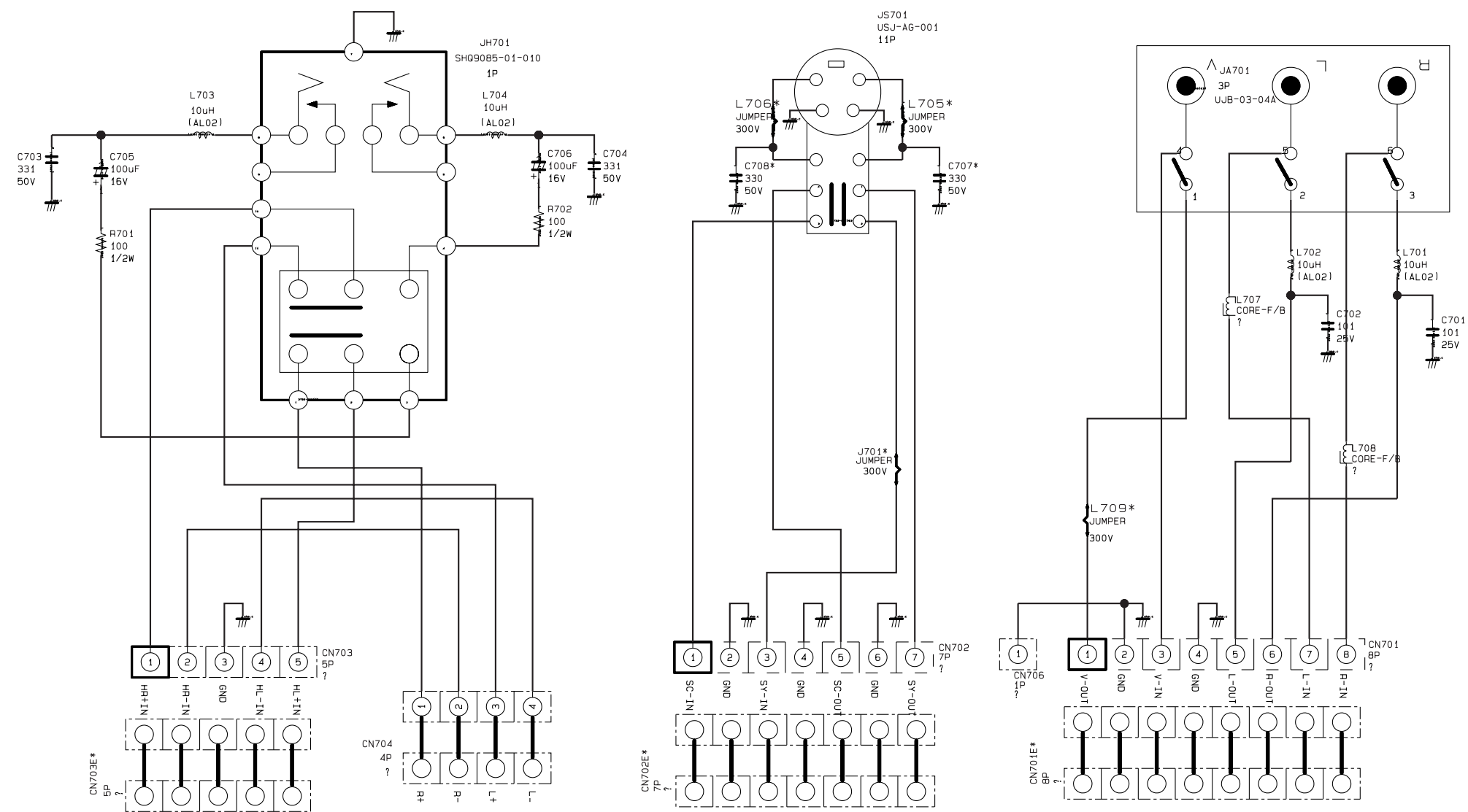
KS2A/KS3A ASSY-PIP MODULE



10-7 SCAN MODULE



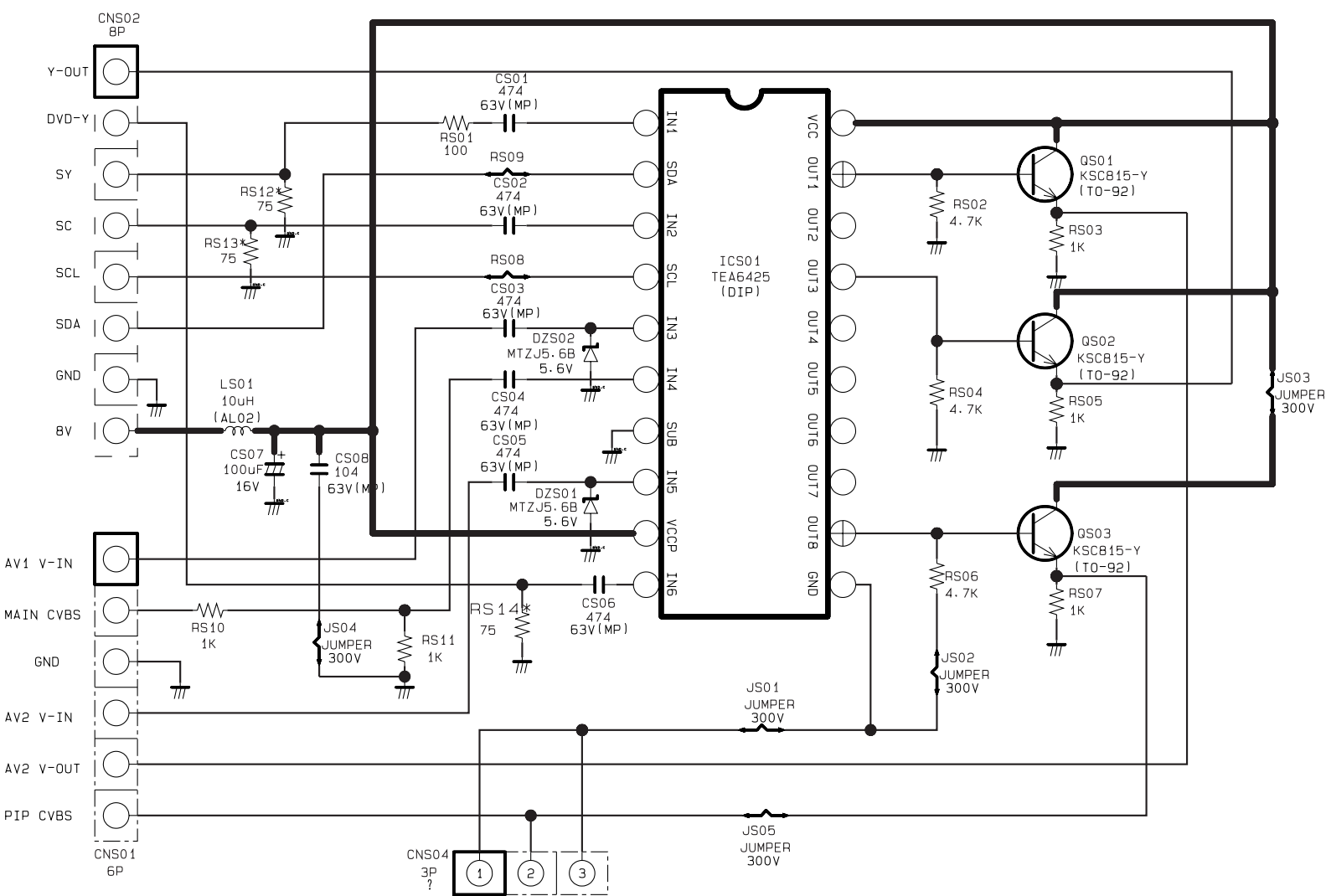
10-8 SIDE A/V



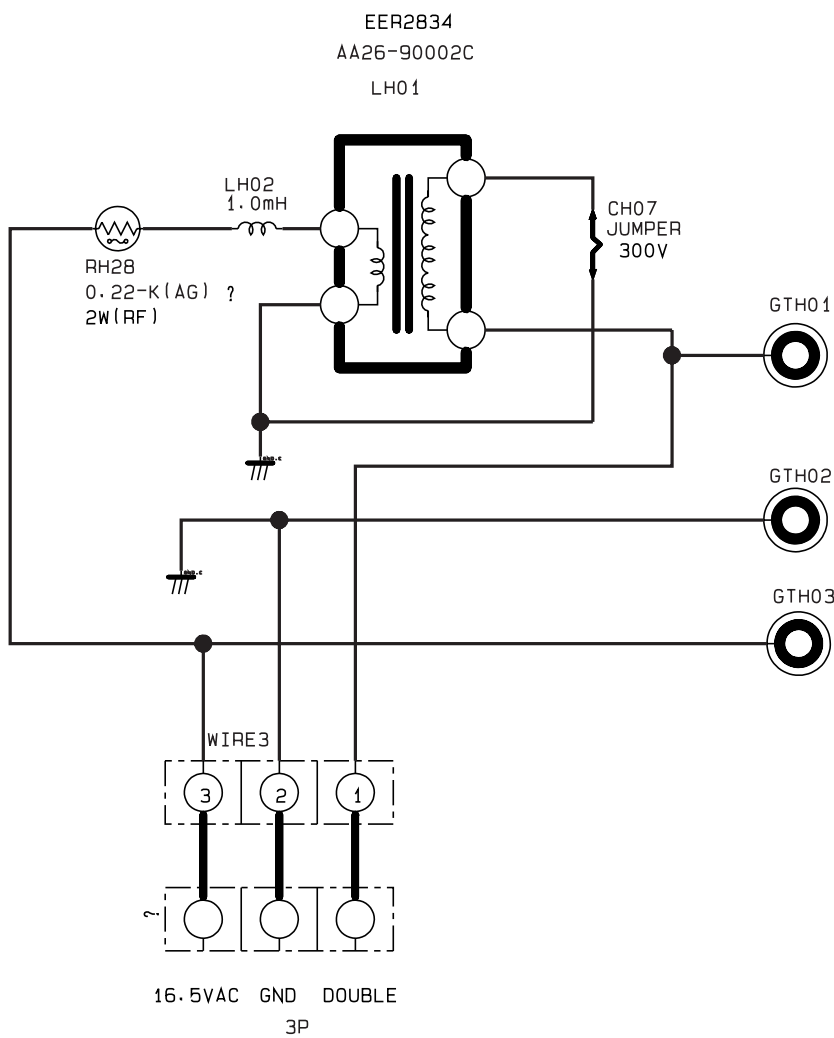
10-9 VIDEO S/W MODULE, DOUBLE FOCUS

VIDEO S/W MODULE

KS2A/KS3A VIDEO S/W MODULE (TEA6425)



DOUBLE FOCUS



# **TOSHIBA CORPORATION**

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN