



SERVICE MANUAL

Sec. 1: Main Section

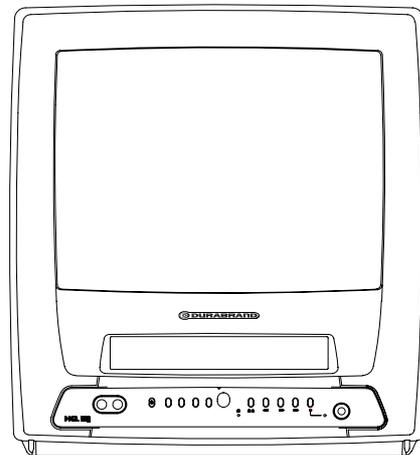
- Specifications
- Preparation for Servicing
- Adjustment Procedures
- Schematic Diagrams
- CBA's
- Exploded views
- Parts List

Sec. 2: Deck Mechanism Section

- Standard Maintenance
- Alignment for Mechanism
- Disassembly/Assembly of Mechanism
- Alignment Procedures of Mechanism
- Deck Exploded Views
- Deck Parts List

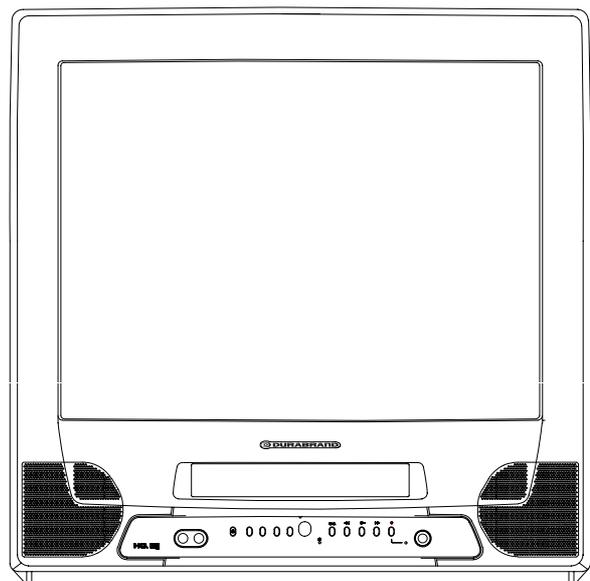
**14" COLOR TV/VCR
COMBINATION**

T6605VF



**21" COLOR TV/VCR
COMBINATION**

T6705VF



MAIN SECTION

14"/21" COLOR TV/VCR COMBINATION

T6605VF/T6705VF

| |
|-----------------------------|
| Sec. 1: Main Section |
| ● Specifications |
| ● Preparation for Servicing |
| ● Adjustment Procedures |
| ● Schematic Diagrams |
| ● CBA's |
| ● Exploded Views |
| ● Parts List |

TABLE OF CONTENTS

| | |
|--|--------|
| Specifications | 1-1-1 |
| Important Safety Precautions | 1-2-1 |
| Standard Notes for Servicing | 1-3-1 |
| Preparation for Servicing | 1-4-1 |
| Cabinet Disassembly Instructions | 1-5-1 |
| Electrical Adjustment Instructions | 1-6-1 |
| Block Diagrams | 1-7-1 |
| Mechanical Trouble Indicator | 1-7-7 |
| Schematic Diagrams / CBA's and Test Points | 1-8-1 |
| Waveforms | 1-9-1 |
| Wiring Diagram | 1-10-1 |
| System Control Timing Charts | 1-11-1 |
| IC Pin Function Descriptions | 1-12-1 |
| Lead Identifications | 1-13-1 |
| Cabinet Exploded Views | 1-14-1 |
| Packing Exploded Views | 1-14-5 |
| Mechanical Parts List | 1-15-1 |
| Electrical Parts List | 1-16-1 |

SPECIFICATIONS

×Mode-----SP mode unless otherwise specified

×Test input terminal

<Except Tuner>-----Video input (1Vp-p)
Audio input (-10dB)

<Tuner>-----Ant. input (80dB μ V) Video: 87.5% mod.(BG/DK), 80.0% mod.(I)
Audio: 30kHz div (1kHz Sin)

<DEFLECTION>

[T6605VF]

| Description | Condition | Unit | Nominal | Limit |
|-----------------|------------|------|---------|-------|
| 1. Over Scan | — | % | 90 | 85/95 |
| 2. Linearity | Horizontal | % | — | ±15 |
| | Vertical | % | — | ±10 |
| 3. High Voltage | — | kV | 22 | — |

[T6705VF]

| Description | Condition | Unit | Nominal | Limit |
|-----------------|------------|------|---------|-------|
| 1. Over Scan | — | % | 90 | 85/95 |
| 2. Linearity | Horizontal | % | — | ±15 |
| | Vertical | % | — | ±10 |
| 3. High Voltage | — | kV | 25 | — |

<VIDEO & CHROMA>

[T6605VF]

| Description | Condition | Unit | Nominal | Limit |
|---------------------------|-----------|------|---------|-------|
| 1. Misconvergence | Center | m/m | — | 0.6 |
| | Corner | m/m | — | 2.0 |
| | Side | m/m | — | 1.5 |
| 2. Contrast Control Range | — | dB | — | 6 |
| 3. Brightness | APL 100% | ft-L | 55 | 40 |
| 4. Color Temperature | — | K | 8500 | — |

[T6705VF]

| Description | Condition | Unit | Nominal | Limit |
|---------------------------|-----------|------|---------|-------|
| 1. Misconvergence | Center | m/m | — | 0.6 |
| | Corner | m/m | — | 2.5 |
| | Side | m/m | — | 1.8 |
| 2. Contrast Control Range | — | dB | — | 6 |
| 3. Brightness | APL 100% | ft-L | 35 | 24 |
| 4. Color Temperature | — | K | 8500 | — |

<VCR>

| Description | Condition | Unit | Nominal | Limit |
|--------------------------|-----------|------|---------|-------|
| 1. Horizontal Resolution | (R/P) | Line | 230 | 200 |
| 2. Jitter (Low) | (R/P) | μS | 0.05 | 0.2 |
| 3. S/N Chroma AM(SP) | (R/P) | dB | 38 | 33 |
| PM(SP) | (R/P) | dB | 36 | 33 |
| 4. Wow & Flutter (RMS) | (R/P) | % | 0.25 | 0.5 |

<TUNER>

| Description | Condition | Unit | Nominal | Limit |
|----------------------|-----------|------|---------|-------|
| 1. Video S/N | — | dB | 45 | 40 |
| 2. Audio S/N (W/LPF) | — | dB | 43 | 40 |

<AUDIO>

All items are measured across 8Ω resistor at speaker output terminal.

| Description | Condition | Unit | Nominal | Limit |
|---|---------------------------|----------|---------|--------------------|
| 1. Audio Output Power (Max.) | (R/P) | W | 1.0 | 0.8 |
| 2. Audio S/N (W/LPF) | (R/P) | dB | 40 | 36 |
| 3. Audio Distortion (W/LPF) | (R/P) | % | 3.0 | 5.0 |
| 4. Audio Freq. Response (-20dB Ref. 1kHz) | 200Hz (R/P) 6kHz (R/P) | dB dB | — — | 5.0/-10 5.0/-10 |

Note: Nominal specifications represent the design specifications. All units should be able to approximate these. Some will exceed and some may drop slightly below these specifications. Limit specifications represent the absolute worst condition that still might be considered acceptable. In no case should a unit fail to meet limit specifications.

<TV NORM, TUNER SENSIVITY, RECEPTIVE TV CHANNELS>

| TV Norm | Tuner Sensivity | Receptive TV Channels |
|---------|--|---|
| PAL-B/G | NOM: VHF 46dBμV / UHF 47dBμV MAX: VHF 53dBμV / UHF 56dBμV | E2 - E12, IA - IH, E21 - E69, S01 - S03, Z+1, Z+2, S1 - S41, gap2 |

IMPORTANT SAFETY PRECAUTIONS

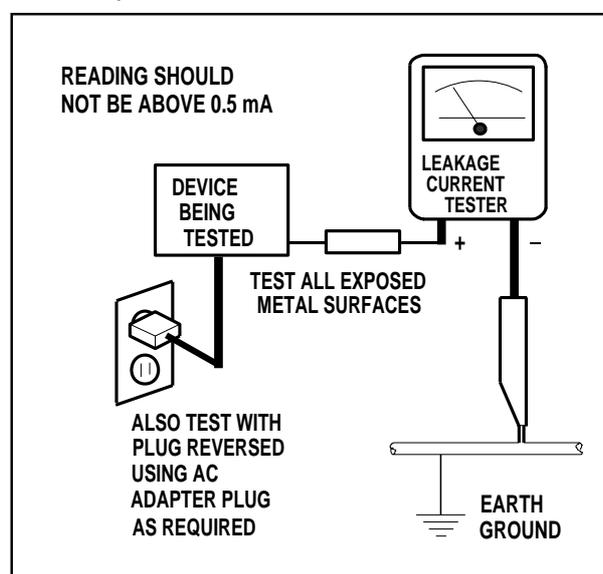
Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Safety Precautions for TV Circuit

1. **Before returning an instrument to the customer**, always make a safety check of the entire instrument, including, but not limited to, the following items:

- a. Be sure that no built-in protective devices are defective and have been defeated during servicing.
(1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, including any removed for servicing convenience.
(2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**
- b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the picture tube and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.
- c. **Antenna Cold Check** - With the instrument AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohm or greater than 5.2 megohm, an abnormality exists that must be corrected before the instrument is returned to the customer. Repeat this test with the instrument AC switch in the off position.
- d. **Leakage Current Hot Check** - With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leak-

age current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the instrument AC switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the instrument power cord plug in the outlet and repeat the test.



ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE CONNECTING THE ANTENNA OR ACCESSORIES.

- e. **X-Radiation and High Voltage Limits** - Because the picture tube is the primary potential source of X-radiation in solid-state TV receivers, it is specially constructed to prohibit X-radiation emissions. For continued X-radiation protection, the replacement picture tube must be the same type as the original. Also, because the picture tube shields and mounting hardware perform an X-radiation protection function, they must be correctly in place. High voltage must be measured each time servic-

ing is performed that involves B+, horizontal deflection or high voltage. Correct operation of the X-radiation protection circuits also must be reconfirmed each time they are serviced. (X-radiation protection circuits also may be called "horizontal disable" or "hold down.") Read and apply the high voltage limits and, if the chassis is so equipped, the X-radiation protection circuit specifications given on instrument labels and in the Product Safety & X-Radiation Warning note on the service data chassis schematic. High voltage is maintained within specified limits by close tolerance safety-related components/adjustments in the high-voltage circuit. If high voltage exceeds specified limits, check each component specified on the chassis schematic and take corrective action.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the picture tube.
3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions, including, but not limited to circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.
4. **Picture Tube Implosion Protection Warning** - The picture tube in this receiver employs integral implosion protection. For continued implosion protection, replace the picture tube only with one of the same type number. Do not remove, install, or otherwise handle the picture tube in any manner without first putting on shatterproof goggles equipped with side shields. People not so equipped must be kept safely away while picture tubes are handled. Keep the picture tube away from your body. Do not handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; because of potential hazard, do not try to remove such "permanently attached" yokes from the picture tube.
5. **Hot Chassis Warning** -
 - a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and maybe safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.
 - b. Some TV receiver chassis normally have 85V AC(RMS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.
 - c. Some TV receiver 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 insulation material that must not be defeated or altered.
6. Observe original lead dress. Take extra care to assure correct lead dress in the following areas: a. near sharp edges, b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts, c. the AC supply, d. high voltage, and e. antenna wiring. Always inspect in all areas for pinched, out of place, or frayed wiring. Check AC power cord for damage.
7. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
8. **Product Safety Notice** - Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc.. Parts that have special safety characteristics are identified by a (⚠) on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

- A.** Parts identified by the (⚠) symbol are critical for safety.
Replace only with part number specified.
- B.** In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C.** Use specified internal wiring. Note especially:
- 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
- D.** Use specified insulating materials for hazardous live parts. Note especially:
- 1) Insulation Tape
 - 2) PVC tubing
 - 3) Spacers
 - 4) Insulators for transistors.
- E.** When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F.** Observe that the wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)
- G.** Check that replaced wires do not contact sharp edged or pointed parts.
- H.** When a power cord has been replaced, check that 5~6 kg of force in any direction will not loosen it.
- I.** Also check areas surrounding repaired locations.
- J.** Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K.** Crimp type wire connector
When replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, in order to prevent shock hazards, perform carefully and precisely the following steps.
Replacement procedure
- 1) Remove the old connector by cutting the wires at a point close to the connector.
Important: Do not re-use a connector (discard it).
 - 2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
 - 3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
 - 4) Use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.
- L.** When connecting or disconnecting the VCR connectors, first, disconnect the AC plug from AC supply socket.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

Table 1 : Ratings for selected area

| AC Line Voltage | Clearance Distance (d), (d') |
|-----------------|--|
| 220 to 240 V | $\geq 3\text{mm}(d)$ $\geq 6\text{ mm}(d')$ |

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See Fig. 2 and following table.

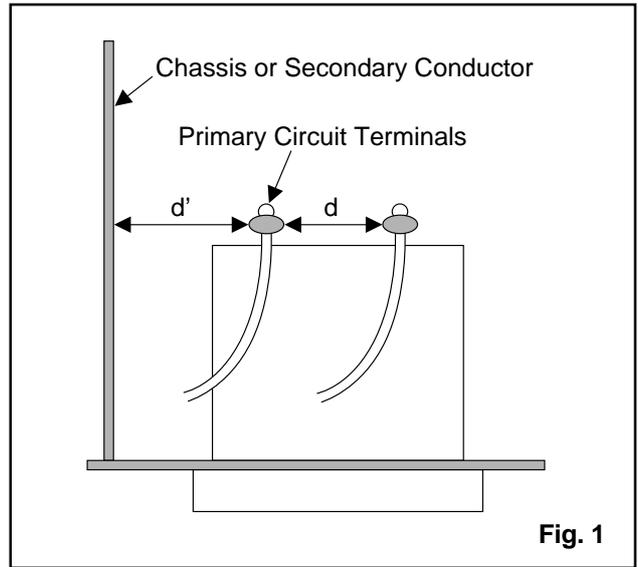


Fig. 1

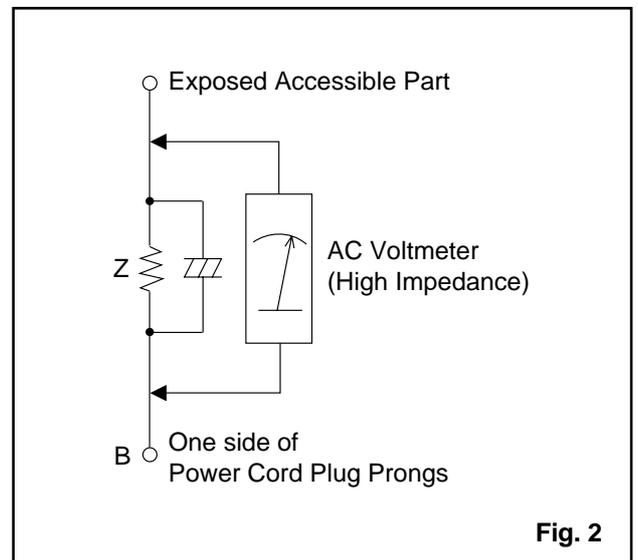


Fig. 2

Table 2: Leakage current ratings for selected areas

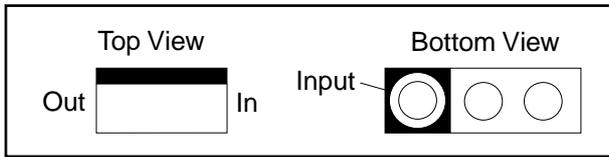
| AC Line Voltage | Load Z | Leakage Current (i) | One side of power cord plug prongs (B) to: |
|-----------------|---------------------------------|---|--|
| 220 to 240 V | 2kΩ RES. Connected in parallel | $i \leq 0.7\text{mA AC Peak}$ $i \leq 2\text{mA DC}$ | RF or Antenna terminals |
| | 50kΩ RES. Connected in parallel | $i \leq 0.7\text{mA AC Peak}$ $i \leq 2\text{mA DC}$ | A/V Input, Output |

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

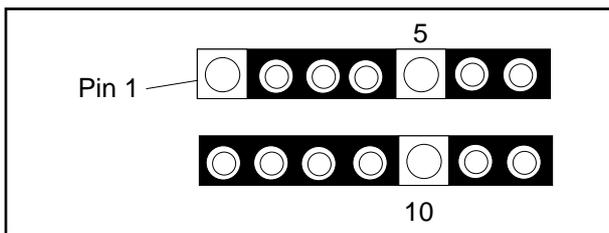
STANDARD NOTES FOR SERVICING

Circuit Board Indications

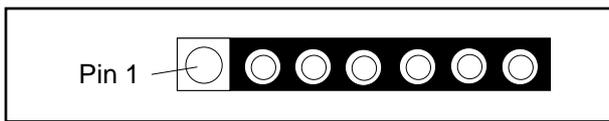
1. The output pin of the 3 pin Regulator ICs is indicated as shown:



2. For other ICs, pin 1 and every 5th pin is indicated as shown:

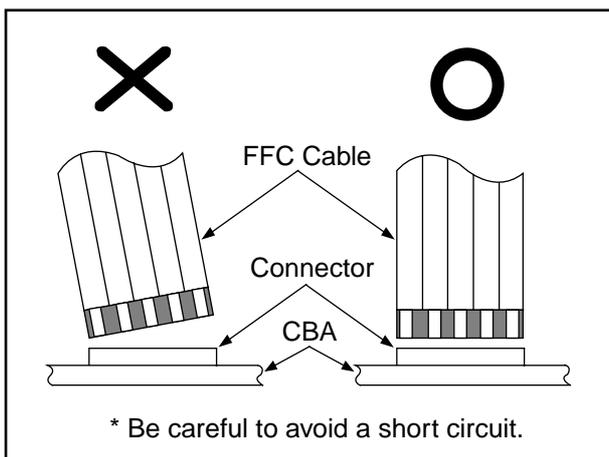


3. The 1st pin of every pin connector are indicated as shown:



Instructions for Connectors

1. When you connect or disconnect FFC cable (connector), be sure to disconnect the AC cord.
2. FFC cable (connector) should be inserted parallel into the connector, not at an angle.



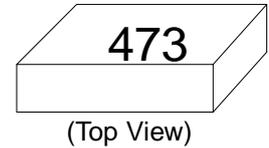
[CBA= Circuit Board Assembly]

How to Read the Values of the Rectangular Type Chip Components

Example:

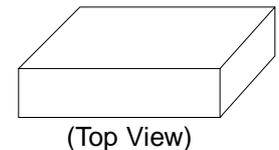
(a) Resistor

$$= 473 = 47 \text{ [k}\Omega\text{]}$$



(b) Capacitor

= Not Shown

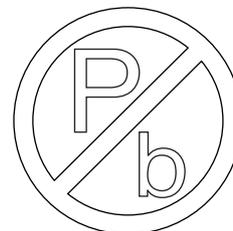


Caution:

Once chip parts (Resistors, Capacitors, Transistors, etc.) are removed, they must not be reused. Always use a new part.

Pb (Lead) Free Solder

Pb free mark will be found on PCBs used Pb free solder. (Refer to figure.) For PCBs with Pb free mark, be sure to use Pb free solder. For PCBs without Pb free mark, use standard solder.



Pb free mark

Replacement Procedures for Leadless (Chip) Components

The Following Procedures are Recommended for the Replacement of the Leadless Components Used in this Unit.

1. Preparation for replacement

1.1. Pb free solder

- a. Soldering Iron
Use a soldering iron for Pb free solder.
- b. Solder
Be sure to use Pb free solder.
- c. Soldering time
Do not apply heat for more than 4 seconds.
- d. Preheating
Leadless capacitor must be preheated before installation. (130°C~150°C, for about two minutes.)

1.2. Standard solder

e. Soldering Iron

Use a pencil-type soldering iron (less than 30 watts).

f. Solder

Eutectic solder (Tin 63%, Lead 37%) is recommended.

g. Soldering time

Do not apply heat for more than 4 seconds.

h. Preheating

Leadless capacitor must be preheated before installation. (130°C~150°C, for about two minutes.)

Notes:

- Leadless components must not be reused after removal.
- Excessive mechanical stress and rubbing for the component electrode must be avoided.

2. Removing the leadless component

Grasp the leadless component body with tweezers and alternately apply heat to both electrodes. When the solder on both electrodes has melted, remove leadless component with a twisting motion.

Notes:

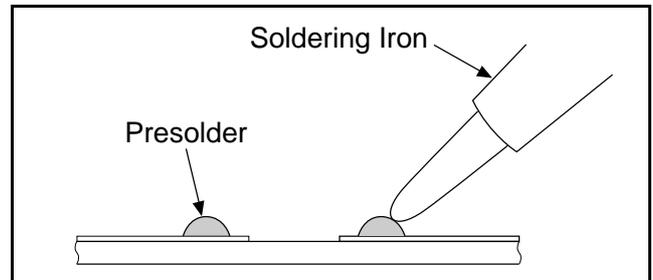
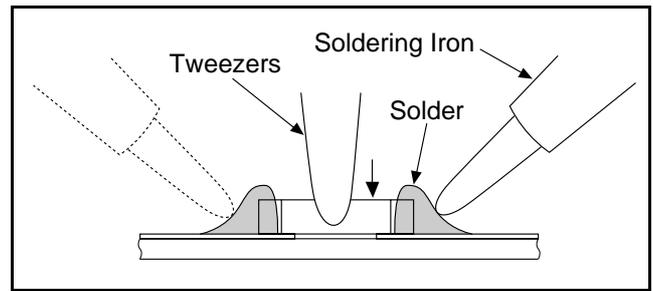
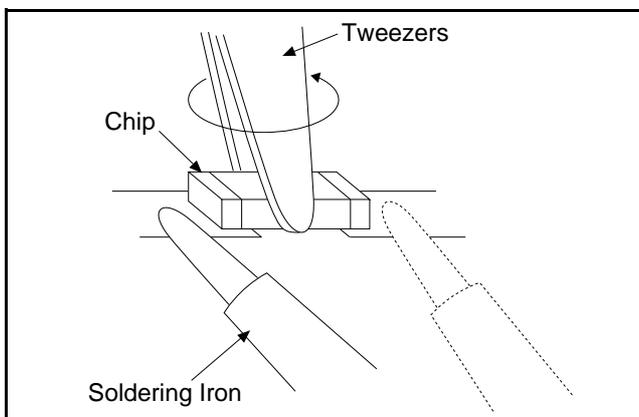
- Do not attempt to lift the component off the board until the component is completely disconnected from the board by the twisting action.
- Take care not to break the copper foil on the printed board

3. Installing the leadless component

- Presolder the contact points of the circuit board.
- Press the part downward with tweezers and solder both electrodes as shown below.

Note:

Do not glue the replacement leadless component to the circuit board.



How to Remove / Install Flat Pack IC

Caution:

- The Flat Pack-IC shape may differ by models. Use an appropriate hot-air flat pack-IC desoldering machine, whose shape matches that of the Flat Pack-IC.
- Do not apply the hot air to the chip parts around the Flat Pack-IC for over 6 seconds as damage may occur to the chip parts. Put Masking Tape around the Flat Pack-IC to protect other parts from damage. (Fig. S-1-2)
- The Flat Pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or solder lands under the IC when removing it.

1. Removal

With Hot - Air Flat Pack - IC Desoldering Machine:

- Prepare the Hot - Air Flat Pack - IC Desoldering Machine, then apply hot air to Flat Pack - IC (about 5~6 seconds). (Fig. S-1-1)
- Remove the Flat Pack- IC with tweezers while applying the hot air.

With Soldering Iron:

- Using desoldering braid, remove the solder from all pins of the Flat Pack - IC. When you use solder flux which is applied to all pins of the Flat Pack - IC, you can remove it easily. (Fig. S-1-3)
- Lift each lead of the Flat Pack - IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air Desoldering Machine. (Fig. S-1-4)

With Iron Wire:

- Using desoldering braid, remove the solder from all pins of the Flat Pack - IC. When you use solder flux which is applied to all pins of the Flat Pack - IC, you can remove it easily. (Fig. S-1-3)

- b. Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
- c. Pull up on the wire as the solder melts so as to lift the IC leads from the CBA contact pads, while heating the pins using a fine tip soldering iron or hot air blower.

Note:

When using a soldering iron, care must be taken to ensure that the Flat Pack - IC is not being held by glue, or when it is removed from the CBA, it may be damaged if force is used.

2. Installation

- a. Using desoldering braid, remove the solder from the foil of each pin of the Flat Pack - IC on the CBA, so you can install a replacement Flat Pack - IC more easily.
- b. The "●" mark on the Flat Pack - IC indicates pin 1 (See Fig. S-1-6). Make sure this mark matches the 1 on the CBA when positioning for installation. Then pre - solder the four corners of the Flat Pack - IC (See Fig. S-1-7).
- c. Solder all pins of the Flat Pack - IC. Make sure that none of the pins have solder bridges.

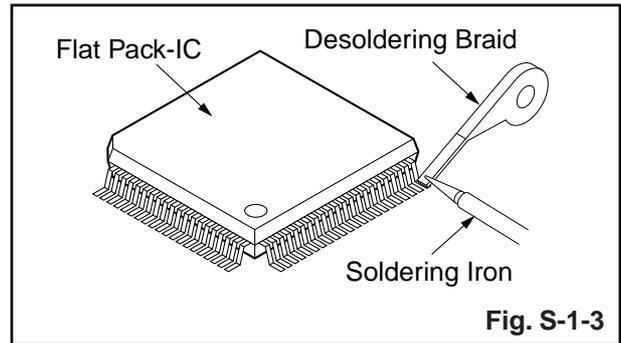


Fig. S-1-3

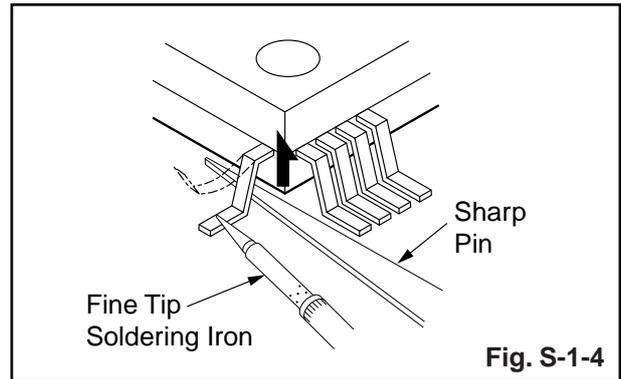


Fig. S-1-4

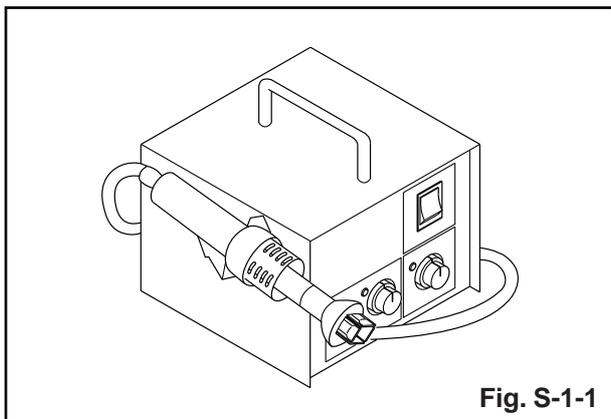


Fig. S-1-1

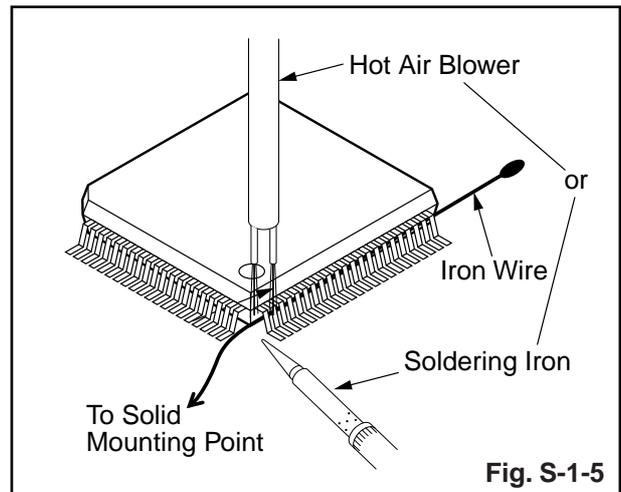


Fig. S-1-5

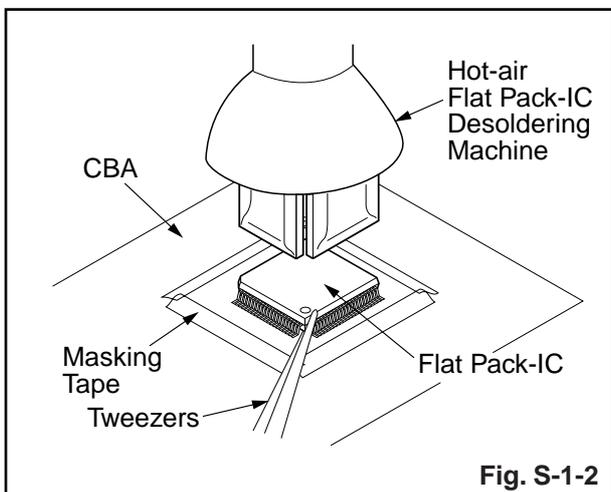


Fig. S-1-2

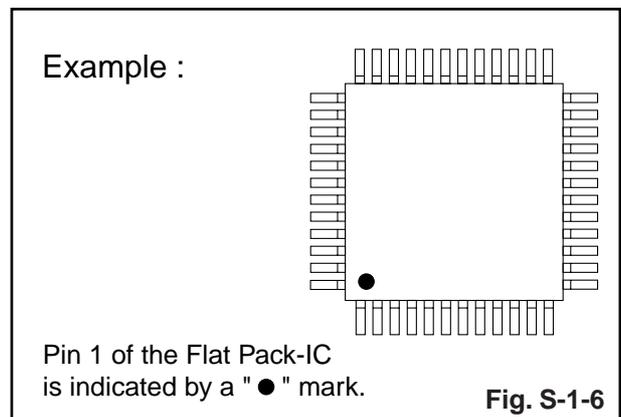
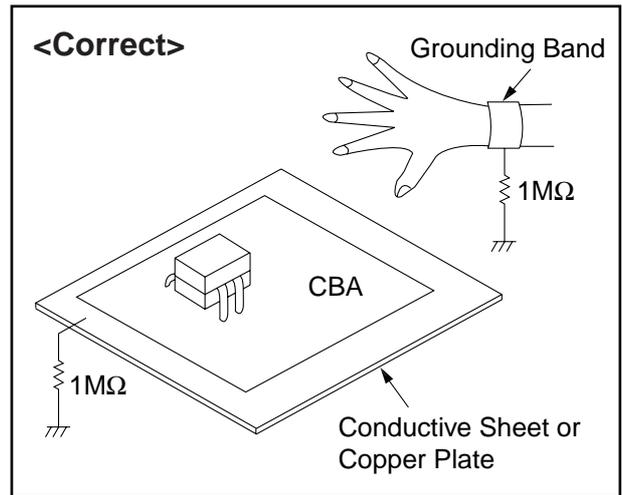
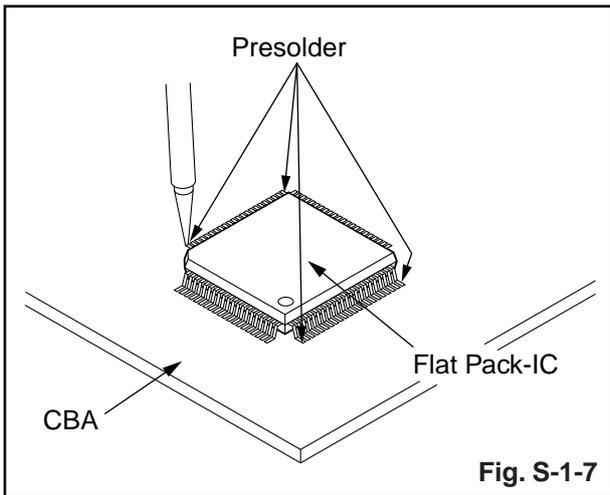


Fig. S-1-6



Instructions for Handling Semiconductors

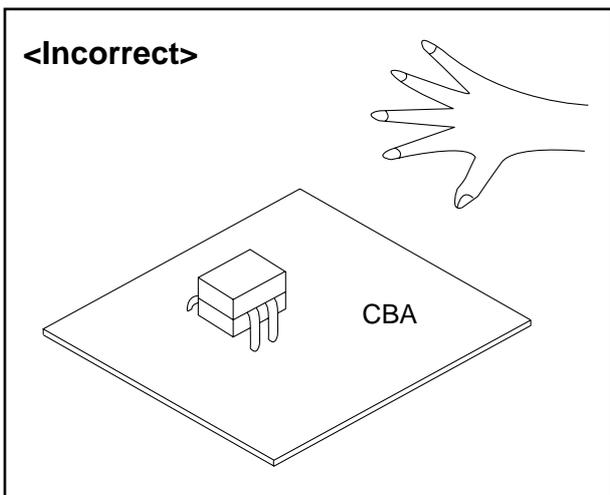
Electrostatic breakdown of the semiconductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

Ground for Human Body

Be sure to wear a grounding band ($1M\Omega$) that is properly grounded to remove any static electricity that may be charged on the body.

Ground for Work Bench

Be sure to place a conductive sheet or copper plate with proper grounding ($1M\Omega$) on the work bench or other surface, where the semiconductors are to be placed. Because the static electricity charge on the clothing will not escape through the body grounding band, be careful to avoid contacting semiconductors to clothing.



PREPARATION FOR SERVICING

How to Enter the Service Mode

Caution: 1

- Optical sensors system are used for Tape Start and End Sensor on this equipment. Read this page carefully and prepare as described on this page before starting to service; otherwise, the unit may operate unexpectedly.

Preparing: 1

- Cover Q202 (START SENSOR) and Q201 (END SENSOR) with Insulation Tape or enter the service mode to activate Sensor Inhibition automatically.

Note: Avoid playing, rewinding or fast forwarding the tape to its beginning or end, because both Tape End Sensors are not active.

How to Enter the Service Mode

- Turn the power on. (Use main power on the TV unit.)
- Press [STANDBY/ON], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds. When entering the service mode, "4" will display at corners of the screen.
- During the service mode, electrical adjustment mode can be selected by remote control key. Details are as follows.

| Key | Adjustment Mode |
|-------------|--|
| MENU | Picture adjustment mode: Press the MENU button to change from BRT (Bright), *CNT (Contrast), *COL (Color), *TNT (Tint) and SHP (SHARP). Press PROG+/PROG- key to adjust Initial Value. *Marked items are not necessary to adjust normally. |
| VOL- | SECAM Black Level adjustment mode: See adjustment instructions page 1-6-3. Cut-Off adjustment mode: See adjustment instructions page 1-6-4. White Balance adjustment mode: See adjustment instructions page 1-6-5. |
| 0 | C-Trap adjustment mode: See adjustment instructions page 1-6-3. |
| 1 | No need to use. |
| 2 | H adjustment mode: See adjustment instructions page 1-6-2. |
| 3 | Head switching point adjustment mode (Auto adjustment): See adjustment instructions page 1-6-7. |
| 4 | Auto record mode: Perform recording (15 Sec.)-->Stop-->Rewind (Zero return) automatically. |
| 5 | Head switching point adjustment mode (Manual adjustment): See adjustment instructions page 1-6-7. |

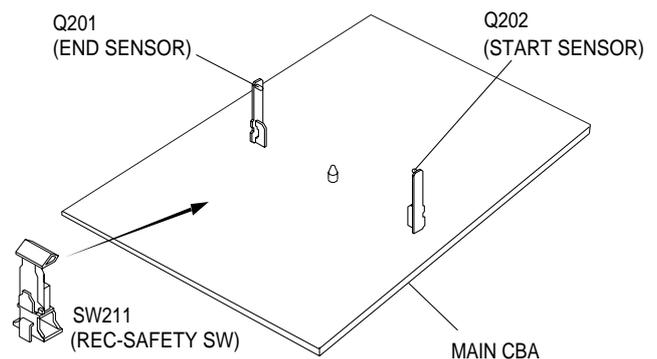
| Key | Adjustment Mode |
|----------|---|
| 6 | No need to use. |
| 7 | No need to use. |
| 8 | H. Shift adjustment mode: See adjustment instructions page 1-6-4. |
| 9 | V.size/V. shift adjustment: See adjustment instructions page 1-6-4. |

Caution: 2

- The deck mechanism assembly is mounted on the Main CBA directly, and SW211 (REC-SAFETY SW) is mounted on the Main CBA. When deck mechanism assembly is removed from the Main CBA due to servicing, this switch can not be operated automatically.

Preparing: 2

- To eject the tape, press the STOP/EJECT button on the unit (or Remote Control).
- When you want to record during the Service mode, press the Rec button while depressing SW211 (REC-SAFETY SW) on the Main CBA.



CABINET DISASSEMBLY INSTRUCTIONS

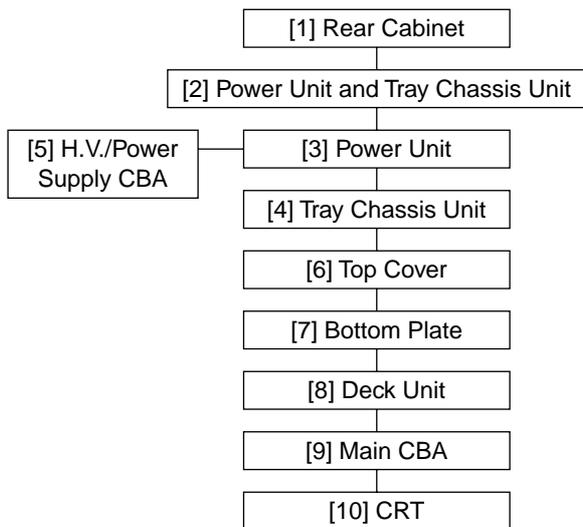
[T6605VF]

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.

Caution !!

When removing the CRT, be sure to discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.



2. Disassembly Method

| ID/ LOC. No. | PART | REMOVAL | | |
|--------------------|----------------------------------|-------------|---|------|
| | | Fig. No. | REMOVE/ *UNHOOK/ UNLOCK/RELEASE/ UNPLUG/ DESOLDER | Note |
| [1] | Rear Cabinet | 1,2,5 | 4(S-1), 2(S-2), *CN151 | 1 |
| [2] | Power Unit and Tray Chassis Unit | 3,4,5 | Anode Cap, *CN501, *CN551, *CN601, CRT CBA, Power Knob | 2 |
| [3] | Power Unit | 3,5 | *CN502, *CN552, *CN602 | 3 |
| [4] | Tray Chassis Unit | 3 | ----- | - |
| [5] | H.V./Power Supply CBA | 3 | 6(S-3) | 4 |
| [6] | Top Cover | 3 | 5(S-4), CL604 | 5 |
| [7] | Bottom Plate | 3 | (S-5) | 6 |

| ID/ LOC. No. | PART | REMOVAL | | |
|--------------------|-----------|-------------|---|------|
| | | Fig. No. | REMOVE/ *UNHOOK/ UNLOCK/RELEASE/ UNPLUG/ DESOLDER | Note |
| [8] | Deck Unit | 3, 5 | 7(S-6), (S-7), (S-8), Desolder *CN201, CL401, CL402, CL403) | 7 |
| [9] | Main CBA | 3 | 4(S-9) | 8 |
| [10] | CRT | 4 | 4(S-10) | 9 |

↓ (1) ↓ (2) ↓ (3) ↓ (4) ↓ (5)

(1): Order of steps in Procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the identification (location) No. of parts in Figures.

(2): Parts to be removed or installed.

(3): Fig. No. showing Procedure of Part Location.

(4): Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.

S=Screw, P=Spring, L=Locking Tab, CN=Connector, *=Unhook, Unlock, Release, Unplug, or Desolder

2(S-2) = two Screw (S-2)

(5): Refer to the following "Reference Notes in the Table."

Reference Notes in the Table

1. Removal of the Rear Cabinet.
Remove four screws (S-1) and two screws (S-2). Disconnect connector CN151 and remove the Rear Cabinet.

Caution !!

Discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.

2. Removal of the Power Unit and Tray Chassis Unit.
Discharge the Anode Lead of the CRT with the CRT Ground before removing the Anode Cap. Disconnect the following: Anode Cap, CN501, CN551, CN601, CRT CBA, and Power Button. Then pull the Power Unit and Tray Chassis Unit out backward.

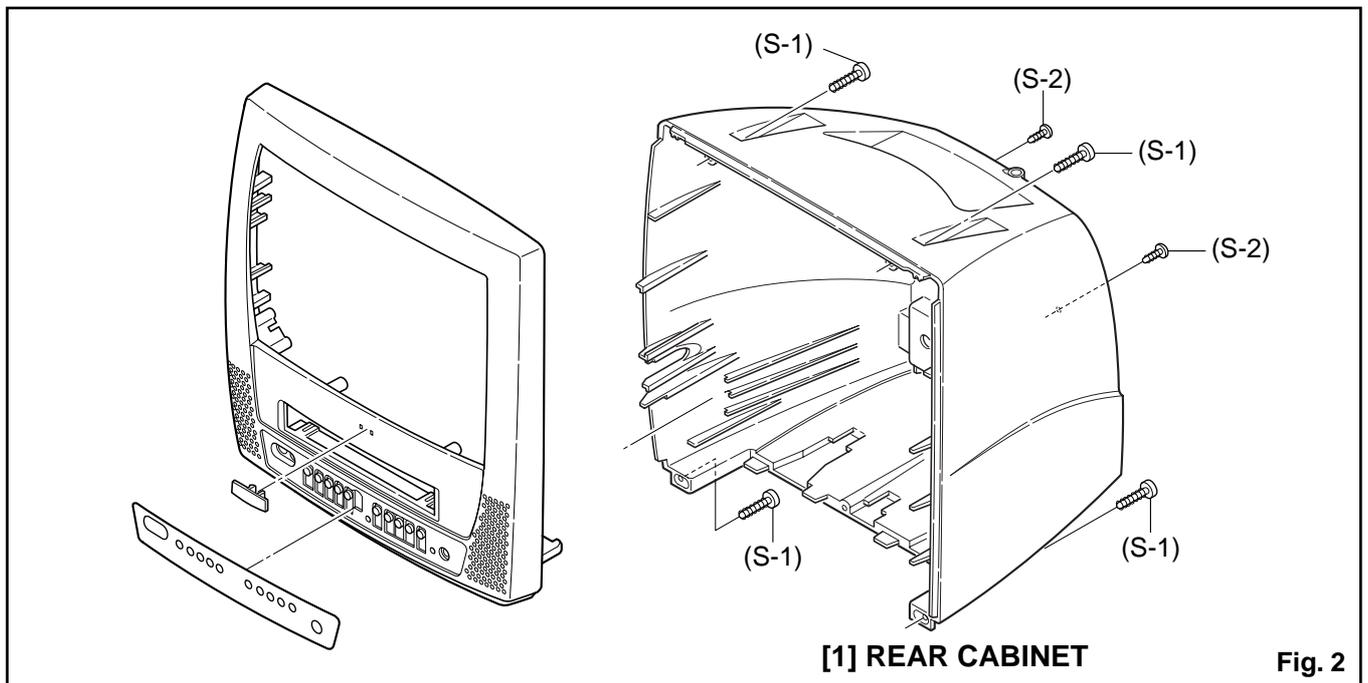
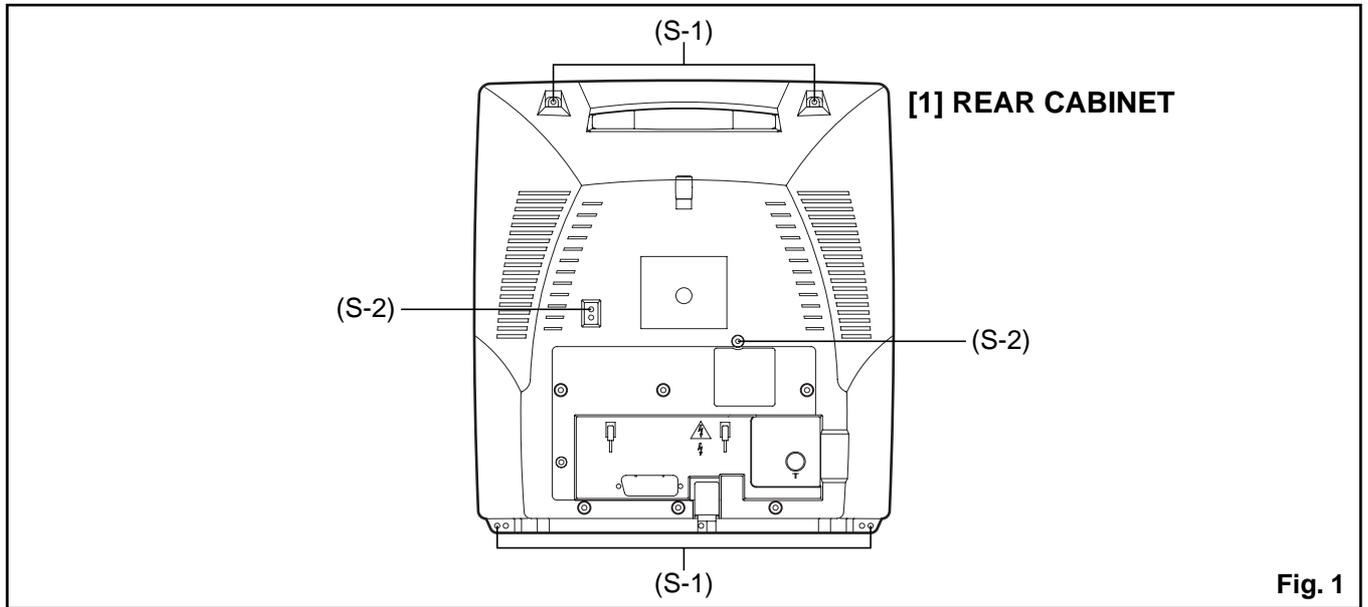
3. Removal of the Power Unit.
Disconnect connectors CN502, CN552, and CN602. Then slide the Power Unit out.

4. Removal of the H.V./Power Supply CBA.
Remove six screws (S-3) and pull up the H.V./Power Supply CBA.

5. Removal of the Top Cover.
Remove five screws (S-4) and CL604, and remove the Top Cover.

6. Removal of the Bottom Plate.
Remove a screw (S-5). Then slide the Bottom Plate out front.
7. Removal of the Deck Unit.
Remove seven screws (S-6), screw (S-7) and screw (S-8). Then, desolder connectors (CN201, CL401, CL402, CL403) and lift up the Deck Unit.

8. Removal of the Main CBA.
Remove four screws (S-9) and pull up the Main CBA.
9. Removal of the CRT.
Remove four screws (S-10) and pull the CRT backward.



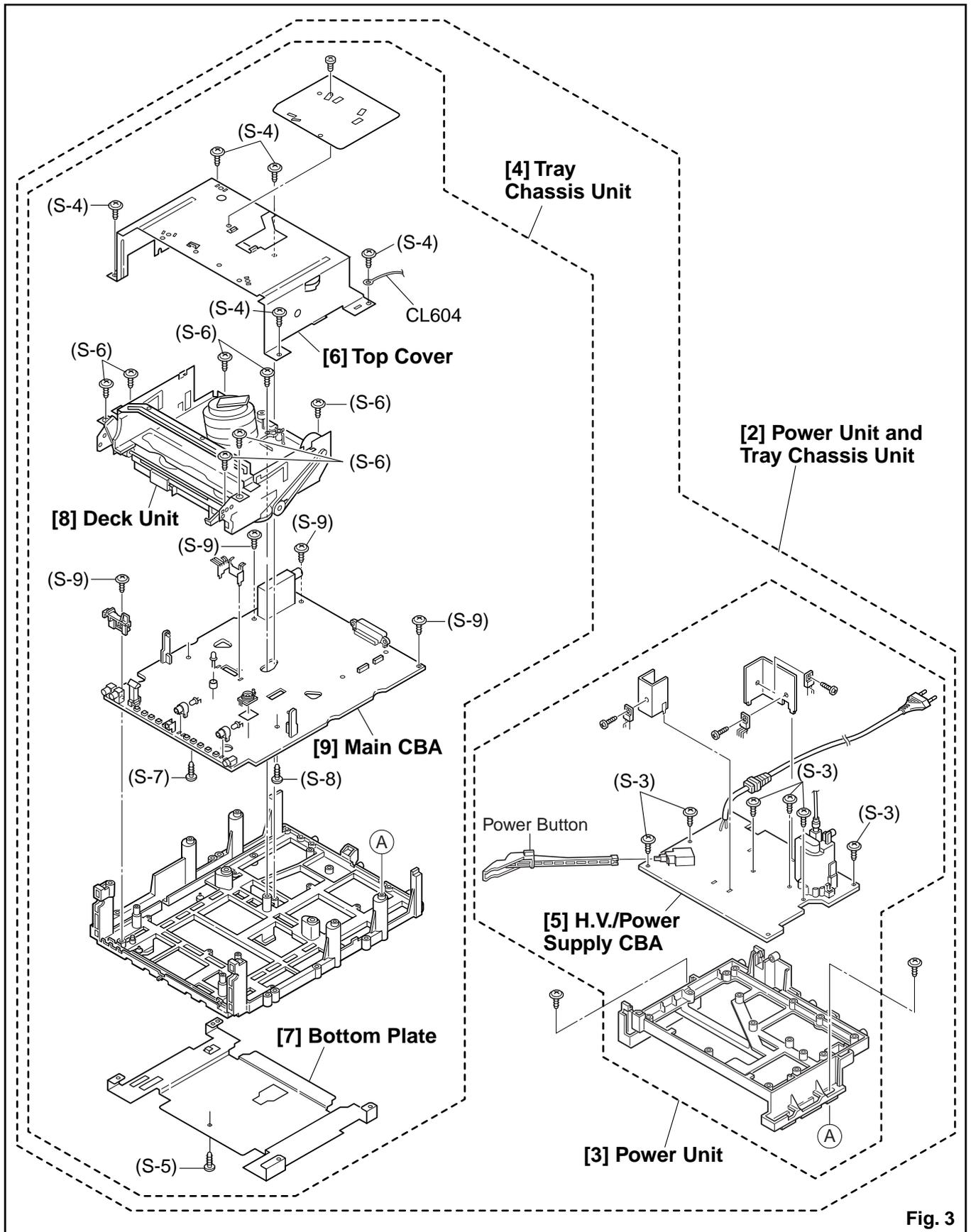


Fig. 3

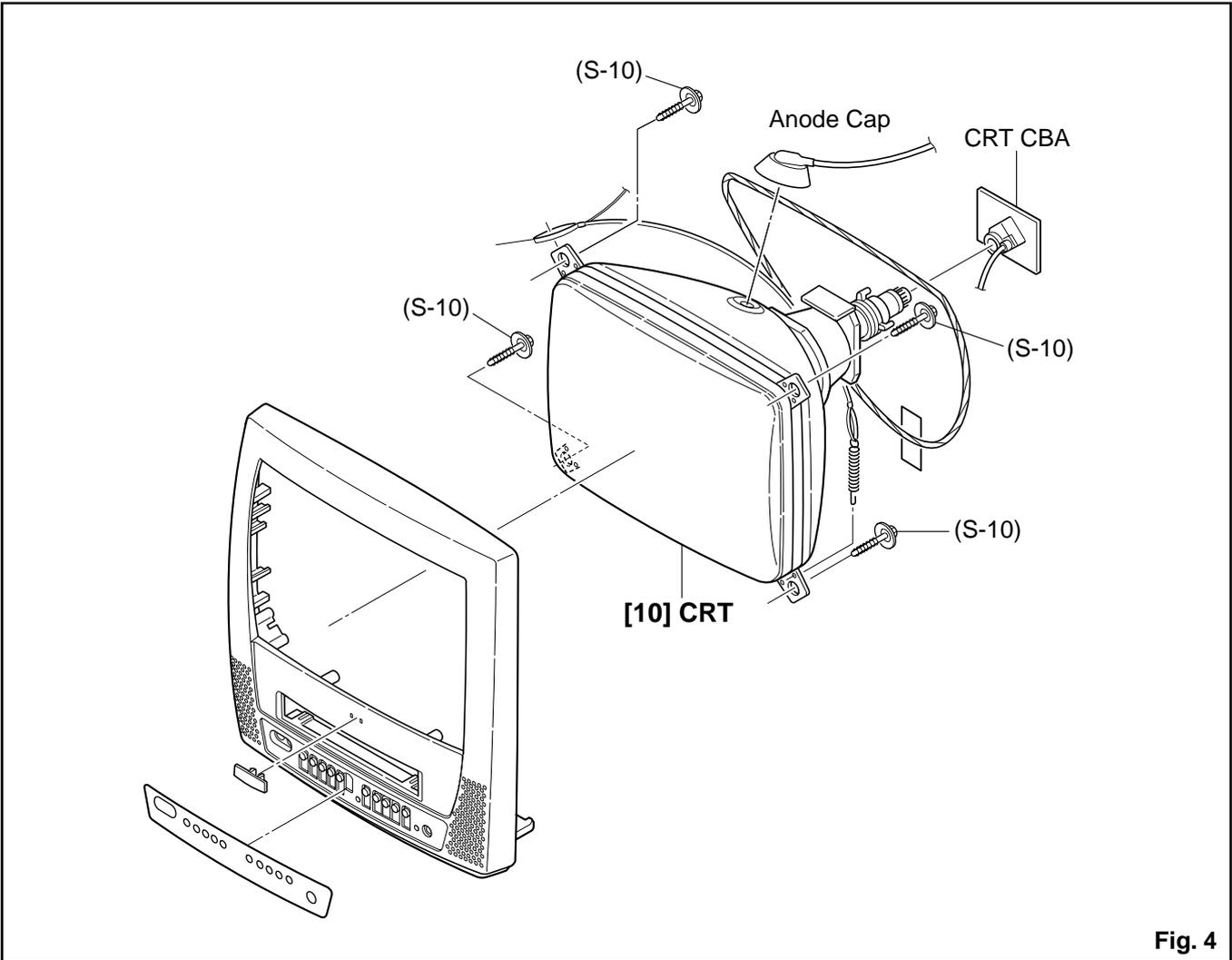


Fig. 4

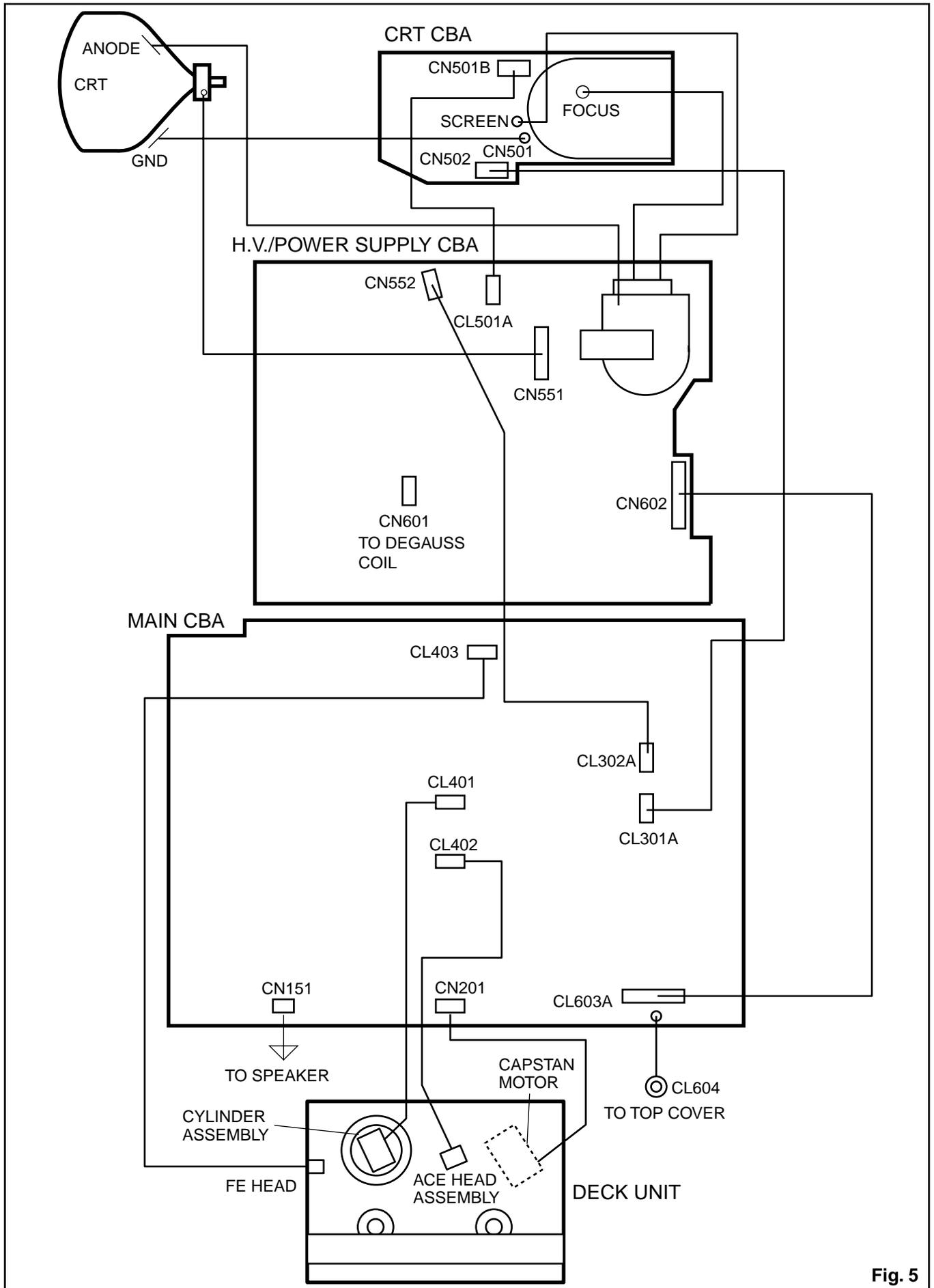


Fig. 5

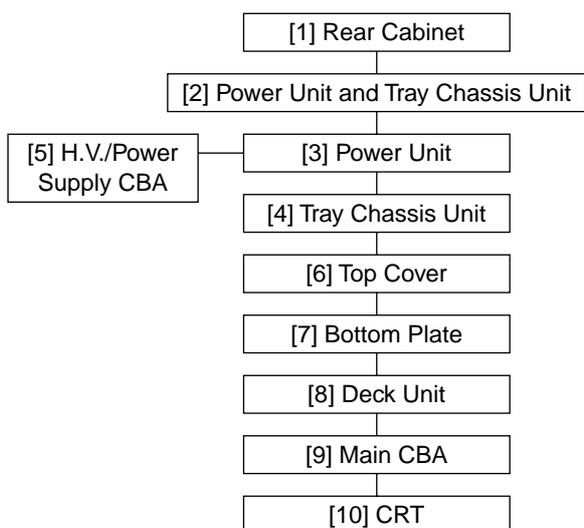
[T6607VF]

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, and the CBA in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route and dress the cables as they were.

Caution !!

When removing the CRT, be sure to discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.



2. Disassembly Method

| ID/ LOC. No. | PART | REMOVAL | | |
|--------------------|----------------------------------|-------------|---|------|
| | | Fig. No. | REMOVE/ *UNHOOK/ UNLOCK/RELEASE/ UNPLUG/ DESOLDER | Note |
| [1] | Rear Cabinet | 1,2,5 | 6(S-1), 2(S-2), *CN151 | 1 |
| [2] | Power Unit and Tray Chassis Unit | 3,4,5 | Anode Cap, *CN501, *CN551, *CN601, CRT CBA, Power Knob | 2 |
| [3] | Power Unit | 3,5 | *CN502, *CN552, *CN602 | 3 |
| [4] | Tray Chassis Unit | 3 | ----- | - |
| [5] | H.V./Power Supply CBA | 3 | 6(S-3) | 4 |
| [6] | Top Cover | 3 | 5(S-4), CL604 | 5 |
| [7] | Bottom Plate | 3 | (S-5) | 6 |

| ID/ LOC. No. | PART | REMOVAL | | |
|--------------------|-----------|-------------|---|------|
| | | Fig. No. | REMOVE/ *UNHOOK/ UNLOCK/RELEASE/ UNPLUG/ DESOLDER | Note |
| [8] | Deck Unit | 3, 5 | 7(S-6), (S-7), (S-8), Desolder *(CN201, CL401, CL402, CL403) | 7 |
| [9] | Main CBA | 3 | 4(S-9) | 8 |
| [10] | CRT | 4 | 4(S-10) | 9 |

(1) ↓ (2) ↓ (3) ↓ (4) ↓ (5) ↓

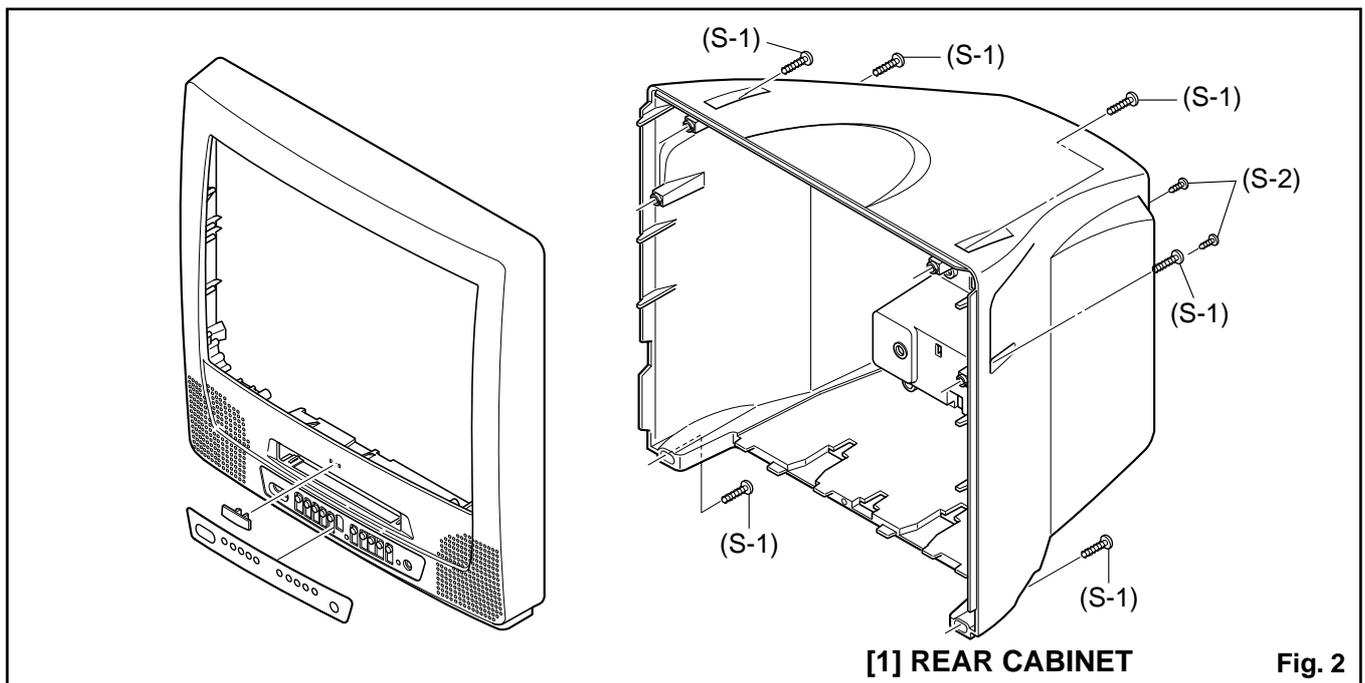
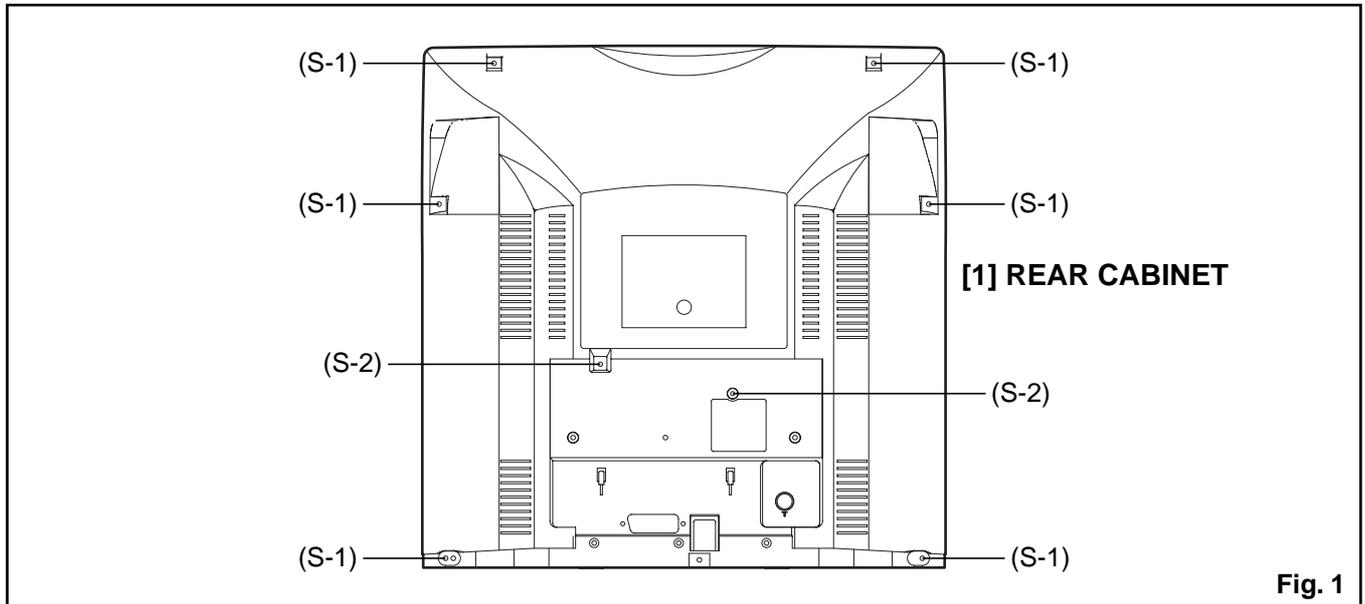
- (1): Order of steps in Procedure. When reassembling, follow the steps in reverse order. These numbers are also used as the identification (location) No. of parts in Figures.
- (2): Parts to be removed or installed.
- (3): Fig. No. showing Procedure of Part Location.
- (4): Identification of part to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
S=Screw, P=Spring, L=Locking Tab, CN=Connector, *=Unhook, Unlock, Release, Unplug, or Desolder
2(S-2) = two Screw (S-2)
- (5): Refer to the following "Reference Notes in the Table."

Reference Notes in the Table

1. Removal of the Rear Cabinet.
Remove six screws (S-1) and two screws (S-2). Disconnect connector CN151 and remove the Rear Cabinet.
- Caution !!**
Discharge the Anode Lead of the CRT with the CRT Ground Wire before removing the Anode Cap.
2. Removal of the Power Unit and Tray Chassis Unit.
Discharge the Anode Lead of the CRT with the CRT Ground before removing the Anode Cap. Disconnect the following: Anode Cap, CN501, CN551, CN601, CRT CBA, and Power Button. Then pull the Power Unit and Tray Chassis Unit out backward.
3. Removal of the Power Unit.
Disconnect connectors CN502, CN552, and CN602. Then slide the Power Unit out.
4. Removal of the H.V./Power Supply CBA.
Remove six screws (S-3) and pull up the H.V./Power Supply CBA.
5. Removal of the Top Cover.
Remove five screws (S-4) and CL604, and remove the Top Cover.

6. Removal of the Bottom Plate.
Remove a screw (S-5). Then slide the Bottom Plate out front.
7. Removal of the Deck Unit.
Remove seven screws (S-6), screw (S-7) and screw (S-8). Then, desolder connectors (CN201, CL401, CL402, CL403) and lift up the Deck Unit.

8. Removal of the Main CBA.
Remove four screws (S-9) and pull up the Main CBA.
9. Removal of the CRT.
Remove four screws (S-10) and pull the CRT backward.



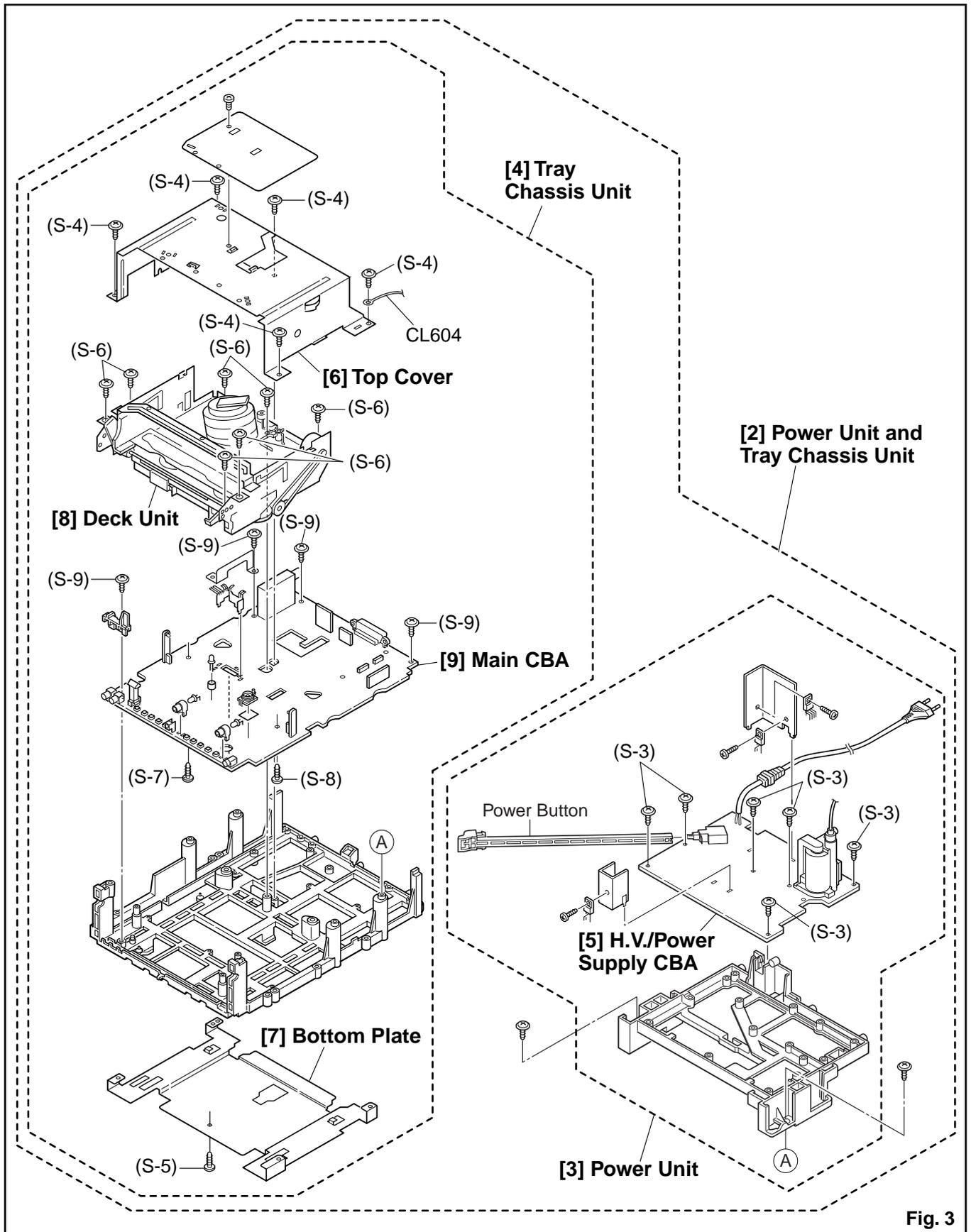
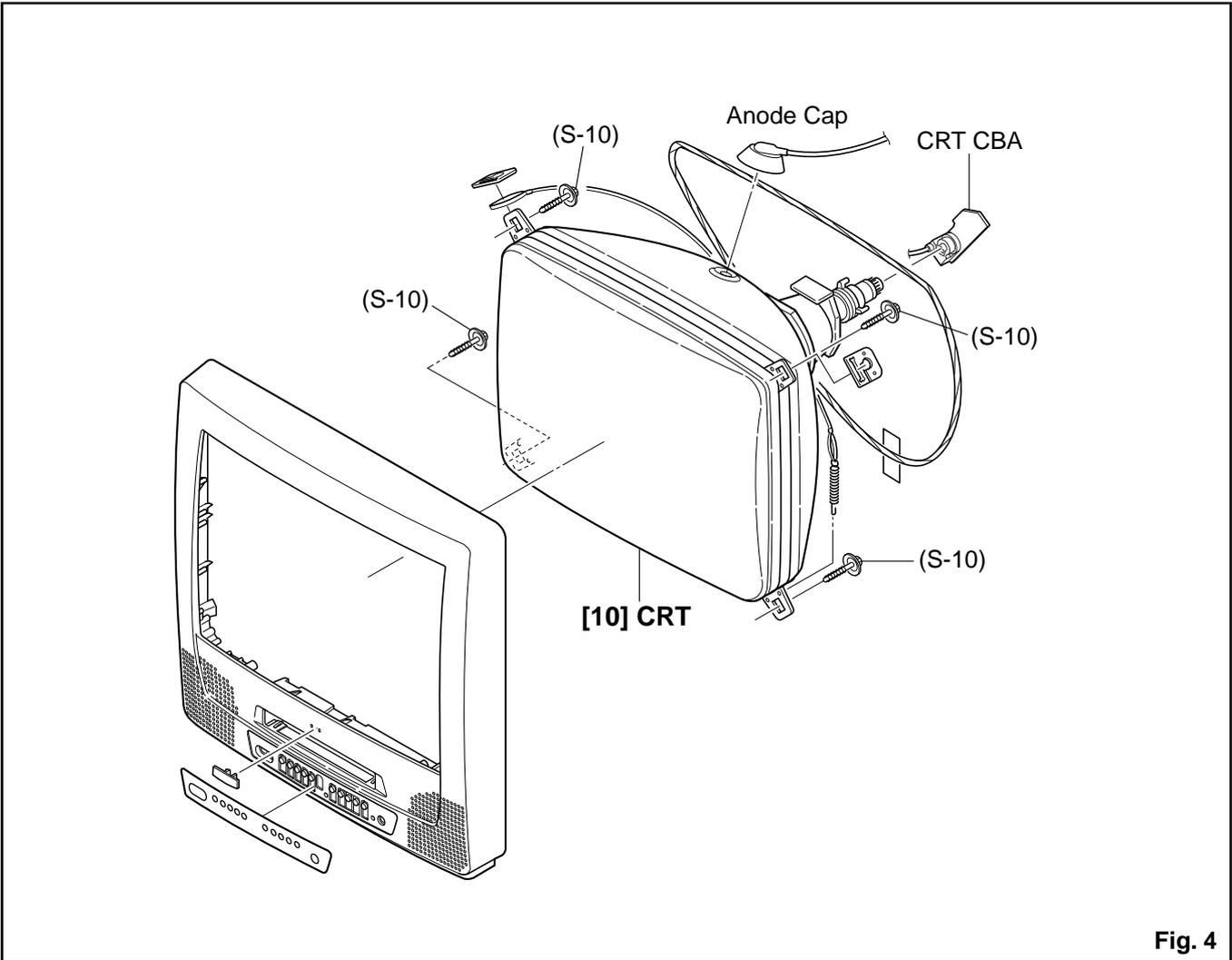


Fig. 3



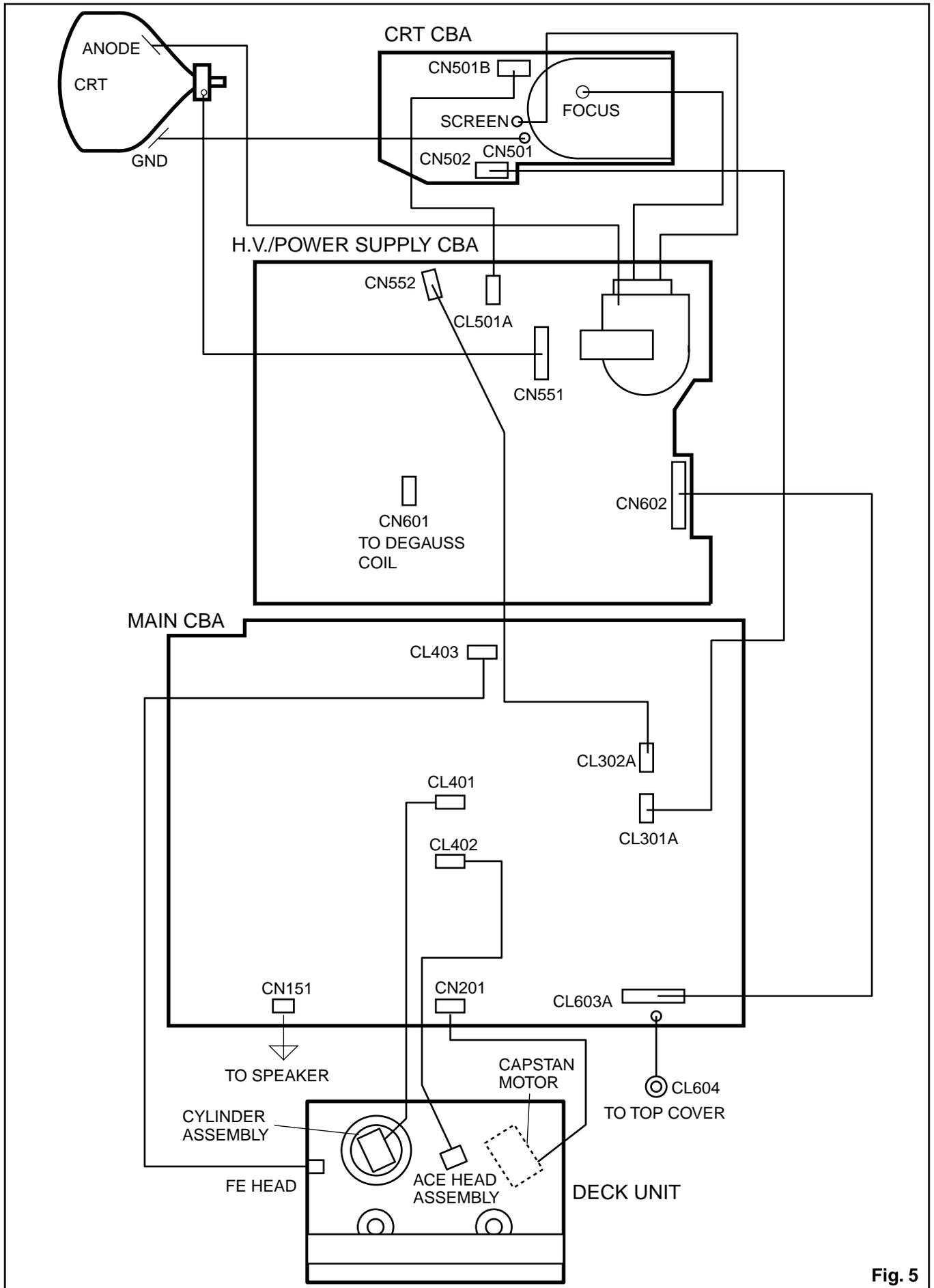


Fig. 5

ELECTRICAL ADJUSTMENT INSTRUCTIONS

General Note:

"CBA" is abbreviation for "Circuit Board Assembly."

NOTE:

Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed.

Also, do not attempt these adjustments unless the proper equipment is available.

Test Equipment Required

1. PAL Pattern Generator (Color Bar, Monoscope, Black Raster, White Raster, Sympte)
2. SECAM Pattern Generator (Gray Scale)
3. AC Milli Voltmeter (RMS)
4. Alignment Tape (FL6A), Blank Tape (E180)
5. DC Voltmeter
6. Oscilloscope: Dual-trace with 10:1 probe,
V-Range: 0.001~50V/Div,
F-Range: DC~AC-60MHz
7. Frequency Counter
8. Plastic Tip Driver
9. RF input (at each broadcasting system)
Receiving Channel : VHF Low
Input level : 80dB μ V
10. Ext. input
FRONT VIDEO-IN JACK or REAR SCART JACK

How to Set up the Service mode:

NOTE:

After replacing the IC202 (Memory) or Main CBA, the set value in IC202 (Memory) will be lost. So it is necessary to set up or adjust in the Service mode after its replacement.

Service Mode:

1. Turn the power on. (Use main power on the TV unit.)
 2. Press [STANDBY/ON], [2], [7], [1], and [MUTE] buttons on the remote control unit in that order within 5 seconds.
- To cancel the service mode, press [STANDBY/ON] button on the remote control.

How to set up the option code

1. Enter the Service mode.
2. Press the [STATUS] button on the remote control unit. The option code appears on the display.
3. If needed, input the option code (0130) using number buttons on the remote control unit.
4. To reset the software, press [PAUSE] and [5] buttons on the remote control unit.
The option code is changed.

[T6605VF]

1. DC 105V (+B) Adjustment

Purpose: To obtain correct operation.

Symptom of Misadjustment: The picture is dark and unit does not operate correctly.

| Test point | Adj. Point | Mode | Input |
|-------------------------|----------------------------------|--------------|-----------|
| TP503 (+B), TP504 (GND) | VR601 | RF (or Ext.) | Color Bar |
| Tape | M. EQ. | Spec. | |
| --- | DC Voltmeter, Plastic Tip Driver | +105±0.5V DC | |

Note: TP503(+B), TP504(GND), VR601 --- H.V./Power Supply CBA

1. Connect the unit to AC Power Outlet. (exact AC230V)
2. Input a color bar signal from RF (or Ext.) input and leave it for at least 20 minutes.
3. Connect DC Volt Meter to TP503(+B) and TP504(GND).
4. Adjust VR601 so that the voltage of TP503(+B) becomes +105±0.5V DC.

[T6705VF]

1. DC 114V (+B) Adjustment

Purpose: To obtain correct operation.

Symptom of Misadjustment: The picture is dark and unit does not operate correctly.

| Test point | Adj. Point | Mode | Input |
|-------------------------|----------------------------------|--------------|-----------|
| TP503 (+B), TP504 (GND) | VR601 | RF (or Ext.) | Color Bar |
| Tape | M. EQ. | Spec. | |
| --- | DC Voltmeter, Plastic Tip Driver | +114±0.5V DC | |

Note: TP503(+B), TP504(GND), VR601 --- H.V./Power Supply CBA

1. Connect the unit to AC Power Outlet. (exact AC230V)
2. Input a color bar signal from RF (or Ext.) input and leave it for at least 20 minutes.
3. Connect DC Volt Meter to TP503(+B) and TP504(GND).
4. Adjust VR601 so that the voltage of TP503(+B) becomes +114±0.5V DC.

2. H Adjustment

Purpose: To get correct horizontal position and size of screen image.

Symptom of Misadjustment: Horizontal position and size of screen image may not be properly displayed.

| Test point | Adj. Point | Mode | Input |
|------------|---------------------|-----------------|-------|
| R590 | PROG+/PROG- buttons | Ext. | --- |
| Tape | M. EQ. | Spec. | |
| --- | Frequency Counter | 15.625kHz±250Hz | |

Note: R590 --- H.V./Power Supply CBA

1. Connect Frequency Counter to R590.
2. Set the unit to the Ext. mode and no input is necessary. Enter the Service mode. (See page 1-6-1.)
3. Operate the unit for at least 20 minutes.
4. Press [2] button on the remote control unit and select H-Adj mode.
5. Press [PROG+/PROG-] buttons on the remote control unit so that the display will change [0] to [7.] At this moment, choose display [0] to [7] when the Frequency counter display is closest to 15.625kHz±250Hz.
6. Turn the power off and on again.

3. C-Trap Adjustment

Purpose: To get minimum leakage of the color signal carrier.

Symptom of Misadjustment: If C-Trap Adjustment is incorrect, stripes will appear on the screen.

| Test point | Adj. Point | Mode | Input |
|----------------|---------------------------------|---------------|-----------|
| J349F3 (B-OUT) | PROG+/PROG- buttons | RF (or Ext.) | Color Bar |
| Tape | M. EQ. | Spec. | |
| --- | Oscilloscope, Pattern Generator | 200mVp-p Max. | |
| Figure | | | |
| | | | |

Note: J349F3 (B-Out)--- Main CBA

1. Connect Oscilloscope to J349F3.
2. Input a color bar signal from RF (or Ext.) input. Enter the Service mode. (See page 1-6-1.)
3. Press [0] button on the remote control unit and select C-TRAP mode.
4. Press [PROG+/PROG-] buttons on the remote control unit so that the carrier leakage B-Out (4.43MHz) value becomes minimum on the oscilloscope.
5. Turn the power off and on again.

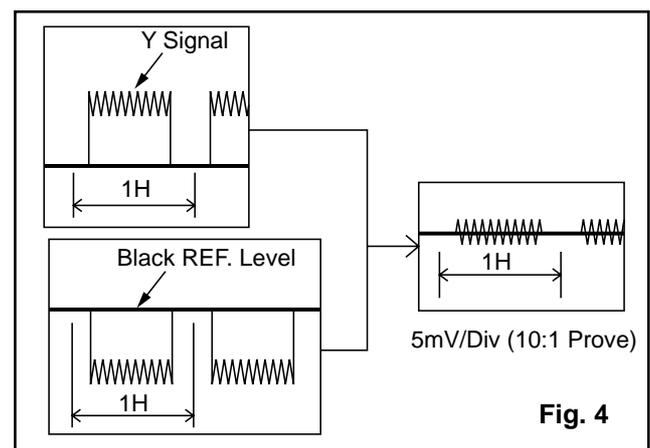
4. SECAM Black Level Adjustment

Purpose: To set Black Level of the SECAM signal R-Y/B-Y to Ref. level.

Symptom of Misadjustment: If Black Level of the SECAM signal R-Y/B-Y is incorrect, the picture is bluish or reddish in grayscale compared with PAL signal.

| Test point | Adj. Point | Mode | Input |
|------------|--|-------|------------------|
| J361G4 | PROG+/PROG- buttons | Ext. | SECAM Gray Scale |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator, Analog Oscilloscope (unusable Digital Oscilloscope) | --- | |

1. Degauss the CRT and allow CRT to operate for 20 minutes before starting the alignment.
2. Input the SECAM Gray Scale signal from Ext. input.
3. Enter the service mode. (See page 1-6-1.)
4. To enter the C/D/S mode, press [VOL-] on the remote control unit.
5. To select SBR (SECAM Black Level R-Y), press [6] button on the remote control unit.
6. Press [PROG+/PROG-] buttons to adjust Y signal to the black ref. level.
7. To select SBB (SECAM Black Level B-Y), press [7] button on the remote control unit.
8. Press [PROG+/PROG-] buttons to adjust Y signal to the black ref. level.



5. V. Size Adjustment

Purpose: To obtain correct vertical height of screen image.

Symptom of Misadjustment: If V. Size is incorrect, vertical height of image on the screen may not be properly displayed.

| Test point | Adj. Point | Mode | Input |
|-------------|------------------------|-----------------|-----------|
| Screen | PROG+/PROG- buttons | RF (or Ext.) | Monoscope |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | 90±5% | |

1. Enter the Service mode. (See page 1-6-1.)
Press [9] button on the remote control unit and select V-S mode. (Press [9] button then display will change to V-P and V-S).
2. Input monoscope pattern and leave it for at least 20 minutes.
3. Press [PROG+/PROG-] buttons on the remote control unit so that the monoscope pattern is 90±5% of display size and the circle is round.

6. V. Shift Adjustment

Purpose: To obtain correct vertical position of screen image.

Symptom of Misadjustment: If V. position is incorrect, vertical position of image on the screen may not be properly displayed.

| Test point | Adj. Point | Mode | Input |
|-------------|------------------------|-----------------|-----------|
| Screen | PROG+/PROG- buttons | RF (or Ext.) | Monoscope |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | 90±5% | |

1. Enter the Service mode. (See page 1-6-1.)
Press [9] button on the remote control unit and select V-P mode. (Press [9] button then display will change to V-P and V-S).
2. Input monoscope pattern and leave it for at least 20 minutes.
3. Press [PROG+/PROG-] buttons on the remote control unit so that the top and bottom of the monoscope pattern are equal to each other.

7. H. Shift Adjustment

Purpose: To obtain correct horizontal position and size of screen image.

Symptom of Misadjustment: Horizontal position and size of screen image may not be properly displayed.

| Test point | Adj. Point | Mode | Input |
|-------------|------------------------|-----------------|-----------|
| Screen | PROG+/PROG- buttons | RF (or Ext.) | Monoscope |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | 90±5% | |

1. Enter the Service mode. (See page 1-6-1.)
Press [8] button on the remote control unit and select H-P mode.
2. Input monoscope pattern and leave it for at least 20 minutes.
3. Press [PROG+/PROG-] buttons on the remote control unit so that the left and right side of the monoscope pattern are equal to each other.
4. Turn the power off and on again.

8. Cut-off Adjustment

Purpose: To adjust the beam current of R, G, B, and screen voltage.

Symptom of Misadjustment: White color may be reddish, greenish or bluish.

| Test point | Adj. Point | Mode | Input |
|-------------|---|---------------------------|--------------|
| Screen | Screen-Control, PROG+/PROG- buttons | RF (or Ext.) | Black Raster |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | See Reference Notes below | |

Notes:

Screen Control (FBT) --- H.V./Power Supply CBA
FBT= Fly Back Transformer
Use the Remote Control Unit

1. Degauss the CRT and allow CRT to operate for 20 minutes before starting the alignment.
2. Set the screen control to minimum position. Input the Black raster signal from RF (or Ext.) input.
3. Enter the service mode. (See page 1-6-1.)
Dimmed horizontal line appears on the CRT.
4. To enter the C/D/S mode, press the [VOL-] button on the remote control unit.
5. To enter the CUT OFF (R) mode, press [1] button on the remote control unit.
6. Turn the screen control up until dimmed horizontal line appears.

7. Press the [PROG+/PROG-] buttons until the horizontal line becomes white.
8. To enter the CUT OFF (G) mode, press [2] button on the remote control unit.
9. Press the [PROG+/PROG-] buttons until the horizontal line becomes white.
10. To enter the CUT OFF (B) mode, press [3] button on the remote control unit.
11. Press the [PROG+/PROG-] buttons until the horizontal line becomes white.
12. Turn the screen control so that the horizontal line adjusted white looks lightly.
13. Turn the power off and on again.

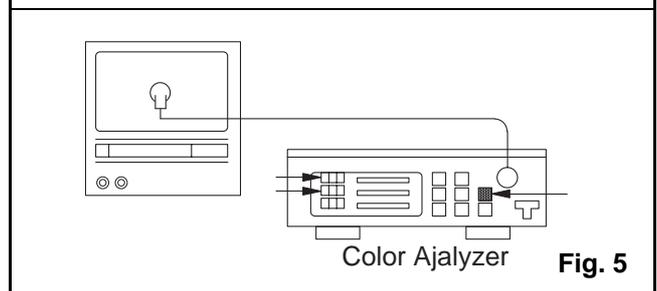
9. White Balance Adjustment

Purpose: To mix red, green and blue beams correctly for pure white.

Symptom of Misadjustment: White becomes bluish or reddish.

| Test point | Adj. Point | Mode | Input |
|-------------|-------------------------------------|--------------|-------------------------|
| Screen | Screen-Control, PROG+/PROG- buttons | RF (or Ext.) | White Raster (APL 100%) |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator, Color analyzer | See below | |

Figure



Note: Use remote control unit

1. Operate the unit more than 20 minutes.
2. Face the unit to east. Degauss the CRT using Degaussing Coil.
3. Input the White Raster (APL 100%).
4. Set the color analyzer to the CHROMA mode and after zero point calibration, bring the optical receptor to the center on the tube surface (CRT).
5. Enter the Service mode. Press [VOL-] button on the remote control.
6. Press [4] button on the remote control unit for Red adjustment. Press [5] button on the remote control unit for Blue adjustment.
7. In each color mode, Press [PROG+/PROG-] buttons to adjust the values of color.
8. Adjusting Red and Blue color so that the temperature becomes 8500K (x : 290 / y : 300) ±3%.
9. At this time, Re-check that Horizontal line is white. If not, Re-adjust Cut-off Adjustment until the Horizontal Line becomes pure white.
10. Turn off and on again to return to normal mode. Receive APL 100% white signal and Check Chroma temperatures become 8500K (x : 290 / y : 300) ±3%.

Note: Confirm that Cut Off Adj. is correct after this adjustment, and attempt Cut Off Adj. if needed.

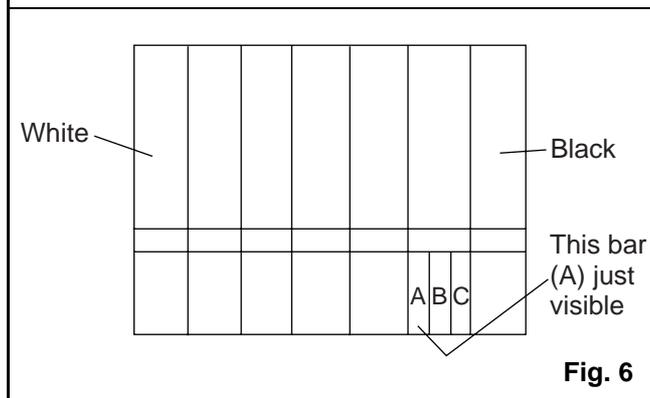
10. Sub-Brightness Adjustment

Purpose: To get proper brightness.

Symptom of Misadjustment: If Sub-Brightness is incorrect, proper brightness cannot be obtained by adjusting the Brightness Control.

| Test point | Adj. Point | Mode | Input |
|------------|------------------------|-----------------|--------|
| Screen | PROG+/PROG- buttons | RF (or Ext.) | SYMPTE |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | See below | |

Figure



Note: Bar (A) in Fig. 7 --- 0 IRE

1. Enter the service mode. (See page 1-6-1.) Then input SYMPTE signal from RF (or Ext.) input and leave it for at least 20 minutes.
2. Press [MENU] button. (Each time [MENU] button is pressed, display will change BRT, CNT, COL, TNT, and SHP in that order.) Select BRT and press [PROG+/PROG-] buttons so that the bar (A) in Fig. 6 is just visible.
3. Turn the power off and on again.

11. Setting for CONTRAST, COLOR, TINT and SHARP Data Values

General

1. Enter the Service mode. (See page 1-6-1)
2. Press [MENU] button. (Each time [MENU] button is pressed, display will change BRT, CNT, COL, TNT, and SHP in that order.)

CONTRAST (CNT)

1. Press [MENU] button on the remote control unit. Then select CNT display.
2. Press [PROG+/PROG-] buttons on the remote control unit so that the value of "CONTRAST" (CNT) becomes 83.

COLOR (COL)

1. Press [MENU] button on the remote control unit. Then select "COLOR" (COL) display.
2. Press [PROG+/PROG-] buttons on the remote control unit so that the value of "COLOR" (COL) becomes 65.

TINT (TNT)

1. Press [MENU] button on the remote control unit. Then select "TINT" (TNT) display.
2. Press [PROG+/PROG-] buttons on the remote control unit so that the value of "TINT" (TNT) becomes 68.

SHARP (SHP)

[T6605VF]

1. Press [MENU] button on the remote control unit. Then select "SHARP" (SHP) display.
2. Press [PROG+/PROG-] buttons on the remote control unit and select "1."

[T6705VF]

1. Press [MENU] button on the remote control unit. Then select "SHARP" (SHP) display.
2. Press [PROG+/PROG-] buttons on the remote control unit and select "0."

12. Focus Adjustment

Purpose: Set the optimum Focus.

Symptom of Misadjustment: If Focus Adjustment is incorrect, blurred images are shown on the display.

| Test point | Adj. Point | Mode | Input |
|------------|-------------------|-----------------|-----------|
| Screen | Focus Control | RF (or Ext.) | Monoscope |
| Tape | M. EQ. | Spec. | |
| --- | Pattern Generator | See below. | |

Note: Focus VR (FBT) --- H.V./Power Supply CBA

FBT= Fly Back Transformer

1. Operate the unit more than 30 minutes.
2. Face the unit to the East and degauss the CRT using a Degaussing Coil.
3. Input the monoscope pattern.
4. Adjust the Focus Control on the FBT to obtain clear picture.

13. Head Switching Position Adjustment

Purpose: Determine the Head Switching Position during Playback.

Symptom of Misadjustment: May cause Head Switching Noise or Vertical Jitter in the picture.

Note: Unit reads Head Switching Position automatically and displays it on the screen (Upper Left Corner).

Manual Adjustment

1. Enter the service mode. (See page 1-6-1.)
2. Playback the test tape (FL6A).
3. Press the number [5] button on the remote control unit.
4. The Head Switching position will display on the screen; if adjustment is necessary follow step 4. 7.0H (448 μ s) is preferable.
5. Press [PROG+/PROG-] buttons on the remote control unit if necessary. The value will be changed in 0.5H steps up or down. Adjustable range is up to 9.5H. If the value is beyond adjustable range, the display will change as:
Lower out of range: 0.0H
Upper out of range: --H
6. Turn the power off and on again.

Auto Adjustment

1. Load the test tape (FL6A) that have been recorded the Head Switching Position Value.
2. Enter the service mode.
3. Press [3] button on the remote control unit in the tape stop mode. The unit playback and adjust the Head Switching Position automatically.
4. The adjusting report appears on upper left corner of the screen with blueback.
In case of adjusting correctly: the Head Switching Position Value recorded in the test tape (FL6A) is indicated with green.
In case of adjusting incorrectly: "NG" (red) is indicated with ejecting tape.

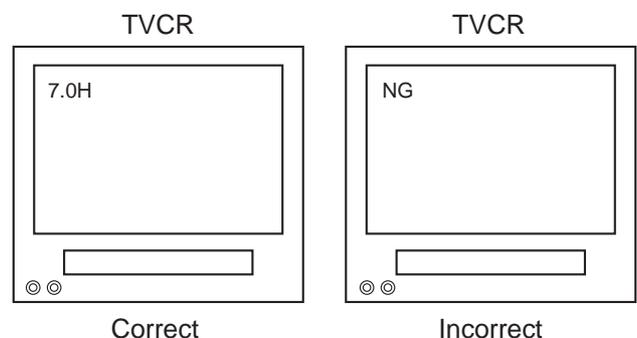
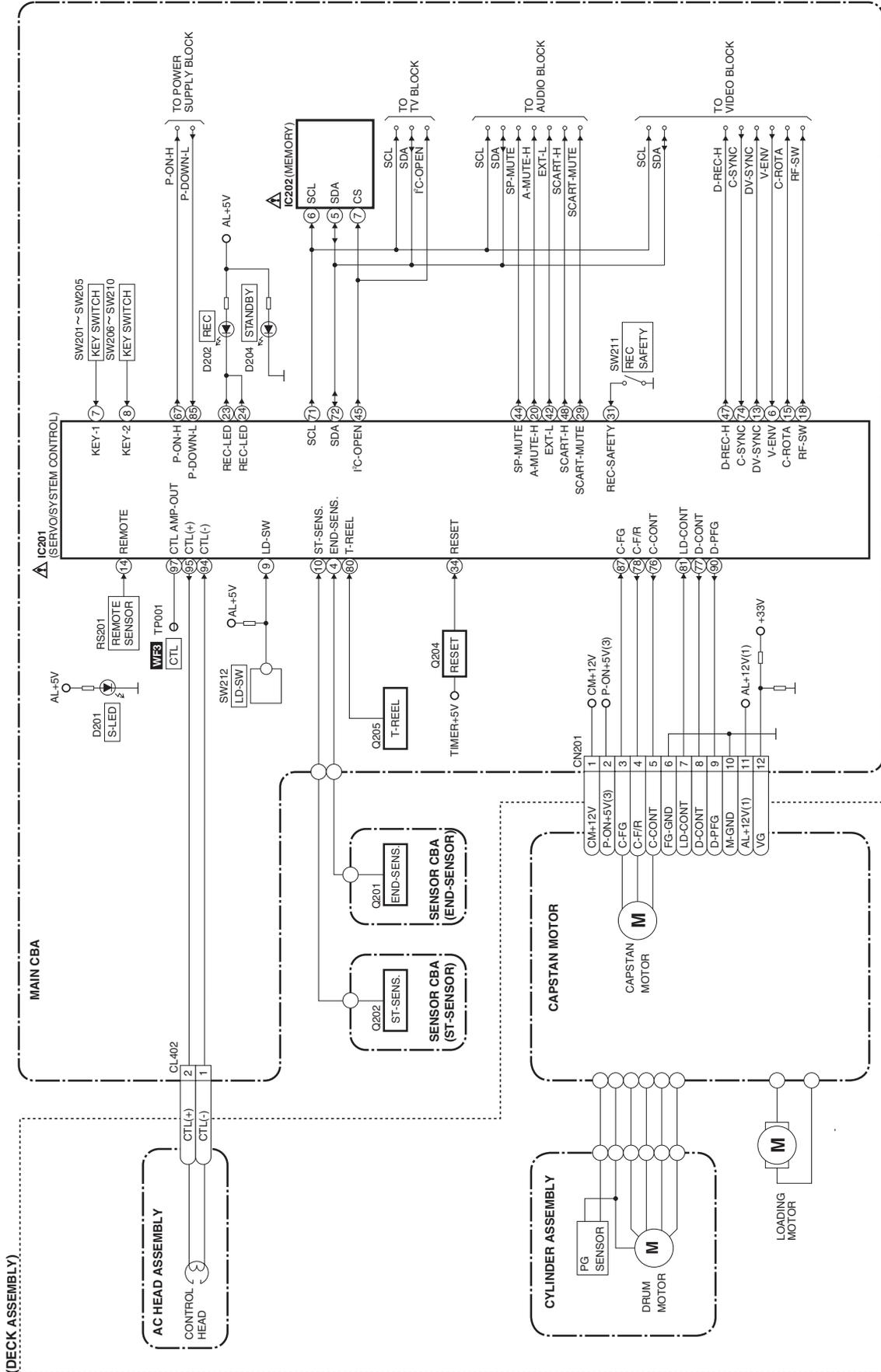


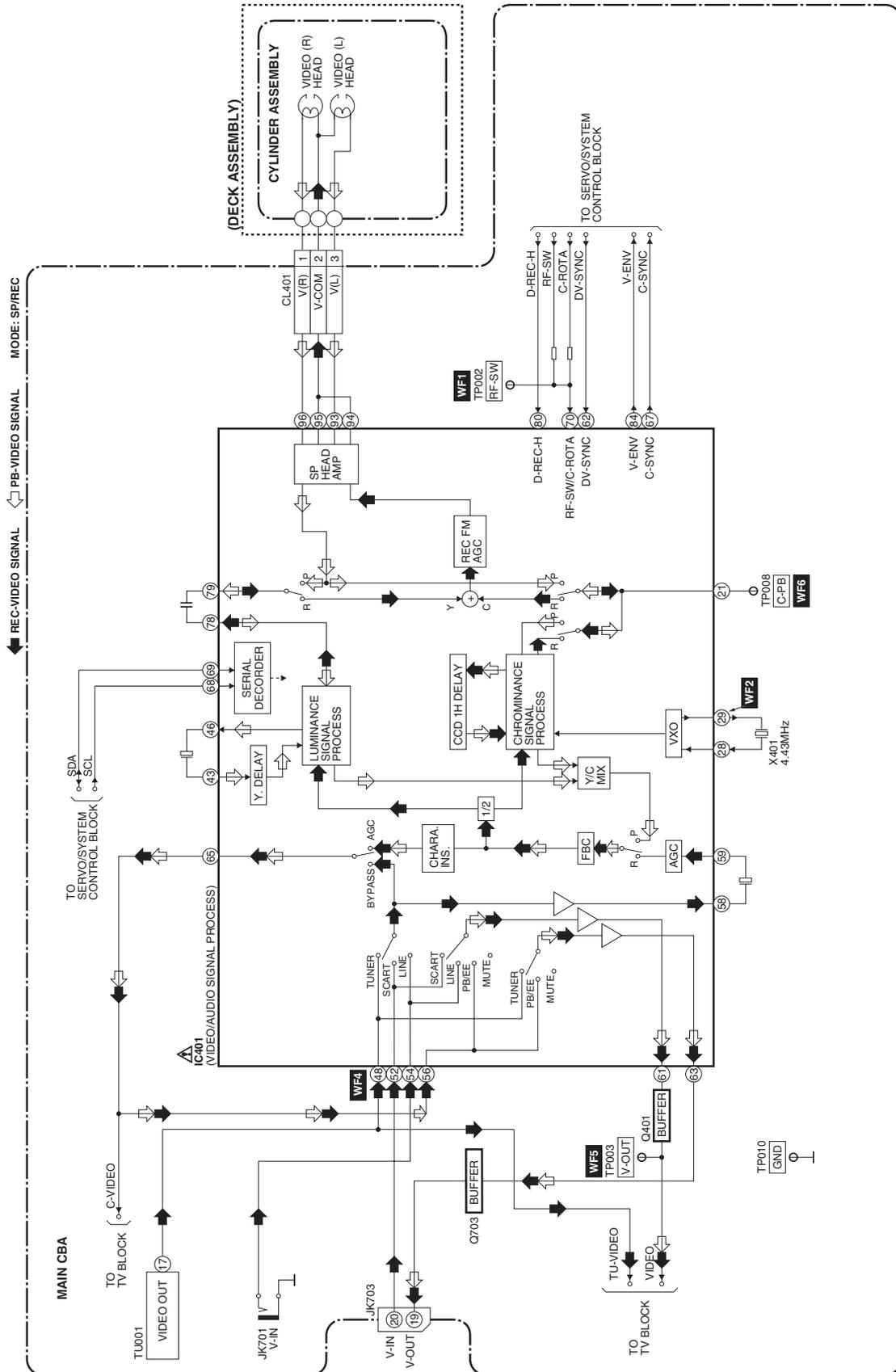
Fig. 7

BLOCK DIAGRAMS

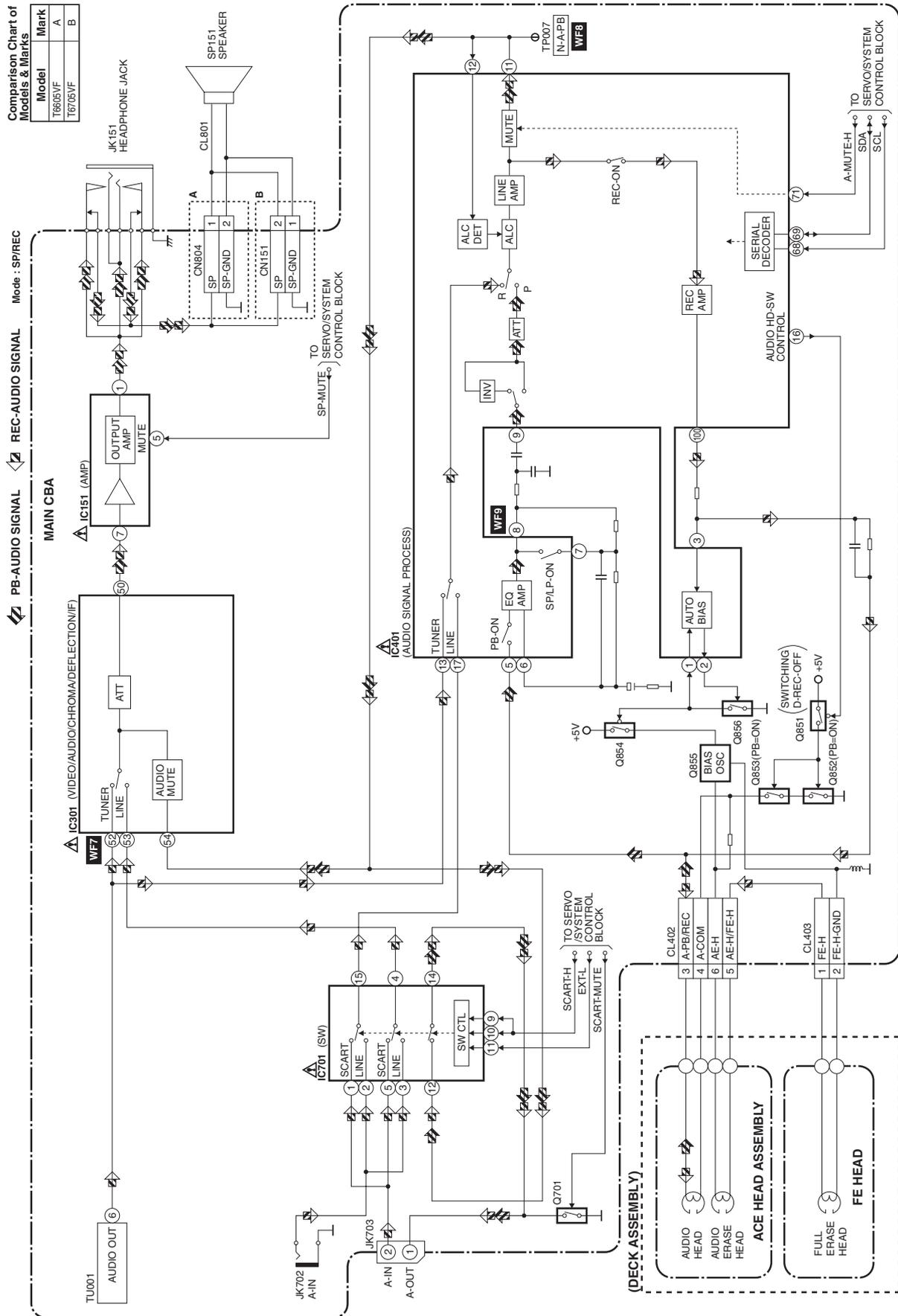
Servo/System Control Block Diagram



Video Block Diagram



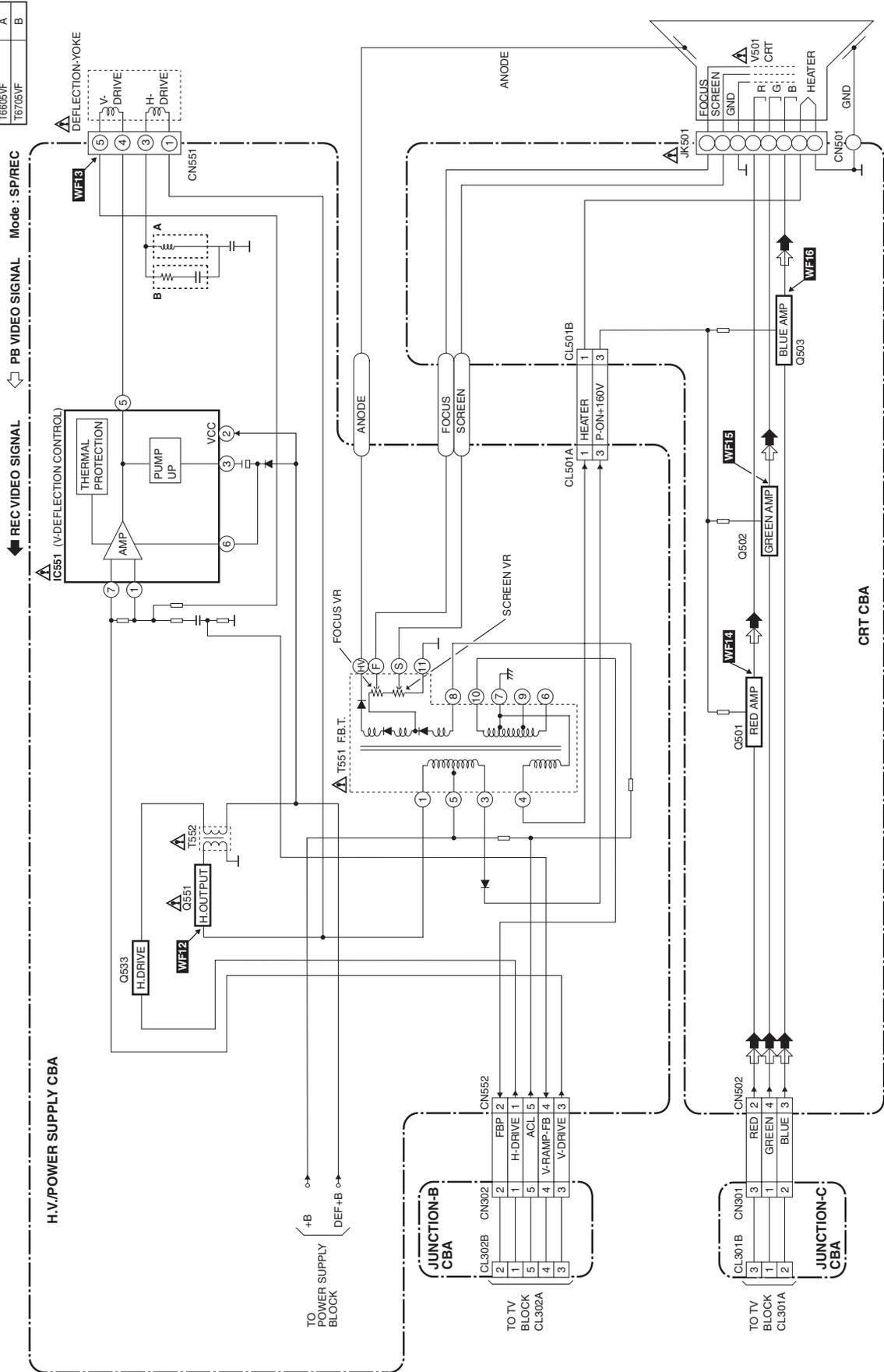
Audio Block Diagram



CRT/H.V. Block Diagram

Comparison Chart of Models & Marks

| Model | Mark |
|---------|------|
| T6605VF | A |
| T6705VF | B |



Power Supply Block Diagram

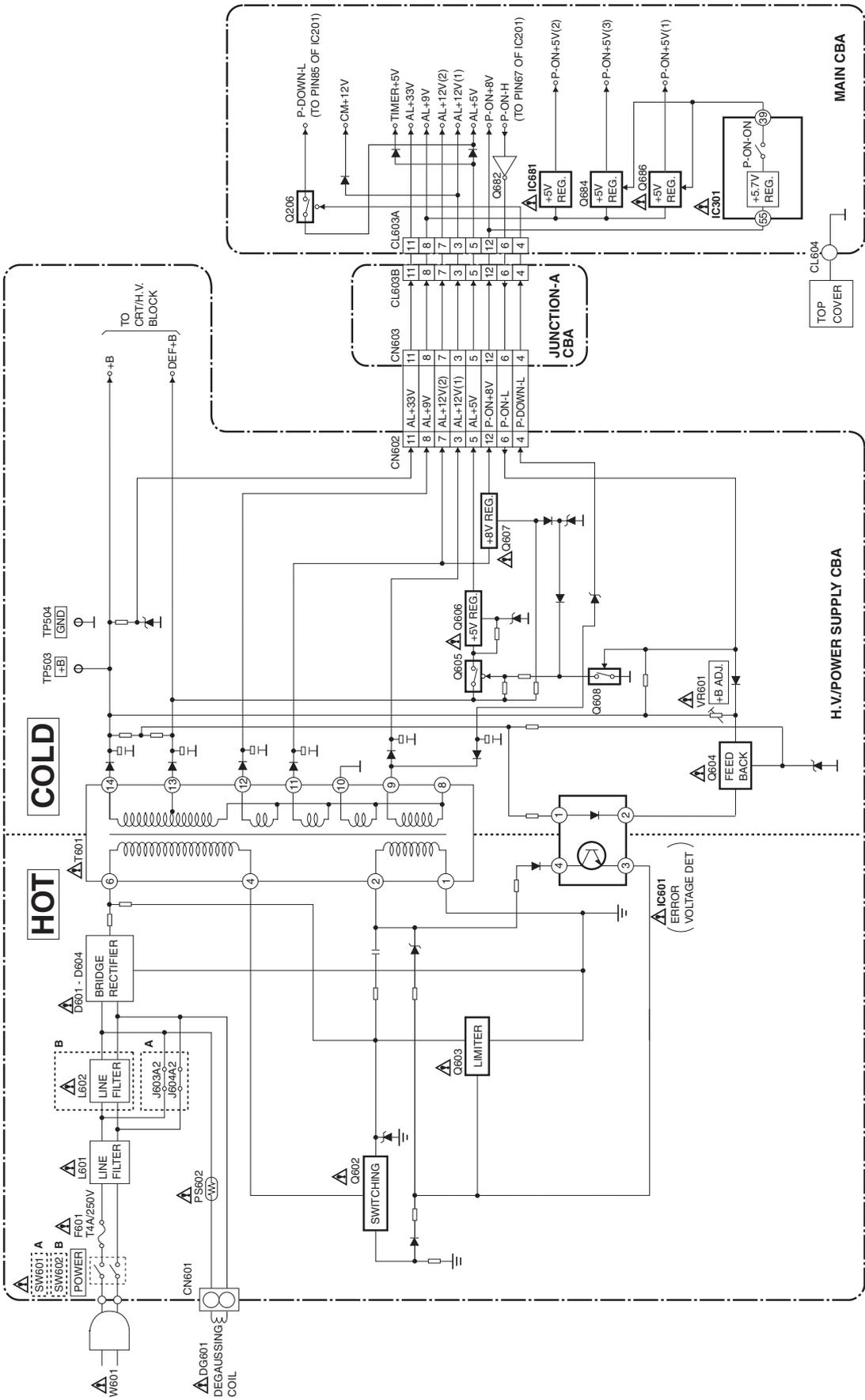
Comparison Chart of Models & Marks

| Model | Mark |
|---------|------|
| T6605VF | A |
| T6705VF | B |

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE T4A/250V FUSE.

CAUTION !
Fixed voltage power supply circuit is used in this unit. If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



MECHANICAL TROUBLE INDICATOR

1, Each Malfunction Indication

If the MONITOR is turned ON right after the Mechanical Malfunction occurs or POWER SAFETY/X-RAY is turned ON, display the following character to show Malfunction after the EJECT display.

| Immediately preceding Malfunction | Display character |
|-----------------------------------|-------------------|
| REEL Malfunction | R |
| DRUM Malfunction | D |
| CASSETTE LOADING Malfunction | C |
| TAPE LOADING Malfunction | T |
| P-SAFETY 1 | 1 |
| P-SAFETY 2 | 2 |
| X-RAY | X |

Example: If REEL Malfunction



2, Each Malfunction evaluation method

X-RAY protect

If X-RAY port becomes continuously 2.5V or more for 120 msec. (4 times 40 msec. interval), the unit shall immediately turn OFF the POWER/MONITOR and switch over to the Mechanical Malfunction mode with POWER OFF.

(To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

POWER SAFETY

1) POWER SAFETY 1

If P-SAFETY 1 port becomes continuously 2.5V or less for 120 msec. (4 times 40 msec. interval) when MONITOR is ON, the unit shall be assumed to be the Power Malfunction 1 and immediately turn OFF the POWER/MONITOR and switch over the Mechanical Malfunction mode with POWER OFF.

(To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

* However the POWER SAFETY 1 function shall be disabled during 500 msec. right after the MONITOR turns ON.

2) POWER SAFETY 2

If P-SAFETY 2 port becomes continuously 2.5V or less for 120 msec. (4 times 40 msec. interval) when P-ON-H port is ON, the unit shall be assumed to be the Power Malfunction 2 and immediately turn OFF the POWER/MONITOR and switch over the Mechanical Malfunction mode with POWER OFF.

(To return from this mode shall become possible only by POWER Key as in the case of the Mechanical Malfunction).

* However the POWER SAFETY 2 function shall be disabled during 500 msec. right after the P-ON-H port turns ON.

Mechanical Malfunction determination

1) REEL Malfunction detection

Countermeasure for REEL and CAPSTAN motor rotation malfunction (Except CASSETTE LOADING function)

After the Malfunction detection with REEL/CAPSTAN sensor, the unit shall switch over to STOP (B) and be REEL Mechanical Malfunction.

- a) If the T-REEL pulse is not impressed after a lapse of 7 sec. at SP, 14 sec. at LP, or more in the REEL Rotation Mode like PLAY/REC, FS/RS Mode, and the T-REEL or S-REEL pulse is not impress after a lapse of 4 sec. or more in REEL Rotation Mode of FF/REW, it shall be assumed to stop the rotation and switch over to STOP (B) position, then POWER be turned OFF and the unit be REEL Mechanical Malfunction. (T-REEL and S-REEL for the models on S-REEL and only T-REEL for other models)
- b) If the C-FG pulse is not impressed for a lapse of 1 sec. or more during the CAPSTAN MOTOR rotation, it shall be MOTOR Rotation Malfunction (REEL Malfunction).

2) DRUM Malfunction detection

Detect the DRUM rotation at the D-FG input terminal.

If the variation of D-FG input level is not detected for a lapse of 1 sec. or more when D-CONT is "H", it shall be assumed to be Rotation Malfunction and be DRUM Malfunction.

When detect Drum Malfunction, POWER shall be turned OFF after the unit switches over to STOP (B) Mode.

3) Countermeasure for TAPE LOADING Malfunction

Detect the Malfunction with the LOADING Switch.

a) TAPE LOADING Malfunction

If LD-SW does not go to the established position after a lapse of 7 sec. or more from TAPE LOADING or TAPE UNLOADING start, the LOADING function shall immediately be stopped and POWER be turned OFF, and inform the Timer about the LOADING Mechanical Malfunction.

b) LD-SW Position Malfunction at each mode

When the unit operates at each mode, even if the LD-SW position changes from the established one in its mode, it keeps the function according to its mode.

4) Countermeasure for CASSETTE LOADING Malfunction

a) CASSETTE IN operating Malfunction

If LD-SW does not go to SB position after a lapse of 5 sec. or more from the CASSETTE insertion start, the unit starts the CASSETTE OUT operation.

After switch over to CASSETTE OUT operation and then a laps of 5 sec. or more from the CASSETTE OUT operation start, if LD-SW does not go to the EJ position or if START Sensor and END Sensor does not turn "ON" at the EJ position, the unit starts again to insert CASSETTE.

(However in S-INH state, the START/END Sensor shall be disabled).

b) CASSETTE OUT operating Malfunction

After a lapse of 5 sec. or more from CASSETTE OUT operation start, if LD-SW does not go to the EJ position or if START Sensor and END Sensor does not turn "ON" at the EJ position, the unit starts to insert CASSETTE.

(However in S-INH state, the START/END Sensor shall be disabled).



When the unit switches over to CASSETTE insertion at CASSETTE IN or CASSETTE OUT Malfunction, if LD-SW does not go to the SB position after a lapse of 5 sec. or more from CASSETTE insertion start, the function shall immediately be stopped and POWER be turned OFF, and the unit be CASSETTE LOADING Malfunction.

- c) When POWER is turned ON, if the CL position or GC position cannot be detected after 5 sec. LD-REV operation and 5 sec. LD-FWD operation, the function shall immediately be stopped and POWER be turned OFF, and the unit be CASSETTE LOADING Malfunction.

- d) When POWER is turned ON without CASSETTE (EJ position) and LD-SW is monitored all the time, if the CL or GC position is detected continuously for 1 sec. or more, the POWER shall be turned OFF and the unit be CASSETTE LOADING Malfunction.

Countermeasure for Mechanical Malfunction

If the unit detects Mechanical Malfunction, turn the POWER OFF. If the unit is Mechanical Malfunction, Key input except POWER key shall be disabled and CASSETTE insertion disabled. When POWER Key is entered, the POWER is turned ON and the unit switches over the EJECT Mode. (Return with POWER ON)

SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

Warning

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark " \triangle " in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Note:

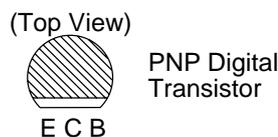
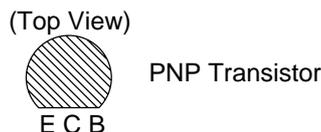
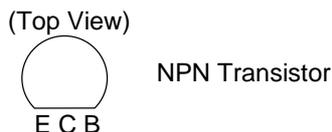
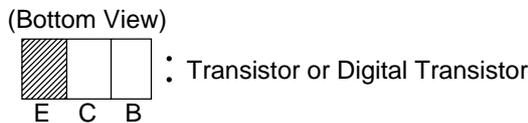
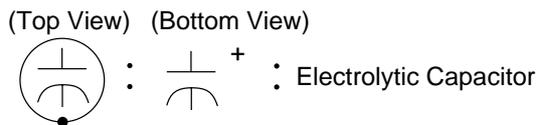
1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ($K=10^3$, $M=10^6$).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in μF ($P=10^{-6}\mu F$).
5. All voltages are DC voltages unless otherwise specified.

Capacitor Temperature Markings

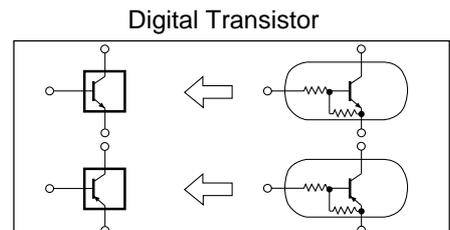
| Mark | Capacity change rate | Standard temperature | Temperature range |
|------|----------------------|----------------------|-------------------|
| (B) | $\pm 10\%$ | 20°C | -25~+85°C |
| (F) | +30 -80% | 20°C | -25~+85°C |
| (SR) | $\pm 15\%$ | 20°C | -25~+85°C |
| (Z) | +30 -80% | 20°C | -10~+70°C |

Capacitors and transistors are represented by the following symbols.

CBA Symbols



Schematic Diagram Symbols



LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

1. CAUTION:

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.

If Main Fuse (F601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

3. Note:

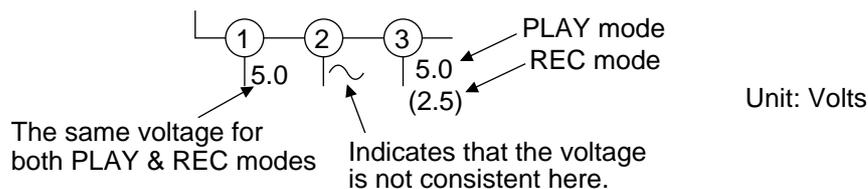
- (1) Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.
- (2) To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Wire Connectors

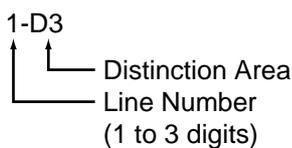
- (1) Prefix symbol "CN" means "connector" (can disconnect and reconnect).
- (2) Prefix symbol "CL" means "wire-solder holes of the PCB" (wire is soldered directly).

5. Mode: SP/REC

6. Voltage indications for PLAY and REC modes on the schematics are as shown below:

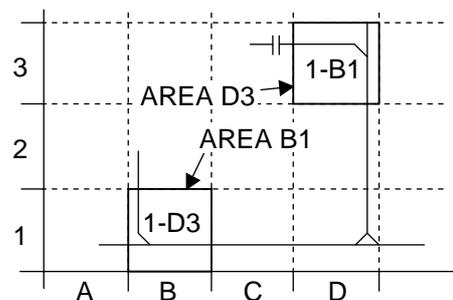


7. How to read converged lines



Examples:

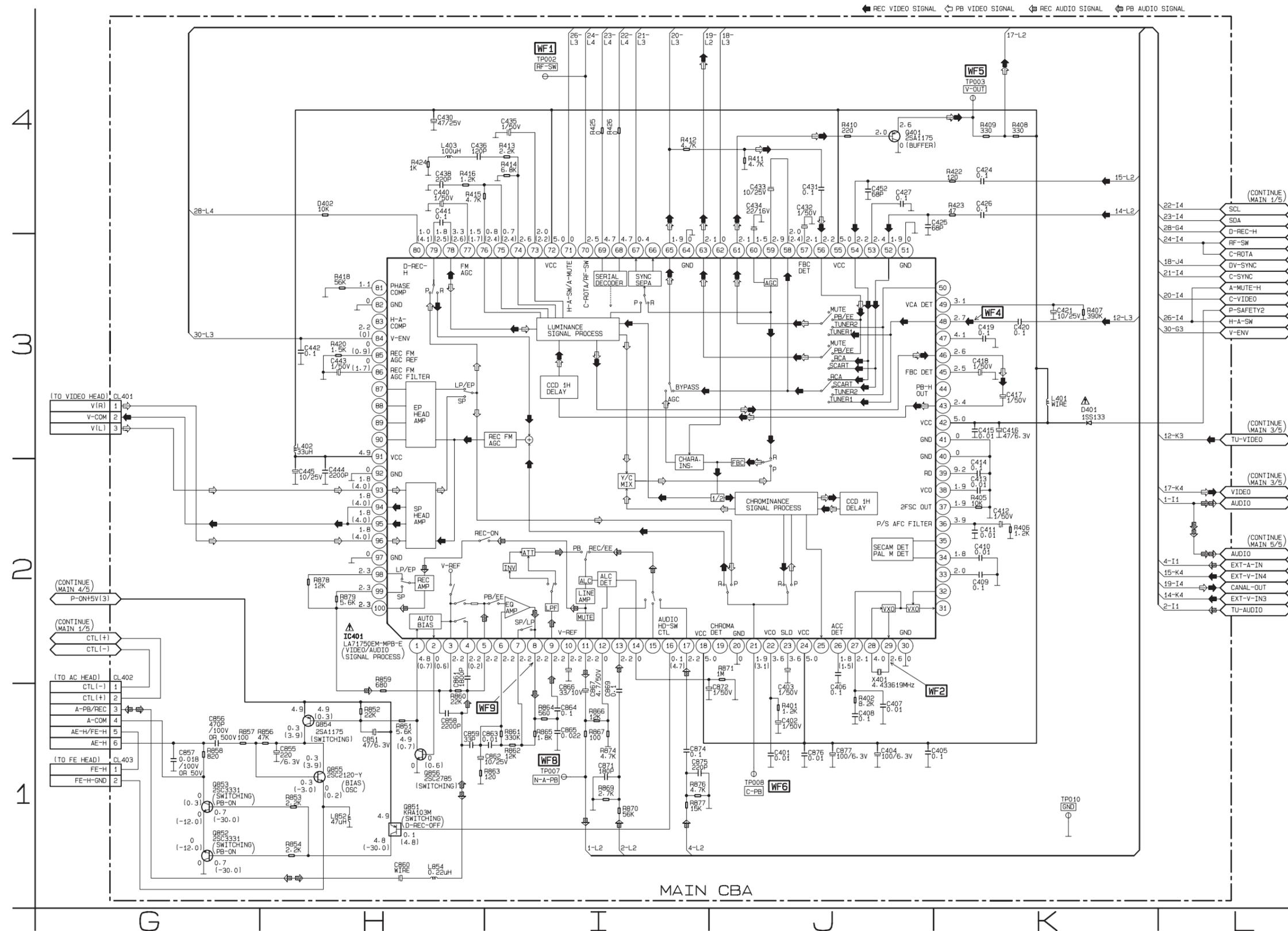
1. "1-D3" means that line number "1" goes to area "D3".
2. "1-B1" means that line number "1" goes to area "B1".



8. Test Point Information

- : Indicates a test point with a jumper wire across a hole in the PCB.
- : Used to indicate a test point with a component lead on foil side.
- : Used to indicate a test point with no test pin.
- : Used to indicate a test point with a test pin.

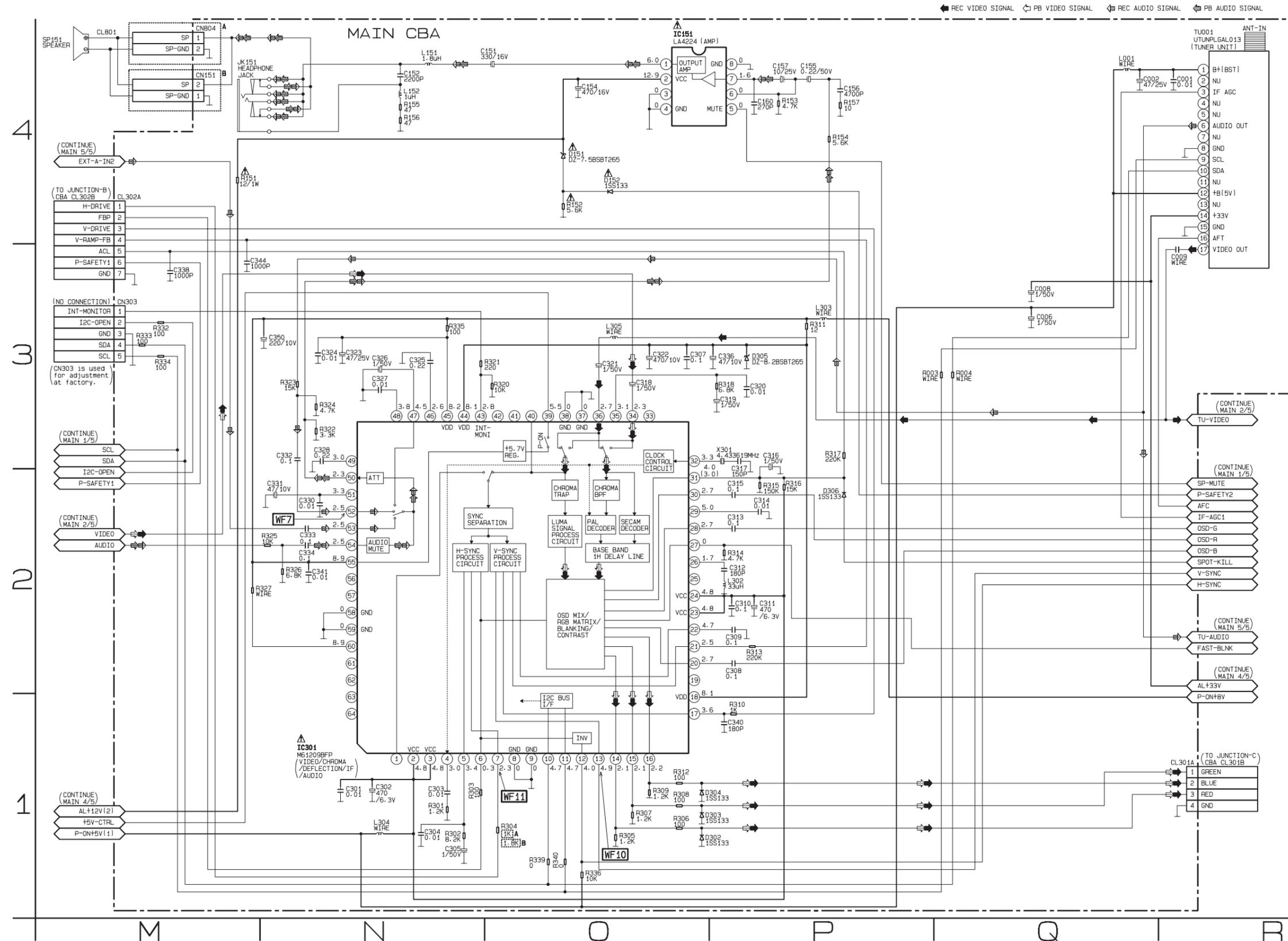
Main 2/5 Schematic Diagram



Main 3/5 Schematic Diagram

Comparison Chart of Models and Marks

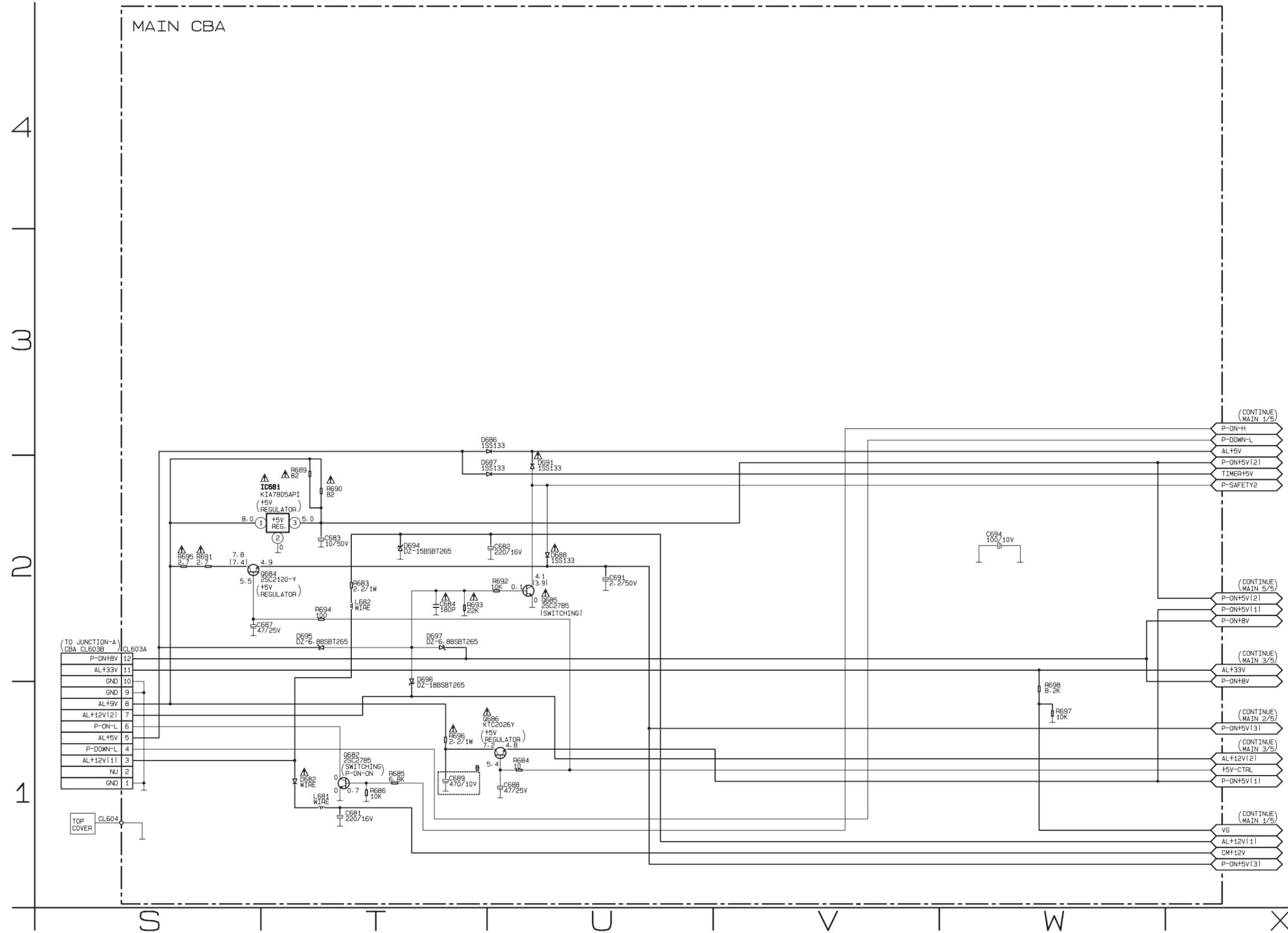
| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |



Main 4/5 Schematic Diagram

Comparison Chart of Models and Marks

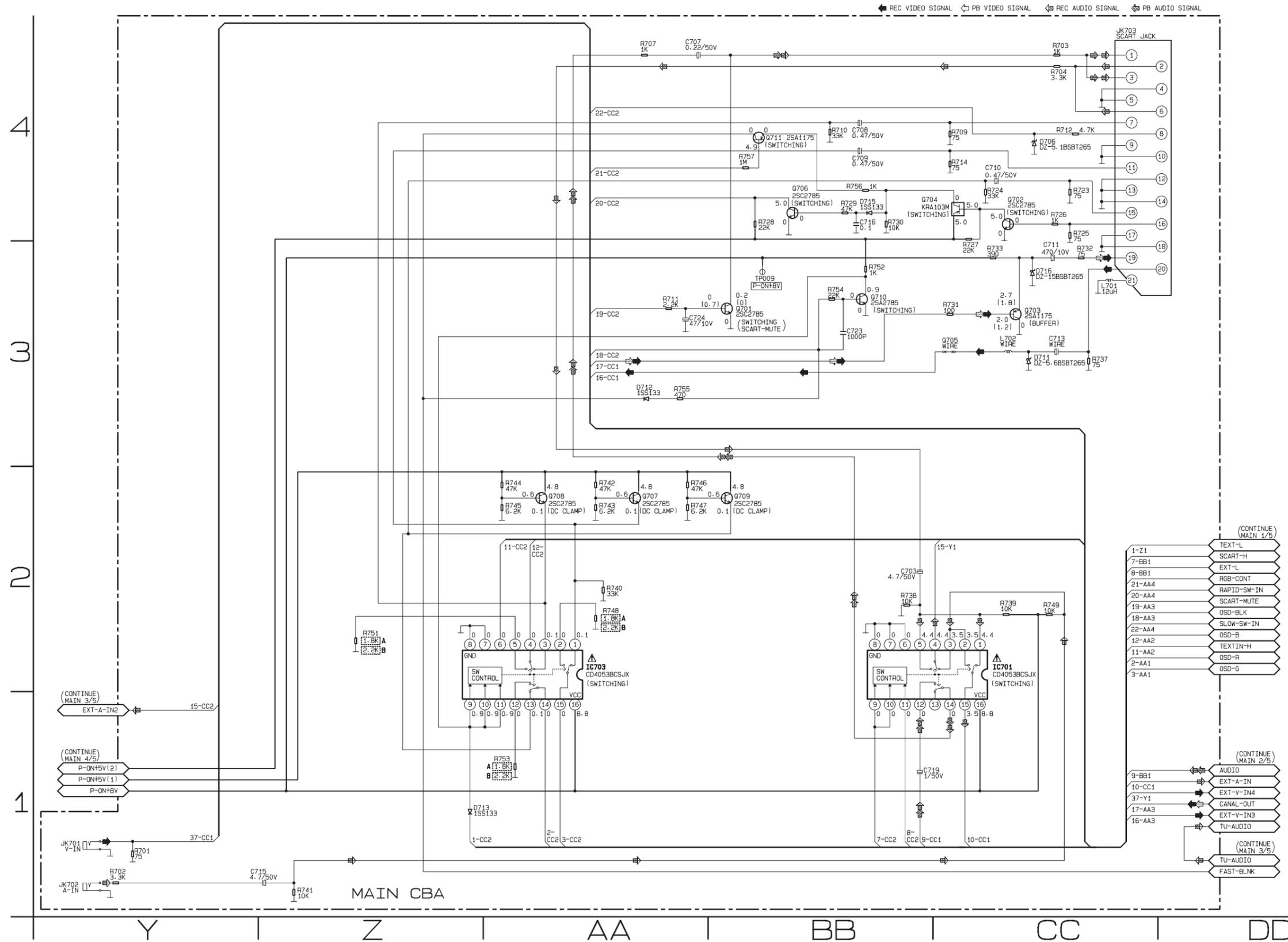
| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |



Main 5/5 Schematic Diagram

Comparison Chart of Models and Marks

| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |



H.V./Power Supply 1/2 Schematic Diagram

Comparison Chart of Models and Marks

| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |

CAUTION !

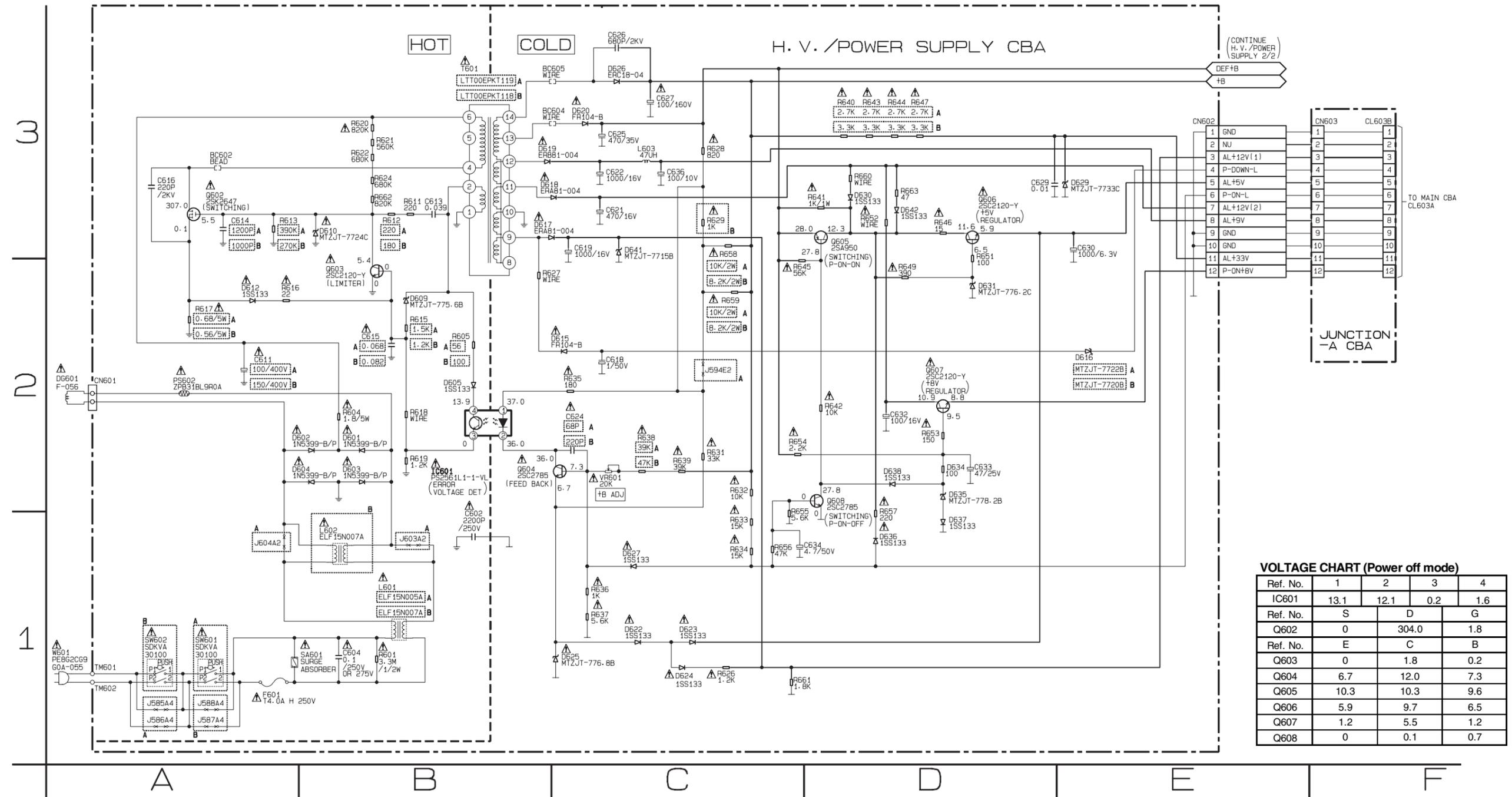
Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

NOTE:

The voltage for parts in hot circuit is measured using hot GND as a common terminal.



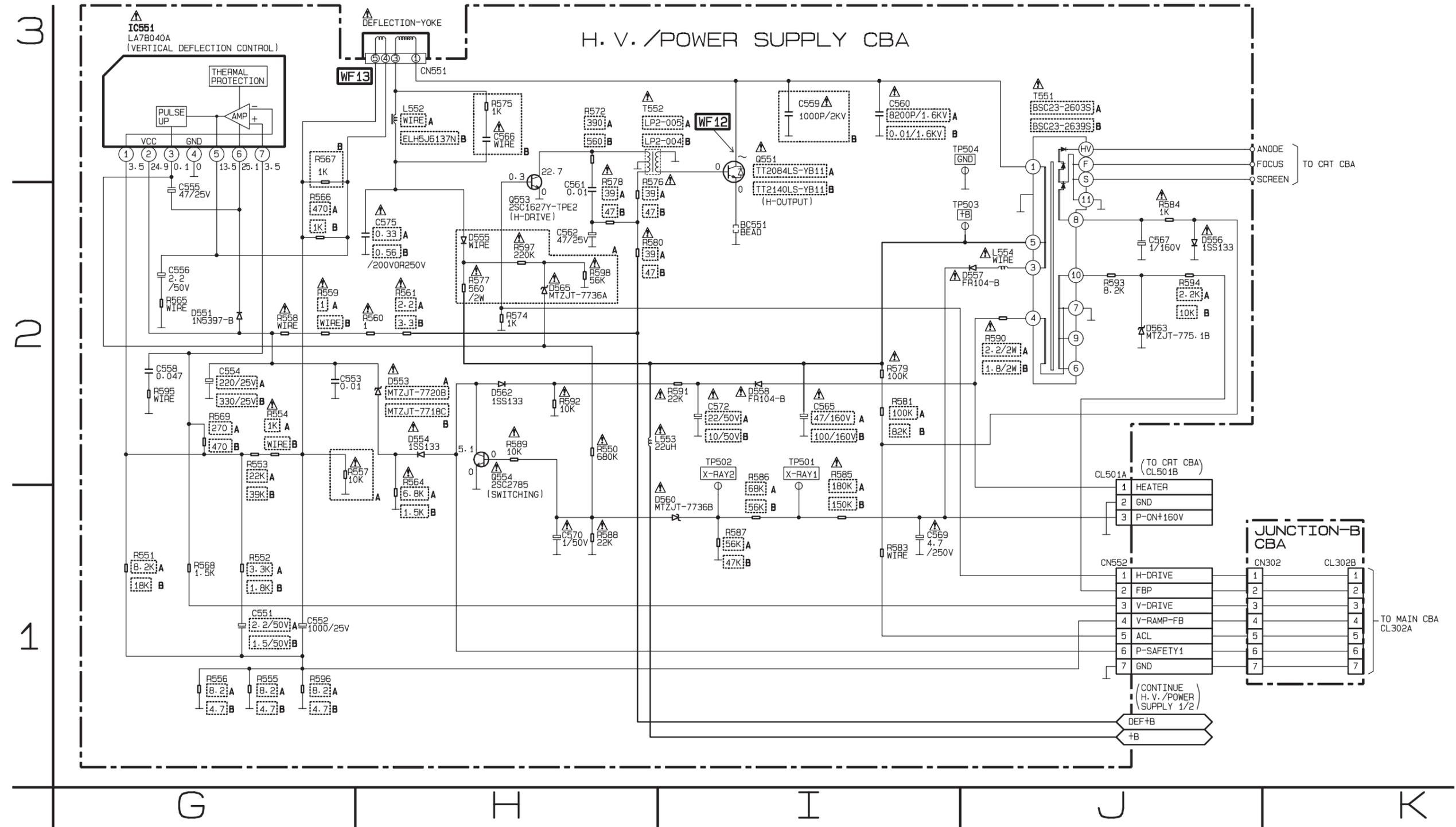
VOLTAGE CHART (Power off mode)

| Ref. No. | 1 | 2 | 3 | 4 |
|----------|------|-------|-----|-----|
| IC601 | 13.1 | 12.1 | 0.2 | 1.6 |
| Ref. No. | S | D | G | |
| Q602 | 0 | 304.0 | 1.8 | |
| Ref. No. | E | C | B | |
| Q603 | 0 | 1.8 | 0.2 | |
| Q604 | 6.7 | 12.0 | 7.3 | |
| Q605 | 10.3 | 10.3 | 9.6 | |
| Q606 | 5.9 | 9.7 | 6.5 | |
| Q607 | 1.2 | 5.5 | 1.2 | |
| Q608 | 0 | 0.1 | 0.7 | |

H.V./Power Supply 2/2 Schematic Diagram

Comparison Chart of Models and Marks

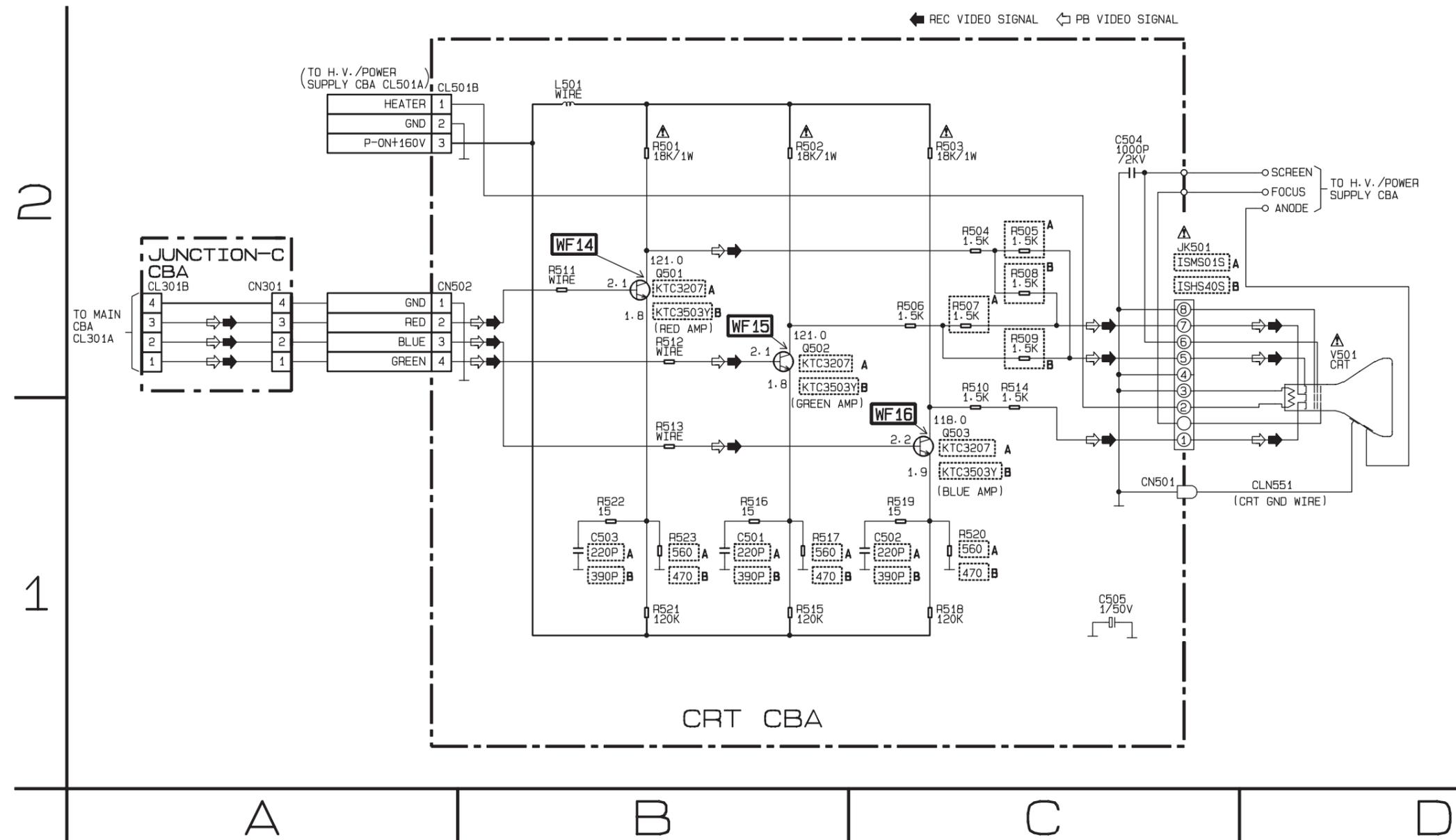
| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |



CRT Schematic Diagram

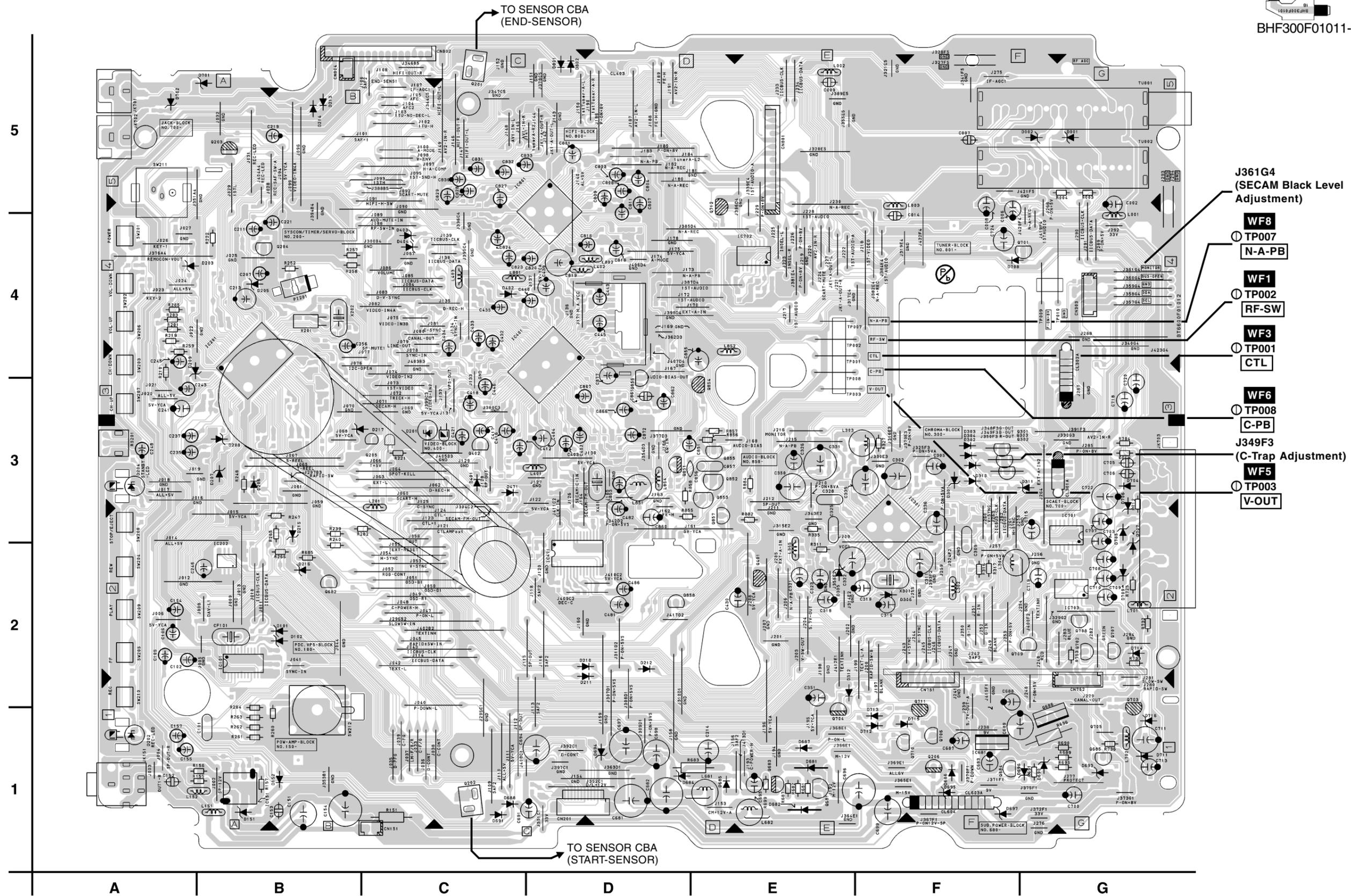
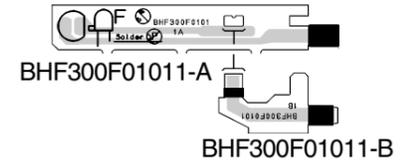
Comparison Chart of Models and Marks

| MODEL | MARK |
|---------|------|
| T6605VF | A |
| T6705VF | B |

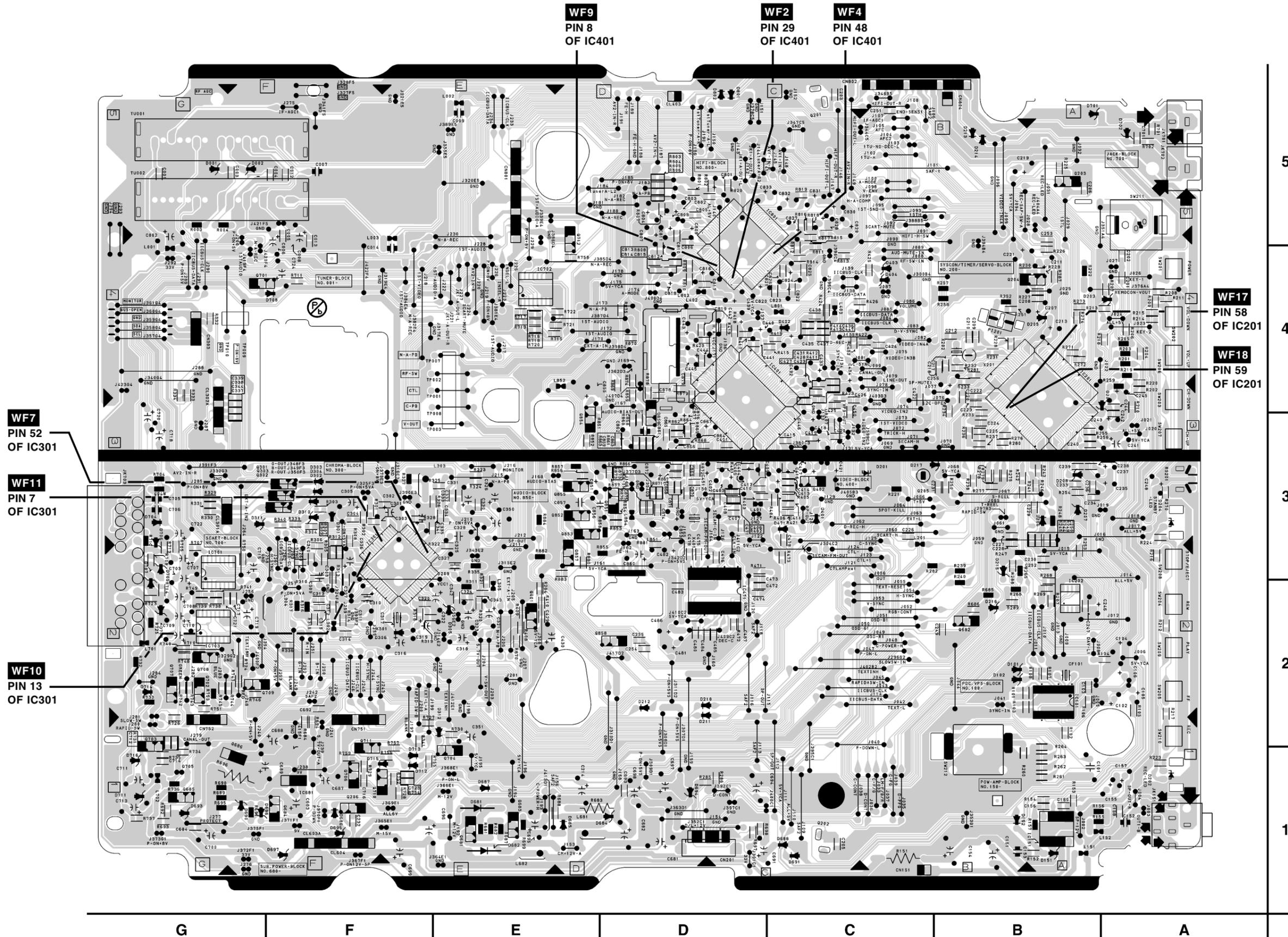


Main CBA Top View

Sensor CBA Top View



Main CBA Bottom View



H.V./Power Supply CBA Top View

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit. If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

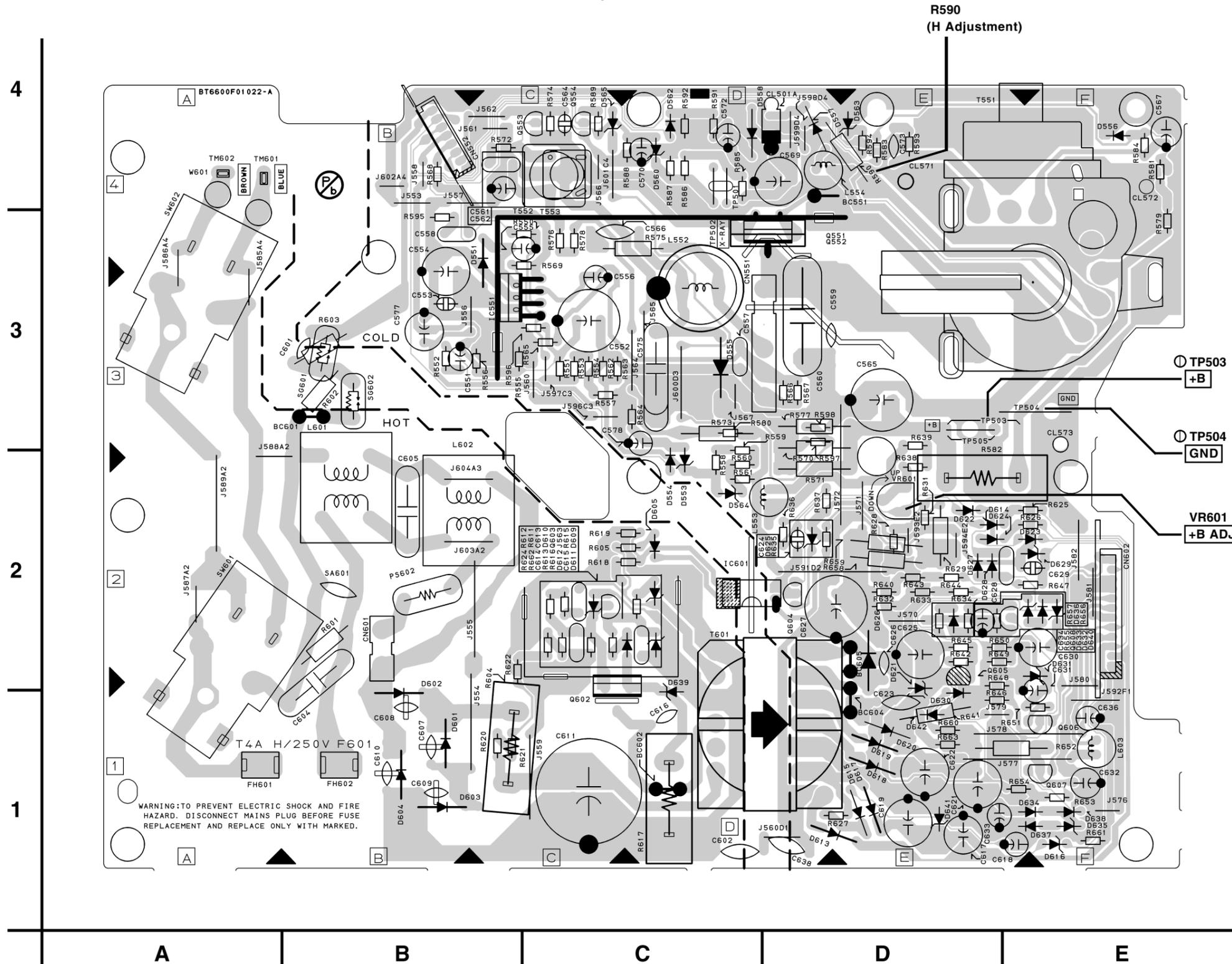
CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.

NOTE :

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.



H.V./Power Supply CBA Bottom View

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

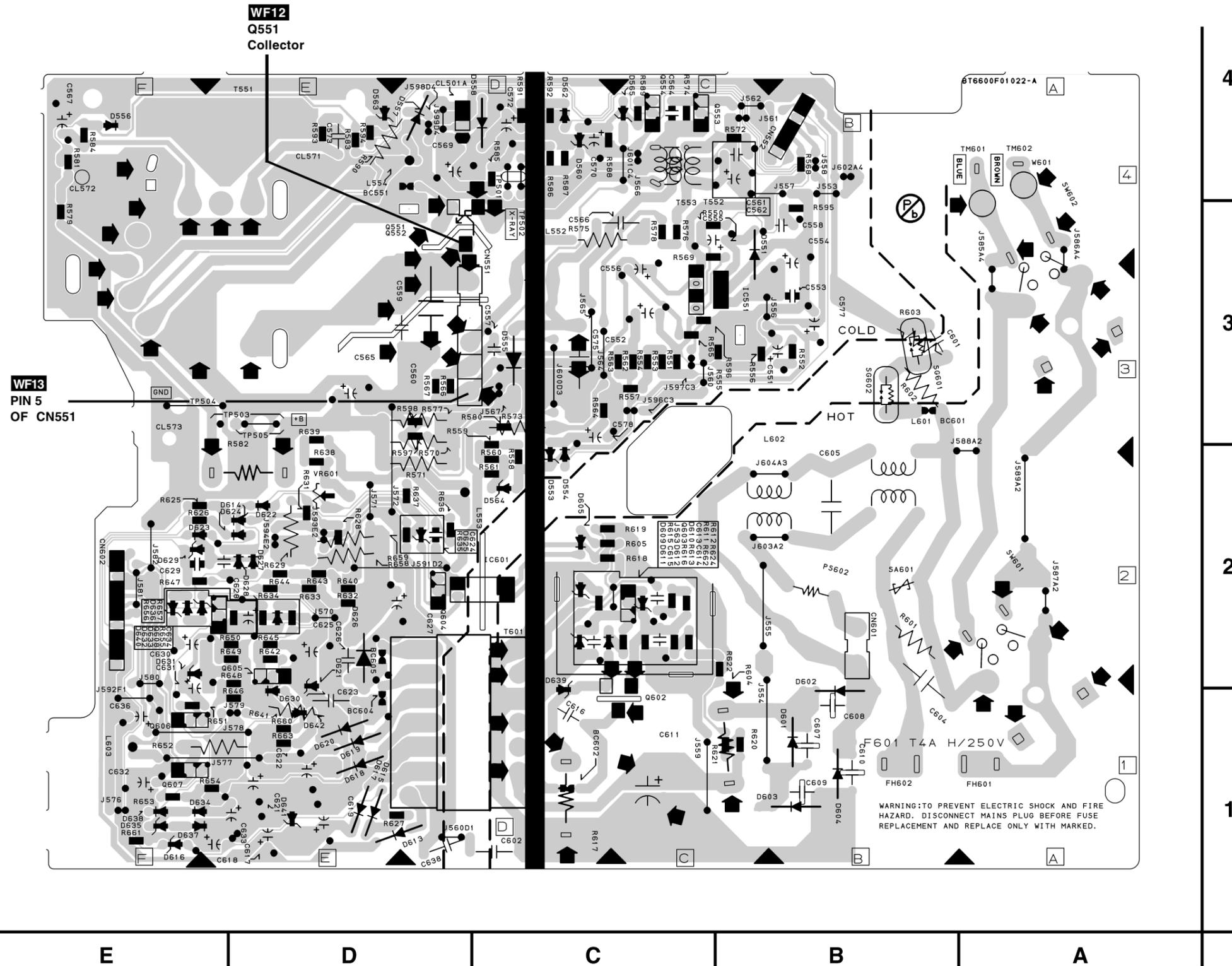
CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.

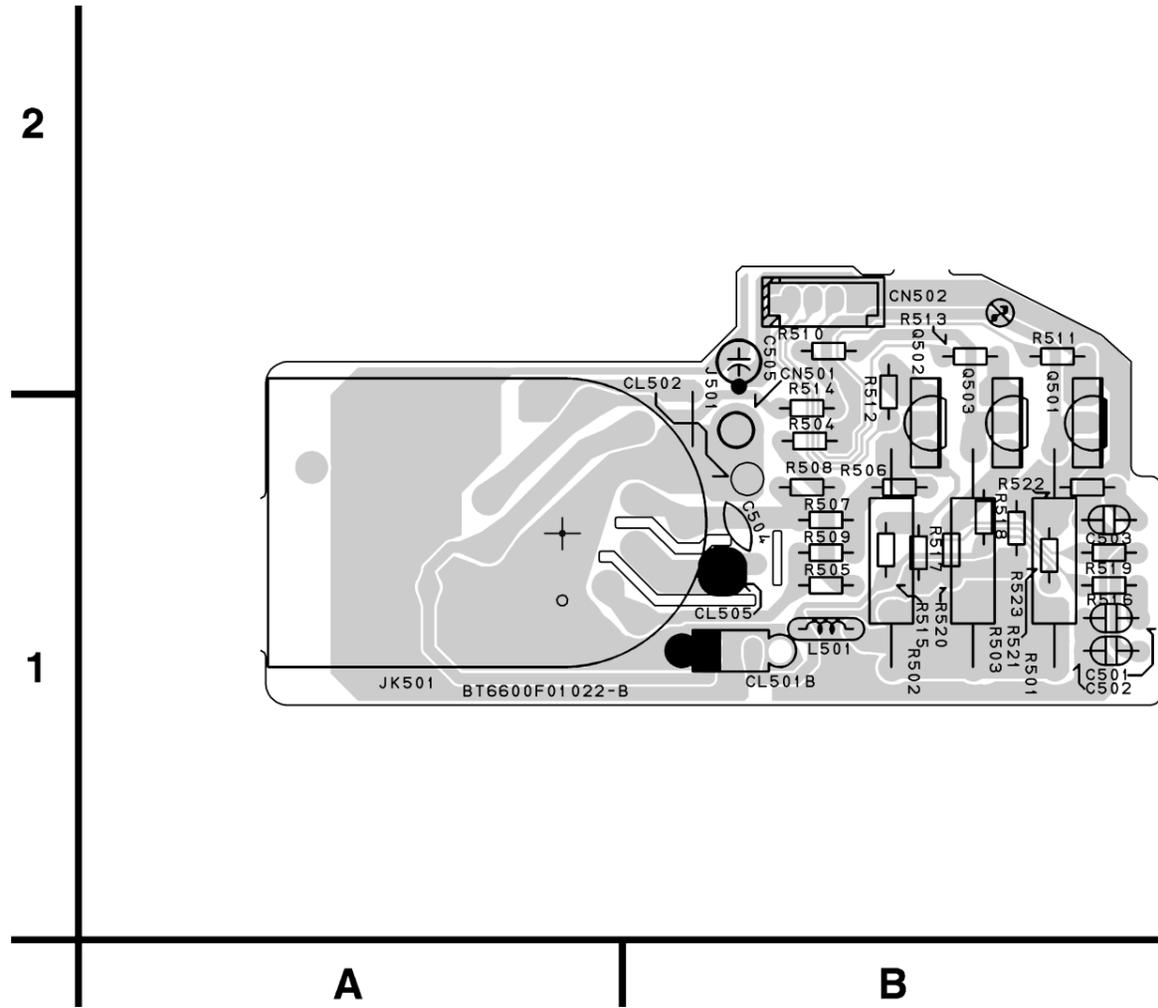
NOTE :

The voltage for parts in hot circuit is measured using hot GND as a common terminal.

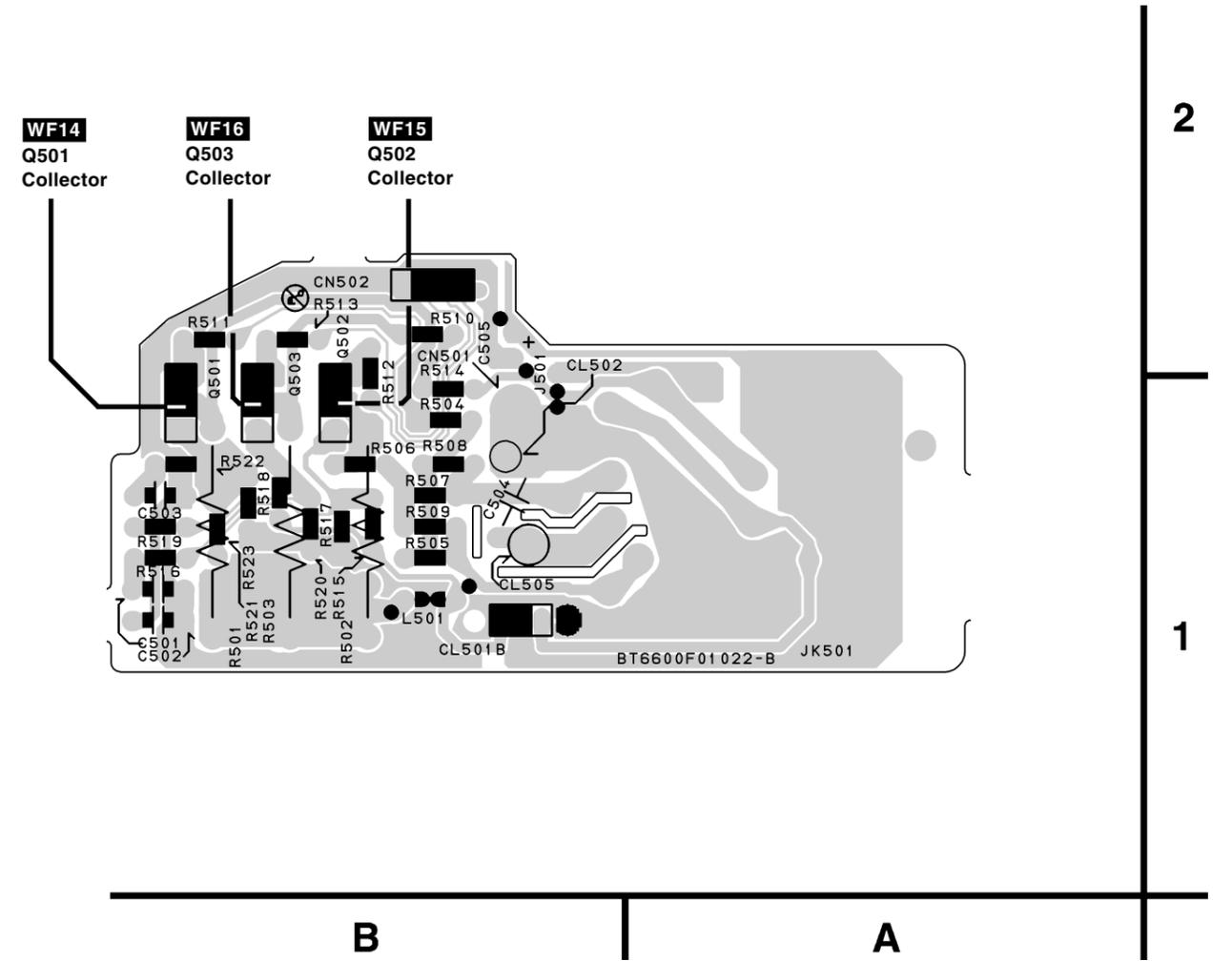
BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.



CRT CBA Top View

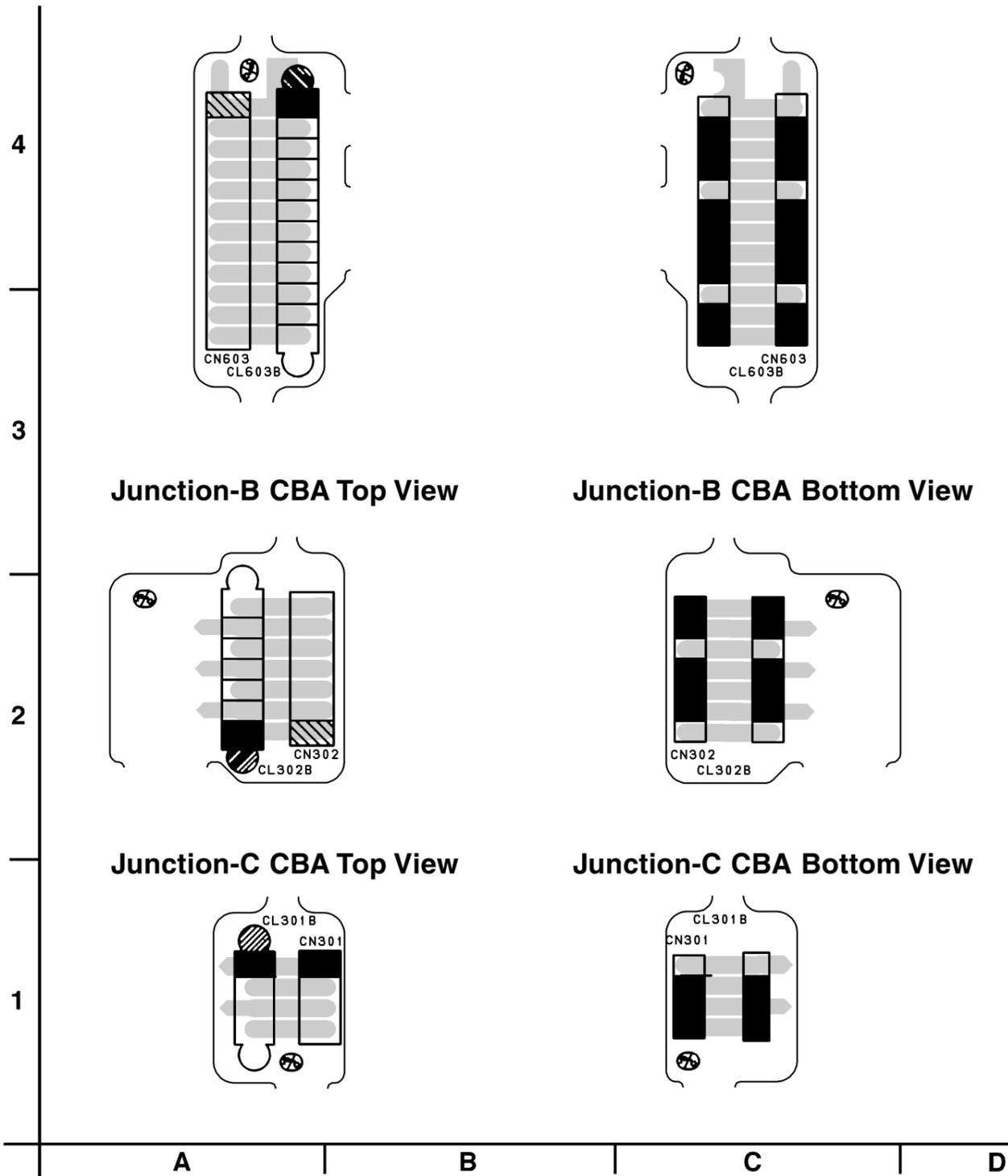


CRT CBA Bottom View



Junction-A CBA Top View

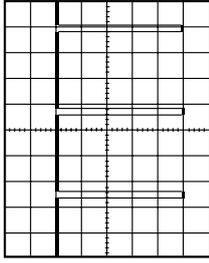
Junction-A CBA Bottom View



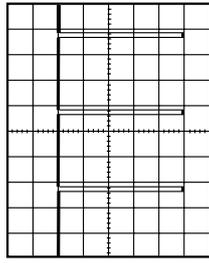
BT6600F01012

WAVEFORMS

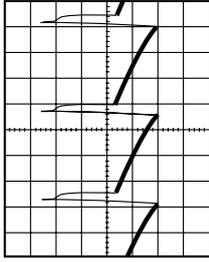
WAVEFORM NOTES
 INPUT: COLOR BAR SIGNAL
 OTHER CONTROLS: CENTER POSITION
 VOLTAGES SHOWN ARE RANGE OF
 OSCILLOSCOPE SETTING



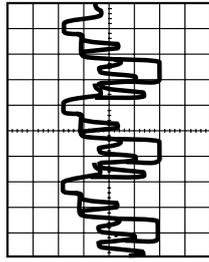
WF17 1DIV: 1V 20 μ s
 IC201 PIN 58



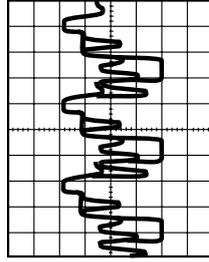
WF18 1DIV: 1V 5ms
 IC201 PIN 59



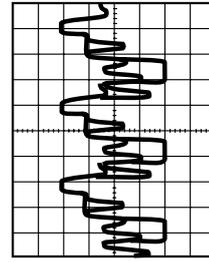
WF13 1DIV: 10V 5ms
 CN551 PIN 5



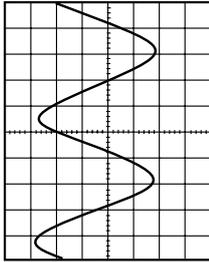
WF14 1DIV: 20V 20 μ s
 Q501 COLLECTOR



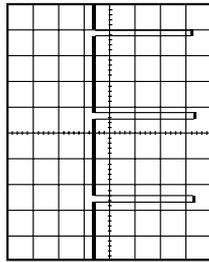
WF15 1DIV: 20V 20 μ s
 Q502 COLLECTOR



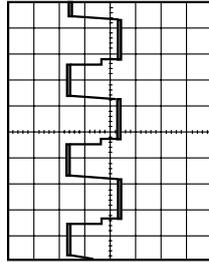
WF16 1DIV: 20V 20 μ s
 Q503 COLLECTOR



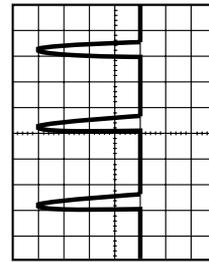
WF9 1DIV: 0.5V 0.5ms
 IC401 PIN 8



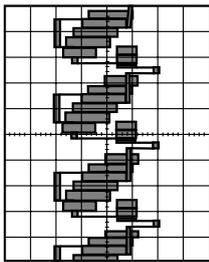
WF10 1DIV: 2V 5ms
 IC301 PIN 13



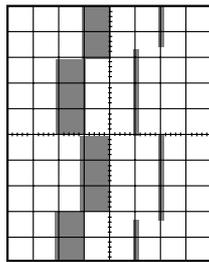
WF11 1DIV: 1V 20 μ s
 IC301 PIN 7



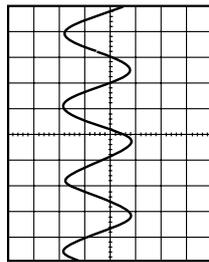
WF12 1DIV: 200V 20 μ s
 Q551 COLLECTOR



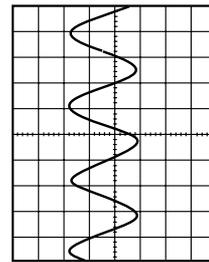
WF5 1DIV: 0.5V 20 μ s
 TP003 V-OUT



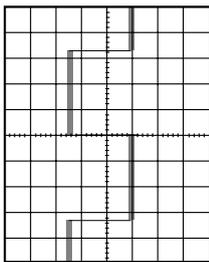
Upper: WF6 Lower: WF1
 1DIV: 0.2V 2DIV: 5V 5ms
 TP008 C-PB



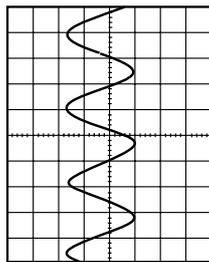
WF7 1DIV: 0.2V 0.5ms
 IC301 PIN 52



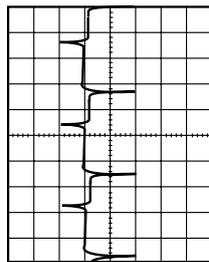
WF8 1DIV: 0.5V 0.5ms
 TP007 N-A-PB



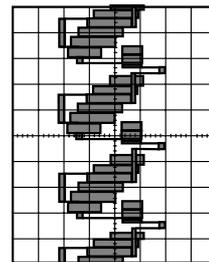
WF1 1DIV: 2V 5ms
 TP002 RF-SW



WF2 1DIV: 0.2V 0.1 μ s
 IC401 PIN 29



WF3 1DIV: 1V 10ms
 TP001 CTL



WF4 1DIV: 0.25V 20 μ s
 IC401 PIN 48

SYSTEM CONTROL TIMING CHARTS

Chart 1

1. EJECT (POWER OFF) -> CASSETTE IN (POWER ON) -> STOP(B) -> STOP(A) -> PLAY -> RS -> FS -> PLAY -> STILL(N-CANCEL) -> PLAY -> STOP(A)

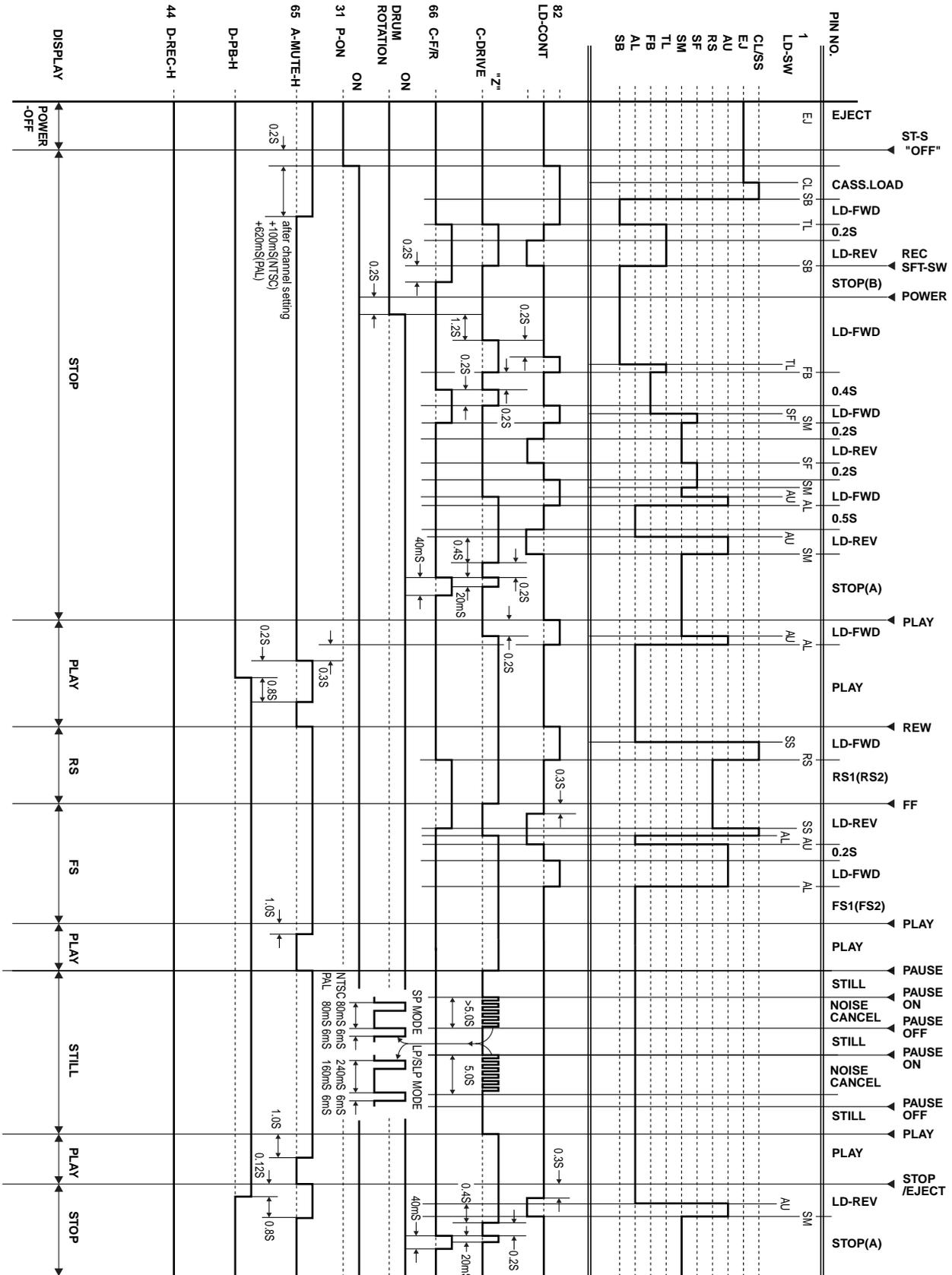
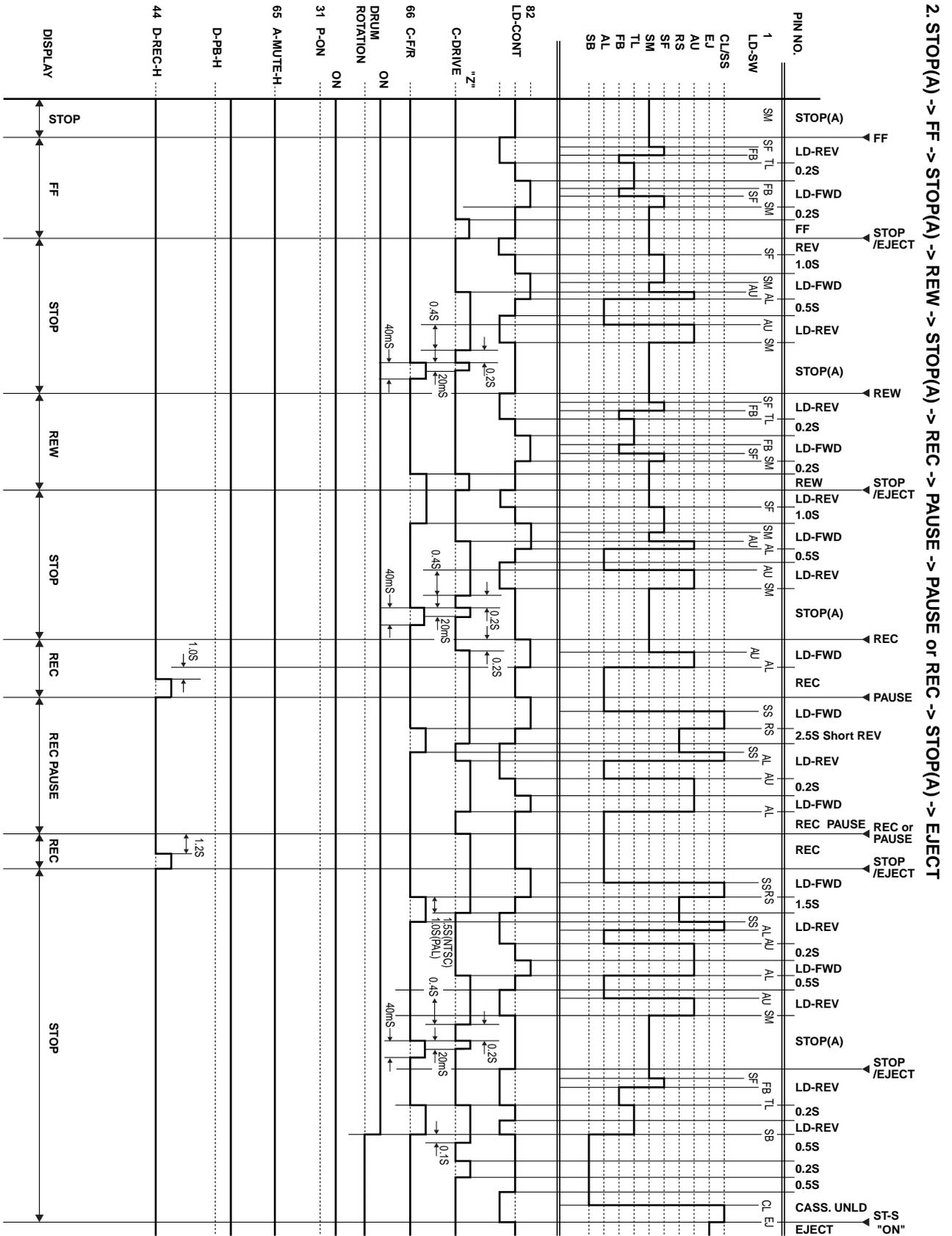


Chart 2



IC PIN FUNCTION DESCRIPTIONS

Comparison Chart of Models and Marks

| Model | Mark |
|---------|------|
| T6605VF | A |
| T6705VF | B |

IC 201 (TV/VCR Micro Controller)

“H” ≥ 4.5V, “L” ≤ 1.0V

| Pin No. | IN/OUT | Signal Name | Function |
|---------|--------|-------------|--|
| 1 | - | NU | Not Used |
| 2 | IN | P-SAFETY 2 | Power Supply Failure Detection 2 |
| 3 | IN | P-SAFETY 1 | Power Supply Failure Detection 1 |
| 4 | IN | END-SENS | End-Sensor |
| 5 | IN | AFC | Automatic Frequency Control Signal |
| 6 | IN | V-ENV | Video Envelope Input |
| 7 | IN | KEY-1 | Key 1 Input |
| 8 | IN | KEY-2 | Key 2 Input |
| 9 | IN | LD-SW | Loading Switch Input |
| 10 | IN | ST-SENS | Start-Sensor |
| 11 | - | NU | Not Used |
| 12 | - | NU | Not Used |
| 13 | IN/OUT | DV SYNC | Artificial V-Sync Output |
| 14 | IN | REMOTE | Remote Signal Input |
| 15 | OUT | C-ROTA | Color Phase Rotary Changeover Signal |
| 16 | OUT | H-A-SW | Video Head Amp Switching Pulse |
| 17 | - | NU | Not Used |
| 18 | OUT | RF-SW | Video Head Switching Pulse |
| 19 | - | NU | Not Used |
| 20 | OUT | A-MUTE-H | Audio Mute Control Signal (Mute = “H”) |
| 21 | - | NU | Not Used |
| 22 | - | NU | Not Used |
| 23 | IN/OUT | REC-LED | Recording LED Control Signal |
| 24 | IN/OUT | REC-LED | Recording LED Control Signal |
| 25 | - | NU | Not Used |
| 26 | - | NU | Not Used |
| 27 | - | NU | Not Used |
| 28 | - | NU | Not Used |

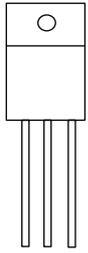
| Pin No. | IN/OUT | Signal Name | Function |
|---------|--------|-------------|---|
| 29 | OUT | SCART-MUTE | RAPID-Switch Input Signal from Scart Jack |
| 30 | - | NU | Not Used |
| 31 | IN | REC-SAFETY | Record Protection Tab Detection |
| 32 | - | NU | Not Used |
| 33 | - | NU | Not Used |
| 34 | IN | RESET | System Reset Signal (Reset=“L”) |
| 35 | IN | XCIN | Sub Clock 32 kHz |
| 36 | OUT | XCOUT | Sub Clock 32 kHz |
| 37 | - | TIMER+5V | Vcc |
| 38 | IN | XIN | Main Clock Input |
| 39 | OUT | XOUT | Main Clock Output |
| 40 | - | GND | GND |
| 41 | OUT | SPOT-KILL | Counter-measure for Spot |
| 42 | OUT | EXT-L | External Input or Playback = Output |
| 43 | IN | CLKSEL | Clock Select (GND) |
| 44 | OUT | SP-MUTE | Speaker Mute Signal |
| 45 | IN/OUT | I2C-OPEN | White Balance Adjust Mode Judgment |
| 46 | - | GND | GND |
| 47 | OUT | D-REC-H | Delayed Record Signal |
| 48 | OUT | SCART-H | Switching Signal of Scart Jack and RCA Jack |
| 49 | - | OSD-GND | OSD GND |
| 50 | - | NU | Not Used |
| 51 | - | NU | Not Used |
| 52 | - | NU | Not Used |
| 53 | - | OSDVcc | OSDVcc |
| 54 | - | HLF | HLF |
| 55 | - | NU | Not Used |
| 56 | IN | CV-IN | Video Signal Input |
| 57 | - | GND | GND |
| 58 | IN | H-SYNC | H-SYNC Input |
| 59 | IN | V-SYNC | V-SYNC Input |
| 60 | OUT | OSD-BLK | Output for Picture Cut off |
| 61 | OUT | RGB-CONT | RGB Control Signal |
| 62 | OUT | OSD-B | Blue Output |
| 63 | OUT | OSD-G | Green Output |

| Pin No. | IN/OUT | Signal Name | Function |
|---------|--------|--------------|--|
| 64 | OUT | OSD-R | Red Output |
| 65 | IN | RAPIT-SW-IN | RAPID-Switch Input Signal |
| 66 | - | NU | Not Used |
| 67 | OUT | P-ON-H | Power On Signal at High |
| 68 | IN | SLOW-SW-IN | Slow Switch Input Signal |
| 69 | - | NU | Not Used |
| 70 | OUT | TEXT-IN-H | Tele Text Input Signal at High |
| 71 | OUT | SCL | E2PROM/CHROMA IC Tuner Communication Clock |
| 72 | IN/OUT | SDA | E2PROM/CHROMA IC Tuner Communication Data |
| 73 | - | NU | Not Used |
| 74 | IN | C-SYNC | C-Sync Input |
| 75 | - | NU | Not Used |
| 76 | OUT | C-CONT | Capstan Motor Control Signal |
| 77 | OUT | D-CONT | Drum Motor Control Signal |
| 78 | OUT | C-F/R | Capstan Motor FWD/REV Control Signal (FWD="L"/REV="H") |
| 79 | - | NU | Not Used |
| 80 | IN/OUT | T-REEL | Take Up Reel Rotation Signal |
| 81 | IN/OUT | LD-CONT | Loading Motor Control Signal |
| 82 | OUT | TEXT-L | Teletext Control Signal |
| 83 | - | NU | Not Used |
| 84 | - | NU | Not Used |
| 85 | IN | P-DOWN-L | Power Voltage Down Detector Signal at Low |
| 86 | - | NU | Not Used |
| 87 | IN | C-FG | Capstan Motor Rotation Detection Pulse |
| 88 | - | AMPVss | AMPVss (GND) |
| 89 | - | NU | Not Used |
| 90 | IN | D-PFG | Drum Motor Phase/Frequency Generator |
| 91 | OUT | AMP VREF-OUT | Standard Voltage Output |
| 92 | IN | AMP VREF- IN | Standard Voltage Input |
| 93 | - | C | C Terminal |

| Pin No. | IN/OUT | Signal Name | Function |
|---------|--------|--------------|---|
| 94 | IN/OUT | CTL (-) | CTL (-) |
| 95 | IN/OUT | CTL (+) | CTL (+) |
| 96 | - | AMPC | AMPC |
| 97 | OUT | CTL AMP- OUT | Control Amp Output |
| 98 | - | AMPVcc | AMPVcc |
| 99 | - | AVcc | A/D Converter Power Input/ Standard Voltage Input |
| 100 | IN | AGC | Tuner IF Output Signal |

LEAD IDENTIFICATIONS

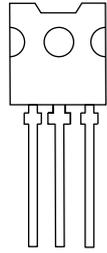
2SK2647



S D G

S: Source
D: Drain
G: Gate

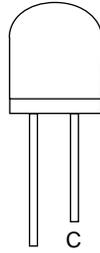
2SC3619
KTC3503Y



E C B

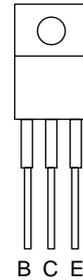
E: Emitter
C: Collector
B: Base

MID-32A22F
PT204-6B-12



E

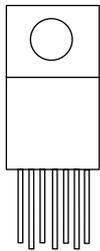
C



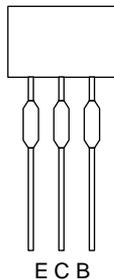
B C E

2SC5884000RF
2SD1913(R)
KTC2026Y
TT2084LS-YB11
TT2138LS-YB11
2SD2627LS-FEC-YB11

LA78040A

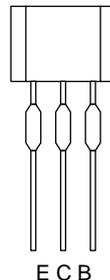


IN G OUT



E C B

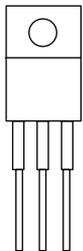
2SA1346
2SC1815-GR(TPE2)
2SC2120-O(TPE2)
2SC2120-Y(TPE2)
2SC3331(T,U)
KRA103M
KTA1266(GR)
KTC3203(Y)
KTC3207



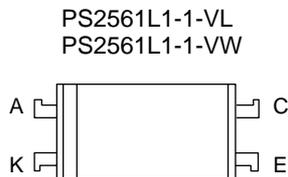
E C B

2SA1015-GR(TPE2)
2SA1175(F)
2SA950(Y,O)
2SC1627Y-TPE2
2SC2482 TPE6
2SC2785(F,H,J)
2SC3468(D,E)-AE
BN1F4M-T
KTA1267(GR)
KTA1271(Y)
KTC3198(GR)
KTC3199(GR)

KA7805A
KIA7805API

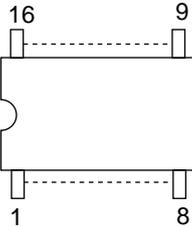


IN G OUT



PS2561L1-1-VL
PS2561L1-1-VW

CD4053BCSJX
CD4053BNSR
TC4053BF(N)



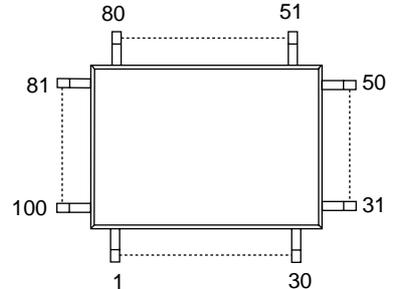
1

8

16

9

LA71750EM-MPB-E
M37762MCA-BB0GP



1

30

50

31

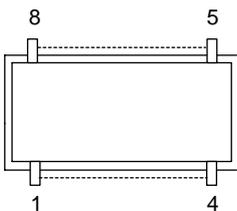
80

51

81

100

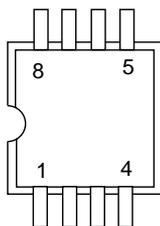
LA4224



1

4

AT24C04N-10SC
BR24C04F
BR24C04F-W
BR24L04F-WE2
CAT24WC04JI
M24C04-MN6
M24C04-WMN6



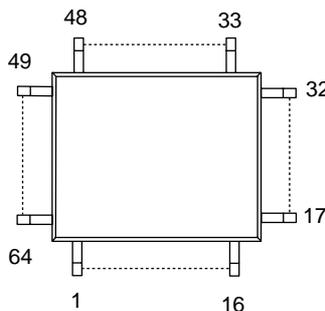
8

5

1

4

M61209BFP



1

16

32

17

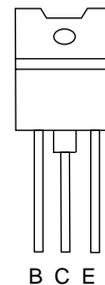
48

33

49

64

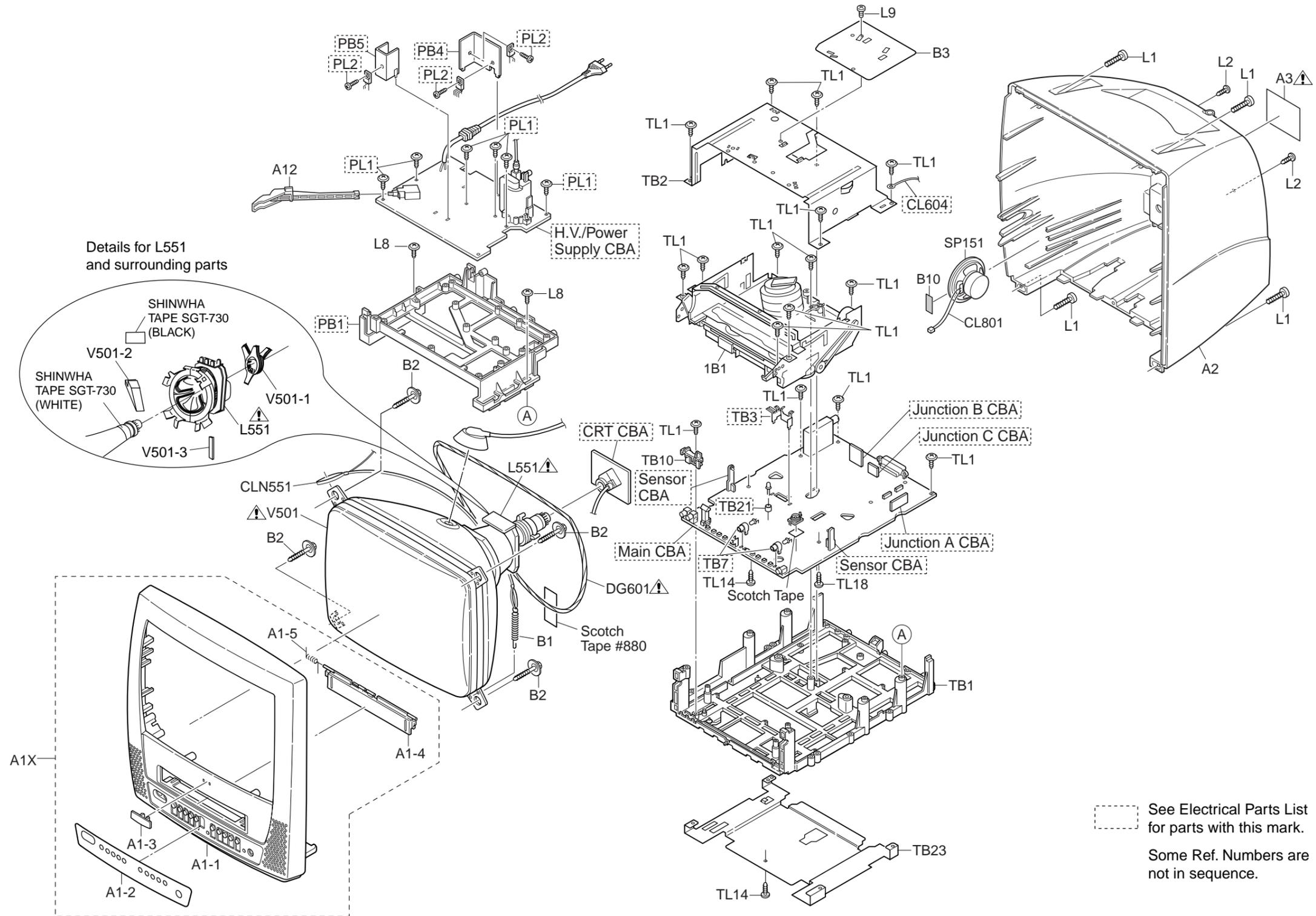
2SC5885000RF
TT2140LS-YB11



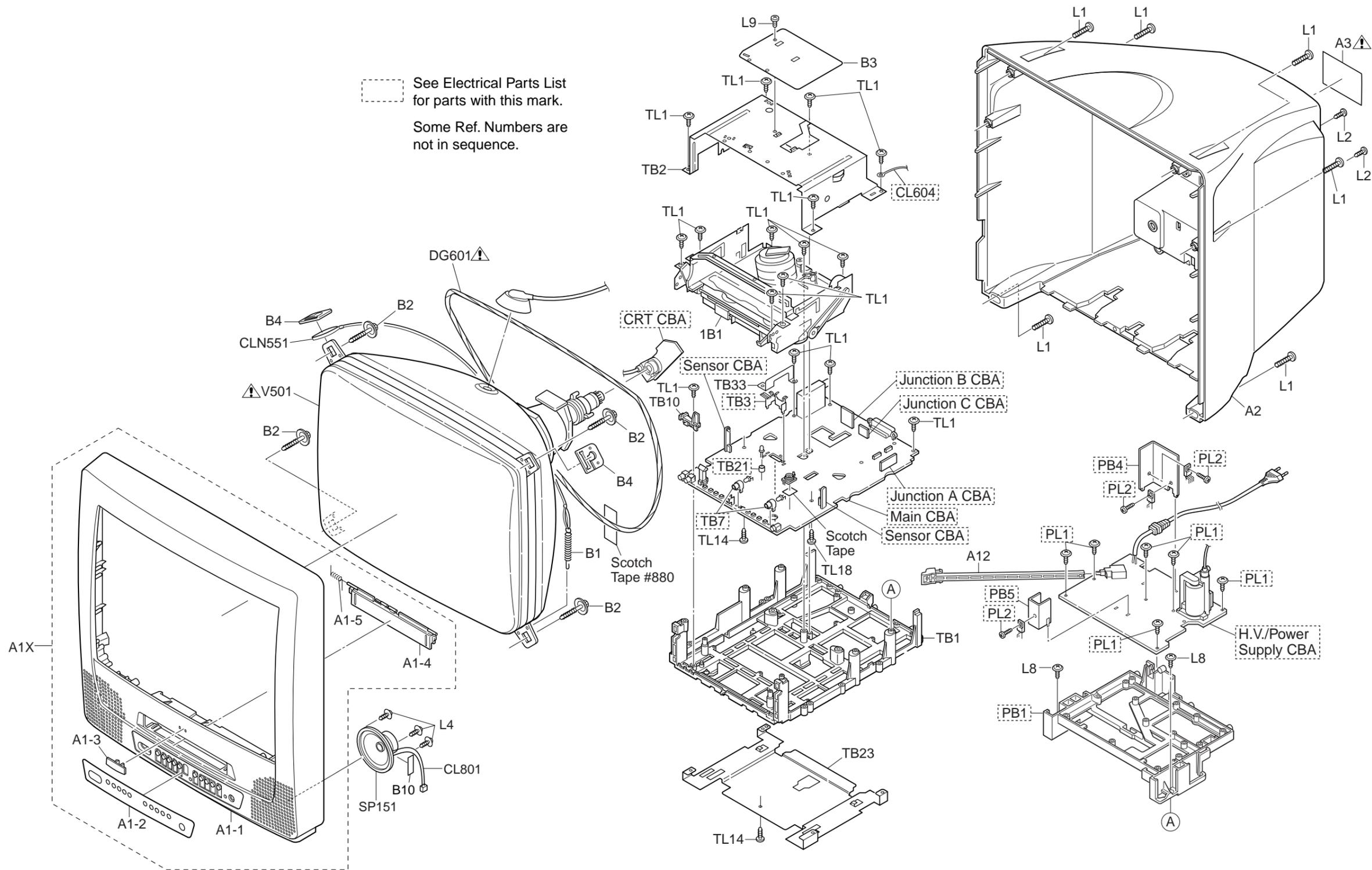
B C E

EXPLODED VIEWS

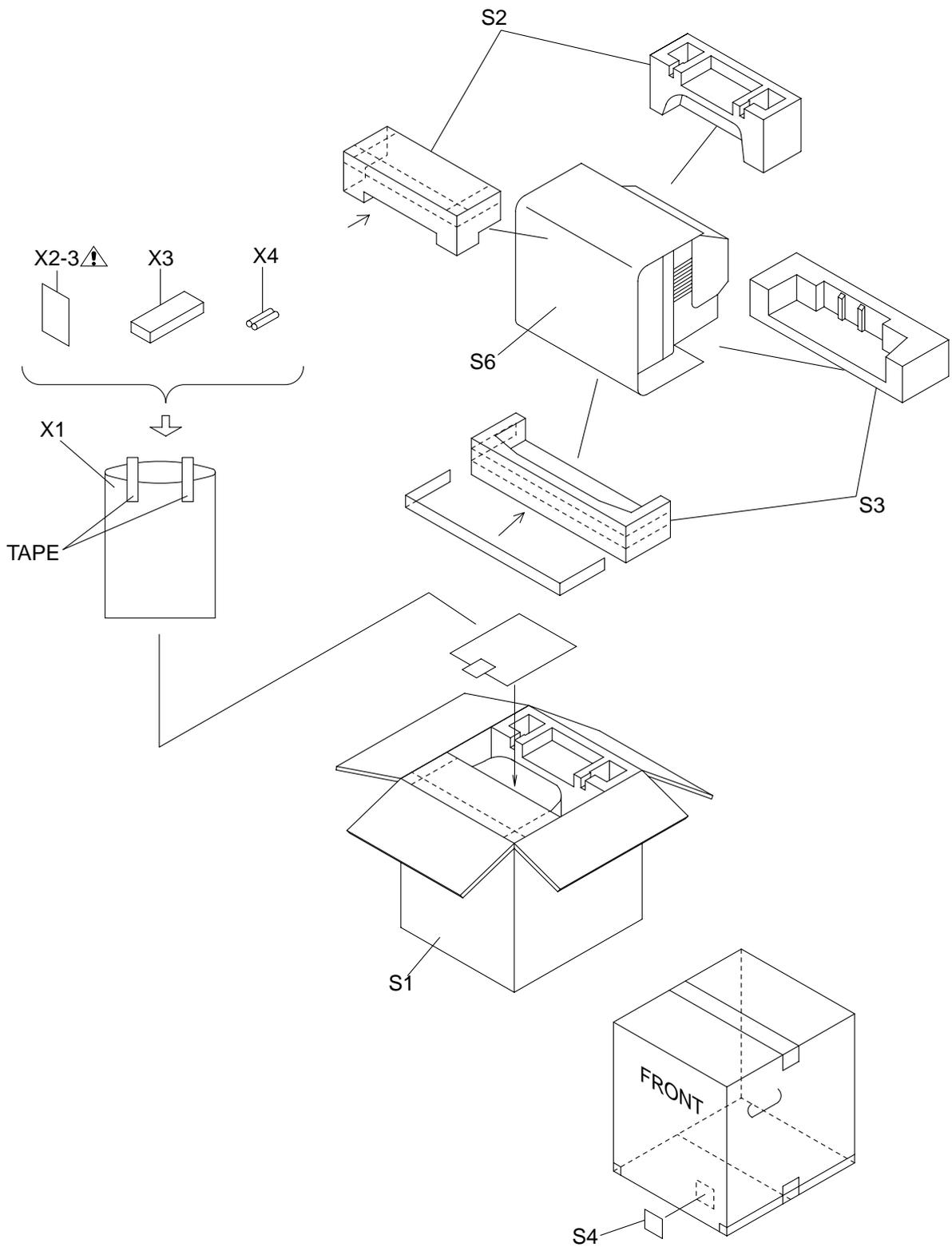
Cabinet [T6605VF]



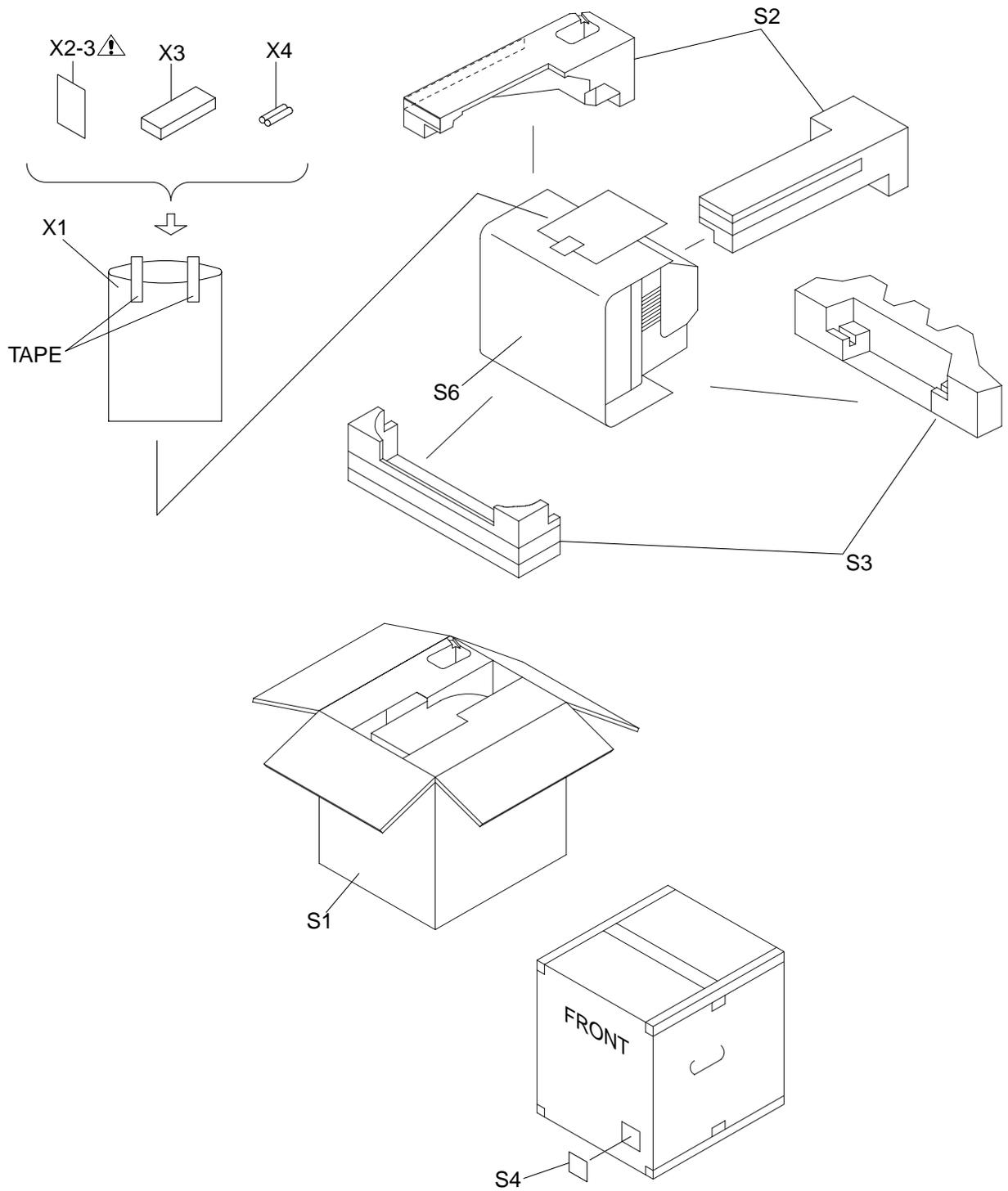
See Electrical Parts List for parts with this mark.
Some Ref. Numbers are not in sequence.



Packing [T6605VF]



[T6705VF]



MECHANICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTE:

Parts that are not assigned part numbers (-----) are not available.

Comparison Chart of Models and Marks

| Model | Mark |
|---------|------|
| T6605VF | A |
| T6705VF | B |

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|---------------------------------|--------------|
| A1X | A | FRONT CABINET ASSEMBLY T6605VF | 0EM101475 |
| A1X | B | FRONT CABINET ASSEMBLY T6705VF | 0EM101476 |
| A1-1 | A | FRONT CABINET T6605VF | 0EM000936 |
| A1-1 | B | FRONT CABINET T6705VF | 0EM000937 |
| A1-2 | A | CONTROL PLATE T6605VF | 0EM201851 |
| A1-2 | B | CONTROL PLATE T6705VF | 0EM201852 |
| A1-3 | | BRAND BADGE TD006CGDURABRAND | 0EM301865 |
| A1-4 | | CASSETTE DOOR T6600EA | 0EM408804 |
| A1-5 | | SPRING DOOR(Z10) T5200UA | 0EM406687 |
| A2 | A | REAR CABINET REAR CABINET | 0EM101490 |
| A2 | B | REAR CABINET REAR CABINET | 0EM000956 |
| A3 [△] | A | RATING LABEL T6605VF | ----- |
| A3 [△] | B | RATING LABEL T6705VF | ----- |
| A12 | A | POWER BUTTON POWER BUTTON | 0EM302129 |
| A12 | B | POWER BUTTON POWER BUTTON | 0EM302130 |
| CL801 | | WIRE ASSEMBLY (SPEAKER) 2P/200 | WX1T6300-002 |
| CLN551 | A | CRT GND WIRE CRT GND | WX1L7720-001 |
| CLN551 | B | CRT WIRE WX1T7180-005 | WX1T7180-005 |
| DG601 [△] | A | DEGAUSSING COIL F-056 | LLBH00ZTM056 |
| DG601 [△] | B | DEGAUSSING COIL F-057 | LLBH00ZTM057 |
| L1 | | SCREW, P-TIGHT 4X18 BIND HEAD + | GBMP4180 |
| L2 | | SCREW, P-TIGHT M4X12 BIND HEAD+ | GBUP4120 |
| L4 | B | SCREW, ASSEMBLED 12:M3X12 | 0EM406746 |
| L8 | | FLAT HEAD SCREW T4000UA | 0EM404793 |
| L9 | | SCREW, S-TIGHT 3X4 BIND HEAD+ | GBMS3040 |
| L551 [△] | A | DEFLECTION YOKE LLBY00ZSY005 or | LLBY00ZSY005 |
| [△] | A | DEFLECTION YOKE KDY3GDA82X | LLBY00ZMS011 |
| 1B1 | | DECK ASSEMBLY CZD013/VM2326 | N2326FT |
| B1 | | SPRING TENSION B0080B0:EM40808 | 26WH006 |
| B2 | A | M5 CRT SCREW(B) B4000UA | 0VM403923 |
| B2 | B | SCREW M7 CRT(D22) T7205UF | 0EM406573 |
| B3 | A | SHIELD PLATE (PAL 14V) T6600EA | 0EM408803 |
| B3 | B | SHIELD PLATE (PAL 21V) T6500RA | 0EM407921 |
| B4 | B | DEGAUSS HOLDER T7100UA | 0EM405476 |
| B10 | | CLOTH(10X30XT0.5) B5900UA | 0EM404486 |
| SP151 | | SPEAKER S08F02B or | DSD0808XQ010 |
| | | SPEAKER J-F097-C5 | DSD0808DCP01 |
| TB1 | | TRAY CHASSIS T6400RA | 0EM000697 |
| TB2 | | TOP COVER T6300RA | 0EM101155 |

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|-----------------------------------|--------------|
| TB10 | A | RCA HOLDER T6400RA | 0EM407753 |
| TB10 | B | RCA HOLDER(B) T6500RA | 0EM407833 |
| TB23 | | BOTTOM PLATE T6300RA | 0EM101156 |
| TB33 | B | EARTH HOLDER(TU) T6310EZ | 0EM406959 |
| TL1 | | SCREW, P-TIGHT 3X12 WASHER HEAD+ | GCMP3120 |
| TL14 | | SCREW, B-TIGHT M3X8 BIND HEAD+ | GBMB3080 |
| TL18 | | SCREW, P-TIGHT M3X8 BIND HEAD+ | GBCP3080 |
| V501 [△] | A | CRT A34AGT13X | TCRT190CP036 |
| V501 [△] | B | CRT A51AEZ90X25 K | TCRT190CP047 |
| V501-1 | A | C.PMAGNET JH225-FN-00 | XM04000BV003 |
| V501-2 | A | WEDGE FT-00110W or | XV10000T4001 |
| | A | WEDGE DB25SR | XV10000D9001 |
| V501-3 | A | RUBBER MAGNET 20X10X1.2 | XM05000BV001 |
| PACKING | | | |
| S1 | A | CARTON T6605VF | 0EM409176 |
| S1 | B | CARTON T6705VF | 0EM409180 |
| S2 | A | STYROFOAM TOP ASSEMBLY T6600EA | 0EM409185 |
| S2 | B | STYROFOAM TOP ASSEMBLY T6700EA | 0EM409187 |
| S3 | A | STYROFOAM BOTTOM ASSEMBLY T6600EA | 0EM409186 |
| S3 | B | STYROFOAM BOTTOM ASSEMBLY T6700EA | 0EM409188 |
| S4 | A | SERIAL NO. LABEL T6605VF | ----- |
| S4 | B | SERIAL NO. LABEL T6705VF | ----- |
| S6 | A | SET SHEET B5506JG:800X1500 | 0EM402369 |
| S6 | B | SET SHEET B7500UA:1000X1700 | 0EM402178 |
| ACCESSORIES | | | |
| X1 | | BAG POLYETHYLENE 235X365XT0.03 | 0EM408420 |
| X2-3 [△] | | OWNER'S MANUAL T6605VF:DE | 0EMN02496 |
| X3 | | REMOTE CONTROL 512/ERC001/NE136RD | NE136RD |
| X4 | | DRY BATTERY R6P UM3 or | XB0M451GH001 |
| | | DRY BATTERY R6P(AR)2PX or | XB0M451HU002 |
| | | DRY BATTERY R6P(AR)2P X ICI or | XB0M451HU003 |
| | | DRY BATTERY(SUNRISE) R6SSE/2S or | XB0M451MS002 |
| | | DRY BATTERY R6P/2S | XB0M451T0001 |

ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTES:

- Parts that are not assigned part numbers (-----) are not available.
- Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25% D.....±0.5% F.....±1%
 G.....±2% J.....±5% K.....±10%
 M.....±20% N.....±30% Z.....+80/-20%

Comparison Chart of Models and Marks

| Model | Mark |
|---------|------|
| T6605VF | A |
| T6705VF | B |

MMA CBA

| Ref. No. | Mark | Description | Part No. |
|----------|------|---------------------------|-----------|
| | A | MMA CBA | 0ESA06014 |
| | B | MMA CBA | 0ESA06027 |
| | | Consists of the following | |
| | | MAIN CBA | ----- |
| | | JUNCTION A CBA | ----- |
| | | JUNCTION B CBA | ----- |
| | | JUNCTION C CBA | ----- |
| | | SENDER CBA | 0ESA06133 |

MAIN CBA

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|---|--------------|
| | | MAIN CBA Consists of the following | ----- |
| CAPACITORS | | | |
| C001 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C002 | | ELECTROLYTIC CAP. 47µF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47µF/25V M | CE1EMASTL470 |
| C006 | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1µF/50V M | CE1JMASTL1R0 |
| C008 | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1µF/50V M | CE1JMASTL1R0 |
| C009 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| C151 | | ELECTROLYTIC CAP. 330µF/16V M or | CE1CMASDL331 |
| | | ELECTROLYTIC CAP. 330µF/16V M | CE1CMASTL331 |
| C152 | | CERAMIC CAP.(AX) X M 2200pF/16V | GCA1CMT0X222 |
| C154 | | ELECTROLYTIC CAP. 470µF/16V M or | CE1CMASDL471 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--------------|
| | | ELECTROLYTIC CAP. 470µF/16V M | CE1CMASTL471 |
| C155 | | ELECTROLYTIC CAP. 0.22µF/50V M H7 | CE1JMAVSLR22 |
| C156 | | CHIP CERAMIC CAP.(1608) B K 4700pF/50V or | CHD1JK30B472 |
| | | CHIP CERAMIC CAP. B K 4700pF/50V | CHD1JKB0B472 |
| C157 | | ELECTROLYTIC CAP. 10µF/25V M H7 | CE1EMAVSL100 |
| C160 | | CHIP CERAMIC CAP.(1608) CH J 270pF/50V or | CHD1JJ3CH271 |
| | | CHIP CERAMIC CAP. CH J 270pF/50V | CHD1JJBCH271 |
| C203 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C205 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C207 | | ELECTROLYTIC CAP. 1µF/50V M H7 | CE1JMAVSL1R0 |
| C208 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C209 | | CHIP CERAMIC CAP.(1608) CH J 22pF/50V or | CHD1JJ3CH220 |
| | | CHIP CERAMIC CAP. CH J 22pF/50V | CHD1JJBCH220 |
| C210 | | CHIP CERAMIC CAP.(1608) CH J 22pF/50V or | CHD1JJ3CH220 |
| | | CHIP CERAMIC CAP. CH J 22pF/50V | CHD1JJBCH220 |
| C211 | | ELECTROLYTIC CAP. 47µF/6.3V M H7 | CE0KMAVSL470 |
| C212 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C213 | | ELECTROLYTIC CAP. 47µF/6.3V M H7 | CE0KMAVSL470 |
| C214 | | ELECTROLYTIC CAP. 330µF/6.3V M or | CE0KMASDL331 |
| | | ELECTROLYTIC CAP. 330µF/6.3V M | CE0KMASTL331 |
| C217 | | CHIP CERAMIC CAP. CH D 10pF/50V or | CHD1JD3CH100 |
| | | CHIP CERAMIC CAP. CH D 10pF/50V | CHD1JDBCH100 |
| C218 | | CHIP CERAMIC CAP. CH D 10pF/50V or | CHD1JD3CH100 |
| | | CHIP CERAMIC CAP. CH D 10pF/50V | CHD1JDBCH100 |
| C221 | | ELECTROLYTIC CAP. 47µF/6.3V M H7 | CE0KMAVSL470 |
| C222 | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V | CZM1CZB0F103 |
| C223 | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V or | CZM1CK30Y472 |
| | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V | CZM1CKB0Y472 |
| C224 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C225 | | CHIP CERAMIC CAP. CH J 560pF/50V or | CHD1JJ3CH561 |
| | | CHIP CERAMIC CAP. CH J 560pF/50V | CHD1JJBCH561 |
| C226 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C227 | | CHIP CERAMIC CAP. CH D 10pF/50V or | CHD1JD3CH100 |
| | | CHIP CERAMIC CAP. CH D 10pF/50V | CHD1JDBCH100 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|---|--------------|
| C228 | | CHIP CERAMIC CAP. CH D 10pF/50V or | CHD1JD3CH100 |
| | | CHIP CERAMIC CAP. CH D 10pF/50V | CHD1JDBCH100 |
| C229 | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V or | CZM1CK30Y472 |
| | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V | CZM1CKB0Y472 |
| C230 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C231 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C233 [△] | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V or | CZM1GK30Y102 |
| [△] | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V | CZM1GKB0Y102 |
| C234 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C235 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C236 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C237 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C238 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C239 | | CHIP CERAMIC CAP. CH J 560pF/50V or | CHD1JJ3CH561 |
| | | CHIP CERAMIC CAP. CH J 560pF/50V | CHD1JJBCH561 |
| C240 | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V or | CZM1CK30Y472 |
| | | CHIP CERAMIC CAP.(MELF) Y K 4700pF/16V | CZM1CKB0Y472 |
| C241 | | ELECTROLYTIC CAP. 22μF/50V M or | CE1JMASDL220 |
| | | ELECTROLYTIC CAP. 22μF/50V M | CE1JMASTL220 |
| C242 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C243 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C244 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C245 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C248 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C253 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C254 | | CHIP CERAMIC CAP. CH J 560pF/50V or | CHD1JJ3CH561 |
| | | CHIP CERAMIC CAP. CH J 560pF/50V | CHD1JJBCH561 |
| C255 | | CHIP CERAMIC CAP. CH J 560pF/50V or | CHD1JJ3CH561 |
| | | CHIP CERAMIC CAP. CH J 560pF/50V | CHD1JJBCH561 |
| C256 | | ELECTROLYTIC CAP. 10μF/25V M H7 | CE1EMAVSL100 |
| C301 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C302 | | ELECTROLYTIC CAP. 470μF/6.3V M or | CE0KMASDL471 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--------------|
| | | ELECTROLYTIC CAP. 470μF/6.3V M | CE0KMASTL471 |
| C303 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C304 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C305 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C307 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C308 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C309 | | FILM CAP.(P) 0.1μF/50V J or | CA1J104MS029 |
| | | FILM CAP.(P) 0.1μF/50V J | CMA1JJS00104 |
| C310 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C311 | | ELECTROLYTIC CAP. 470μF/6.3V M or | CE0KMASDL471 |
| | | ELECTROLYTIC CAP. 470μF/6.3V M | CE0KMASTL471 |
| C312 | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V or | CZM1JK30B181 |
| | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V | CZM1JKB0B181 |
| C313 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C314 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C315 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C316 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C317 | | CHIP CERAMIC CAP. CH J 150pF/50V or | CHD1JJ3CH151 |
| | | CHIP CERAMIC CAP. CH J 150pF/50V | CHD1JJBCH151 |
| C318 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C319 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C320 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C321 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--------------|
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C322 | | ELECTROLYTIC CAP. 470μF/10V M or | CE1AMASDL471 |
| | | ELECTROLYTIC CAP. 470μF/10V M | CE1AMASTL471 |
| C323 | | ELECTROLYTIC CAP. 47μF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47μF/25V M | CE1EMASTL470 |
| C324 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C325 | | FILM CAP.(P) 0.22μF/50V J or | CA1J224MS029 |
| | | MYLAR CAP. 0.22μF/50V J or | CMA1JJS00224 |
| | | TF CAP. 0.22μF/50V J | CT1J224MS045 |
| C326 | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C327 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C328 | | FILM CAP.(P) 0.22μF/50V J or | CA1J224MS029 |
| | | MYLAR CAP. 0.22μF/50V J or | CMA1JJS00224 |
| | | TF CAP. 0.22μF/50V J | CT1J224MS045 |
| C330 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C331 | | ELECTROLYTIC CAP. 47μF/10V M or | CE1AMASDL470 |
| | | ELECTROLYTIC CAP. 47μF/10V M | CE1AMASTL470 |
| C332 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C333 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C334 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C336 | | ELECTROLYTIC CAP. 47μF/10V M or | CE1AMASDL470 |
| | | ELECTROLYTIC CAP. 47μF/10V M | CE1AMASTL470 |
| C338 | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V or | CZM1GK30Y102 |
| | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V | CZM1GKB0Y102 |
| C340 | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V or | CZM1JK30B181 |
| | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V | CZM1JKB0B181 |
| C341 | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V or | CZM1CZ30F103 |
| | | CHIP CERAMIC CAP.(MELF) F Z 0.01μF/16V | CZM1CZB0F103 |
| C344 | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V or | CZM1GK30Y102 |
| | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V | CZM1GKB0Y102 |
| C350 | | ELECTROLYTIC CAP. 220μF/10V M or | CE1AMASDL221 |
| | | ELECTROLYTIC CAP. 220μF/10V M | CE1AMASTL221 |
| C401 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--------------|
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C402 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C403 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C404 | | ELECTROLYTIC CAP. 100μF/6.3V H7 | CE0KMAVSL101 |
| C405 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C406 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C407 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C408 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C409 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C410 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C411 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C412 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C413 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C414 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C415 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C416 | | ELECTROLYTIC CAP. 47μF/6.3V M H7 | CE0KMAVSL470 |
| C417 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C418 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C419 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C420 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C421 | | ELECTROLYTIC CAP. 10μF/25V M H7 | CE1EMAVSL100 |
| C424 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|--|--------------|
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C425 | | CHIP CERAMIC CAP. CH J 68pF/50V or | CHD1JJ3CH680 |
| | | CHIP CERAMIC CAP. CH J 68pF/50V | CHD1JJBCH680 |
| C426 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C427 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C430 | | ELECTROLYTIC CAP. 47µF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47µF/25V M | CE1EMASTL470 |
| C431 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C432 | | ELECTROLYTIC CAP. 1µF/50V M H7 | CE1JMAVSL1R0 |
| C433 | | ELECTROLYTIC CAP. 10µF/25V M H7 | CE1EMAVSL100 |
| C434 | | ELECTROLYTIC CAP. 22µF/16V M H7 | CE1CMAVSL220 |
| C435 | | ELECTROLYTIC CAP. 1µF/50V M H7 | CE1JMAVSL1R0 |
| C436 | | CHIP CERAMIC CAP. CH J 120pF/50V or | CHD1JJ3CH121 |
| | | CHIP CERAMIC CAP. CH J 120pF/50V | CHD1JJBCH121 |
| C438 | | CHIP CERAMIC CAP. CH J 220pF/50V or | CHD1JJ3CH221 |
| | | CHIP CERAMIC CAP. CH J 220pF/50V | CHD1JJBCH221 |
| C440 | | ELECTROLYTIC CAP. 1µF/50V M H7 | CE1JMAVSL1R0 |
| C441 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C442 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C443 | | ELECTROLYTIC CAP. 1µF/50V M H7 | CE1JMAVSL1R0 |
| C444 | | CHIP CERAMIC CAP. B K 2200pF/50V or | CHD1JK30B222 |
| | | CHIP CERAMIC CAP. B K 2200pF/50V | CHD1JKB0B222 |
| C445 | | ELECTROLYTIC CAP. 10µF/25V M H7 | CE1EMAVSL100 |
| C452 | | CHIP CERAMIC CAP. CH J 68pF/50V or | CHD1JJ3CH680 |
| | | CHIP CERAMIC CAP. CH J 68pF/50V | CHD1JJBCH680 |
| C681 | | ELECTROLYTIC CAP. 220µF/16V M or | CE1CMASDL221 |
| | | ELECTROLYTIC CAP. 220µF/16V M | CE1CMASTL221 |
| C682 | | ELECTROLYTIC CAP. 220µF/16V M or | CE1CMASDL221 |
| | | ELECTROLYTIC CAP. 220µF/16V M | CE1CMASTL221 |
| C683 | | ELECTROLYTIC CAP. 10µF/50V M or | CE1JMASDL100 |
| | | ELECTROLYTIC CAP. 10µF/50V M | CE1JMASTL100 |
| C684 [△] | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V or | CZM1JK30B181 |
| [△] | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V | CZM1JKB0B181 |
| C687 | | ELECTROLYTIC CAP. 47µF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47µF/25V M | CE1EMASTL470 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|--|---------------|
| C688 | | ELECTROLYTIC CAP. 47µF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47µF/25V M | CE1EMASTL470 |
| C689 | B | ELECTROLYTIC CAP. 470µF/10V M or | CE1AMASDL471 |
| | B | ELECTROLYTIC CAP. 470µF/10V M | CE1AMASTL471 |
| C691 | | ELECTROLYTIC CAP. 2.2µF/50V M or | CE1JMASDL2R2 |
| | | ELECTROLYTIC CAP. 2.2µF/50V M | CE1JMASTL2R2 |
| C694 | | ELECTROLYTIC CAP. 100µF/10V M or | CE1AMASDL101 |
| | | ELECTROLYTIC CAP. 100µF/10V M | CE1AMASTL101 |
| C703 | | ELECTROLYTIC CAP. 4.7µF/50V M or | CE1JMASDL4R7 |
| | | ELECTROLYTIC CAP. 4.7µF/50V M | CE1JMASTL4R7 |
| C707 | | ELECTROLYTIC CAP. 0.22µF/50V M or | CE1JMASDLR22 |
| | | ELECTROLYTIC CAP. 0.22µF/50V M | CE1JMASTLR22 |
| C708 | | ELECTROLYTIC CAP. 0.47µF/50V M or | CE1JMASDLR47 |
| | | ELECTROLYTIC CAP. 0.47µF/50V M | CE1JMASTLR47 |
| C709 | | ELECTROLYTIC CAP. 0.47µF/50V M or | CE1JMASDLR47 |
| | | ELECTROLYTIC CAP. 0.47µF/50V M | CE1JMASTLR47 |
| C710 | | ELECTROLYTIC CAP. 0.47µF/50V M or | CE1JMASDLR47 |
| | | ELECTROLYTIC CAP. 0.47µF/50V M | CE1JMASTLR47 |
| C711 | | ELECTROLYTIC CAP. 470µF/10V M or | CE1AMASDL471 |
| | | ELECTROLYTIC CAP. 470µF/10V M | CE1AMASTL471 |
| C713 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| C715 | | ELECTROLYTIC CAP. 4.7µF/50V M or | CE1JMASDL4R7 |
| | | ELECTROLYTIC CAP. 4.7µF/50V M | CE1JMASTL4R7 |
| C716 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C719 | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL010 |
| | | ELECTROLYTIC CAP. 1µF/50V M or | CE1JMASDL1R0 |
| | | ELECTROLYTIC CAP. 1µF/50V M | CE1JMASTL1R0 |
| C723 | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V or | CZM1GK30Y102 |
| | | CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V | CZM1GKB0Y102 |
| C724 | | ELECTROLYTIC CAP. 47µF/10V M or | CE1AMASDL470 |
| | | ELECTROLYTIC CAP. 47µF/10V M | CE1AMASTL470 |
| C851 | | ELECTROLYTIC CAP. 47µF/6.3V M H7 | CE0KMAVSL470 |
| C855 | | ELECTROLYTIC CAP. 220µF/6.3V M H7 | CE0KMAVSL221 |
| C856 | | CERAMIC CAP. B K 470pF/100V or | CCD2AKS0B471 |
| | | CERAMIC CAP. B K 470pF/500V | CCD2JKS0B471 |
| C857 | | FILM CAP.(P) 0.018µF/50V J or | CA1J183MS029 |
| | | FILM CAP.(P) 0.018µF/100V J | CMA2JMS00183 |
| C858 | | CHIP CERAMIC CAP. B K 2200pF/50V or | CHD1JK30B222 |
| | | CHIP CERAMIC CAP. B K 2200pF/50V | CHD1JKB0B222 |
| C859 | | CHIP CERAMIC CAP.(MELF) SL J 33pF/50V or | CZM1JJ3SL330 |
| | | CHIP CERAMIC CAP.(MELF) SL J 33pF/50V | CZM1JJBLSL330 |
| C860 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| C861 | | CERAMIC CAP.(AX) X M 1800pF/16V | CCA1CMT0X182 |
| C862 | | ELECTROLYTIC CAP. 10µF/25V M H7 | CE1EMAVSL100 |
| C863 | | CHIP CERAMIC CAP.(1608) B K 0.01µF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01µF/50V | CHD1JKB0B103 |
| C864 | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1µF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1µF/50V | CHD1JZB0F104 |
| C865 | | CHIP CERAMIC CAP.(1608) B K 0.022µF/25V or | CHD1EK30B223 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|---|--------------|
| | | CHIP CERAMIC CAP. B K 0.022μF/25V or | CHD1EKB0B223 |
| | | CHIP CERAMIC CAP.(1608) B K 0.022μF/50V or | CHD1JK30B223 |
| | | CHIP CERAMIC CAP. B K 0.022μF/50V | CHD1JKB0B223 |
| C866 | | ELECTROLYTIC CAP. 33μF/10V H7 | CE1AMAVSL330 |
| C867 | | ELECTROLYTIC CAP. 4.7μF/50V M H7 | CE1JMAVSL4R7 |
| C869 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C871 | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V or | CZM1JK30B181 |
| | | CHIP CERAMIC CAP.(MELF) B K 180pF/50V | CZM1JKB0B181 |
| C872 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| C874 | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/25V or | CHD1EZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/25V or | CHD1EZB0F104 |
| | | CHIP CERAMIC CAP.(1608) F Z 0.1μF/50V or | CHD1JZ30F104 |
| | | CHIP CERAMIC CAP. F Z 0.1μF/50V | CHD1JZB0F104 |
| C875 | | CHIP CERAMIC CAP. CH J 220pF/50V or | CHD1JJ3CH221 |
| | | CHIP CERAMIC CAP. CH J 220pF/50V | CHD1JJBCH221 |
| C876 | | CHIP CERAMIC CAP.(1608) B K 0.01μF/50V or | CHD1JK30B103 |
| | | CHIP CERAMIC CAP. B K 0.01μF/50V | CHD1JKB0B103 |
| C877 | | ELECTROLYTIC CAP. 100μF/6.3V H7 | CE0KMAVSL101 |
| CONNECTORS | | | |
| CN151 | B | STRAIGHT PIN HEADER, 2P 173981-2 or | 1770258 |
| | B | STRAIGHT CONNECTOR BASE 00 8283 0212 00 000 | J383C02UG002 |
| CN201 | | FFC/FPC CONNECTOR, 12P 04 6232 112 103 800 | JC62D12TM003 |
| CN303 | | CONNECTOR BASE, 5P TUC-P05P-B1 | J3TUA05TG001 |
| CN804 | A | STRAIGHT PIN HEADER, 2P 173981-2 or | 1770258 |
| | A | STRAIGHT CONNECTOR BASE 00 8283 0212 00 000 | J383C02UG002 |
| DIODES | | | |
| D151 | △ | ZENER DIODE DZ-7.5BSBT265 or | NDTB0DZ7R5BS |
| | △ | ZENER DIODE MTZJT-777.5B | QDTB0MTZJ7R5 |
| D152 | △ | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | △ | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D201 | | LED SIR-563ST3F P or | QPQPS1R563ST |
| | | LED SIR-563ST3F Q | QPQQS1R563ST |
| D202 | | LED(RED) L-1513EC | NPQZ0L1513EC |
| D204 | | LED(RED) L-1513EC | NPQZ0L1513EC |
| D205 | | ZENER DIODE DZ-5.6BSBT265 or | NDTB0DZ5R6BS |
| | | ZENER DIODE MTZJT-775.6B | QDTB0MTZJ5R6 |
| D206 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| D210 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D211 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D212 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D213 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D214 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D302 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D303 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |

| Ref. No. | Mark | Description | Part No. |
|------------|------|--|--------------|
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D304 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D305 | | ZENER DIODE DZ-8.2BSBT265 or | NDTB0DZ8R2BS |
| | | ZENER DIODE MTZJT-778.2B | QDTB0MTZJ8R2 |
| D306 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D401 | △ | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | △ | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D402 | | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| D682 | △ | PCB JUMPER D0.6-P10.0 | JW10.0T |
| D686 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D687 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D688 | △ | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | △ | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D691 | △ | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | △ | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D694 | | ZENER DIODE DZ-15BSBT265 or | NDTB0DZ15BS |
| | | ZENER DIODE MTZJT-7715B | QDTB00MTZJ15 |
| D695 | | ZENER DIODE DZ-6.8BSBT265 or | NDTB0DZ6R8BS |
| | | ZENER DIODE MTZJT-776.8B | QDTB0MTZJ6R8 |
| D696 | | ZENER DIODE DZ-18BSBT265 or | NDTB0DZ18BS |
| | | ZENER DIODE MTZJT-7718B | QDTB00MTZJ18 |
| D697 | | ZENER DIODE DZ-9.1BSBT265 or | NDTB0DZ9R1BS |
| | | ZENER DIODE MTZJT-779.1B | QDTB0MTZJ9R1 |
| D706 | | ZENER DIODE DZ-5.1BSBT265 or | NDTB0DZ5R1BS |
| | | ZENER DIODE MTZJT-775.1B | QDTB0MTZJ5R1 |
| D711 | | ZENER DIODE DZ-5.6BSBT265 or | NDTB0DZ5R6BS |
| | | ZENER DIODE MTZJT-775.6B | QDTB0MTZJ5R6 |
| D712 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D713 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D715 | | SWITCHING DIODE 1N4148 or | NDTZ001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDTZ001SS133 |
| D716 | | ZENER DIODE MTZJT-7715B or | QDTB00MTZJ15 |
| | | ZENER DIODE DZ-15BSBT265 | NDTB0DZ15BS |
| ICS | | | |
| IC151 | △ | AUDIO AMP LA4224 | QSZAA0SSY005 |
| IC201 | △ | MICRO COMPUTER M37762MCA-BB0GP | QSZAA0RHT016 |
| IC202 | △ | IC:MEMORY AT24C04N-10SC or | NSMMA0SAZ013 |
| | △ | IC(EEPROM) M24C04-MN6 or | NSMMA0SSS029 |
| | △ | IC(EEP-ROM) M24C04-WMN6 or | NSZAA0SSS005 |
| | △ | IC:EEPROM CAT24WC04JI or | NSZBA0SBG002 |
| | △ | IC:MEMORY BR24C04F-W or | QSMBA0SRM004 |
| | △ | IC:MEMORY BR24C04F or | QSMMA0SRM004 |
| | △ | IC:EEPROM(4K) BR24L04F-WE2 | QSZBA0TRM066 |
| IC301 | △ | IC:CHROMA/IF 1 CHIP M61209BFP | QSZBA0RMB017 |
| IC401 | △ | IC:Y/C/A LA71750EM-MPB-E | QSZBA0RSY020 |
| IC681 | △ | VOLTAGE REGULATOR KIA7805API or | NSBBA0SJY011 |
| | △ | VOLTAGE REGULATOR KA7805A | NSZBA0SF3052 |
| IC701 | △ | IC:ANALOG MULTIPLEXERS CD4053BCS.JX or | NSZBA0TF3071 |
| | △ | IC:ANALOG MULTIPLEXER CD4053BNSR or | NSZBA0TTY093 |
| | △ | IC:SWITCH TC4053BF(N) | QSMBA0STS002 |
| IC703 | △ | IC:ANALOG MULTIPLEXERS CD4053BCS.JX or | NSZBA0TF3071 |
| | △ | IC:ANALOG MULTIPLEXER CD4053BNSR or | NSZBA0TTY093 |

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|---|--|
| △ | | IC:SWITCH TC4053BF(N) | QSMBA0STS002 |
| COILS | | | |
| L001 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| L151 | | INDUCTOR 1.8μH-J-26T or INDUCTOR 1.8μH-K-26T | LLAXJATTU1R8 LLAXKDTKA1R8 |
| L152 | | INDUCTOR 1.0μH-J-26T or INDUCTOR 1.0μH-K-26T | LLAXJATTU010 LLAXKDTKA1R0 |
| L201 | | INDUCTOR 0.10μH-K-26T or INDUCTOR 0.1μH-M-26T | LLAXKATTUR10 LLAXMDTKAR10 |
| L302 | | INDUCTOR 33μH-J-26T or INDUCTOR 33μH-K-26T | LLAXJATTU330 LLAXKDTKA330 |
| L303 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L304 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L305 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| L401 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| L402 | | INDUCTOR 33μH-J-26T or INDUCTOR 33μH-K-26T | LLAXJATTU330 LLAXKDTKA330 |
| L403 | | INDUCTOR 100μH-J-26T or INDUCTOR 100μH-K-26T | LLAXJATTU101 LLAXKDTKA101 |
| L681 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L682 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L701 | | INDUCTOR 12μH-J-26T or INDUCTOR 12μH-K-26T | LLAXJATTU120 LLAXKDTKA120 |
| L702 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| L852 | | INDUCTOR 47μH-K-5FT or INDUCTOR 47μH-K-5FT | LLARKBSTU470 LLARKDSKA470 |
| L854 | | INDUCTOR 0.22μH-K-26T or INDUCTOR 0.22μH-M-26T | LLAXKATTUR22 LLAXMDTKAR22 |
| TRANSISTORS | | | |
| Q204 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q205 | | PHOTO TRANSISTOR MID-32A22F or PHOTO TRANSISTOR PT204-6B-12 | NPWZ1D32A22F NPWZT2046B12 |
| Q206 | | RES. BUILT-IN TRANSISTOR 2SA1346 or RES. BUILT-IN TRANSISTOR KRA103M or RES. BUILT-IN TRANSISTOR BN1F4M-T | 2SA1346Z NQSZ0KRA103M QQSZ00BN1F4M |
| Q401 | | TRANSISTOR KTA1267(GR) or TRANSISTOR KTA1266(GR) or TRANSISTOR 2SA1015-GR(TPE2) or TRANSISTOR 2SA1175(F) | NQS10KTA1267 NQS40KTA1266 QQS102SA1015 QQSF02SA1175 |
| Q682 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q684 | | TRANSISTOR KTC3203(Y) or TRANSISTOR 2SC2120-O-TPE2 or TRANSISTOR 2SC2120-Y(TPE2) | NQSY0KTC3203 QQS002SC2120 QQSY02SC2120 |
| Q685△ | | TRANSISTOR KTC3199(GR) or △ TRANSISTOR KTC3198(GR) or △ TRANSISTOR 2SC1815-GR(TPE2) or △ TRANSISTOR 2SC2785(F) or △ TRANSISTOR 2SC2785(H) or △ TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q686△ | | TRANSISTOR KTC2026Y or | NQWY0KTC2026 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--|
| △ | | TRANSISTOR 2SD1913(R) | Q2SD1913R*** |
| Q701 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q702 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q703 | | TRANSISTOR KTA1267(GR) or TRANSISTOR KTA1266(GR) or TRANSISTOR 2SA1015-GR(TPE2) or TRANSISTOR 2SA1175(F) | NQS10KTA1267 NQS40KTA1266 QQS102SA1015 QQSF02SA1175 |
| Q704 | | RES. BUILT-IN TRANSISTOR 2SA1346 or RES. BUILT-IN TRANSISTOR KRA103M or RES. BUILT-IN TRANSISTOR BN1F4M-T | 2SA1346Z NQSZ0KRA103M QQSZ00BN1F4M |
| Q705 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| Q706 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q707 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q708 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q709 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q710 | | TRANSISTOR KTC3199(GR) or TRANSISTOR KTC3198(GR) or TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC2785(F) or TRANSISTOR 2SC2785(H) or TRANSISTOR 2SC2785(J) | NQS10KTC3199 NQS40KTC3198 QQS102SC1815 QQSF02SC2785 QQSH02SC2785 QQSJ02SC2785 |
| Q711 | | TRANSISTOR KTA1267(GR) or TRANSISTOR KTA1266(GR) or TRANSISTOR 2SA1015-GR(TPE2) or TRANSISTOR 2SA1175(F) | NQS10KTA1267 NQS40KTA1266 QQS102SA1015 QQSF02SA1175 |
| Q851 | | RES. BUILT-IN TRANSISTOR 2SA1346 or RES. BUILT-IN TRANSISTOR KRA103M or RES. BUILT-IN TRANSISTOR BN1F4M-T | 2SA1346Z NQSZ0KRA103M QQSZ00BN1F4M |
| Q852 | | TRANSISTOR 2SC1815-GR(TPE2) or TRANSISTOR 2SC3331(T) or TRANSISTOR 2SC3331(U) | QQS102SC1815 QSC3331TNPAA QSC3331UNPAA |

| Ref. No. | Mark | Description | Part No. |
|------------------|------|---------------------------------------|--------------|
| Q853 | | TRANSISTOR 2SC1815-GR(TPE2) or | QQS102SC1815 |
| | | TRANSISTOR 2SC3331(T) or | QSC3331TNPAA |
| | | TRANSISTOR 2SC3331(U) | QSC3331UNPAA |
| Q854 | | TRANSISTOR KTA1267(GR) or | NQS10KTA1267 |
| | | TRANSISTOR KTA1266(GR) or | NQS40KTA1266 |
| | | TRANSISTOR 2SA1015-GR(TPE2) or | QQS102SA1015 |
| | | TRANSISTOR 2SA1175(F) | QQSF02SA1175 |
| Q855 | | TRANSISTOR KTC3203(Y) or | NQSY0KTC3203 |
| | | TRANSISTOR 2SC2120-O-TPE2 or | QQS002SC2120 |
| | | TRANSISTOR 2SC2120-Y(TPE2) | QQSY02SC2120 |
| Q856 | | TRANSISTOR KTC3199(GR) or | NQS10KTC3199 |
| | | TRANSISTOR KTC3198(GR) or | NQS40KTC3198 |
| | | TRANSISTOR 2SC1815-GR(TPE2) or | QQS102SC1815 |
| | | TRANSISTOR 2SC2785(F) or | QQSF02SC2785 |
| | | TRANSISTOR 2SC2785(H) or | QQSH02SC2785 |
| | | TRANSISTOR 2SC2785(J) | QQS02SC2785 |
| RESISTORS | | | |
| R003 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R004 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R151 | △ | METAL OXIDE FILM RES. 1W J 12 Ω or | RN01JZLZ0120 |
| △ | | FIXED METAL OXIDE FILM RES. 1W J 12 Ω | RN01JZPZ0120 |
| R152 | △ | CHIP RES.(1608) 1/10W J 5.6k Ω or | RRXAJB5Z0562 |
| △ | | CHIP RES.(1608) 1/10W J 5.6k Ω | RRXAJR5Z0562 |
| R153 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R154 | | CHIP RES.(1608) 1/10W J 5.6k Ω or | RRXAJB5Z0562 |
| | | CHIP RES.(1608) 1/10W J 5.6k Ω | RRXAJR5Z0562 |
| R155 | | CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| R156 | | CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| R157 | | CARBON RES. 1/4W J 10 Ω | RCX4JATZ0100 |
| R201 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R202 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R203 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R204 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R205 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R206 | | CHIP RES.(1608) 1/10W J 390k Ω or | RRXAJB5Z0394 |
| | | CHIP RES.(1608) 1/10W J 390k Ω | RRXAJR5Z0394 |
| R207 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R208 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R209 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R210 | | CARBON RES. 1/4W G 4.7k Ω or | RCX4GATZ0472 |
| | | CARBON RES. 1/6W G 4.7k Ω | RCX6GATZ0472 |
| R211 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R212 | | CHIP RES.(1608) 1/10W J 2.7k Ω or | RRXAJB5Z0272 |
| | | CHIP RES.(1608) 1/10W J 2.7k Ω | RRXAJR5Z0272 |
| R213 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R214 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R215 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R216 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R217 | | CHIP RES.(1608) 1/10W J 2.7k Ω or | RRXAJB5Z0272 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|-----------------------------------|--------------|
| | | CHIP RES.(1608) 1/10W J 2.7k Ω | RRXAJR5Z0272 |
| R218 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R219 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R220 | | CHIP RES.(1608) 1/10W J 390k Ω or | RRXAJB5Z0394 |
| | | CHIP RES.(1608) 1/10W J 390k Ω | RRXAJR5Z0394 |
| R221 | | CARBON RES. 1/4W J 270 Ω | RCX4JATZ0271 |
| R222 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R223 | | CHIP RES.(1608) 1/10W J 680 Ω or | RRXAJB5Z0681 |
| | | CHIP RES.(1608) 1/10W J 680 Ω | RRXAJR5Z0681 |
| R224 | | CHIP RES.(1608) 1/10W J 680 Ω or | RRXAJB5Z0681 |
| | | CHIP RES.(1608) 1/10W J 680 Ω | RRXAJR5Z0681 |
| R226 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R227 | | CHIP RES.(1608) 1/10W J 47 Ω or | RRXAJB5Z0470 |
| | | CHIP RES.(1608) 1/10W J 47 Ω | RRXAJR5Z0470 |
| R228 | | CHIP RES.(1608) 1/10W J 100k Ω or | RRXAJB5Z0104 |
| | | CHIP RES.(1608) 1/10W J 100k Ω | RRXAJR5Z0104 |
| R229 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R230 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R231 | | CHIP RES.(1608) 1/10W J 330k Ω or | RRXAJB5Z0334 |
| | | CHIP RES.(1608) 1/10W J 330k Ω | RRXAJR5Z0334 |
| R232 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R233 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R234 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R235 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R236 | | CHIP RES.(1608) 1/10W J 470 Ω or | RRXAJB5Z0471 |
| | | CHIP RES.(1608) 1/10W J 470 Ω | RRXAJR5Z0471 |
| R237 | | CHIP RES.(1608) 1/10W J 1M Ω or | RRXAJB5Z0105 |
| | | CHIP RES.(1608) 1/10W J 1M Ω | RRXAJR5Z0105 |
| R238 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R239 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R240 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R241 | | CHIP RES.(1608) 1/10W J 220 Ω or | RRXAJB5Z0221 |
| | | CHIP RES.(1608) 1/10W J 220 Ω | RRXAJR5Z0221 |
| R242 | | CHIP RES.(1608) 1/10W J 220 Ω or | RRXAJB5Z0221 |
| | | CHIP RES.(1608) 1/10W J 220 Ω | RRXAJR5Z0221 |
| R243 | | CHIP RES.(1608) 1/10W J 39k Ω or | RRXAJB5Z0393 |
| | | CHIP RES.(1608) 1/10W J 39k Ω | RRXAJR5Z0393 |
| R244 | | CHIP RES.(1608) 1/10W J 220k Ω or | RRXAJB5Z0224 |
| | | CHIP RES.(1608) 1/10W J 220k Ω | RRXAJR5Z0224 |
| R248 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R249 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R250 | | CHIP RES.(1608) 1/10W J 33k Ω or | RRXAJB5Z0333 |
| | | CHIP RES.(1608) 1/10W J 33k Ω | RRXAJR5Z0333 |
| R254 | | CHIP RES.(1608) 1/10W J 100k Ω or | RRXAJB5Z0104 |
| | | CHIP RES.(1608) 1/10W J 100k Ω | RRXAJR5Z0104 |
| R255 | | CHIP RES.(1608) 1/10W J 680 Ω or | RRXAJB5Z0681 |
| | | CHIP RES.(1608) 1/10W J 680 Ω | RRXAJR5Z0681 |
| R256 | | CHIP RES.(1608) 1/10W J 1.8k Ω or | RRXAJB5Z0182 |
| | | CHIP RES.(1608) 1/10W J 1.8k Ω | RRXAJR5Z0182 |
| R257 | | CARBON RES. 1/4W J 6.8k Ω | RCX4JATZ0682 |
| R258 | | CARBON RES. 1/4W J 47k Ω | RCX4JATZ0473 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|-----------------------------------|--------------|
| R259 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R260 | | CARBON RES. 1/4W G 1.5k Ω or | RCX4GATZ0152 |
| | | CARBON RES. 1/6W G 1.5k Ω | RCX6GATZ0152 |
| R261 | | CARBON RES. 1/4W G 22k Ω or | RCX4GATZ0223 |
| | | CARBON RES. 1/6W G 22k Ω | RCX6GATZ0223 |
| R262 | | CARBON RES. 1/4W G 470 Ω or | RCX4GATZ0471 |
| | | CARBON RES. 1/6W G 470 Ω | RCX6GATZ0471 |
| R263 | | CARBON RES. 1/4W G 10k Ω or | RCX4GATZ0103 |
| | | CARBON RES. 1/6W G 10k Ω | RCX6GATZ0103 |
| R264 | | CARBON RES. 1/4W G 3.6k Ω or | RCX4GATZ0362 |
| | | CARBON RES. 1/6W G 3.6k Ω | RCX6GATZ0362 |
| R265 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R266 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R267 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R268 | | CHIP RES.(1608) 1/10W J 3.3k Ω or | RRXAJB5Z0332 |
| | | CHIP RES.(1608) 1/10W J 3.3k Ω | RRXAJR5Z0332 |
| R269 | | CHIP RES.(1608) 1/10W J 3.3k Ω or | RRXAJB5Z0332 |
| | | CHIP RES.(1608) 1/10W J 3.3k Ω | RRXAJR5Z0332 |
| R270 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R271 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R272 | | CHIP RES.(1608) 1/10W J 18k Ω or | RRXAJB5Z0183 |
| | | CHIP RES.(1608) 1/10W J 18k Ω | RRXAJR5Z0183 |
| R273 | | CHIP RES.(1608) 1/10W J 18k Ω or | RRXAJB5Z0183 |
| | | CHIP RES.(1608) 1/10W J 18k Ω | RRXAJR5Z0183 |
| R274 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R275 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R276 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R277 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R278 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R279 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R280 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R281 | | CHIP RES.(1608) 1/10W J 3.3k Ω or | RRXAJB5Z0332 |
| | | CHIP RES.(1608) 1/10W J 3.3k Ω | RRXAJR5Z0332 |
| R282 | | CARBON RES. 1/4W J 330 Ω | RCX4JATZ0331 |
| R288 | | CHIP RES.(1608) 1/10W J 10 Ω or | RRXAJB5Z0100 |
| | | CHIP RES.(1608) 1/10W J 10 Ω | RRXAJR5Z0100 |
| R289 | | CHIP RES.(1608) 1/10W J 10 Ω or | RRXAJB5Z0100 |
| | | CHIP RES.(1608) 1/10W J 10 Ω | RRXAJR5Z0100 |
| R301 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R302 | | CHIP RES.(1608) 1/10W J 8.2k Ω or | RRXAJB5Z0822 |
| | | CHIP RES.(1608) 1/10W J 8.2k Ω | RRXAJR5Z0822 |
| R303 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R304 | A | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | A | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R304 | B | CHIP RES.(1608) 1/10W J 1.8k Ω or | RRXAJB5Z0182 |
| | B | CHIP RES.(1608) 1/10W J 1.8k Ω | RRXAJR5Z0182 |
| R305 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R306 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|-----------------------------------|--------------|
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R307 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R308 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R309 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R310 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R311 | | CARBON RES. 1/4W J 12 Ω | RCX4JATZ0120 |
| R312 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R313 | | CHIP RES.(1608) 1/10W J 220k Ω or | RRXAJB5Z0224 |
| | | CHIP RES.(1608) 1/10W J 220k Ω | RRXAJR5Z0224 |
| R314 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R315 | | CHIP RES.(1608) 1/10W J 150k Ω or | RRXAJB5Z0154 |
| | | CHIP RES.(1608) 1/10W J 150k Ω | RRXAJR5Z0154 |
| R316 | | CARBON RES. 1/4W J 15k Ω | RCX4JATZ0153 |
| R317 | | CARBON RES. 1/4W J 220k Ω | RCX4JATZ0224 |
| R318 | | CHIP RES.(1608) 1/10W J 6.8k Ω or | RRXAJB5Z0682 |
| | | CHIP RES.(1608) 1/10W J 6.8k Ω | RRXAJR5Z0682 |
| R320 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R321 | | CHIP RES.(1608) 1/10W J 220 Ω or | RRXAJB5Z0221 |
| | | CHIP RES.(1608) 1/10W J 220 Ω | RRXAJR5Z0221 |
| R322 | | CHIP RES.(1608) 1/10W J 3.3k Ω or | RRXAJB5Z0332 |
| | | CHIP RES.(1608) 1/10W J 3.3k Ω | RRXAJR5Z0332 |
| R323 | | CHIP RES.(1608) 1/10W J 15k Ω or | RRXAJB5Z0153 |
| | | CHIP RES.(1608) 1/10W J 15k Ω | RRXAJR5Z0153 |
| R324 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R325 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R326 | | CHIP RES.(1608) 1/10W J 6.8k Ω or | RRXAJB5Z0682 |
| | | CHIP RES.(1608) 1/10W J 6.8k Ω | RRXAJR5Z0682 |
| R327 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R332 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R333 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R334 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R335 | | CARBON RES. 1/4W J 100 Ω | RCX4JATZ0101 |
| R336 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R339 | | CHIP RES.(1608) 1/10W 0 Ω or | RRXAZB5Z0000 |
| | | CHIP RES.(1608) 1/10W 0 Ω | RRXAZR5Z0000 |
| R340 | | CHIP RES.(1608) 1/10W 0 Ω or | RRXAZB5Z0000 |
| | | CHIP RES.(1608) 1/10W 0 Ω | RRXAZR5Z0000 |
| R401 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R402 | | CHIP RES.(1608) 1/10W J 8.2k Ω or | RRXAJB5Z0822 |
| | | CHIP RES.(1608) 1/10W J 8.2k Ω | RRXAJR5Z0822 |
| R405 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R406 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R407 | | CHIP RES.(1608) 1/10W J 390k Ω or | RRXAJB5Z0394 |
| | | CHIP RES.(1608) 1/10W J 390k Ω | RRXAJR5Z0394 |
| R408 | | CHIP RES.(1608) 1/10W J 330 Ω or | RRXAJB5Z0331 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|-------------------------------------|--------------|
| | | CHIP RES.(1608) 1/10W J 330 Ω | RRXAJR5Z0331 |
| R409 | | CHIP RES.(1608) 1/10W J 330 Ω or | RRXAJB5Z0331 |
| | | CHIP RES.(1608) 1/10W J 330 Ω | RRXAJR5Z0331 |
| R410 | | CHIP RES.(1608) 1/10W J 220 Ω or | RRXAJB5Z0221 |
| | | CHIP RES.(1608) 1/10W J 220 Ω | RRXAJR5Z0221 |
| R411 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R412 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R413 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R414 | | CHIP RES.(1608) 1/10W J 6.8k Ω or | RRXAJB5Z0682 |
| | | CHIP RES.(1608) 1/10W J 6.8k Ω | RRXAJR5Z0682 |
| R415 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R416 | | CHIP RES.(1608) 1/10W J 1.2k Ω or | RRXAJB5Z0122 |
| | | CHIP RES.(1608) 1/10W J 1.2k Ω | RRXAJR5Z0122 |
| R418 | | CHIP RES.(1608) 1/10W J 56k Ω or | RRXAJB5Z0563 |
| | | CHIP RES.(1608) 1/10W J 56k Ω | RRXAJR5Z0563 |
| R420 | | CHIP RES.(1608) 1/10W J 1.5k Ω or | RRXAJB5Z0152 |
| | | CHIP RES.(1608) 1/10W J 1.5k Ω | RRXAJR5Z0152 |
| R422 | | CHIP RES.(1608) 1/10W J 120 Ω or | RRXAJB5Z0121 |
| | | CHIP RES.(1608) 1/10W J 120 Ω | RRXAJR5Z0121 |
| R423 | | CHIP RES.(1608) 1/10W J 47 Ω or | RRXAJB5Z0470 |
| | | CHIP RES.(1608) 1/10W J 47 Ω | RRXAJR5Z0470 |
| R424 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R425 | | CHIP RES.(1608) 1/10W 0 Ω or | RRXAZB5Z0000 |
| | | CHIP RES.(1608) 1/10W 0 Ω | RRXAZR5Z0000 |
| R426 | | CHIP RES.(1608) 1/10W 0 Ω or | RRXAZB5Z0000 |
| | | CHIP RES.(1608) 1/10W 0 Ω | RRXAZR5Z0000 |
| R683 | | METAL OXIDE FILM RES. 1W J 2.2 Ω or | RN012R2DP003 |
| | | METAL OXIDE FILM RES. 1W J 2.2 Ω | RN012R2ZU001 |
| R684 | | CHIP RES.(1608) 1/10W J 10 Ω or | RRXAJB5Z0100 |
| | | CHIP RES.(1608) 1/10W J 10 Ω | RRXAJR5Z0100 |
| R685 | | CARBON RES. 1/4W J 6.8k Ω | RCX4JATZ0682 |
| R686 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R689 [△] | | CARBON RES. 1/4W J 82 Ω | RCX4JATZ0820 |
| R690 [△] | | CARBON RES. 1/4W J 82 Ω | RCX4JATZ0820 |
| R691 [△] | | CARBON RES. 1/4W J 2.7 Ω | RCX4JATZ02R7 |
| R692 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R693 [△] | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| [△] | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R694 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R695 [△] | | CARBON RES. 1/4W J 2.7 Ω | RCX4JATZ02R7 |
| R696 [△] | | METAL OXIDE FILM RES. 1W J 2.2 Ω or | RN012R2DP003 |
| [△] | | METAL OXIDE FILM RES. 1W J 2.2 Ω | RN012R2ZU001 |
| R697 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R698 | | CHIP RES.(1608) 1/10W J 8.2k Ω or | RRXAJB5Z0822 |
| | | CHIP RES.(1608) 1/10W J 8.2k Ω | RRXAJR5Z0822 |
| R701 | | CHIP RES.(1608) 1/10W J 75 Ω or | RRXAJB5Z0750 |
| | | CHIP RES.(1608) 1/10W J 75 Ω | RRXAJR5Z0750 |
| R702 | | CHIP RES.(1608) 1/10W J 3.3k Ω or | RRXAJB5Z0332 |
| | | CHIP RES.(1608) 1/10W J 3.3k Ω | RRXAJR5Z0332 |
| R703 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R704 | | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R707 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|-----------------------------------|--------------|
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R709 | | CHIP RES.(1608) 1/10W J 75 Ω or | RRXAJB5Z0750 |
| | | CHIP RES.(1608) 1/10W J 75 Ω | RRXAJR5Z0750 |
| R710 | | CHIP RES.(1608) 1/10W J 33k Ω or | RRXAJB5Z0333 |
| | | CHIP RES.(1608) 1/10W J 33k Ω | RRXAJR5Z0333 |
| R711 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R712 | | CARBON RES. 1/4W J 4.7k Ω | RCX4JATZ0472 |
| R714 | | CHIP RES.(1608) 1/10W J 75 Ω or | RRXAJB5Z0750 |
| | | CHIP RES.(1608) 1/10W J 75 Ω | RRXAJR5Z0750 |
| R723 | | CHIP RES.(1608) 1/10W J 75 Ω or | RRXAJB5Z0750 |
| | | CHIP RES.(1608) 1/10W J 75 Ω | RRXAJR5Z0750 |
| R724 | | CHIP RES.(1608) 1/10W J 33k Ω or | RRXAJB5Z0333 |
| | | CHIP RES.(1608) 1/10W J 33k Ω | RRXAJR5Z0333 |
| R725 | | CARBON RES. 1/4W J 75 Ω | RCX4JATZ0750 |
| R726 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R727 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R728 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R729 | | CHIP RES.(1608) 1/10W J 47k Ω or | RRXAJB5Z0473 |
| | | CHIP RES.(1608) 1/10W J 47k Ω | RRXAJR5Z0473 |
| R730 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R731 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R732 | | CARBON RES. 1/4W J 75 Ω | RCX4JATZ0750 |
| R733 | | CARBON RES. 1/4W J 390 Ω | RCX4JATZ0391 |
| R737 | | CHIP RES.(1608) 1/10W J 75 Ω or | RRXAJB5Z0750 |
| | | CHIP RES.(1608) 1/10W J 75 Ω | RRXAJR5Z0750 |
| R738 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R739 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R740 | | CHIP RES.(1608) 1/10W J 33k Ω or | RRXAJB5Z0333 |
| | | CHIP RES.(1608) 1/10W J 33k Ω | RRXAJR5Z0333 |
| R741 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R742 | | CHIP RES.(1608) 1/10W J 47k Ω or | RRXAJB5Z0473 |
| | | CHIP RES.(1608) 1/10W J 47k Ω | RRXAJR5Z0473 |
| R743 | | CHIP RES.(1608) 1/10W J 6.2k Ω or | RRXAJB5Z0622 |
| | | CHIP RES.(1608) 1/10W J 6.2k Ω | RRXAJR5Z0622 |
| R744 | | CHIP RES.(1608) 1/10W J 47k Ω or | RRXAJB5Z0473 |
| | | CHIP RES.(1608) 1/10W J 47k Ω | RRXAJR5Z0473 |
| R745 | | CHIP RES.(1608) 1/10W J 6.2k Ω or | RRXAJB5Z0622 |
| | | CHIP RES.(1608) 1/10W J 6.2k Ω | RRXAJR5Z0622 |
| R746 | | CHIP RES.(1608) 1/10W J 47k Ω or | RRXAJB5Z0473 |
| | | CHIP RES.(1608) 1/10W J 47k Ω | RRXAJR5Z0473 |
| R747 | | CHIP RES.(1608) 1/10W J 6.2k Ω or | RRXAJB5Z0622 |
| | | CHIP RES.(1608) 1/10W J 6.2k Ω | RRXAJR5Z0622 |
| R748 | A | CHIP RES.(1608) 1/10W J 1.8k Ω or | RRXAJB5Z0182 |
| | A | CHIP RES.(1608) 1/10W J 1.8k Ω | RRXAJR5Z0182 |
| R748 | B | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | B | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R749 | | CHIP RES.(1608) 1/10W J 10k Ω or | RRXAJB5Z0103 |
| | | CHIP RES.(1608) 1/10W J 10k Ω | RRXAJR5Z0103 |
| R751 | A | CHIP RES.(1608) 1/10W J 1.8k Ω or | RRXAJB5Z0182 |
| | A | CHIP RES.(1608) 1/10W J 1.8k Ω | RRXAJR5Z0182 |
| R751 | B | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | B | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |

| Ref. No. | Mark | Description | Part No. |
|-----------------|------|-----------------------------------|--------------|
| R752 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R753 | A | CARBON RES. 1/4W J 1.8k Ω | RCX4JATZ0182 |
| R753 | B | CARBON RES. 1/4W J 2.2k Ω | RCX4JATZ0222 |
| R754 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R755 | | CHIP RES.(1608) 1/10W J 470 Ω or | RRXAJB5Z0471 |
| | | CHIP RES.(1608) 1/10W J 470 Ω | RRXAJR5Z0471 |
| R756 | | CHIP RES.(1608) 1/10W J 1k Ω or | RRXAJB5Z0102 |
| | | CHIP RES.(1608) 1/10W J 1k Ω | RRXAJR5Z0102 |
| R757 | | CHIP RES.(1608) 1/10W J 1M Ω or | RRXAJB5Z0105 |
| | | CHIP RES.(1608) 1/10W J 1M Ω | RRXAJR5Z0105 |
| R851 | | CHIP RES.(1608) 1/10W J 5.6k Ω or | RRXAJB5Z0562 |
| | | CHIP RES.(1608) 1/10W J 5.6k Ω | RRXAJR5Z0562 |
| R852 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R853 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R854 | | CHIP RES.(1608) 1/10W J 2.2k Ω or | RRXAJB5Z0222 |
| | | CHIP RES.(1608) 1/10W J 2.2k Ω | RRXAJR5Z0222 |
| R856 | | CARBON RES. 1/4W J 47k Ω | RCX4JATZ0473 |
| R857 | | CARBON RES. 1/4W J 100 Ω | RCX4JATZ0101 |
| R858 | | CARBON RES. 1/4W J 820 Ω | RCX4JATZ0821 |
| R859 | | CHIP RES.(1608) 1/10W J 680 Ω or | RRXAJB5Z0681 |
| | | CHIP RES.(1608) 1/10W J 680 Ω | RRXAJR5Z0681 |
| R860 | | CHIP RES.(1608) 1/10W J 22k Ω or | RRXAJB5Z0223 |
| | | CHIP RES.(1608) 1/10W J 22k Ω | RRXAJR5Z0223 |
| R861 | | CHIP RES.(1608) 1/10W J 330k Ω or | RRXAJB5Z0334 |
| | | CHIP RES.(1608) 1/10W J 330k Ω | RRXAJR5Z0334 |
| R862 | | CHIP RES.(1608) 1/10W J 12k Ω or | RRXAJB5Z0123 |
| | | CHIP RES.(1608) 1/10W J 12k Ω | RRXAJR5Z0123 |
| R863 | | CHIP RES.(1608) 1/10W J 120 Ω or | RRXAJB5Z0121 |
| | | CHIP RES.(1608) 1/10W J 120 Ω | RRXAJR5Z0121 |
| R864 | | CHIP RES.(1608) 1/10W J 560 Ω or | RRXAJB5Z0561 |
| | | CHIP RES.(1608) 1/10W J 560 Ω | RRXAJR5Z0561 |
| R865 | | CHIP RES.(1608) 1/10W J 1.8k Ω or | RRXAJB5Z0182 |
| | | CHIP RES.(1608) 1/10W J 1.8k Ω | RRXAJR5Z0182 |
| R866 | | CHIP RES.(1608) 1/10W J 12k Ω or | RRXAJB5Z0123 |
| | | CHIP RES.(1608) 1/10W J 12k Ω | RRXAJR5Z0123 |
| R867 | | CHIP RES.(1608) 1/10W J 100 Ω or | RRXAJB5Z0101 |
| | | CHIP RES.(1608) 1/10W J 100 Ω | RRXAJR5Z0101 |
| R869 | | CHIP RES.(1608) 1/10W J 2.7k Ω or | RRXAJB5Z0272 |
| | | CHIP RES.(1608) 1/10W J 2.7k Ω | RRXAJR5Z0272 |
| R870 | | CHIP RES.(1608) 1/10W J 56k Ω or | RRXAJB5Z0563 |
| | | CHIP RES.(1608) 1/10W J 56k Ω | RRXAJR5Z0563 |
| R871 | | CHIP RES.(1608) 1/10W J 1M Ω or | RRXAJB5Z0105 |
| | | CHIP RES.(1608) 1/10W J 1M Ω | RRXAJR5Z0105 |
| R874 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R876 | | CHIP RES.(1608) 1/10W J 4.7k Ω or | RRXAJB5Z0472 |
| | | CHIP RES.(1608) 1/10W J 4.7k Ω | RRXAJR5Z0472 |
| R877 | | CHIP RES.(1608) 1/10W J 15k Ω or | RRXAJB5Z0153 |
| | | CHIP RES.(1608) 1/10W J 15k Ω | RRXAJR5Z0153 |
| R878 | | CHIP RES.(1608) 1/10W J 12k Ω or | RRXAJB5Z0123 |
| | | CHIP RES.(1608) 1/10W J 12k Ω | RRXAJR5Z0123 |
| R879 | | CHIP RES.(1608) 1/10W J 5.6k Ω or | RRXAJB5Z0562 |
| | | CHIP RES.(1608) 1/10W J 5.6k Ω | RRXAJR5Z0562 |
| R884 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| SWITCHES | | | |
| SW201 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |

| Ref. No. | Mark | Description | Part No. |
|----------------------|------|---------------------------------------|--------------|
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW202 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW203 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW204 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW205 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW206 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW207 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW208 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW209 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW210 | | TACT SWITCH SKQNAED010 or | SST0101AL055 |
| | | TACTILE SWITCH KSHG612BT | SST0101HH027 |
| SW211 | | LEAF SWITCH LSA-1142-2AU or | SSC0101KB014 |
| | | LEAF SWITCH MXS00052MPP0 or | SSC0101MCE01 |
| | | LEAF SWITCH MXS00981MPP0 | SSC0101MCE02 |
| SW212 | | ROTARY MODE SWITCH SSS-50MD or | SSR0106KB002 |
| | | ROTARY MODE SWITCH R8100245 | SSR0106U3002 |
| MISCELLANEOUS | | | |
| CL301A | A | LEAD WIRE 4P/300 | WX1T6300-102 |
| CL301A | B | LEAD WIRE 4P/450 | WX1T6500-104 |
| CL302A | A | LEAD WIRE 7P/190 | WX1T6450-103 |
| CL302A | B | LEAD WIRE 7P/280 | WX1T6700-102 |
| CL603A | | LEAD WIRE 12P/190 | WX1T6450-102 |
| CL604 | | WIRE ASSEMBLY 1P/45 | WX1T6400-001 |
| RS201 | | REMOTE RECEIVER PIC-37042LU | USESJRSKK033 |
| JK151 | | HEADPHONE JACK MSJ-035-10A B or | JYSL020LY002 |
| | | HEADPHONE JACK DP3-26-7-001 | JYSL020RP001 |
| JK701 | A | RCA JACK(YELLOW) MSP-281V4-B or | JXRL010LY003 |
| | A | RCA JACK(YELLOW) AV1-15-3 | JXRL010RP013 |
| JK701 | B | RCA JACK(YELLOW) MTJ-032-05B-20 or | JXRL010LY038 |
| | B | RCA JACK 1P:YELLOW DA1-05A3N0S001 | JXRL010RP036 |
| JK702 | A | RCA JACK(WHITE) MSP-281V1-B or | JXRL010LY005 |
| | A | RCA JACK(WHITE) AV1-15-4 | JXRL010RP014 |
| JK702 | B | RCA JACK(WHITE) MTJ-032-05B-22 or | JXRL010LY039 |
| | B | RCA JACK 1P : WHITE DA1-05A4N0S001 | JXRL010RP037 |
| JK703 | | SKIRT JACK 21P MRC-021-02 or | JXGL210LY001 |
| | | SKIRT JACK 21P MRC-021V-02 3.4 ABS or | JXGL210LY005 |
| | | SKIRT JACK 21P HRC-21V-02P or | JXGL210RP001 |
| | | SKIRT JACK 21P DSS1020NPC001 | JXGL210RP002 |
| TB3 | | HEAD SHIELD S T6400RA | 0EM301753 |
| TB7 | | LED HOLDER T6400RA | 0EM407754 |
| TB21 | | BUSH, LED(F) H3700UD | 0VM409508 |
| TP001 | | PCB JUMPER D0.6-P12.5 | JW12.5T |
| TP002 | | PCB JUMPER D0.6-P12.5 | JW12.5T |
| TP003 | | PCB JUMPER D0.6-P12.5 | JW12.5T |
| TP007 | | PCB JUMPER D0.6-P10.0 | JW10.0T |
| TP008 | | PCB JUMPER D0.6-P12.5 | JW12.5T |
| TP009 | | PCB JUMPER D0.6-P12.5 | JW12.5T |
| TP010 | | PCB JUMPER D0.6-P22.5 | JW22.5T |
| TU001 | | TUNER UNIT TMQ22-303A | UTUNPLGAL013 |
| X201 | | X'TAL 32.768kHz(20PPM) or | FXC323LCT001 |
| | | X'TAL 32.768kHz(20PPM) or | FXC323LDS002 |
| | | X'TAL 32.768kHz(20PPM) or | FXC323LJNY01 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|-----------------------|--------------|
| | | XTAL 32.768kHz(20PPM) | FXC323LQUA01 |
| X202 | | XTAL 12.000MHz | FXD126LDS001 |
| X301 | | XTAL 4.433619MHz or | FXB445LCH01 |
| | | XTAL 4.433619MHz or | FXB445LDS002 |
| | | XTAL 4.433619MHz | FXB445LNL001 |
| X401 | | XTAL 4.433619MHz or | 1811388 |
| | | XTAL 4.433619MHz | FXC445LLN001 |

JUNCTION A CBA

| Ref. No. | Mark | Description | Part No. |
|------------------|------|---|--------------|
| | | JUNCTION A CBA Consists of the following | ----- |
| CONNECTOR | | | |
| CN603 | | CONNECTOR 12P TUC-P12X-B1 | JCTUS12TG001 |

JUNCTION B CBA

| Ref. No. | Mark | Description | Part No. |
|------------------|------|---|--------------|
| | | JUNCTION B CBA Consists of the following | ----- |
| CONNECTOR | | | |
| CN302 | | CONNECTOR, 7P TUC-P07X-B1 | JCTUS07TG001 |

JUNCTION C CBA

| Ref. No. | Mark | Description | Part No. |
|------------------|------|---|--------------|
| | | JUNCTION C CBA Consists of the following | ----- |
| CONNECTOR | | | |
| CN301 | | CONNECTOR 4P TUC-P04X-B1 | JCTUS04TG001 |

SENSOR CBA

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|---|--------------|
| | | SENSOR CBA Consists of the following | 0ESA06133 |
| TRANSISTORS | | | |
| Q201 | | PHOTO TRANSISTOR MID-32A22F or | NPWZ1D32A22F |
| | | PHOTO TRANSISTOR PT204-6B-12 | NPWZT2046B12 |
| Q202 | | PHOTO TRANSISTOR MID-32A22F or | NPWZ1D32A22F |
| | | PHOTO TRANSISTOR PT204-6B-12 | NPWZT2046B12 |

POWER CBA

| Ref. No. | Mark | Description | Part No. |
|----------|------|---------------------------|-----------|
| | A | POWER CBA | 0ESA06011 |
| | B | POWER CBA | 0ESA06024 |
| | | Consists of the following | ----- |
| | | H.V./POWER SUPPLY CBA | ----- |
| | | CRT CBA | ----- |

H.V./POWER SUPPLY CBA

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|--|--------------|
| | | H.V./POWER SUPPLY CBA Consists of the following | ----- |
| CAPACITORS | | | |
| C551 | A | ELECTROLYTIC CAP. 2.2μF/50V LL or | CE1JMASLH2R2 |
| | A | ELECTROLYTIC CAP. 2.2μF/50V M LL | CE1JMASLL2R2 |
| C551 | B | ELECTROLYTIC CAP. 1.5μF/50V LL or | CE1JMASLH1R5 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|--|--------------|
| | B | ELECTROLYTIC CAP. 1.5μF/50V M LL | CE1JMASL1R5 |
| C552 | | ELECTROLYTIC CAP. 1000μF/25V M or | CE1EMZPDL102 |
| | | ELECTROLYTIC CAP. 1000μF/25V M | CE1EMZPTL102 |
| C553 | | CERAMIC CAP.(AX) B K 0.01μF/50V | CA1J103TU011 |
| C554 | A | ELECTROLYTIC CAP. 220μF/25V M or | CE1EMASDL221 |
| | A | ELECTROLYTIC CAP. 220μF/25V M | CE1EMASTL221 |
| C554 | B | ELECTROLYTIC CAP. 330μF/25V M or | CE1EMASDL331 |
| | B | ELECTROLYTIC CAP. 330μF/25V M | CE1EMASTL331 |
| C555 | | ELECTROLYTIC CAP. 47μF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47μF/25V M | CE1EMASTL470 |
| C556 | | ELECTROLYTIC CAP. 2.2μF/50V M or | CE1JMASDL2R2 |
| | | ELECTROLYTIC CAP. 2.2μF/50V M | CE1JMASTL2R2 |
| C558 | | FILM CAP.(P) 0.047μF/50V J or | CA1J473MS029 |
| | | FILM CAP.(P) 0.047μF/50V J | CMA1JJS00473 |
| C559 [△] | B | CERAMIC CAP. 1000pF/2KV or | CA3D102PAN04 |
| [△] | B | CERAMIC CAP RB 1000pF/2KV or | CA3D102TE006 |
| [△] | B | CERAMIC CAP. BN 1000pF/2KV or | CCD3DKA0B102 |
| [△] | B | CERAMIC CAP. R K 1000pF/2KV | CCD3DKA0R102 |
| C560 [△] | A | P.P. CAP 0.0082μF/1.6K J or | CA3C822VC010 |
| [△] | A | PP CAP. 0.0082μF/1.6KV J or | CBH3CJQ00822 |
| [△] | A | METALLIZED FILM CAP. 0.0082μF/1.6KV J or | CT3C822F7004 |
| [△] | A | PP CAP. 0.0082μF/1.6KV J | CT3C822MS039 |
| C560 [△] | B | P.P. CAP 0.01μF/1.6K J or | CA3C103VC010 |
| [△] | B | PP CAP. 0.01μF/1.6KV J or | CBH3CJQ00103 |
| [△] | B | METALLIZED FILM CAP. 0.01μF/1.6KV J or | CT3C103F7004 |
| [△] | B | PP CAP. 0.01μF/1.6KV J | CT3C103MS039 |
| C561 | | FILM CAP.(P) 0.01μF/50V J or | CA1J103MS029 |
| | | FILM CAP.(P) 0.01μF/50V J | CMA1JJS00103 |
| C562 | | ELECTROLYTIC CAP. 47μF/25V M or | CE1EMASDL470 |
| | | ELECTROLYTIC CAP. 47μF/25V M | CE1EMASTL470 |
| C565 [△] | A | ELECTROLYTIC CAP. 47μF/160V M W/F or | CE2CMZPDL470 |
| [△] | A | ELECTROLYTIC CAP. 47μF/160V M | CE2CMZPTL470 |
| C565 [△] | B | ELECTROLYTIC CAP. 100μF/160V M or | CE2CMZPDL101 |
| [△] | B | ELECTROLYTIC CAP. 100μF/160V M | CE2CMZPTL101 |
| C566 [△] | B | PCB JUMPER D0.6-P10.0 | JW10.0T |
| C567 | | ELECTROLYTIC CAP. 1μF/160V M or | CE2CMASDL1R0 |
| | | ELECTROLYTIC CAP. 1μF/160V M | CE2CMASTL010 |
| C569 [△] | | ELECTROLYTIC CAP. 4.7μF/250V M | CE2EMASDL4R7 |
| C570 [△] | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL010 |
| [△] | | ELECTROLYTIC CAP. 1μF/50V M or | CE1JMASDL1R0 |
| [△] | | ELECTROLYTIC CAP. 1μF/50V M | CE1JMASTL1R0 |
| C572 [△] | A | ELECTROLYTIC CAP. 22μF/50V M or | CE1JMASDL220 |
| [△] | A | ELECTROLYTIC CAP. 22μF/50V M | CE1JMASTL220 |
| C572 [△] | B | ELECTROLYTIC CAP. 10μF/50V M or | CE1JMASDL100 |
| [△] | B | ELECTROLYTIC CAP. 10μF/50V M | CE1JMASTL100 |
| C575 [△] | A | P.P. CAP 0.33μF/200V J or | CA2D334VC013 |
| [△] | A | METALLIZED FILM CAP. 0.33μF/200V J or | CT2D334F7003 |
| [△] | A | PP CAP. 0.33μF/250V J | CT2E334MS041 |
| C575 [△] | B | P.P. CAP 0.56μF/200V J or | CA2D564VC013 |
| [△] | B | METALLIZED FILM CAP. 0.56μF/200V J or | CT2D564F7003 |
| [△] | B | PP CAP. 0.56μF/250V J | CT2E564MS041 |
| C602 [△] | | SAFETY CAP. 2200pF/250V KX | CA2E222MR050 |
| C604 [△] | | FILM CAP.(MP) 0.1μF/250V K or | CT2E104DC011 |
| [△] | | LINE ACROSS CAP. 0.1U/275V or | CT2E104DC016 |
| [△] | | METALLIZED FILM CAP. 0.1μF/275V K or | CT2E104HJE06 |
| [△] | | METALLIZED FILM CAP. 0.1μF/250V | CT2E104MS037 |
| C611 | A | ELECTROLYTIC CAP. 100μF/400V M or | CA2H101S6016 |
| | A | ELECTROLYTIC CAP. 100μF/400V M | CE2HMZPTL101 |
| C611 | B | ELECTROLYTIC CAP. 150μF/400V(LQ TYPE) | CA2H151NC050 |

| Ref. No. | Mark | Description | Part No. |
|-------------------|------|---|--|
| C613 | | FILM CAP.(P) 0.039µF/50V J or FILM CAP.(P) 0.039µF/50V J | CA1J393MS029 CMA1JJS00393 |
| C614 | A | FILM CAP.(P) 0.0012µF/50V J or FILM CAP.(P) 0.0012µF/50V J | CA1J122MS029 CMA1JJS00122 |
| C614 | B | FILM CAP.(P) 0.001µF/50V J or FILM CAP.(P) 0.001µF/50V J | CA1J102MS029 CMA1JJS00102 |
| C615 | A | FILM CAP.(P) 0.068µF/50V J or FILM CAP.(P) 0.068µF/50V J | CA1J683MS029 CMA1JJS00683 |
| C615 | B | FILM CAP.(P) 0.082µF/50V J or FILM CAP.(P) 0.082µF/50V J | CA1J823MS029 CMA1JJS00823 |
| C616 | | CERAMIC CAP. 220pF/2KV or CERAMIC CAP. RB 220pF/2KV or CERAMIC CAP. BN J 220pF/2KV or CERAMIC CAP. R K 220pF/2KV(HR) | CA3D221PAN04 CA3D221TE006 CCD3DKA0B221 CCD3DKA0R221 |
| C618 | | ELECTROLYTIC CAP. 1µF/50V M or ELECTROLYTIC CAP. 1µF/50V M or ELECTROLYTIC CAP. 1µF/50V M | CE1JMASDL010 CE1JMASDL1R0 CE1JMASTL1R0 |
| C619 | | ELECTROLYTIC CAP. 1000µF/16V M or ELECTROLYTIC CAP. 1000µF/16V M | CE1CMZPDL102 CE1CMZPTL102 |
| C621 | | ELECTROLYTIC CAP. 470µF/16V M or ELECTROLYTIC CAP. 470µF/16V M | CE1CMASDL471 CE1CMASTL471 |
| C622 | | ELECTROLYTIC CAP. 1000µF/16V M or ELECTROLYTIC CAP. 1000µF/16V M | CE1CMZPDL102 CE1CMZPTL102 |
| C624 | A | CERAMIC CAP.(AX) SL J 68pF/50V | CCA1JJS0680 |
| C624 | B | CERAMIC CAP.(AX) B J 220pF/50V | CCA1JJS0221 |
| C625 | | ELECTROLYTIC CAP. 470µF/35V M or ELECTROLYTIC CAP. 470µF/35V M | CE1GMZPDL471 CE1GMZPTL471 |
| C626 | | CERAMIC CAP. 680pF/2KV or CERAMIC CAP. RB 680pF/2KV or CERAMIC CAP. BN 680pF/2KV or CERAMIC CAP. R K 680pF/2KV(HR) | CA3D681PAN04 CA3D681TE006 CCD3DKA0B681 CCD3DKA0R681 |
| C627 | | ELECTROLYTIC CAP. 100µF/160V M or ELECTROLYTIC CAP. 100µF/160V M | CE2CMZPDL101 CE2CMZPTL101 |
| C629 | | CERAMIC CAP.(AX) B K 0.01µF/50V | CA1J103TU011 |
| C630 | | ELECTROLYTIC CAP. 1000µF/6.3V M or ELECTROLYTIC CAP. 1000µF/6.3V M | CE0KMASDL102 CE0KMASTL102 |
| C632 | | ELECTROLYTIC CAP. 100µF/16V M or ELECTROLYTIC CAP. 100µF/16V M | CE1CMASDL101 CE1CMASTL101 |
| C633 | | ELECTROLYTIC CAP. 47µF/25V M or ELECTROLYTIC CAP. 47µF/25V M | CE1EMASDL470 CE1EMASTL470 |
| C634 | | ELECTROLYTIC CAP. 4.7µF/50V M or ELECTROLYTIC CAP. 4.7µF/50V M | CE1JMASDL4R7 CE1JMASTL4R7 |
| C636 | | ELECTROLYTIC CAP. 100µF/10V M or ELECTROLYTIC CAP. 100µF/10V M | CE1AMASDL101 CE1AMASTL101 |
| CONNECTORS | | | |
| CN551 | | CONNECTOR BASE, 5P RTB-1.5-5P or CONNECTOR BASE, 5P TV-50P-05-V3 | J3RTC05JG001 J3TVC05TG002 |
| CN552 | | CONNECTOR BASE, 7P TUC-P07P-B1 | J3TUA07TG001 |
| CN601 | | CONNECTOR BASE, 2P RTB-1.5-2P or CONNECTOR BASE, 2P TV-50P-02-V3 | J3RTC02JG001 J3TVC02TG002 |
| CN602 | | CONNECTOR BASE 12P TUC-P12P-B1 | J3TUA12TG001 |
| DIODES | | | |
| D551 | | DIODE 1N5397-B or RECTIFIER DIODE ERB12-06 | NDLZ001N5397 QDQZ0ERB1206 |
| D553 | A | ZENER DIODE DZ-20BSBT265 or ZENER DIODE MTZJT-7720B | NDTB00DZ20BS QDTB00MTZJ20 |
| D553 | B | ZENER DIODE DZ-18BSCT265 or ZENER DIODE MTZJT-7718C | NDTC00DZ18BS QDTC00MTZJ18 |
| D554 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |

| Ref. No. | Mark | Description | Part No. |
|----------|------|---|--|
| D555 | A | PCB JUMPER D0.6-P12.5 | JW12.5T |
| D556 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D557 | | DIODE FR104-B or RECTIFIER DIODE ERA22-02 or RECTIFIER DIODE 10ELS2 | NDLZ000FR104 QDPZ0ERA2202 QDQZ0010ELS2 |
| D558 | | DIODE FR104-B or RECTIFIER DIODE ERA22-02 or RECTIFIER DIODE 10ELS2 | NDLZ000FR104 QDPZ0ERA2202 QDQZ0010ELS2 |
| D560 | | ZENER DIODE DZ-36BSBT265 or ZENER DIODE MTZJT-7736B | NDTB00DZ36BS QDTB00MTZJ36 |
| D562 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D563 | | ZENER DIODE DZ-5.1BSBT265 or ZENER DIODE MTZJT-775.1B | NDTB0DZ5R1BS QDTB0MTZJ5R1 |
| D565 | A | ZENER DIODE DZ-36BSAT265 or ZENER DIODE MTZJT-7736A | NDTA00DZ36BS QDTA00MTZJ36 |
| D601 | | DIODE 1N5399-B/P | NDLZ001N5399 |
| D602 | | DIODE 1N5399-B/P | NDLZ001N5399 |
| D603 | | DIODE 1N5399-B/P | NDLZ001N5399 |
| D604 | | DIODE 1N5399-B/P | NDLZ001N5399 |
| D605 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D609 | | ZENER DIODE DZ-5.6BSBT265 or ZENER DIODE MTZJT-775.6B | NDTB0DZ5R6BS QDTB0MTZJ5R6 |
| D610 | | ZENER DIODE DZ-24BSCT265 or ZENER DIODE MTZJT-7724C | NDTC00DZ24BS QDTC00MTZJ24 |
| D612 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D615 | | DIODE FR104-B or RECTIFIER DIODE ERA22-02 or RECTIFIER DIODE 10ELS2 | NDLZ000FR104 QDPZ0ERA2202 QDQZ0010ELS2 |
| D616 | A | ZENER DIODE DZ-22BSBT265 or ZENER DIODE MTZJT-7722B | NDTB00DZ22BS QDTB00MTZJ22 |
| D616 | B | ZENER DIODE DZ-20BSBT265 or ZENER DIODE MTZJT-7720B | NDTB00DZ20BS QDTB00MTZJ20 |
| D617 | | SCHOTTKY BARRIER DIODE 11EQS04 or SCHOTTKY BARRIER DIODE ERA81-004 | QD4Z011EQS04 QDPZERA81004 |
| D618 | | SCHOTTKY BARRIER DIODE 11EQS04 or SCHOTTKY BARRIER DIODE ERA81-004 | QD4Z011EQS04 QDPZERA81004 |
| D619 | | SCHOTTKY BARRIER DIODE ERB81-004 or SCHOTTKY BARRIER DIODE 21DQ04 | AERB81004*** QDQZ0021DQ04 |
| D620 | | DIODE FR104-B or RECTIFIER DIODE ERA22-02 or RECTIFIER DIODE 10ELS2 | NDLZ000FR104 QDPZ0ERA2202 QDQZ0010ELS2 |
| D622 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D623 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D624 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D625 | | ZENER DIODE DZ-6.8BSBT265 or ZENER DIODE MTZJT-776.8B | NDTB0DZ6R8BS QDTB0MTZJ6R8 |
| D626 | | FAST RECOVERY DIODE CA201-4 or RECOVERY DIODE ERC18-04 | QDWZ00CA2014 QDZZ0ERC1804 |
| D627 | | SWITCHING DIODE 1N4148 or SWITCHING DIODE 1SS133(T-77) | NDTZ001N4148 QDTZ001SS133 |
| D629 | | ZENER DIODE DZ-33BSCT265 or ZENER DIODE MTZJT-7733C | NDTC00DZ33BS QDTC00MTZJ33 |

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|--------------------------------|--------------|
| D630 | | SWITCHING DIODE 1N4148 or | NDT001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDT001SS133 |
| D631 | | ZENER DIODE DZ-6.2BSCT265 or | NDTC0DZ6R2BS |
| | | ZENER DIODE MTZJT-776.2C | QDTC0MTZJ6R2 |
| D634 | | CARBON RES. 1/4W J 100 Ω | RCX4JATZ0101 |
| D635 | | ZENER DIODE DZ-8.2BSBT265 or | NDTB0DZ8R2BS |
| | | ZENER DIODE MTZJT-778.2B | QDTB0MTZJ8R2 |
| D636 | △ | SWITCHING DIODE 1N4148 or | NDT001N4148 |
| △ | | SWITCHING DIODE 1SS133(T-77) | QDT001SS133 |
| D637 | | SWITCHING DIODE 1N4148 or | NDT001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDT001SS133 |
| D638 | | SWITCHING DIODE 1N4148 or | NDT001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDT001SS133 |
| D641 | | ZENER DIODE DZ-15BSBT265 or | NDTB0DZ15BS |
| | | ZENER DIODE MTZJT-7715B | QDTB00MTZJ15 |
| D642 | | SWITCHING DIODE 1N4148 or | NDT001N4148 |
| | | SWITCHING DIODE 1SS133(T-77) | QDT001SS133 |
| ICS | | | |
| IC551 | △ | VERTICAL OUTPUT IC LA78040A | QSBBA0SSY003 |
| IC601 | △ | PHOTOCOUPLER PS2561L1-1-VL or | QPEL2561L11V |
| △ | | PHOTOCOUPLER PS2561L1-1-VV | QPEW2561L11V |
| COILS | | | |
| L552 | A | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L552 | B | LINEALITY COIL ELH5J6137N | LLBD00PMS009 |
| L553 | △ | CHOKE COIL 22μH-K | LLBD00PKV006 |
| L554 | △ | PCB JUMPER D0.6-P7.5 | JW7.5T |
| L601 | △ | A LINE FILTER LF-048 or | LLBG00ZKV008 |
| △ | A | LINE FILTER ELF15N005A | LLBG00ZMS039 |
| L601 | △ | B LINE FILTER 10MH LF-046 or | LLBG00ZKV006 |
| △ | B | LINE FILTER ELF15N007A | LLBG00ZMS041 |
| L602 | △ | B LINE FILTER 10MH LF-046 or | LLBG00ZKV006 |
| △ | B | LINE FILTER ELF15N007A | LLBG00ZMS041 |
| L603 | | CHOKE COIL 47μH-K or | LLBD00PKV005 |
| | | CHOKE COIL 47μH-K | LLBD00PKV007 |
| TRANSISTORS | | | |
| Q551 | △ | A TRANSISTOR TT2084LS-YB11 or | QQZZ00TT2084 |
| △ | A | TRANSISTOR TT2138LS-YB11 or | QQZZ00TT2138 |
| △ | A | TRANSISTOR 2SC5884000RF | QQZZ02SC5884 |
| Q551 | △ | B TRANSISTOR TT2140LS-YB11 or | QQZZ00TT2140 |
| △ | B | TRANSISTOR 2SC5885000RF or | QQZZ02SC5885 |
| △ | B | TRANSISTOR 2SD2627LS-FEC-YB11 | QQZZ02SD2627 |
| Q553 | | TRANSISTOR 2SC1627Y-TPE2 | QQSY02SC1627 |
| Q554 | △ | TRANSISTOR KTC3199(GR) or | NQS10KTC3199 |
| △ | | TRANSISTOR KTC3198(GR) or | NQS40KTC3198 |
| △ | | TRANSISTOR 2SC1815-GR(TPE2) or | QQS102SC1815 |
| △ | | TRANSISTOR 2SC2785(F) or | QQSF02SC2785 |
| △ | | TRANSISTOR 2SC2785(H) or | QQSH02SC2785 |
| △ | | TRANSISTOR 2SC2785(J) | QQSJ02SC2785 |
| Q602 | △ | MOS FET 2SK2647 | QFWZ02SK2647 |
| Q603 | △ | TRANSISTOR KTC3203(Y) or | NQSY0KTC3203 |
| △ | | TRANSISTOR 2SC2120-O-TPE2 or | QQS002SC2120 |
| △ | | TRANSISTOR 2SC2120-Y(TPE2) | QQSY02SC2120 |
| Q604 | △ | TRANSISTOR KTC3199(GR) or | NQS10KTC3199 |
| △ | | TRANSISTOR KTC3198(GR) or | NQS40KTC3198 |
| △ | | TRANSISTOR 2SC1815-GR(TPE2) or | QQS102SC1815 |
| △ | | TRANSISTOR 2SC2785(F) or | QQSF02SC2785 |
| △ | | TRANSISTOR 2SC2785(H) or | QQSH02SC2785 |
| △ | | TRANSISTOR 2SC2785(J) | QQSJ02SC2785 |
| Q605 | | TRANSISTOR KTA1271(Y) or | NQSY0KTA1271 |
| | | TRANSISTOR 2SA950(O) or | Q2SA9500TPE2 |

| Ref. No. | Mark | Description | Part No. |
|------------------|------|---------------------------------------|--------------|
| | | TRANSISTOR 2SA950(Y) | Q2SA950YTPE2 |
| Q606 | △ | TRANSISTOR KTC3203(Y) or | NQSY0KTC3203 |
| △ | | TRANSISTOR 2SC2120-O-TPE2 or | QQS002SC2120 |
| △ | | TRANSISTOR 2SC2120-Y(TPE2) | QQSY02SC2120 |
| Q607 | △ | TRANSISTOR KTC3203(Y) or | NQSY0KTC3203 |
| △ | | TRANSISTOR 2SC2120-O-TPE2 or | QQS002SC2120 |
| △ | | TRANSISTOR 2SC2120-Y(TPE2) | QQSY02SC2120 |
| Q608 | | TRANSISTOR KTC3199(GR) or | NQS10KTC3199 |
| | | TRANSISTOR KTC3198(GR) or | NQS40KTC3198 |
| | | TRANSISTOR 2SC1815-GR(TPE2) or | QQS102SC1815 |
| | | TRANSISTOR 2SC2785(F) or | QQSF02SC2785 |
| | | TRANSISTOR 2SC2785(H) or | QQSH02SC2785 |
| | | TRANSISTOR 2SC2785(J) | QQSJ02SC2785 |
| RESISTORS | | | |
| R550 | △ | CARBON RES. 1/4W J 680k Ω | RCX4JATZ0684 |
| R551 | A | CARBON RES. 1/4W J 8.2k Ω | RCX4JATZ0822 |
| R551 | B | CARBON RES. 1/4W J 18k Ω | RCX4JATZ0183 |
| R552 | A | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R552 | B | CARBON RES. 1/4W J 1.8k Ω | RCX4JATZ0182 |
| R553 | A | CARBON RES. 1/4W J 22k Ω | RCX4JATZ0223 |
| R553 | B | CARBON RES. 1/4W J 39k Ω | RCX4JATZ0393 |
| R554 | △ | A CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R554 | △ | B PCB JUMPER D0.6-P5.0 | JW5.0T |
| R555 | A | CARBON RES. 1/4W J 8.2 Ω | RCX4JATZ08R2 |
| R555 | B | CARBON RES. 1/4W J 4.7 Ω | RCX4JATZ04R7 |
| R556 | A | CARBON RES. 1/4W J 8.2 Ω | RCX4JATZ08R2 |
| R556 | B | CARBON RES. 1/4W J 4.7 Ω | RCX4JATZ04R7 |
| R557 | A | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R558 | △ | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R559 | △ | A CARBON RES. 1/4W J 1 Ω | RCX4JATZ01R0 |
| R559 | △ | B PCB JUMPER D0.6-P5.0 | JW5.0T |
| R560 | △ | CARBON RES. 1/4W J 1 Ω | RCX4JATZ01R0 |
| R561 | △ | A CARBON RES. 1/4W J 2.2 Ω | RCX4JATZ02R2 |
| R561 | △ | B CARBON RES. 1/4W J 3.3 Ω | RCX4JATZ03R3 |
| R564 | △ | A CARBON RES. 1/4W J 6.8k Ω | RCX4JATZ0682 |
| R564 | △ | B CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R565 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R566 | A | CARBON RES. 1/4W J 470 Ω | RCX4JATZ0471 |
| R566 | B | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R567 | B | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R568 | | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R569 | A | CARBON RES. 1/4W J 270 Ω | RCX4JATZ0271 |
| R569 | B | CARBON RES. 1/4W J 470 Ω | RCX4JATZ0471 |
| R572 | A | CARBON RES. 1/4W J 390 Ω | RCX4JATZ0391 |
| R572 | B | CARBON RES. 1/4W J 560 Ω | RCX4JATZ0561 |
| R574 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R575 | B | METAL OXIDE FILM RES. 1W J 1k Ω or | RN01102DP003 |
| | B | METAL OXIDE FILM RES. 1W J 1k Ω | RN01102ZU001 |
| R576 | △ | A CARBON RES. 1/4W J 39 Ω | RCX4JATZ0390 |
| R576 | △ | B CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| R577 | △ | A METAL OXIDE FILM RES. 2W J 560 Ω or | RN02561DP004 |
| △ | A | METAL OXIDE FILM RES. 2W J 560 Ω | RN02561ZU001 |
| R578 | △ | A CARBON RES. 1/4W J 39 Ω | RCX4JATZ0390 |
| R578 | △ | B CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| R579 | △ | CARBON RES. 1/4W J 100k Ω | RCX4JATZ0104 |
| R580 | △ | A CARBON RES. 1/4W J 39 Ω | RCX4JATZ0390 |
| R580 | △ | B CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| R581 | A | CARBON RES. 1/4W J 100k Ω | RCX4JATZ0104 |
| R581 | B | CARBON RES. 1/4W J 82k Ω | RCX4JATZ0823 |
| R583 | | PCB JUMPER D0.6-P5.0 | JW5.0T |

| Ref. No. | Mark | Description | Part No. |
|----------|------|--------------------------------------|--------------|
| R584 | | CARBON RES. 1/4W J 1k Ω | RCX4JATZ0102 |
| R585 | A | CARBON RES. 1/4W J 180k Ω | RCX4JATZ0184 |
| R585 | B | CARBON RES. 1/4W J 150k Ω | RCX4JATZ0154 |
| R586 | A | CARBON RES. 1/4W J 68k Ω | RCX4JATZ0683 |
| R586 | B | CARBON RES. 1/4W J 56k Ω | RCX4JATZ0563 |
| R587 | A | CARBON RES. 1/4W J 56k Ω | RCX4JATZ0563 |
| R587 | B | CARBON RES. 1/4W J 47k Ω | RCX4JATZ0473 |
| R588 | | CARBON RES. 1/4W J 22k Ω | RCX4JATZ0223 |
| R589 | | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R590 | A | METAL OXIDE FILM RES. 2W J 2.2 Ω or | RN022R2DP004 |
| | A | METAL OXIDE FILM RES. 2W J 2.2 Ω | RN022R2ZU001 |
| R590 | B | METAL OXIDE FILM RES. 2W J 1.8 Ω or | RN021R8DP004 |
| | B | METAL OXIDE FILM RES. 2W J 1.8 Ω | RN021R8ZU001 |
| R591 | | CARBON RES. 1/4W J 22k Ω | RCX4JATZ0223 |
| R592 | | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R593 | | CARBON RES. 1/4W J 8.2k Ω | RCX4JATZ0822 |
| R594 | A | CARBON RES. 1/4W J 2.2k Ω | RCX4JATZ0222 |
| R594 | B | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R595 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R596 | A | CARBON RES. 1/4W J 8.2 Ω | RCX4JATZ08R2 |
| R596 | B | CARBON RES. 1/4W J 4.7 Ω | RCX4JATZ04R7 |
| R597 | A | CARBON RES. 1/4W J 220k Ω | RCX4JATZ0224 |
| R598 | A | CARBON RES. 1/4W J 56k Ω | RCX4JATZ0563 |
| R601 | | CARBON RES. 1/2W J 3.3M Ω or | RCX2335DP001 |
| | | CARBON RES. 1/2W K 3.3M Ω or | RCX2335FS001 |
| | | ANTI-SURGE RESISTOR 1/2W J 3.3M Ω or | RMX2335KA011 |
| | | GLASS GLAZE RES. 1/2W J 3.3M Ω | RXX2JZLZ0335 |
| R604 | | CEMENT RESISTOR 5W J 1.8 Ω or | RW051R8PAK10 |
| | | CEMENT RES. 5W K 1.8 Ω or | RW051R8DP005 |
| | | CEMENT RESISTOR 5W K 1.8 Ω | RW051R8PG001 |
| R605 | A | CARBON RES. 1/4W J 56 Ω | RCX4JATZ0560 |
| R605 | B | CARBON RES. 1/4W J 100 Ω | RCX4JATZ0101 |
| R611 | | CARBON RES. 1/4W J 220 Ω | RCX4JATZ0221 |
| R612 | A | CARBON RES. 1/4W J 220 Ω | RCX4JATZ0221 |
| R612 | B | CARBON RES. 1/4W J 180 Ω | RCX4JATZ0181 |
| R613 | A | CARBON RES. 1/4W J 390k Ω | RCX4JATZ0394 |
| R613 | B | CARBON RES. 1/4W J 270k Ω | RCX4JATZ0274 |
| R615 | A | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R615 | B | CARBON RES. 1/4W J 1.2k Ω | RCX4JATZ0122 |
| R616 | | CARBON RES. 1/4W J 22 Ω | RCX4JATZ0220 |
| R617 | A | CEMENT RESISTOR 5W J 0.68 Ω or | RW05R68PAK10 |
| | A | CEMENT RES. 5W K 0.68 Ω or | RW05R68DP005 |
| | A | CEMENT RESISTOR 5W K 0.68 Ω | RW05R68PG001 |
| R617 | B | CEMENT RESISTOR 5W J 0.56 Ω or | RW05R56PAK10 |
| | B | CEMENT RES. 5W K 0.56 Ω or | RW05R56DP005 |
| | B | CEMENT RES. 5W K 0.56 Ω | RW05R56PG001 |
| R618 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R619 | | CARBON RES. 1/4W J 1.2k Ω | RCX4JATZ0122 |
| R620 | | CARBON RES. 1/4W J 820k Ω | RCX4JATZ0824 |
| R621 | | CARBON RES. 1/4W J 560k Ω | RCX4JATZ0564 |
| R622 | | CARBON RES. 1/4W J 680k Ω | RCX4JATZ0684 |
| R624 | | CARBON RES. 1/4W J 680k Ω | RCX4JATZ0684 |
| R626 | | CARBON RES. 1/4W J 1.2k Ω | RCX4JATZ0122 |
| R627 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R628 | | CARBON RES. 1/4W J 820 Ω | RCX4JATZ0821 |
| R629 | B | CARBON RES. 1/2W J 1k Ω or | RCX2102KA013 |
| | B | CARBON RES. 1/2W J 1k Ω | RCX2JZQZ0102 |
| R631 | | CARBON RES. 1/4W J 33k Ω | RCX4JATZ0333 |
| R632 | | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R633 | | CARBON RES. 1/4W J 15k Ω | RCX4JATZ0153 |

| Ref. No. | Mark | Description | Part No. |
|----------------------|------|--------------------------------------|--------------|
| R634 | | CARBON RES. 1/4W J 15k Ω | RCX4JATZ0153 |
| R635 | | CARBON RES. 1/4W J 180 Ω | RCX4JATZ0181 |
| R636 | | CARBON RES. 1/4W G 1k Ω or | RCX4GATZ0102 |
| | | CARBON RES. 1/6W G 1k Ω | RCX6GATZ0102 |
| R637 | | CARBON RES. 1/4W G 5.6k Ω or | RCX4GATZ0562 |
| | | CARBON RES. 1/6W G 5.6k Ω | RCX6GATZ0562 |
| R638 | A | CARBON RES. 1/4W G 39k Ω or | RCX4GATZ0393 |
| | A | CARBON RES. 1/6W G 39k Ω | RCX6GATZ0393 |
| R638 | B | CARBON RES. 1/4W G 47k Ω or | RCX4GATZ0473 |
| | B | CARBON RES. 1/6W G 47k Ω | RCX6GATZ0473 |
| R639 | | CARBON RES. 1/4W G 39k Ω or | RCX4GATZ0393 |
| | | CARBON RES. 1/6W G 39k Ω | RCX6GATZ0393 |
| R640 | A | CARBON RES. 1/4W J 2.7k Ω | RCX4JATZ0272 |
| R640 | B | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R641 | | METAL OXIDE FILM RES. 1W J 1k Ω or | RN01102DP003 |
| | | METAL OXIDE FILM RES. 1W J 1k Ω | RN01102ZU001 |
| R642 | | CARBON RES. 1/4W J 10k Ω | RCX4JATZ0103 |
| R643 | A | CARBON RES. 1/4W J 2.7k Ω | RCX4JATZ0272 |
| R643 | B | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R644 | A | CARBON RES. 1/4W J 2.7k Ω | RCX4JATZ0272 |
| R644 | B | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R645 | | CARBON RES. 1/4W J 56k Ω | RCX4JATZ0563 |
| R646 | | CARBON RES. 1/4W J 15 Ω | RCX4JATZ0150 |
| R647 | A | CARBON RES. 1/4W J 2.7k Ω | RCX4JATZ0272 |
| R647 | B | CARBON RES. 1/4W J 3.3k Ω | RCX4JATZ0332 |
| R649 | | CARBON RES. 1/4W J 390 Ω | RCX4JATZ0391 |
| R651 | | CARBON RES. 1/4W J 100 Ω | RCX4JATZ0101 |
| R652 | | PCB JUMPER D0.6-P15.0 | JW15.0T |
| R653 | | CARBON RES. 1/4W J 150 Ω | RCX4JATZ0151 |
| R654 | | CARBON RES. 1/4W J 2.2k Ω | RCX4JATZ0222 |
| R655 | | CARBON RES. 1/4W J 5.6k Ω | RCX4JATZ0562 |
| R656 | | CARBON RES. 1/4W J 47k Ω | RCX4JATZ0473 |
| R657 | | CARBON RES. 1/4W J 220 Ω | RCX4JATZ0221 |
| R658 | A | METAL OXIDE FILM RES. 2W J 10k Ω or | RN02103DP004 |
| | A | METAL OXIDE FILM RES. 2W J 10k Ω | RN02103ZU001 |
| R658 | B | METAL OXIDE FILM RES. 2W J 8.2k Ω or | RN02822DP004 |
| | B | METAL OXIDE FILM RES. 2W J 8.2k Ω | RN02822ZU001 |
| R659 | A | METAL OXIDE FILM RES. 2W J 10k Ω or | RN02103DP004 |
| | A | METAL OXIDE FILM RES. 2W J 10k Ω | RN02103ZU001 |
| R659 | B | METAL OXIDE FILM RES. 2W J 8.2k Ω or | RN02822DP004 |
| | B | METAL OXIDE FILM RES. 2W J 8.2k Ω | RN02822ZU001 |
| R660 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R661 | | CARBON RES. 1/4W J 1.8k Ω | RCX4JATZ0182 |
| R662 | | CARBON RES. 1/4W J 820k Ω | RCX4JATZ0824 |
| R663 | | CARBON RES. 1/4W J 47 Ω | RCX4JATZ0470 |
| SWITCHES | | | |
| SW601 | A | POWER SWITCH AAPY2211 or | SPP0AAZMS003 |
| | A | POWER SWITCH SDKVA30100 | SPP0AZZAL001 |
| SW602 | B | POWER SWITCH AAPY2211 or | SPP0AAZMS003 |
| | B | POWER SWITCH SDKVA30100 | SPP0AZZAL001 |
| MISCELLANEOUS | | | |
| BC551 | | BEAD INDUCTORS FBA04HA600VB-00 | LLBF00STU026 |
| BC602 | | BEAD INDUCTORS FBR07HA121TB-00 | LLBF00ZTU021 |
| BC604 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| BC605 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| F601 | | FUSE 4A/250V 215004 | PAGF20BAG402 |
| FH601 | | FUSE HOLDER FH-V-03078 or | XH01Z00DK001 |
| | | FUSE HOLDER MSF-015 | XH01Z00LY001 |
| FH602 | | FUSE HOLDER FH-V-03078 or | XH01Z00DK001 |
| | | FUSE HOLDER MSF-015 | XH01Z00LY001 |

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|--------------------------------------|--------------|
| PB1 | A | POWER PCB HOLDER T6400RA | 0EM000696A |
| PB1 | B | POWER PCB HOLDER T6500RA | 0EM000722 |
| PB4 | A | 13V POW HEAT SINK PAL PHKT6400RA | 0EM407687 |
| PB4 | B | 21V POW HEAT SINK PAL PHLT6500RA | 0EM407688 |
| PB5 | | 13V P H/S PAL PHM ASSEMBLY T6400RA | 0EM407691 |
| PL1 | | SCREW, P-TIGHT 3X12 WASHER HEAD+ | GCMP3120 |
| PL2 | | SCREW, B-TIGHT M3X8 BIND HEAD+ | GBMB3080 |
| PS602 [△] | | THERMISTOR ZPB31BL9R0A | QNWZ31BL9R0A |
| SA601 [△] | | SURGE ABSORBER 470V+-10PER | NVQZ10D471KB |
| T551 [△] | A | FLYBACK TRANS BSC23-2603S or | LTF00CPS2054 |
| [△] | A | FLYBACK TRANSFORMER JF0501-3101B | LTF00CPXB039 |
| T551 [△] | B | FLYBACK TRANS BSC23-2639S or | LTF00CPS2058 |
| [△] | B | FLYBACK TRANSFORMER JF0501-19198A or | LTF00CPXB043 |
| [△] | B | FLYBACK TRANSFORMER JF0501-3240 | LTF00CPXB045 |
| T552 | A | HORIZONTAL DRIVE TRANS LP2-005 | LTH00CPA5005 |
| T552 | B | HORIZONTAL DRIVE TRANS LP2-004 | LTH00CPA5004 |
| T601 [△] | A | SWITCHING TRANS 04705 | LTT00EPKT119 |
| T601 [△] | B | SWITCHING TRANS 04704 | LTT00EPKT118 |
| TP501 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| TP502 | | PCB JUMPER D0.6-P7.5 | JW7.5T |
| TP503 | | PCB JUMPER D0.6-P15.0 | JW15.0T |
| TP504 | | PCB JUMPER D0.6-P15.0 | JW15.0T |
| VR601 [△] | | CARBON P.O.T. 20k Ω B or | VRCB203HH014 |
| [△] | | CARBON P.O.T. 20k Ω B | VRCB203KA011 |
| W601 [△] | | AC CORD PE8G2CG9G0A-055 | WAE0162LW001 |

CRT CBA

| Ref. No. | Mark | Description | Part No. |
|--------------------|------|--------------------------------------|--------------|
| | | CRT CBA Consists of the following | ----- |
| CAPACITORS | | | |
| C501 | A | CERAMIC CAP.(AX) B K 220pF/50V | CCA1JKT0B221 |
| C501 | B | CERAMIC CAP.(AX) B K 390pF/50V | CCA1JKT0B391 |
| C502 | A | CERAMIC CAP.(AX) B K 220pF/50V | CCA1JKT0B221 |
| C502 | B | CERAMIC CAP.(AX) B K 390pF/50V | CCA1JKT0B391 |
| C503 | A | CERAMIC CAP.(AX) B K 220pF/50V | CCA1JKT0B221 |
| C503 | B | CERAMIC CAP.(AX) B K 390pF/50V | CCA1JKT0B391 |
| C504 | | CERAMIC CAP. B K 1000pF/2KV or | CA3D102MR030 |
| | | CERAMIC CAP. B K 1000pF/2KV or | CCD3DKD0B102 |
| | | CERAMIC CAP. B K 1000pF/2KV | CCD3DKP0B102 |
| C505 | | ELECTROLYTIC CAP. 1μF/50V M H7 | CE1JMAVSL1R0 |
| CONNECTORS | | | |
| CN501 | | CONNECTOR PIN, 1P LV or | 1700576 |
| | | CONNECTOR PIN, 1P RT-01N-2.3A or | 1730688 |
| | | PIN CONNECTOR 005P-5100 | JTEA001TG001 |
| CN502 | | CONNECTOR BASE, 4P TUC-P04P-B1 | J3TUA04TG001 |
| COIL | | | |
| L501 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| TRANSISTORS | | | |
| Q501 | A | TRANSISTOR KTC3207 or | NQSZ0KTC3207 |
| | A | TRANSISTOR 2SC3468(D)-AE or | QQSD02SC3468 |
| | A | TRANSISTOR 2SC3468(E)-AE or | QQSE02SC3468 |
| | A | TRANSISTOR 2SC2482 TPE6 | QQSZ02SC2482 |
| Q501 | B | TRANSISTOR KTC3503Y or | NQWY0KTC3503 |
| | B | TRANSISTOR 2SC3619 | QQ9Z02SC3619 |
| Q502 | A | TRANSISTOR KTC3207 or | NQSZ0KTC3207 |
| | A | TRANSISTOR 2SC3468(D)-AE or | QQSD02SC3468 |
| | A | TRANSISTOR 2SC3468(E)-AE or | QQSE02SC3468 |

| Ref. No. | Mark | Description | Part No. |
|----------------------|------|-------------------------------------|--------------|
| | A | TRANSISTOR 2SC2482 TPE6 | QQSZ02SC2482 |
| Q502 | B | TRANSISTOR KTC3503Y or | NQWY0KTC3503 |
| | B | TRANSISTOR 2SC3619 | QQ9Z02SC3619 |
| Q503 | A | TRANSISTOR KTC3207 or | NQSZ0KTC3207 |
| | A | TRANSISTOR 2SC3468(D)-AE or | QQSD02SC3468 |
| | A | TRANSISTOR 2SC3468(E)-AE or | QQSE02SC3468 |
| | A | TRANSISTOR 2SC2482 TPE6 | QQSZ02SC2482 |
| Q503 | B | TRANSISTOR KTC3503Y or | NQWY0KTC3503 |
| | B | TRANSISTOR 2SC3619 | QQ9Z02SC3619 |
| RESISTORS | | | |
| R501 [△] | | METAL OXIDE FILM RES. 1W J 18k Ω or | RN01183DP003 |
| [△] | | METAL OXIDE FILM RES. 1W J 18k Ω | RN01183ZU001 |
| R502 [△] | | METAL OXIDE FILM RES. 1W J 18k Ω or | RN01183DP003 |
| [△] | | METAL OXIDE FILM RES. 1W J 18k Ω | RN01183ZU001 |
| R503 [△] | | METAL OXIDE FILM RES. 1W J 18k Ω or | RN01183DP003 |
| [△] | | METAL OXIDE FILM RES. 1W J 18k Ω | RN01183ZU001 |
| R504 | | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R505 | A | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R506 | | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R507 | A | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R508 | B | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R509 | B | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R510 | | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R511 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R512 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R513 | | PCB JUMPER D0.6-P5.0 | JW5.0T |
| R514 | | CARBON RES. 1/4W J 1.5k Ω | RCX4JATZ0152 |
| R515 | | CARBON RES. 1/4W J 120k Ω | RCX4JATZ0124 |
| R516 | | CARBON RES. 1/4W J 15 Ω | RCX4JATZ0150 |
| R517 | A | CARBON RES. 1/4W J 560 Ω | RCX4JATZ0561 |
| R517 | B | CARBON RES. 1/4W J 470 Ω | RCX4JATZ0471 |
| R518 | | CARBON RES. 1/4W J 120k Ω | RCX4JATZ0124 |
| R519 | | CARBON RES. 1/4W J 15 Ω | RCX4JATZ0150 |
| R520 | A | CARBON RES. 1/4W J 560 Ω | RCX4JATZ0561 |
| R520 | B | CARBON RES. 1/4W J 470 Ω | RCX4JATZ0471 |
| R521 | | CARBON RES. 1/4W J 120k Ω | RCX4JATZ0124 |
| R522 | | CARBON RES. 1/4W J 15 Ω | RCX4JATZ0150 |
| R523 | A | CARBON RES. 1/4W J 560 Ω | RCX4JATZ0561 |
| R523 | B | CARBON RES. 1/4W J 470 Ω | RCX4JATZ0471 |
| MISCELLANEOUS | | | |
| CL501A | A | LEAD WIRE 3P/230 | WX1T6400-101 |
| CL501A | B | LEAD WIRE 3P/260 | WX1T6500-103 |
| JK501 [△] | A | CRT SOCKET ISMS01S | JSCC220PK007 |
| JK501 [△] | B | CRT SOCKET ISHS40S | JSCC290PK004 |

DECK MECHANISM SECTION

14"/21" COLOR TV/VCR COMBINATION

T6605VF/T6705VF

- | |
|--|
| <p>Sec. 2: Deck Mechanism Section</p> <ul style="list-style-type: none">● Standard Maintenance● Mechanism Alignment Procedures● Disassembly / Assembly of Mechanism● Deck Exploded Views● Deck Parts List |
|--|

TABLE OF CONTENTS

| | |
|---|-------|
| Standard Maintenance | 2-1-1 |
| Service Fixture and Tools | 2-2-1 |
| Mechanical Alignment Procedures | 2-3-1 |
| Disassembly / Assembly Procedures of Deck Mechanism | 2-4-1 |
| Alignment Procedures of Mechanism | 2-5-1 |
| Deck Exploded Views | 2-6-1 |
| Deck Parts List | 2-7-1 |

STANDARD MAINTENANCE

Service Schedule of Components

This maintenance chart shows you the standard of replacement and cleaning time for each part. Because those may change depending on environment and purpose for use, use the chart for reference.

H: Hours ○: Cleaning ●: Change

| Deck | | Periodic Service Schedule | | | |
|--|------------------------------|---------------------------|---------|---------|---------|
| Ref.No. | Part Name | 1,000 H | 2,000 H | 3,000 H | 4,000 H |
| B2 | Cylinder Assembly | ○ | ● | ○ | ● |
| B3 | Loading Motor Assembly | | | ● | |
| B8 | Pulley Assembly | | ● | | ● |
| B587 | Tension Lever Assembly | | ● | | ● |
| B31 | ACE Head Assembly | | | ● | |
| B573, B574 | Reel (SP)(D2), Reel (TU)(D2) | | | ● | |
| B37 | Capstan Motor | | ● | | ● |
| B52 | Cap Belt | | ● | | ● |
| B73 | FE Head | | | ● | |
| B133, B134 | Idler Gear, Idler Arm | | ● | | ● |
| B410 | Pinch Arm(A) Assembly | | ● | | ● |
| B414 | M Brake (SP) Assembly | | ● | | ● |
| B416 | M Brake (TU) Assembly | | ● | | ● |
| B525 | LDG Belt | | ● | | ● |
| B569 (2 head only) | Cam Holder | | ● | | ● |
| B593 (4 head, 4 head HiFi only) | Cam Holder Assembly | | ● | | ● |

Notes:

1. Clean all parts for the tape transport (Upper Drum with Video Head / Pinch Roller / ACE Head / FE Head) using 90% Isopropyl Alcohol.
2. After cleaning the parts, do all DECK ADJUSTMENTS.
3. For the reference numbers listed above, refer to Deck Exploded Views.

Cleaning

Cleaning of Video Head

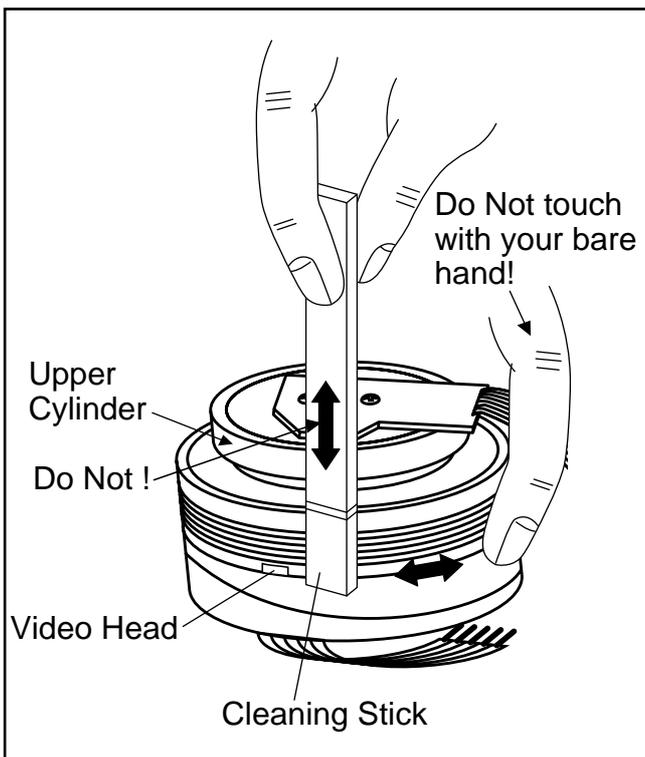
Clean the head with a head cleaning stick or chamois cloth.

Procedure

1. Remove the top cabinet.
2. Put on a glove (thin type) to avoid touching the upper and lower drum with your bare hand.
3. Put a few drops of 90% Isopropyl alcohol on the head cleaning stick or on the chamois cloth and, by slightly pressing it against the head tip, turn the upper drum to the right and to the left.

Notes:

1. The video head surface is made of very hard material, but since it is very thin, avoid cleaning it vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit.
3. Do not reuse a stained head cleaning stick or a stained chamois cloth.



Cleaning of ACE Head

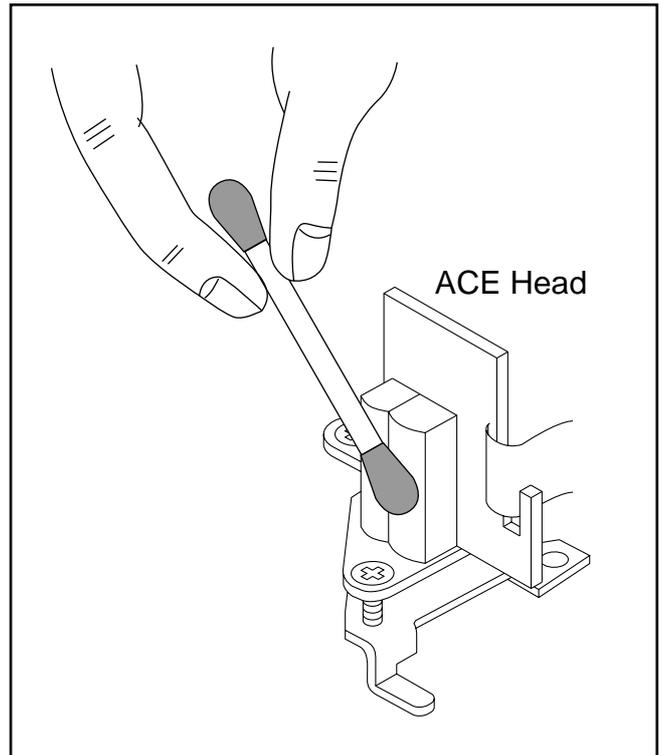
Clean the head with a cotton swab.

Procedure

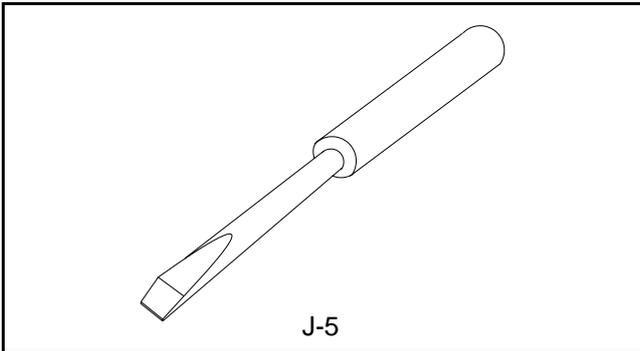
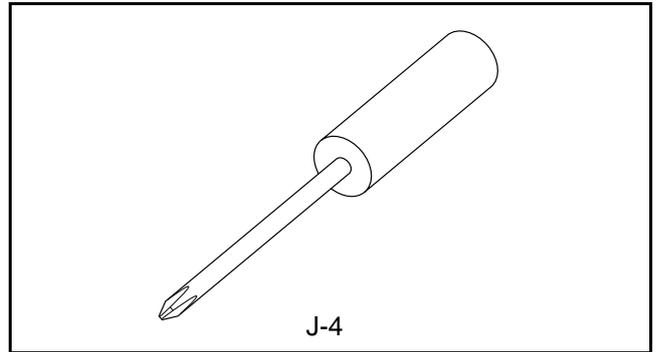
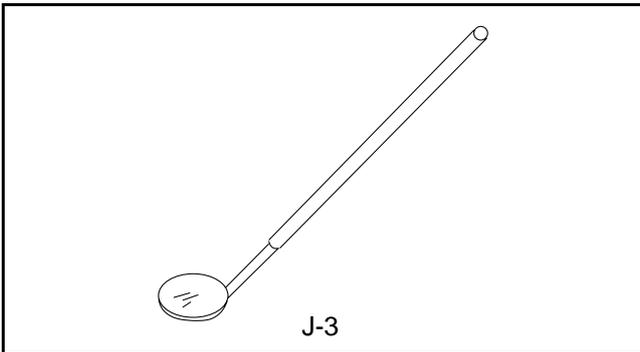
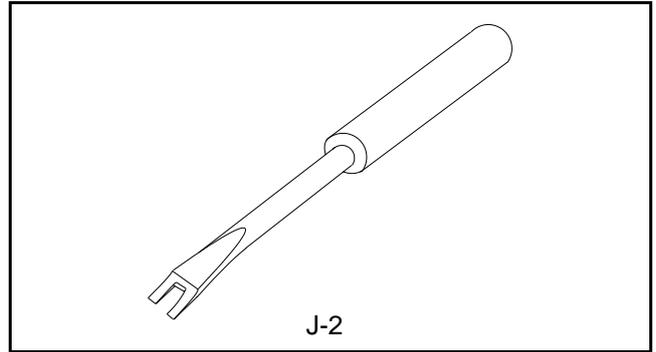
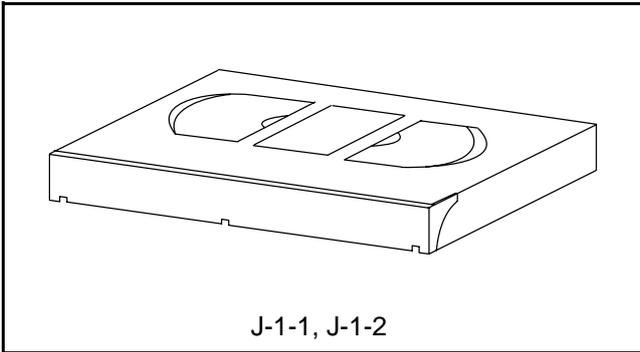
1. Remove the top cabinet.
2. Dip the cotton swab in 90% isopropyl alcohol and clean the ACE Head. Be careful not to damage the upper drum and other tape running parts.

Notes:

1. Avoid cleaning the ACE Head vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit or damage may occur.



SERVICE FIXTURE AND TOOLS



| Ref. No. | Name | Part No. | Adjustment |
|----------|-------------------------------|---|---|
| J-1-1 | Alignment Tape | FL6A | Head Adjustment of ACE Head |
| J-1-2 | Alignment Tape | FL6N8 (2 Head model) FL6NS8 (4 Head model) | Azimuth and X Value Adjustment of ACE Head / Adjustment of Envelope Waveform |
| J-2 | Guide Roller Adj. Screwdriver | Available Locally | Guide Roller |
| J-3 | Mirror | Available Locally | Tape Transportation Check |
| J-4 | Azimuth Adj. Screwdriver + | Available Locally | ACE Head Height |
| J-5 | Flat Screwdriver - | Available Locally | X Value |

MECHANICAL ALIGNMENT PROCEDURES

Explanation of alignment for the tape to correctly run starts on the next page. Refer to the information below on this page if a tape gets stuck, for example, in the mechanism due to some electrical trouble of the unit.

Service Information

A. Method for Manual Tape Loading/Unloading

To load a cassette tape manually:

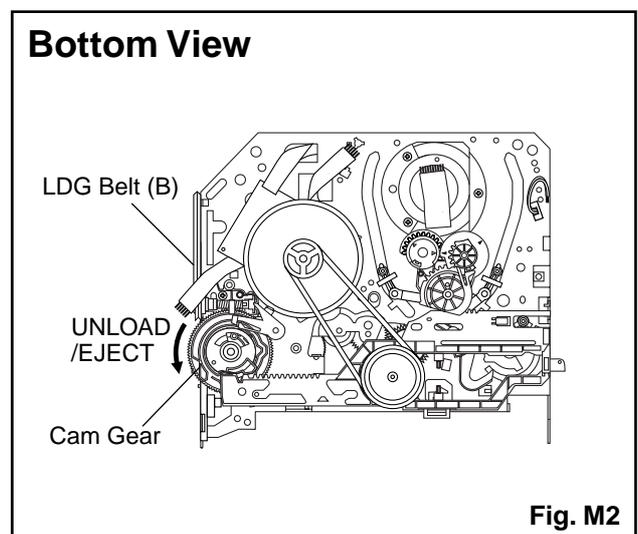
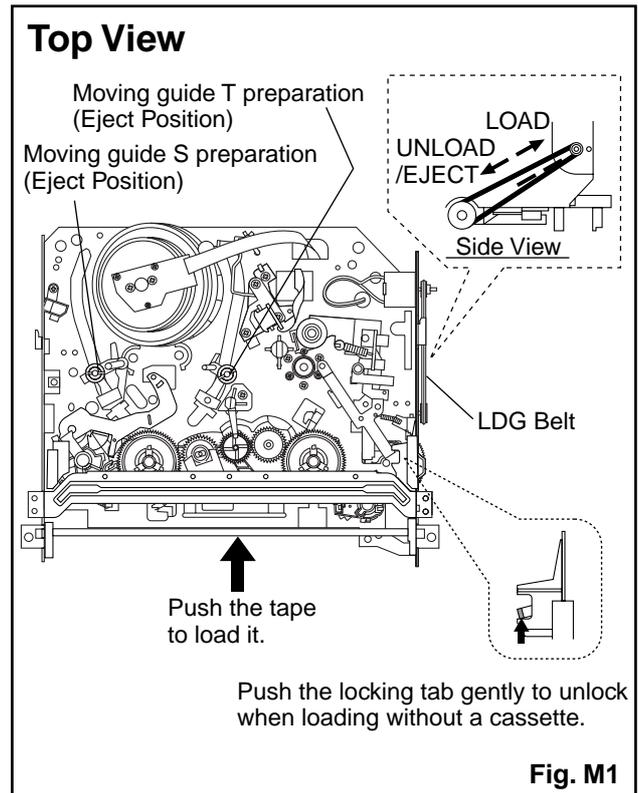
1. Disconnect the AC plug.
2. Remove the Top Case and Front Assembly.
3. Insert a cassette tape. Though the tape will not be automatically loaded, make sure that the cassette tape is all the way in at the inlet of the Cassette Holder. To confirm this, lightly push the cassette tape further in and see if the tape comes back out, by a spring motion, just as much as you have pushed in.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 for a minute or two to complete this task.

To unload a cassette tape manually:

1. Disconnect the AC plug.
2. Remove the Top Case and Front Assembly.
3. Make sure that the Moving guide preparations are in the Eject Position.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 until the Moving guide preparations come to the Eject Position. Stop turning when the preparations begin clicking or can not be moved further. However, the tape will be left wound around the cylinder.
5. Turn the LDG Belt in the appropriate direction continuously, and the cassette tape will be ejected. Allow a minute or two to complete this task.

B. Method to place the Cassette Holder in the tape-loaded position without a cassette tape

1. Disconnect the AC Plug.
2. Remove the Top Case and Front Assembly.
3. Turn the LDG Belt in the appropriate direction shown in Fig. M1. Release the locking tabs shown in Fig. M1 and continue turning the LDG Belt until the Cassette Holder comes to the tape-loaded position. Allow a minute or two to complete this task.



1. Tape Interchangeability Alignment

Note:

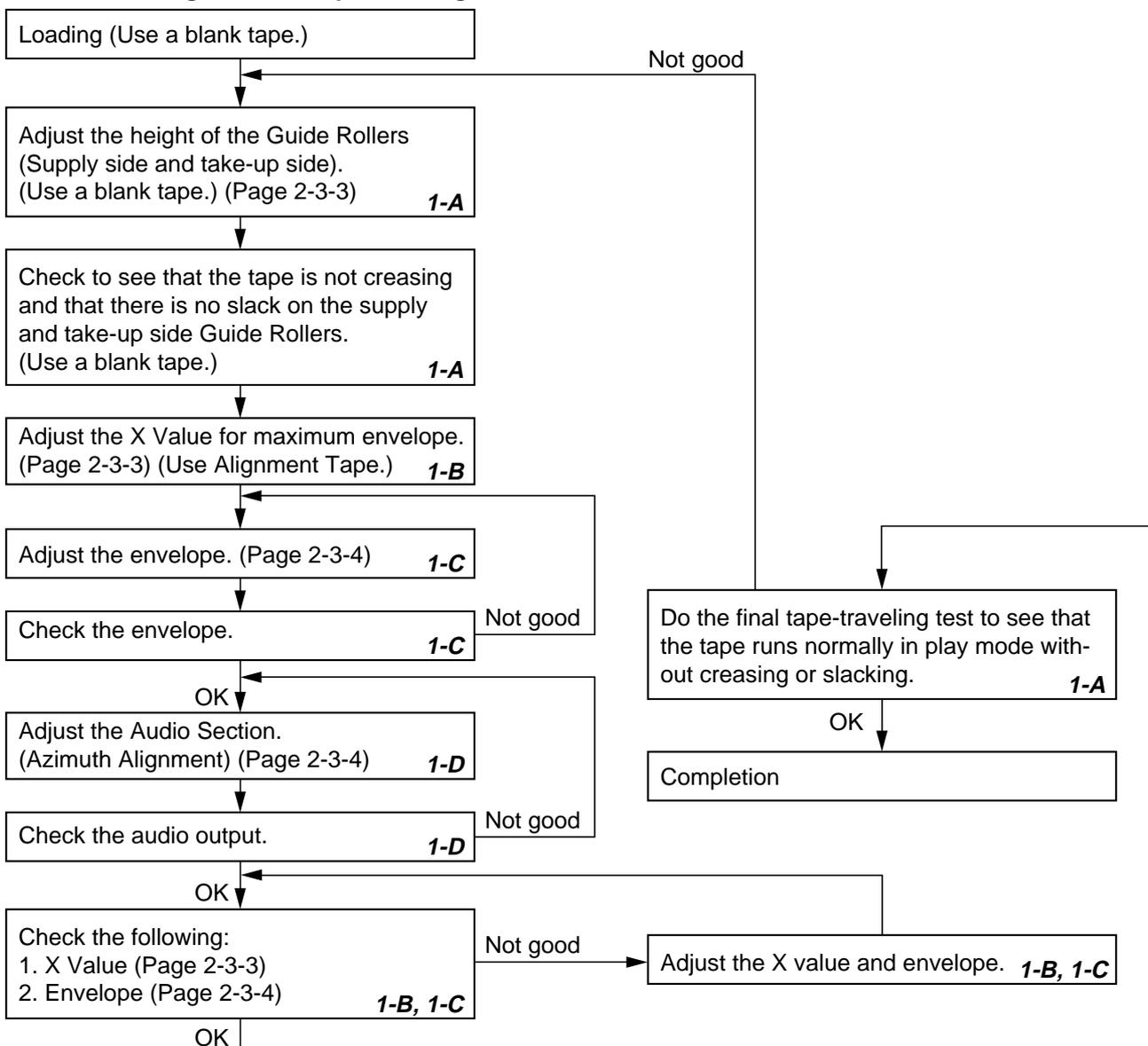
To do these alignment procedures, make sure that the Tracking Control Circuit is set to the preset position every time a tape is loaded or unloaded. (Refer to page 2-3-4, procedure 1-C, step 2.)

Equipment required:

- Dual Trace Oscilloscope
- VHS Alignment Tape (FL6N8)
- Guide Roller Adj. Screwdriver
- Flat Screwdriver (Purchase Locally)

Note: Before starting this Mechanical Alignment, do all Electrical Adjustment procedures.

Flowchart of Alignment for tape traveling



1-A. Preliminary/Final Checking and Alignment of Tape Path

Purpose:

To make sure that the tape path is well stabilized.

Symptom of Misalignment:

If the tape path is unstable, the tape will be damaged.

Note: Do not use an Alignment Tape for this procedure. If the unit is not correctly aligned, the tape may be damaged.

1. Playback a blank cassette tape and check to see that the tape runs without creasing at Guide Rollers [2] and [3], and at points A and B on the lead surface. (Refer to Fig. M3 and M4.)
2. If creasing is apparent, align the height of the guide rollers by turning the top of Guide Rollers [2] and [3] with a Guide Roller Adj. Screwdriver. (Refer to Fig. M3 and M5.)

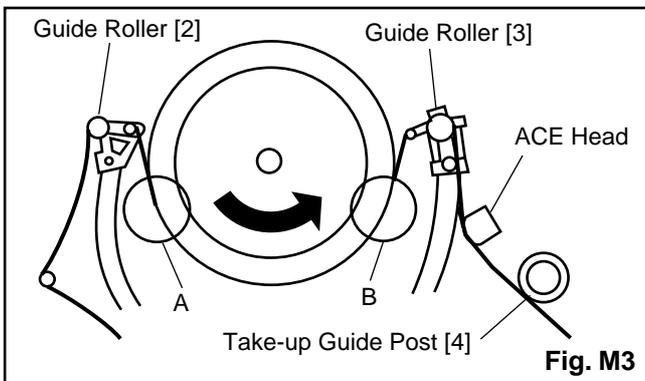


Fig. M3

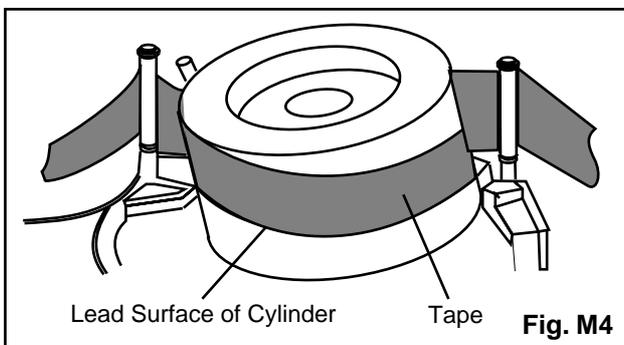


Fig. M4

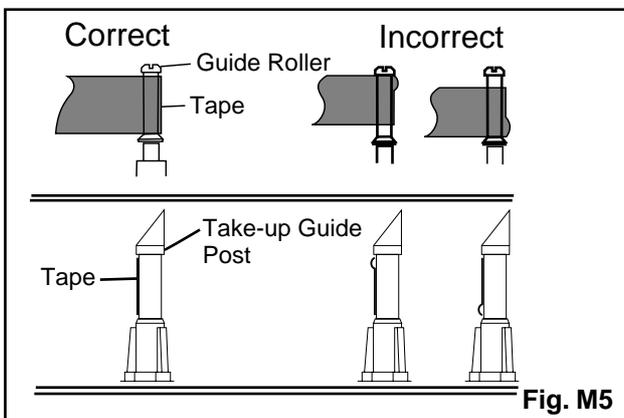


Fig. M5

3. Check to see that the tape runs without creasing at Take-up Guide Post [4] or without snaking between Guide Roller [3] and ACE Head. (Fig. M3 and M5)

4. If creasing or snaking is apparent, adjust the Tilt Adj. Screw of the ACE Head. (Fig. M6)

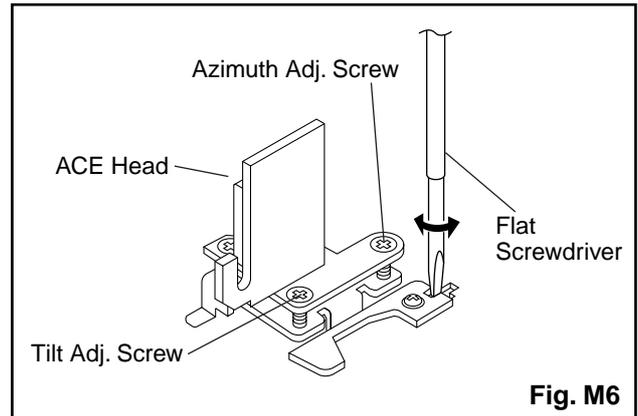


Fig. M6

1-B. X Value Alignment

Purpose:

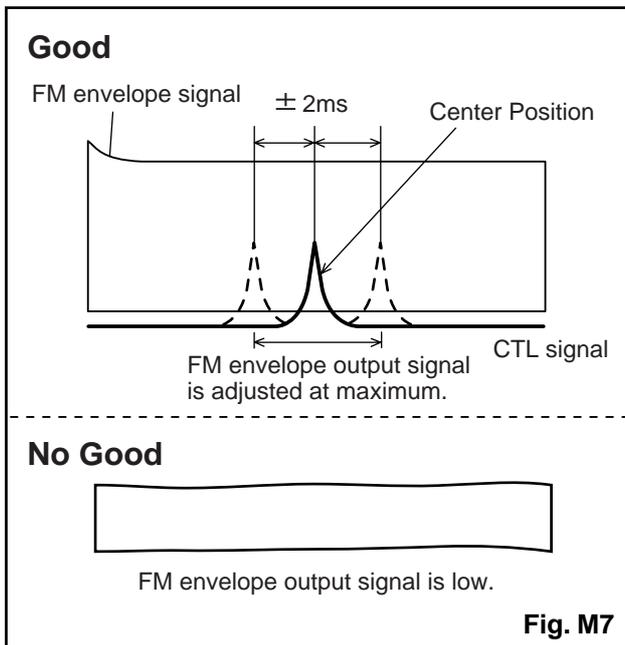
To obtain maximum PB FM envelope signal at the preset position of the Tracking Control Circuit, align the Horizontal Position of the ACE Head.

Symptom of Misalignment:

If the Horizontal Position of the ACE Head is not properly aligned, maximum PB FM envelope cannot be obtained at the preset position of the Tracking Control Circuit.

1. Connect the oscilloscope to TP008 (C-PB) and TP001 (CTL) on the Main CBA. Use TP002 (RF-SW) as a trigger.
2. Playback the Gray Scale of the Alignment Tape (FL6N8) and confirm that the PB FM signal is present.
3. Set the Tracking Control Circuit to the preset position by pressing CH UP button on the remote control unit then "PLAY" button on the unit. (Refer to note on bottom of page 2-3-4.)
4. Use the Flat Screwdriver so that the PB FM signal at TP008 (C-PB) is maximum. (Fig. M6)

- To shift the CTL waveform, press CH UP or CH DOWN button on the remote control unit. Then make sure that the maximum output position of PB FM envelope signal become within $\pm 2\text{ms}$ from pre-set position.



- Set the Tracking Control Circuit to the preset position by pressing CH UP button on the remote control unit. and then "PLAY" button.

1-C. Checking/Adjustment of Envelope Waveform

Purpose:

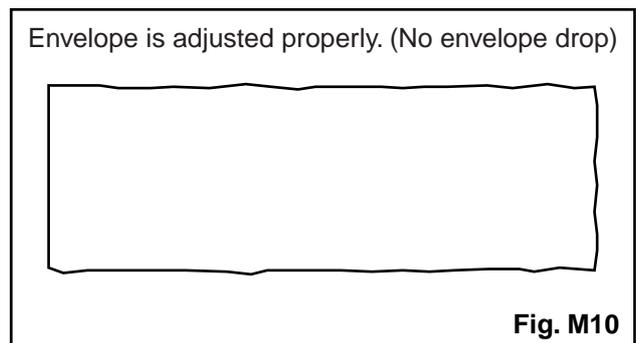
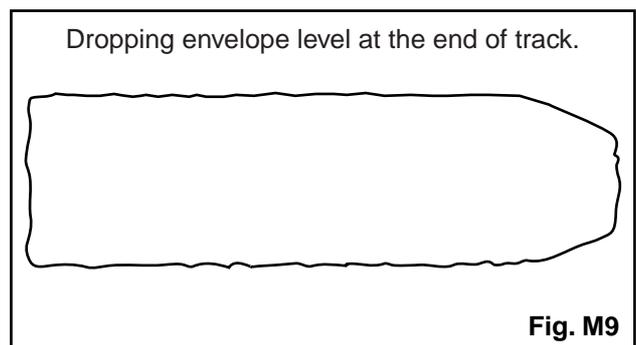
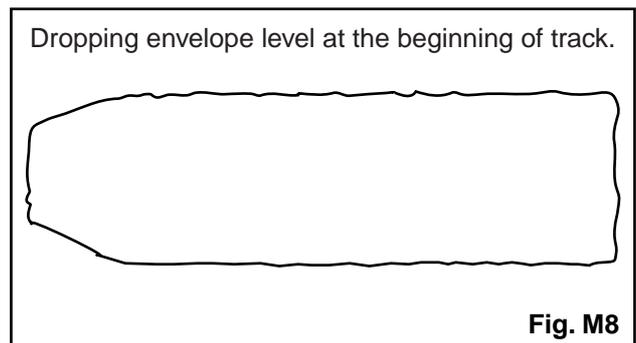
To achieve a satisfactory picture, adjust the PB FM envelope becomes as flat as possible.

Symptom of Misalignment:

If the envelope output is poor, noise will appear in the picture. The tracking will then lose precision and the playback picture will be distorted by any slight variation of the Tracking Control Circuit.

- Connect the oscilloscope to TP008 (C-PB) on the Main CBA. Use TP002 (RF-SW) as a trigger.
- Playback the Gray Scale on the Alignment Tape (FL6N8). Set the Tracking Control Circuit to the preset position by pressing CH UP button and then "PLAY" button on the unit. Adjust the height of Guide Rollers [2] and [3] (Fig. M3, Page 2-3-3) watching the oscilloscope display so that the envelope becomes as flat as possible. To do this adjustment, turn the top of the Guide Roller with the Guide Roller Adj. Screwdriver.
- If the envelope is as shown in Fig. M7, adjust the height of Guide Roller [2] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.
- If the envelope is as shown in Fig. M8, adjust the height of Guide Roller [3] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.

- When Guide Rollers [2] and [3] (Refer to Fig. M3) are aligned properly, there is no envelope drop either at the beginning or end of track as shown in Fig. M9.



Note: Upon completion of the adjustment of Guide Rollers [2] and [3] (Refer to Fig. M3), check the X Value by pushing the CH UP or DOWN buttons alternately, to check the symmetry of the envelope. Check the number of pushes to ensure preset position. The number of pushes CH UP button to achieve 1/2 level of envelope should match the number of pushes CH DOWN button from center. If required, redo the "X Value Alignment."

1-D. Azimuth Alignment of Audio/Control/ Erase Head

Purpose:

To correct the Azimuth alignment so that the Audio/Control/Erase Head meets tape tracks properly.

Symptom of Misalignment:

If the position of the Audio/Control/Erase Head is not properly aligned, the Audio S/N Ratio or Frequency Response will be poor.

1. Connect the oscilloscope to the audio output jack on the rear side of the deck.
2. Playback the alignment tape (FL6N8) and confirm that the audio signal output level is 8kHz.
3. Adjust Azimuth Adj. Screw so that the output level on the AC Voltmeter or the waveform on the oscilloscope is at maximum. (Fig. M6)

Note: Upon completion of the adjustment of Azimuth Adj. Screw, check the X Value by pushing the CH UP or DOWN buttons alternately, to check the symmetry of the envelope. Check the number of pushes to ensure preset position. The number of pushes CH UP button to achieve 1/2 level of envelope should match the number of pushes CH DOWN button from center. If required, redo the "X Value Alignment."

DISASSEMBLY/ASSEMBLY PROCEDURES OF DECK MECHANISM

Before following the procedures described below, be sure to remove the deck assembly from the cabinet. (Refer to CABINET DISASSEMBLY INSTRUCTIONS on page 1-5-1 of Main Section.)

All the following procedures, including those for adjustment and replacement of parts, should be done in Eject mode; see the positions of [41] and [42] in Fig. DM1 on page 2-4-3. When reassembling, follow the steps in reverse order.

| STEP /LOC. No. | START-ING No. | PART | | REMOVAL | | INSTALLATION |
|----------------|----------------|--------------------------|---|---------------------|---|-------------------------|
| | | | | Fig. No. | REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER | ADJUSTMENT CONDITION |
| [1] | [1] | Guide Holder A | T | DM3 | 2(S-1) | |
| [2] | [1] | Cassette Holder Assembly | T | DM4 | (S-10) | |
| [3] | [2] | Slider (SP) | T | DM5 | (S-1A), *(L-1) | |
| [4] | [2] | Slider (TU) | T | DM5 | *(L-2) | |
| [5] | [4] | Lock Lever | T | DM5 | *(L-3), *(P-1) | |
| [6] | [2] | Cassette Plate | T | DM5 | | |
| [7] | [7] | Cylinder Assembly | T | DM1, DM6 | Desolder, 3(S-2) | |
| [8] | [8] | Loading Motor Assembly | T | DM1, DM7 | Desolder, LDG Belt, 2(S-3) | |
| [9] | [9] | ACE Head Assembly | T | DM1, DM7 | (S-4) | |
| [10] | [2] | Tape Guide Arm Assembly | T | DM1, DM8-1 | *(P-2) | |
| [11] | [10] | C Door Opener | T | DM1, DM8-1 | (S-4A), *(L-4) | |
| [12] | [11] | Pinch Arm (B) | T | DM1, DM8-1, DM8-2 | *(P-3) | |
| [13] | [12] | Pinch Arm (A) Assembly | T | DM1, DM8-1, DM8-2 | | |
| [14] | [14] | FE Head | T | DM1, DM9 | (S-5) | |
| [15] | [15] | Prism | T | DM1, DM9 | (S-6) | |
| [16] | [2],[15] | Sensor Gear | T | DM1, DM9 | | |
| [17] | [2] | Slider Shaft | T | DM10 | *(L-5) | |
| [18] | [17] | C Drive Lever (SP) | T | DM10 | | |
| [19] | [17] | C Drive Lever (TU) | T | DM10 | (S-7), *(P-4) | |
| [20] | [7],[8],[10] | Capstan Motor | B | DM2, DM11 | 3(S-8), Cap Belt | |
| [21] | [21] | Clutch Assembly | B | DM2, DM12 | (C-1) | |
| [22] | [22] | Cam Holder Assembly | B | DM2, DM12 | *(L-6) | |
| [23] | [23] | Cam Gear (B) | B | DM2, DM12 | (C-2), *(P-5) | |
| [24] | [24] | Mode Gear | B | DM2, DM13-1 | (C-3) | |
| [25] | [21],[23],[24] | Mode Lever | B | DM2, DM13-1, DM13-2 | (C-4), *(L-8) | |
| [26] | [22] | Worm Holder | B | DM2, DM13-1 | (S-9), *(L-9), *(L-10) | |
| [27] | [26] | Pulley Assembly | B | DM2, DM13-1 | | |
| [28] | [25],[26] | Cam Gear (A) | B | DM2, DM13-1, DM13-2 | | |
| [29] | [25] | Idler Gear | B | DM1, DM14 | | |
| [30] | [29] | Idler Arm | B | DM1, DM14 | *(L-11) | |
| [31] | [25] | BT Arm | B | DM2, DM14 | *(P-6) | |

| STEP /LOC. No. | START-ING No. | PART | | REMOVAL | | INSTALLATION |
|----------------|---------------|----------------------------|----------|-----------|---|--------------------------------------|
| | | | | Fig. No. | REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER | ADJUSTMENT CONDITION |
| [32] | [25] | Loading Arm (SP) Assembly | B | DM2, DM14 | | (+)Refer to Alignment Sec.Page 2-5-1 |
| [33] | [32] | Loading Arm (TU) Assembly | B | DM2, DM14 | | (+)Refer to Alignment Sec.Page 2-5-1 |
| [34] | [2],[25] | M Brake (TU) Assembly | T | DM1, DM15 | *(P-7), Brake Belt | |
| [35] | [2],[25] | M Brake (SP) Assembly | T | DM1, DM15 | *(P-8) | |
| [36] | [35] | Tension Lever Assembly | T | DM1, DM15 | | |
| [37] | [36] | T Lever Holder | T | DM15 | *(L-12) | |
| [38] | [34] | Reel (TU)(D2) | T | DM1, DM15 | | |
| [39] | [38] | M Gear | T | DM1, DM15 | | |
| [40] | [36] | Reel (SP)(D2) | T | DM1, DM15 | | |
| [41] | [32],[36] | Moving Guide S Preparation | T | DM1, DM16 | | |
| [42] | [33] | Moving Guide T Preparation | T | DM1, DM16 | | |
| [43] | [19] | TG Post Assembly | T | DM1, DM16 | *(L-13) | |
| [44] | [28] | Rack Assembly | R | DM17 | *(P-9) | (+)Refer to Alignment Sec.Page 2-5-1 |
| [45] | [44] | F Door Opener | R | DM17 | | |
| [46] | [46] | Cleaner Assembly | T | DM1, DM6 | | |
| [47] | [46] | CL Post | T | DM6 | *(L-14) | |
| ↓ (1) | ↓ (2) | ↓ (3) | ↓ (4) | ↓ (5) | ↓ (6) | ↓ (7) |

(1): Follow steps in sequence. When reassembling, follow the steps in reverse order.

These numbers are also used as identification (location) No. of parts in the figures.

(2): Indicates the part to start disassembling with in order to disassemble the part in column (1).

(3): Name of the part

(4): Location of the part: T=Top B=Bottom R=Right L=Left

(5): Figure Number

(6): Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.

P=Spring, W=Washer, C=Cut Washer, S=Screw, *=Unhook, Unlock, Release, Unplug, or Desolder

e.g., 2(L-2) = two Locking Tabs (L-2).

(7): Adjustment Information for Installation

(+):Refer to Deck Exploded Views for lubrication.

Top View

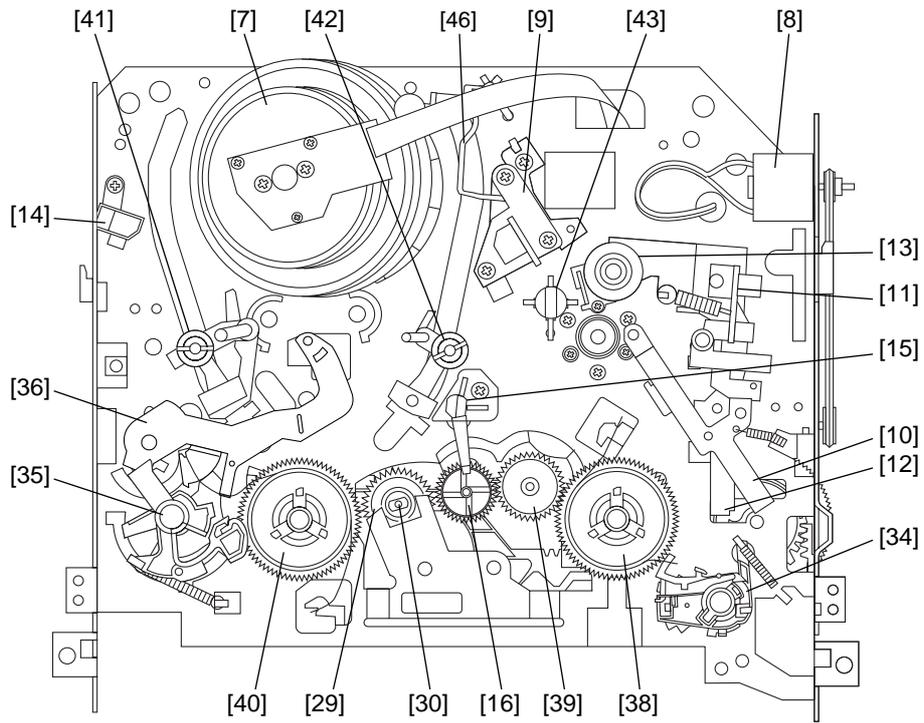


Fig. DM1

Bottom View

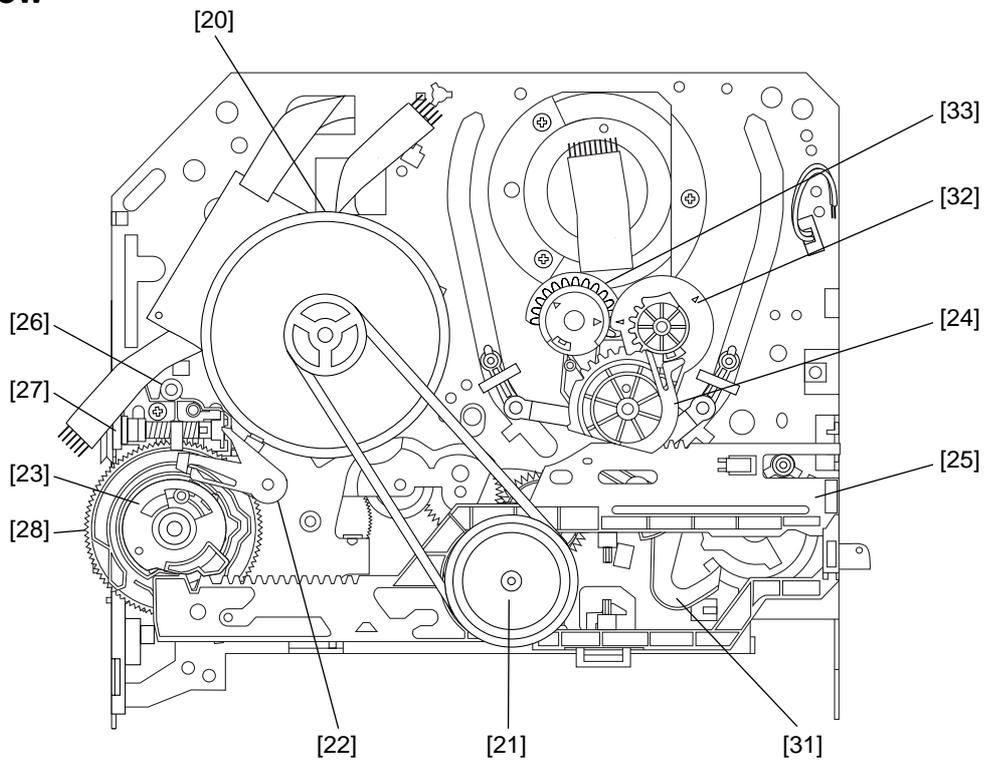


Fig. DM2

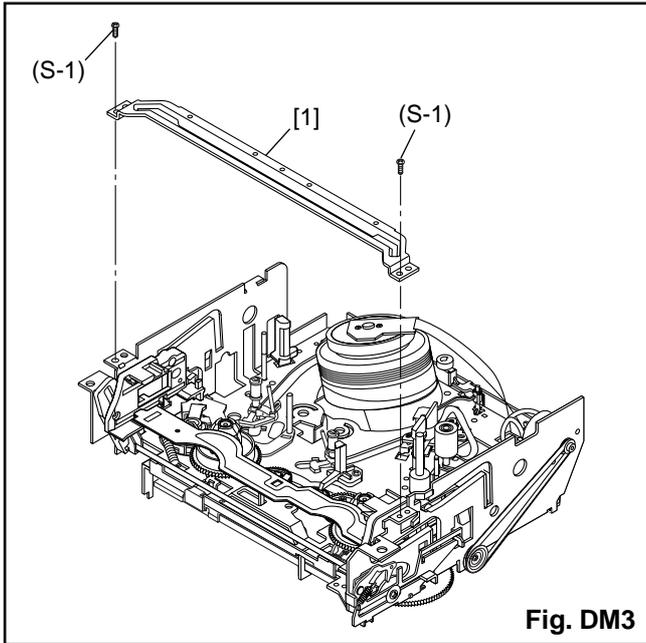
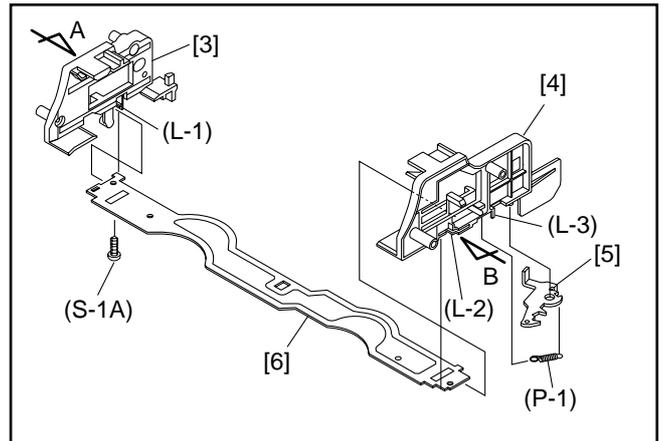
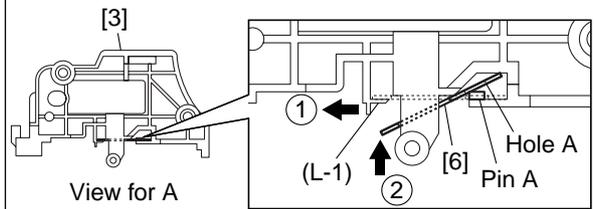


Fig. DM3



Installation of [3] and [6]

First, insert [6] diagonally in [3] as shown below. Then, install [6] in [3] while pushing (L-1) in a direction of arrow. After installing [6] in [3], confirm that pin A of [3] enters hole A of [6] properly.



Installation of [4] and [6]

Install [6] in [4] while pulling (L-2) in a direction of arrow. After installing [6] in [4], confirm that pin B of [4] enters hole B of [6] properly.

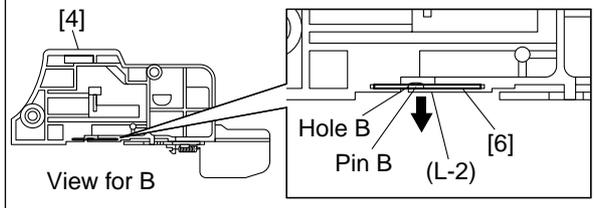
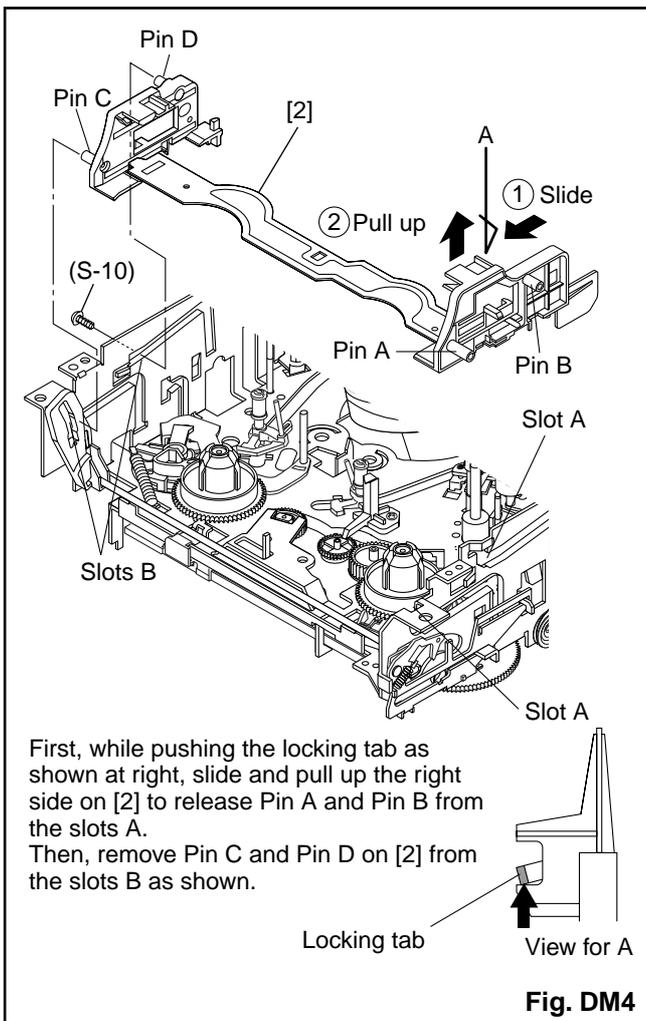


Fig. DM5



First, while pushing the locking tab as shown at right, slide and pull up the right side on [2] to release Pin A and Pin B from the slots A. Then, remove Pin C and Pin D on [2] from the slots B as shown.

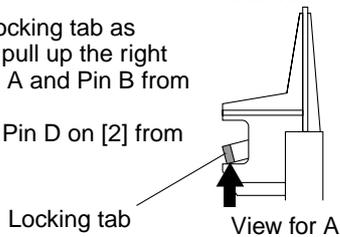
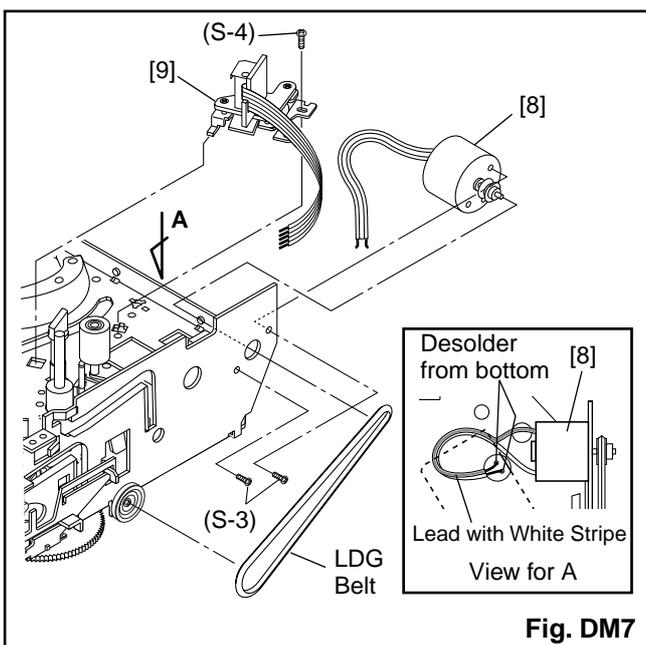
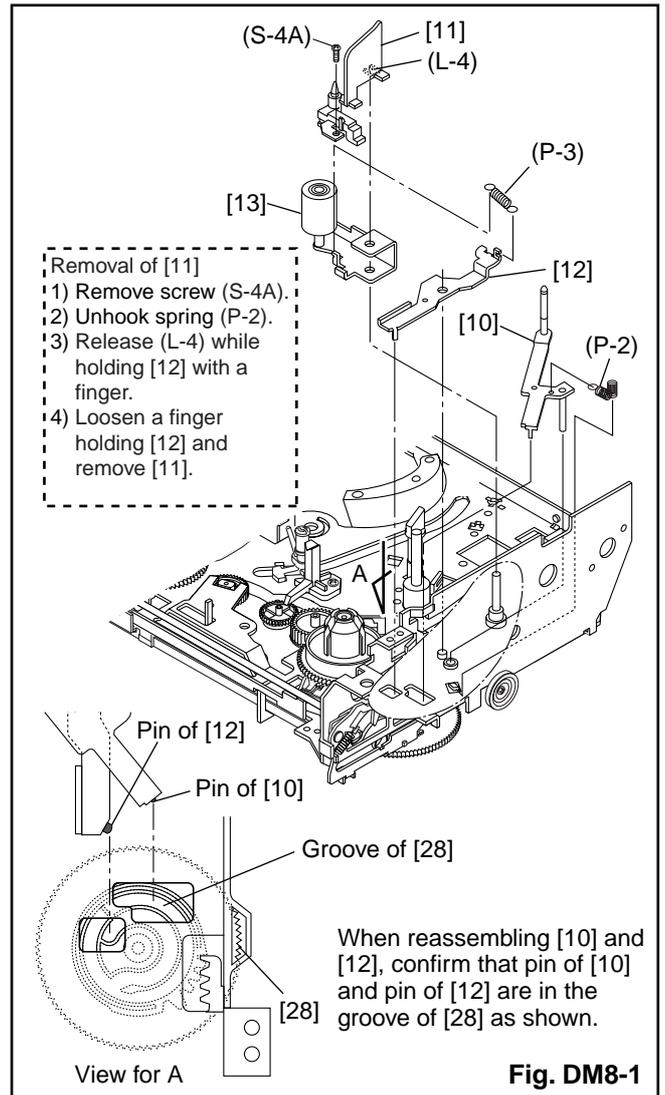
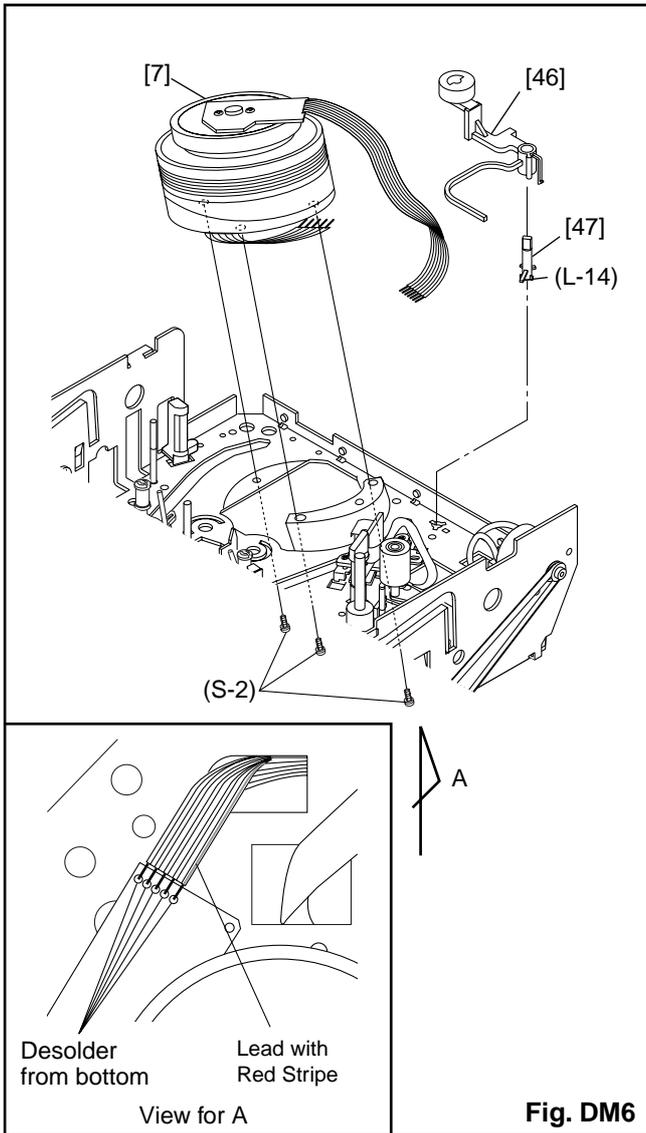


Fig. DM4



Installation of [13] and [12]

Hook spring (P-3) up to [12] and [13], then install them to the specified position so that [12] will be floated slightly while holding [12] and [13]. (Refer to Fig. A.)

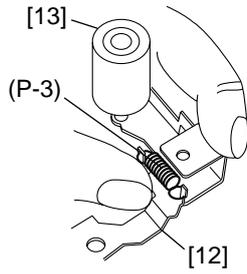


Fig. A

Install pin of [12] in groove of [28]. (Refer to Fig. B.)

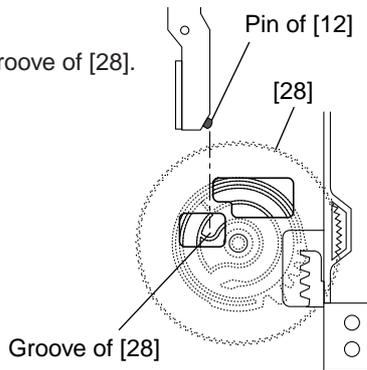


Fig. B (Top view)

Hold [12] and [13] till groove of pin of chassis looks and fit [13] in notch of chassis. Then, turn a few [13] while holding [12]. (Refer to Fig. C.)

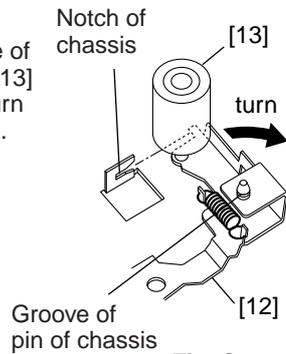


Fig. C

Install [11] and [10] while holding [12]. (Refer to Fig. DM8-1.)

Fig. DM8-2

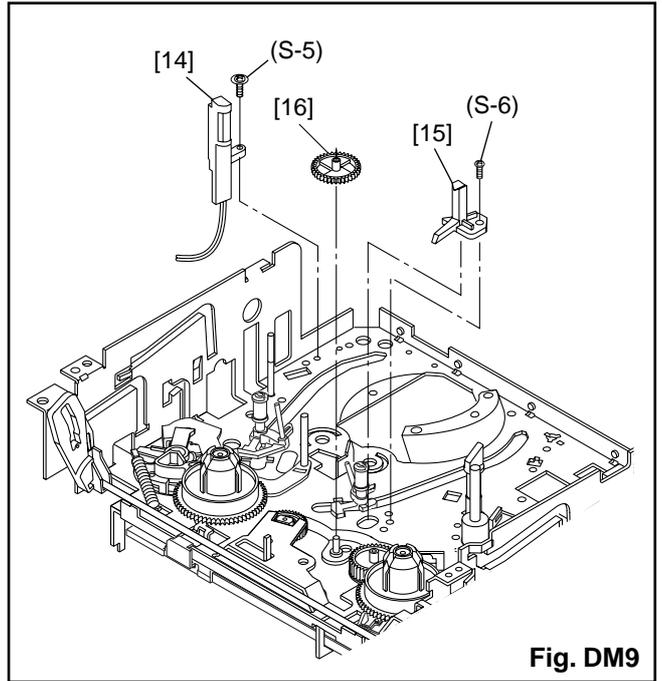


Fig. DM9

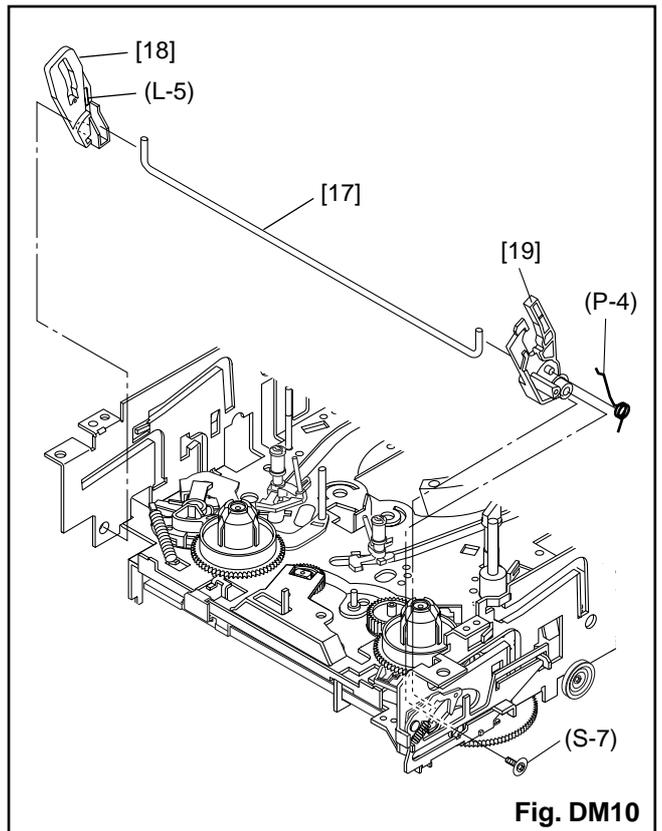


Fig. DM10

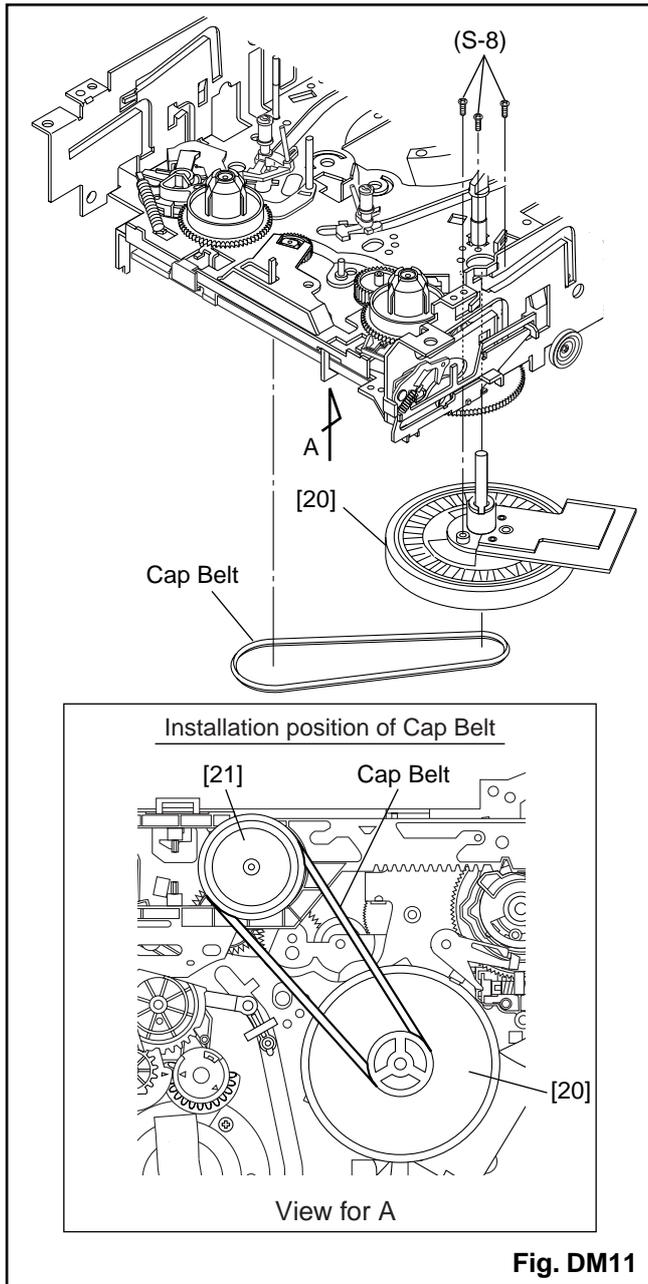


Fig. DM11

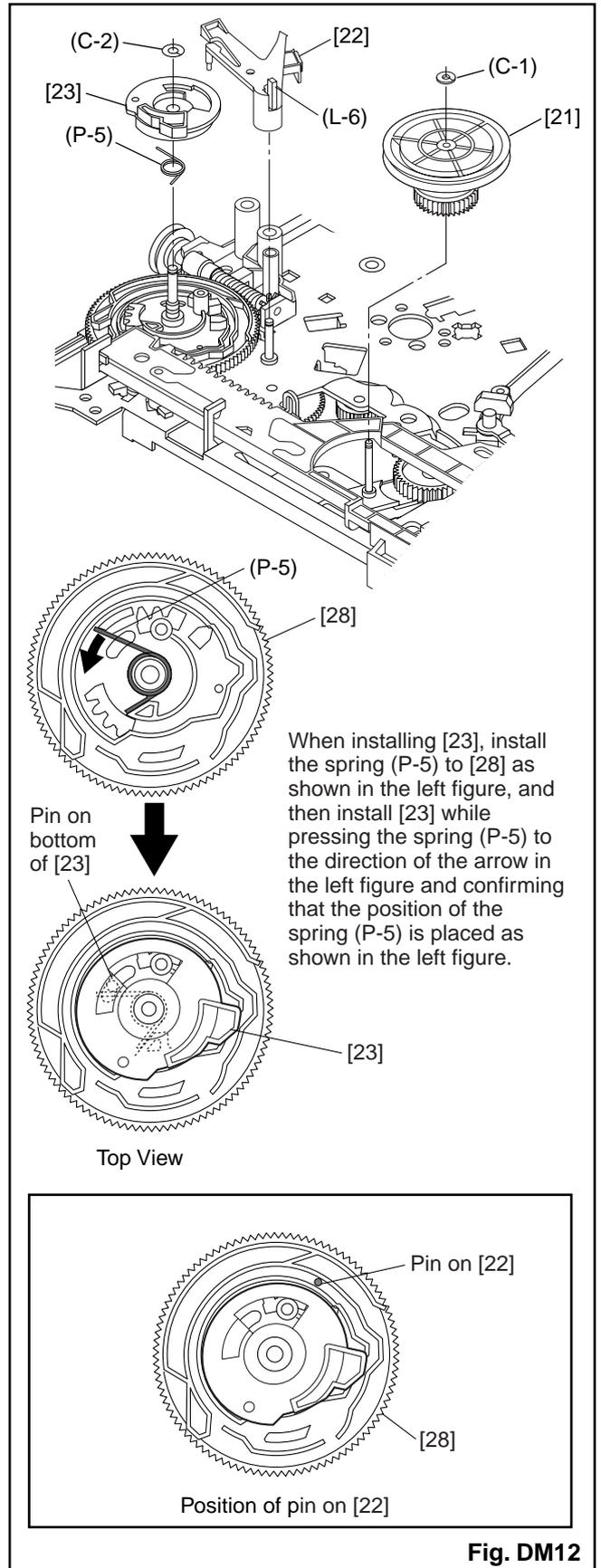


Fig. DM12

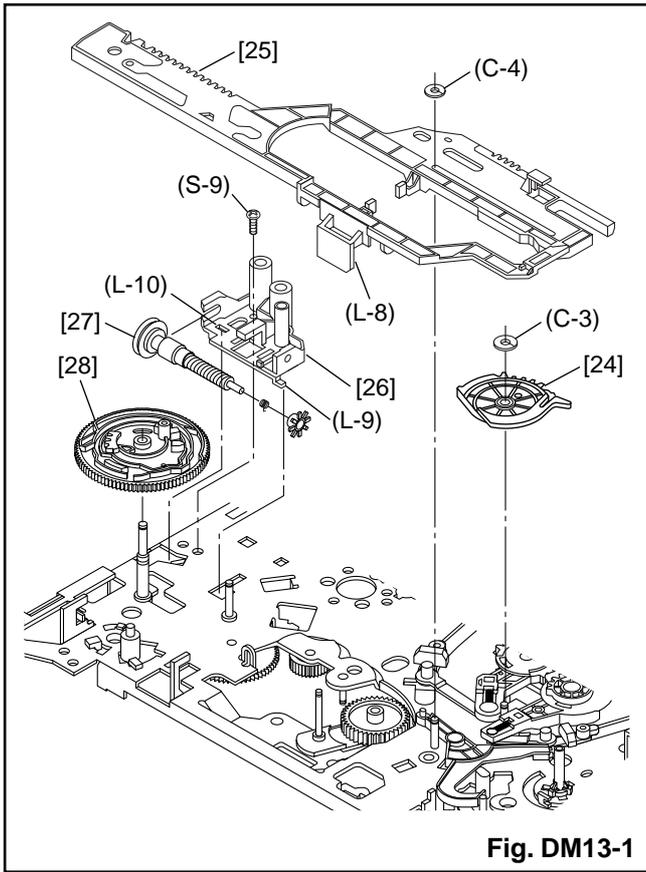


Fig. DM13-1

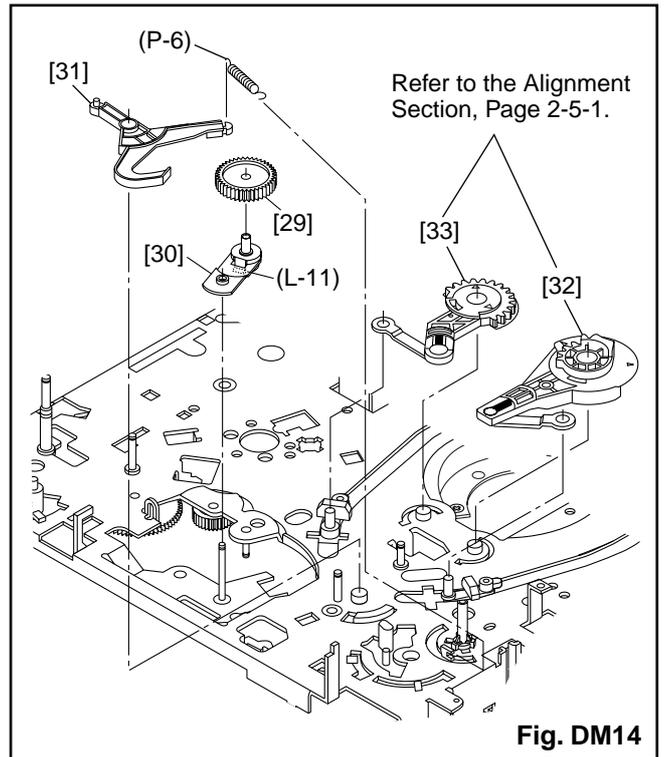


Fig. DM14

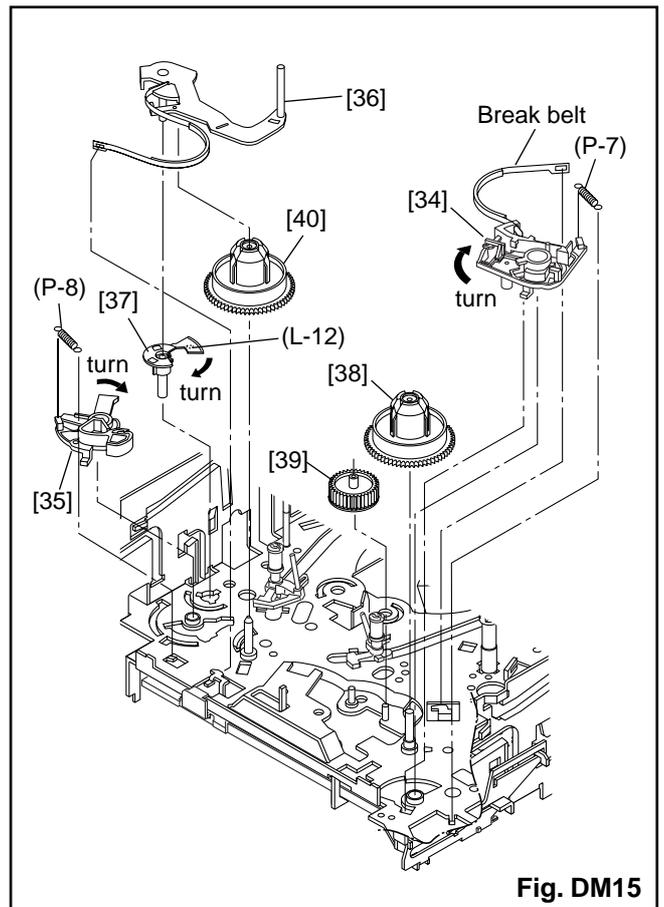
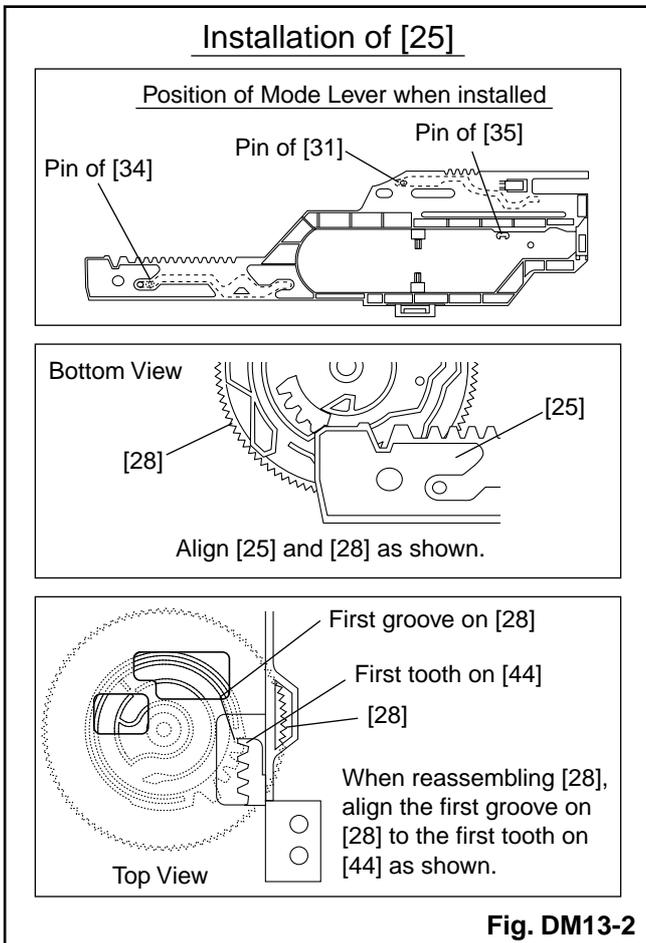


Fig. DM15

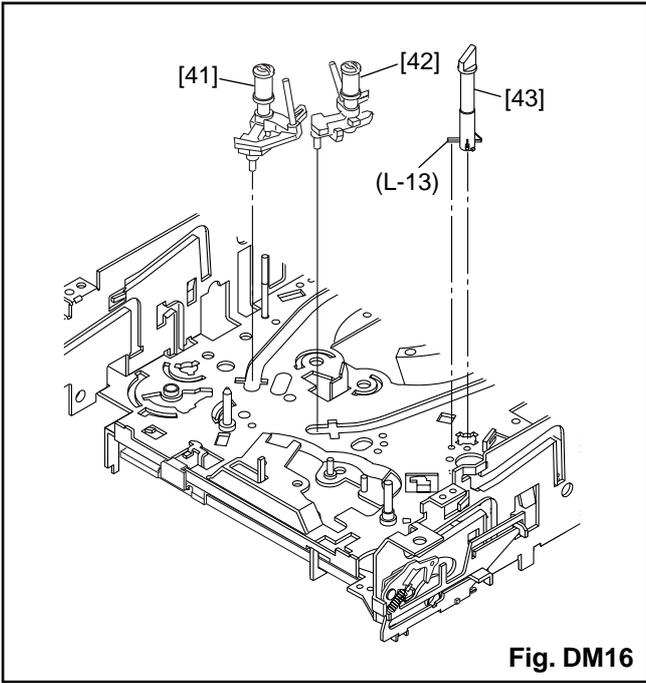


Fig. DM16

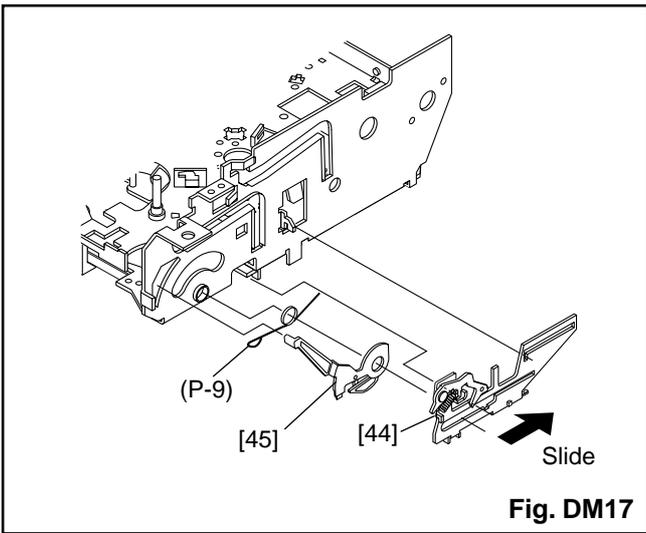


Fig. DM17

ALIGNMENT PROCEDURES OF MECHANISM

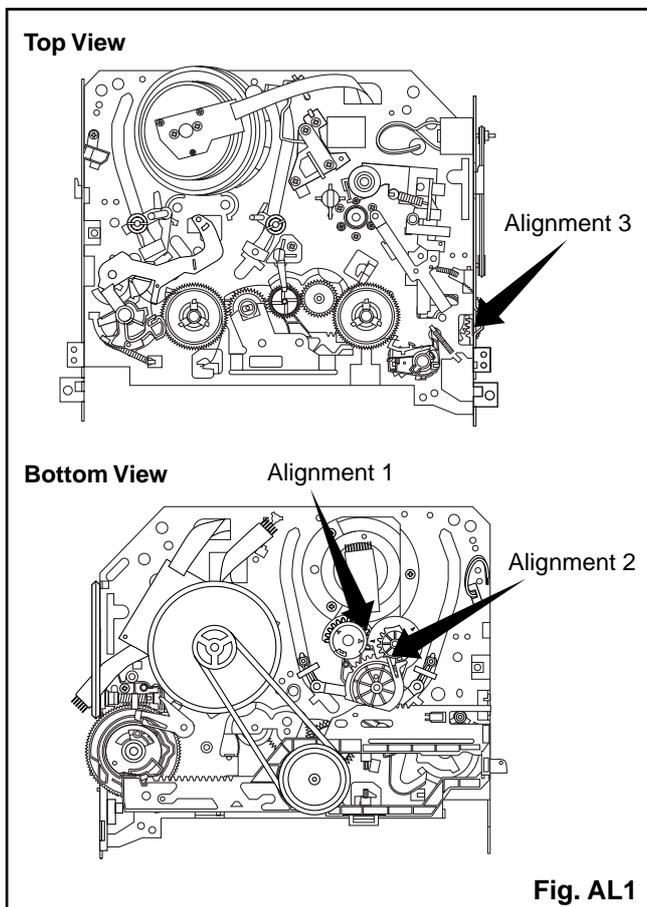
The following procedures describe how to align the individual gears and levers that make up the tape loading/unloading mechanism. Since information about the state of the mechanism is provided to the System Control Circuit only through the Mode Switch, it is essential that the correct relationship between individual gears and levers be maintained.

All alignments are to be performed with the mechanism in Eject mode, in the sequence given. Each procedure assumes that all previous procedures have been completed.

IMPORTANT:

If any one of these alignments is not performed properly, even if off by only one tooth, the unit will unload or stop and it may result in damage to the mechanical or electrical parts.

Alignment points in Eject Position



Alignment 1

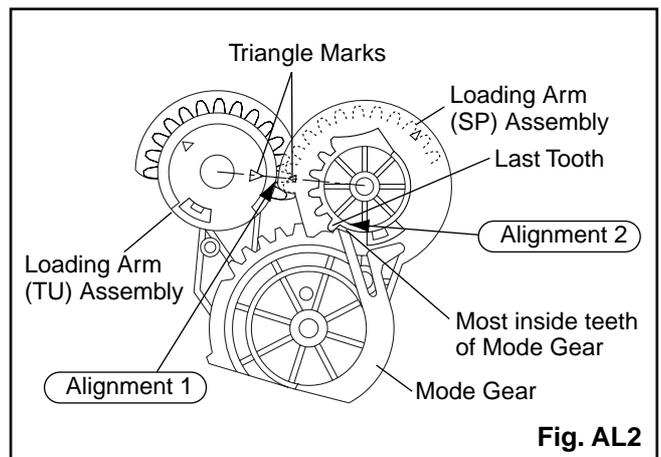
Loading Arm (SP) and (TU) Assembly

Install Loading Arm (SP) and (TU) Assembly so that their triangle marks point to each other as shown in Fig. AL2.

Alignment 2

Mode Gear

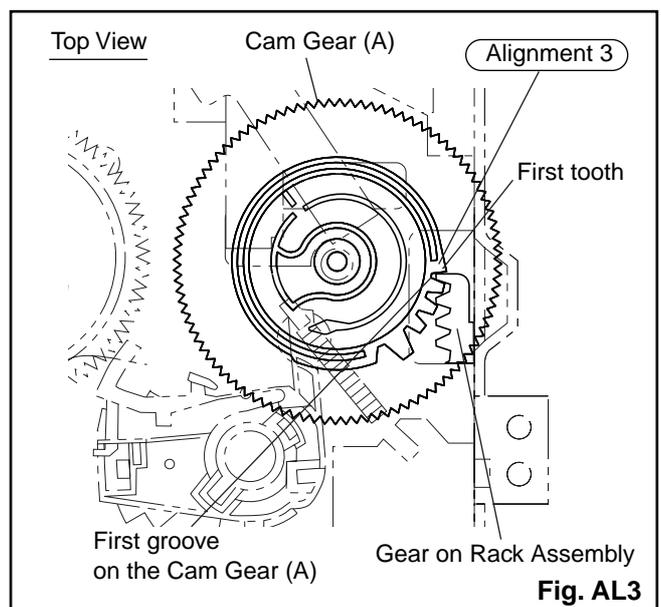
Keeping the two triangles pointing at each other, install the Loading Arm (SP) Assembly so that the last tooth of the gear meets the most inside teeth of the Mode Gear. See Fig. AL2.



Alignment 3

Cam Gear (A), Rack Assembly

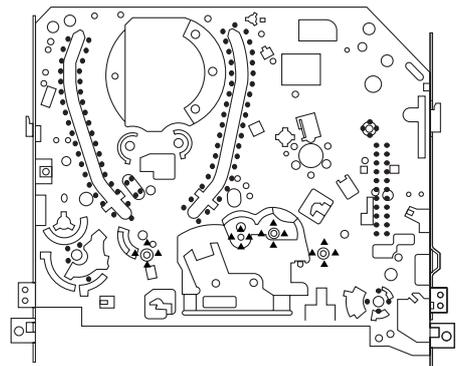
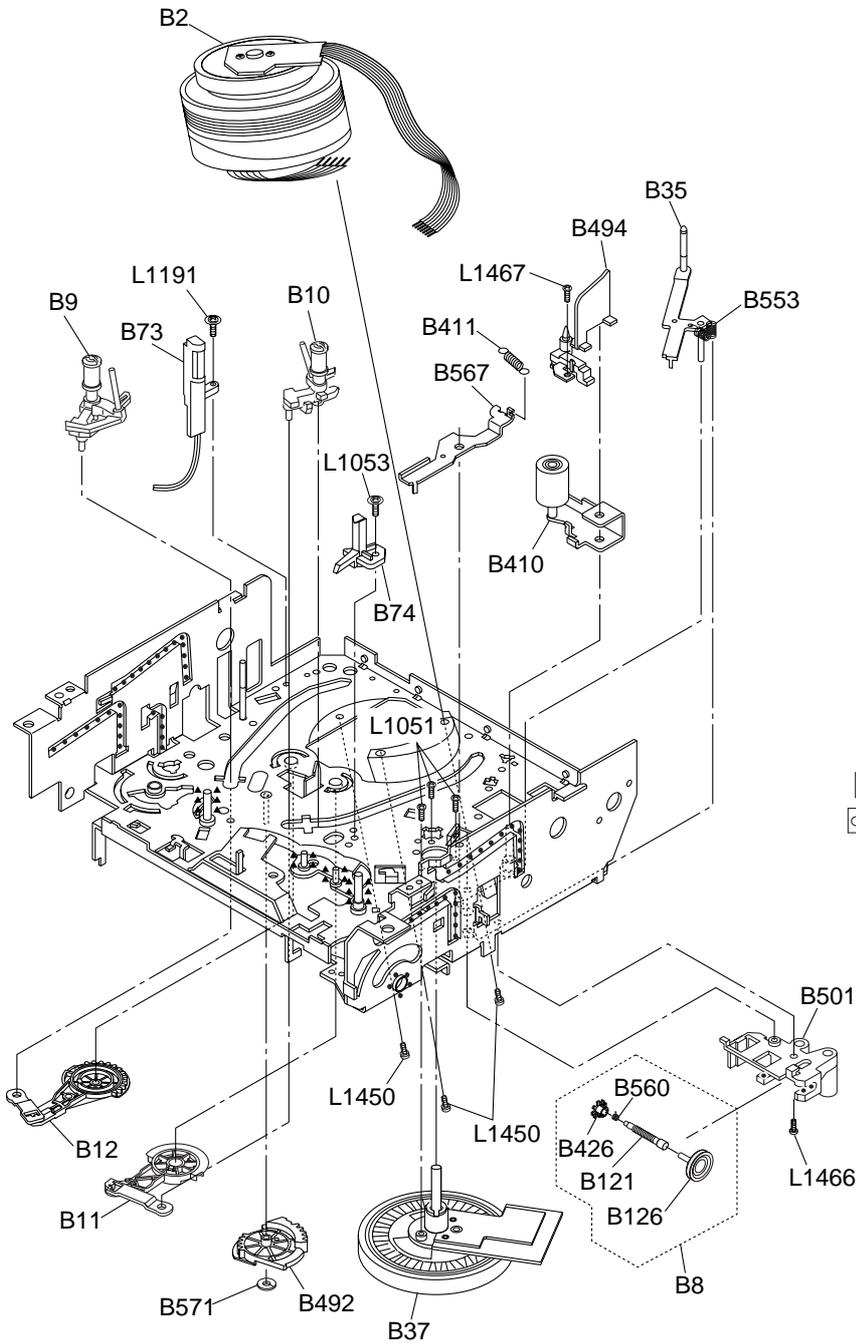
Install the Rack Assembly so that the first tooth on the gear of the Rack Assembly meets the first groove on the Cam Gear (A) as shown in Fig. AL3.



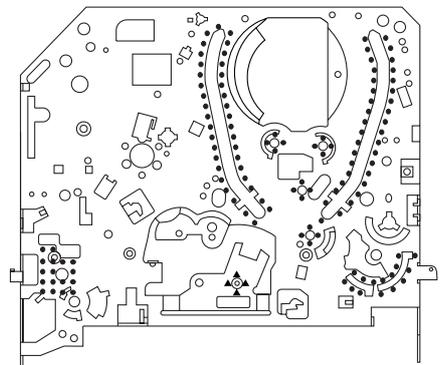
DECK EXPLODED VIEWS

Deck Mechanism View 1

| Mark | Description |
|-------|--|
| ••••• | Floil G-684G or Multemp MH-D (Blue grease) |
| ▲▲▲▲▲ | SLIDUS OIL #150 |



Chassis Assembly
Top View (Lubricating Point)

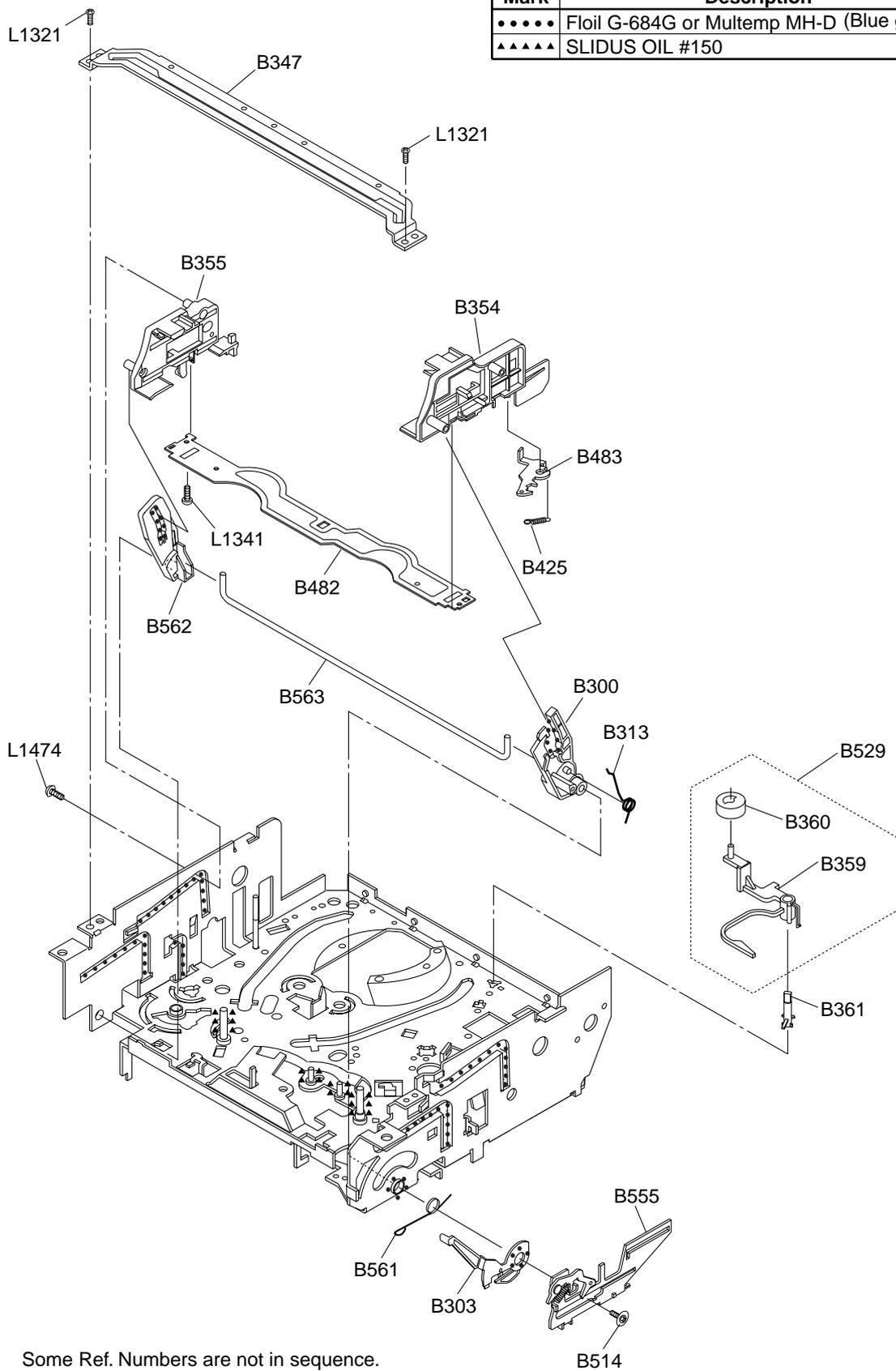


Chassis Assembly
Bottom View (Lubricating Point)

Some Ref. Numbers are not in sequence.

Deck Mechanism View 3

| Mark | Description |
|-------|--|
| ••••• | Floil G-684G or Multemp MH-D (Blue grease) |
| ▲▲▲▲▲ | SLIDUS OIL #150 |



DECK PARTS LIST

NOTE:

Five different, but interchangeable, types of B558 (LOADING MOTOR) may be installed in these models. Please confirm B558 (LOADING MOTOR) type by a part number on it. B558 (LOADING MOTOR) type varies in combination with L1151. Please see Table 1 for details and combination.

Table 1 (B558 and L1151 Combination)

| LOADING MOTOR (B558) | | SCREW (L1151) | |
|--------------------------------|--------------|------------------------------|-----------|
| Description | Parts No. | Description | Parts No. |
| LOADING MOTOR M31E-1 R-14 7376 | MMDZB12MM003 | SCREW, SEMS M2.6X4 PAN HEAD+ | CPM39040 |
| LOADING MOTOR M31E-1 R-14 7391 | MMDZB12MM004 | | |
| LOADING MOTOR M31E-1 R-14 7377 | MMDZB12MM006 | | |
| LOADING MOTOR MDB2B80 | MMDZB12SJ008 | SCREW, SEMS M3X4 PAN HEAD+ | CPM33040 |
| LOADING MOTOR MDB2B82 | MMDZB10SJ001 | | |

| Ref. No. | Description | Part No. |
|----------|--------------------------------------|--------------|
| B2 | CYLINDER ASSEMBLY MK12.5 PAL 2HD 2SP | N2328CYL |
| B3 | LOADING MOTOR ASSEMBLY MK11 TVCR | 0VSA13465 |
| B8 | PULLEY ASSEMBLY MK12 | 0VSA13500 |
| B9 | MOVING GUIDE S PREPARATION MK12 | 0VSA13560 |
| B10 | MOVING GUIDE T PREPARATION MK12 | 0VSA13562 |
| B11 | LOADING ARM(TU) ASSEMBLY MK12 | 0VSA13300 |
| B12 | LOADING ARM(SP) ASSEMBLY MK12 | 0VSA13299 |
| B31 | AC HEAD ASSEMBLY(PB FREE) MK12(TVCR) | 0VSA14902 |
| B35 | TAPE GUIDE ARM ASSEMBLY MK12.5 | 0VSA15014 |
| B37 | CAPSTAN MOTOR 288/VZC21303 | N9683CML |
| B52 | CAP BELT MK10 | 0VM411138 |
| B73 | FE HEAD ASSEMBLY MK11 or | N9742FEL |
| | FE HEAD ASSEMBLY MK11 or | N9743FEL |
| | FE HEAD(MK11) MH-131SF11 or | DHVEC01Z0005 |
| | FE HEAD(MK11) VTR-1X2ERS11-148 or | DHVEC01TE004 |
| | FE HEAD(MK12) VTR-1X2ERS11-155 or | DHVEC01TE005 |
| | FE HEAD(MK12) HVFHP0047A | DHVEC01AL007 |
| B74 | PRISM MK10 | 0VM202870 |
| B121 | WORM MK12 | 0VM414091 |
| B126 | PULLEY MK12 | 0VM414330B |
| B133 | IDLER GEAR MK12 | 0VM305738 |
| B134 | IDLER ARM MK12 | 0VM305739 |
| B148 | TG CAP MK11 | 0VM412972 |
| B300 | C DRIVE LEVER(TU) MK12 | 0VM203773 |
| B303 | F DOOR OPENER MK12 | 0VM203751C |
| B313 | C DRIVE SPRING MK12 | 0VM414145 |
| B347 | GUIDE HOLDER A MK10 | 0VM304920 |
| B354 | SLIDER(TU) MK12 | 0VM101172F |
| B355 | SLIDER(SP) MK12 | 0VM101182K |
| B359 | CLEANER LEVER MK10 | 0VM304413 |
| B360 | CLEANER ROLLER MK9 | 0VM410032C |
| B361 | CL POST MK10 | 0VM411114 |
| B410 | PINCH ARM(A) ASSEMBLY(4) MK12 or | 0VSA13572 |

| Ref. No. | Description | Part No. |
|----------|------------------------------------|--------------|
| | PINCH ARM(A) ASSEMBLY(5) MK12 | 0VSA13788 |
| B411 | PINCH SPRING MK12 | 0VM414644 |
| B414 | M BRAKE(SP) ASSEMBLY MK12.5 | 0VSA14994 |
| B416 | M BRAKE(TU) ASSEMBLY MK12 | 0VSA13283 |
| B417 | TENSION SPG(3002645) MK12.5 | 0VM414221G |
| B425 | LOCK LEVER SPRING MK10 | 0VM411110 |
| B426 | KICK PULLEY MK10 | 0VM411095 |
| B482 | CASSETTE PLATE MK12 | 0VM203749 |
| B483 | LOCK LEVER MK12 | 0VM414095 |
| B487 | BAND BRAKE(SP) MK12 | 0VM305723 |
| B488 | MODE LEVER MK12.5 | 0VM101351 |
| B491 | CAM GEAR(A) MK12 | 0VM101174 |
| B492 | MODE GEAR MK12 | 0VM203769 |
| B494 | C DOOR OPENER MK12 | 0VM305719 |
| B499 | T LEVER HOLDER MK12 | 0VM305729 |
| B501 | WORM HOLDER MK12 | 0VM203767 |
| B502 | CAM GEAR(B) MK12 | 0VM305721 |
| B507 | REEL WASHER MK9 5*2.1*0.5 | 0VM410058 |
| B508 | S BRAKE SPRING MK10 | 0VM411121 |
| B513 | CAM WASHER MK12 | 0VM414741 |
| B514 | SCREW RACK MK10 | 0VM411535 |
| B516 | REEL WASHER MK9 5*2.1*0.5 | 0VM410058 |
| B520 | TU BRAKE SPRING MK12 | 0VM414285 |
| B521 | REV BRAKE SPRING MK12 | 0VM414222 |
| B522 | TG POST ASSEMBLY MK11 | 0VSA12080 |
| B525 | LDG BELT MK11 | 0VM412804 |
| B529 | CLEANER ASSEMBLY MK10 | 0VSA11161 |
| B553 | REV SPRING MK11 | 0VM412555 |
| B555 | RACK ASSEMBLY MK12 | 0VSA13289 |
| B557 | MOTOR PULLEY U5 or | 0VM403205A |
| | MOTOR PULLEY U5 | 0VM403205A |
| B558 | LOADING MOTOR MDB2B82 or | MMDZB10SJ001 |
| | LOADING MOTOR MDB2B80 or | MMDZB12SJ008 |
| | LOADING MOTOR M31E-1 R-14 7376 or | MMDZB12MM003 |
| | LOADING MOTOR M31E-1 R14 7391 or | MMDZB12MM004 |
| | LOADING MOTOR M31E-1 R-14 7377 | MMDZB12MM006 |
| B559 | CLUTCH ASSEMBLY MK12 or | 0VSA13284 |
| | CLUTCH ASSEMBLY(64) MK12 | 0VSA14459 |
| B560 | KICK SPRING MK10 | 0VM411475A |
| B561 | F DOOR SPRING MK10 | 0VM411430 |
| B562 | C DRIVE LEVER(SP) MK12 | 0VM203772 |
| B563 | SLIDER SHAFT MK12 | 0VM305762 |
| B564 | M GEAR MK12 | 0VM305735 |
| B565 | SENSOR GEAR MK12 | 0VM305736 |
| B567 | PINCH ARM(B) MK12 | 0VM305718 |
| B568 | BT ARM MK12 | 0VM305728 |
| B569 | CAM HOLDER(F) MK12 | 0VM305722 |
| B570 | CAM RACK SPRING(HI) MK11 | 0VM412923 |
| B571 | P.S.W CUT 1.6X4.0X0.5T | 0VM408485A |
| B573 | REEL(SP)(D2) MK12 | 0VM203755 |
| B574 | REEL(TU)(D2) MK12 | 0VM203756 |
| B587 | TENSION LEVER ASSEMBLY MK12 | 0VSA13279 |
| B590 | BRAKE ARM(TU) MK12 | 0VM203752E |
| B591 | BAND BRAKE(TU) MK12 | 0VM305724C |
| B592 | TG POST MK11 | 0VM412550 |
| L1051 | SCREW, B-TIGHT M2.6X6 PAN HEAD+ | GPMB9060 |
| L1053 | SCREW, S-TIGHT M2.6X8 WASHER HEAD+ | GCMS9080 |

| Ref. No. | Description | Part No. |
|----------|-------------------------------------|-----------|
| L1151 | SCREW, SEMS M3X4 PAN HEAD + or | CPM33040 |
| | SCREW, SEMS M2.6X4 PAN HEAD+ | CPM39040 |
| L1191 | SCREW, S-TIGHT M2.6X8 WASHER HEAD+ | GCMS9080 |
| L1321 | SCREW, S-TIGHT M3X6 BIND HEAD+ | GBMS3060 |
| L1341 | SCREW, P-TIGHT M2X6 PAN HEAD+ | GPMP2060 |
| L1406 | AC HEAD SCREW MK9 | 0VM410964 |
| L1450 | SCREW, SEMS M2.6X5 PAN HEAD+ | CPM39050 |
| L1466 | SCREW, S-TIGHT M2.6X6 BIND HEAD+ | GBMS9060 |
| L1467 | SCREW M2.6X5 WASHER HEAD+ | SCM39050 |
| L1474 | SCREW, P-TIGHT M2.6X12 WASHER HEAD+ | GCMP9120 |

