

TOSHIBA

FILE NO. 060-200210

SERVICE MANUAL

COLOUR TELEVISION

S2ES Chassis

29VZ6DE, 29VZ6DA

29VZ6SH

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CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a (C) VAC power source. The high voltage must not, under any circumstances, exceed (B) kV.
2. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
3. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

Refer to table-1 for high voltage (A), (B) & AC voltage (C). (See SETTING & ADJUSTING DATA on page 13)

Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on 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 which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

SET-UP ADJUSTMENT

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: 1. The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning.

Refer to figure 1.

2. Mounting position of the purity magnet assembly should fit to same position as old one because slightly difference to the position depend on a kind of tube.

* There are no adjustment of purity and convergence in some picture tube (Unified with purity magnet)

COLOR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes.

1. Demagnetize the picture tube and cabinet using a degaussing coil.
2. Set the brightness and contrast to maximum.
3. Use a green raster from among the built-in test signals.
4. Loosen the clamp screw holding the yoke and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.

5. Remove the Rubber Wedges.
6. Rotate and spread the tabs of the purity magnet (See figure 2.) around the neck of the picture tube until the green belt is in the center of the screen. At the same time, enter the raster vertically.
7. Slowly move the yoke forward or backward until a uniform green screen is obtained. Tighten the clamp screw of the yoke temporarily.
8. Check the purity of the red and blue raster.

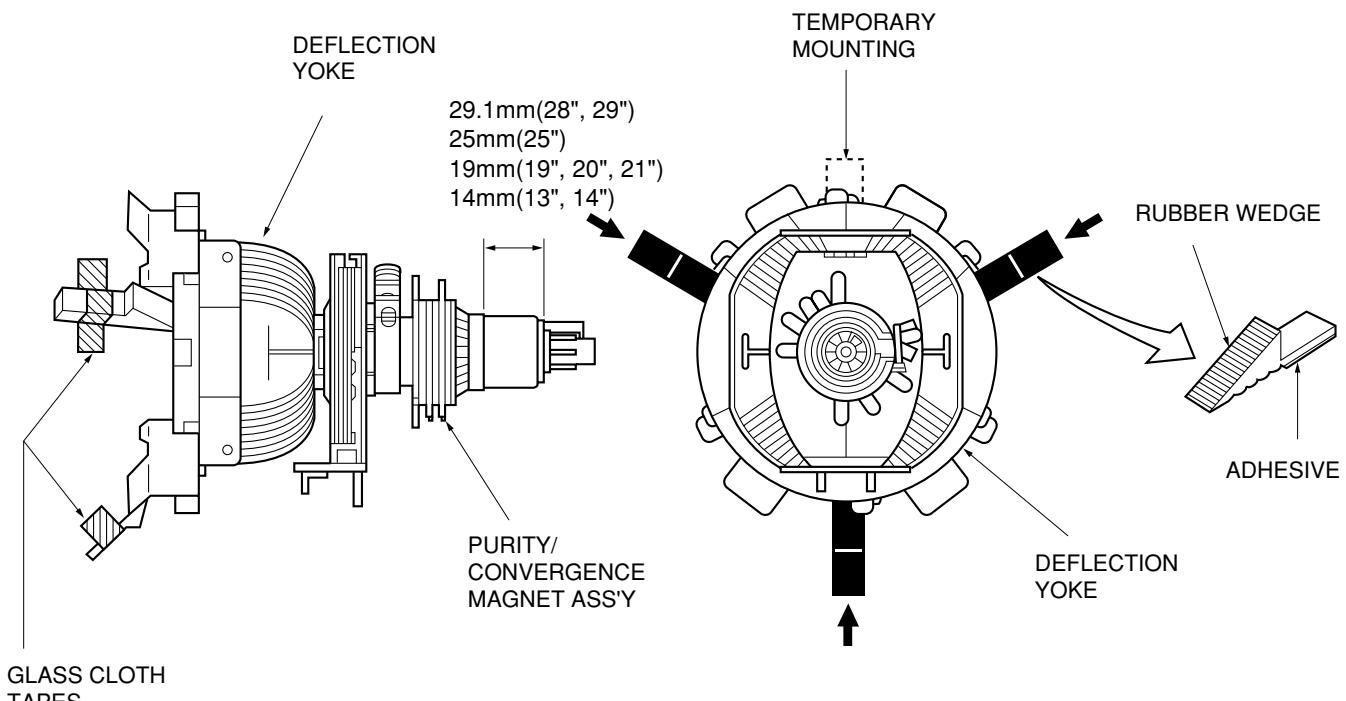


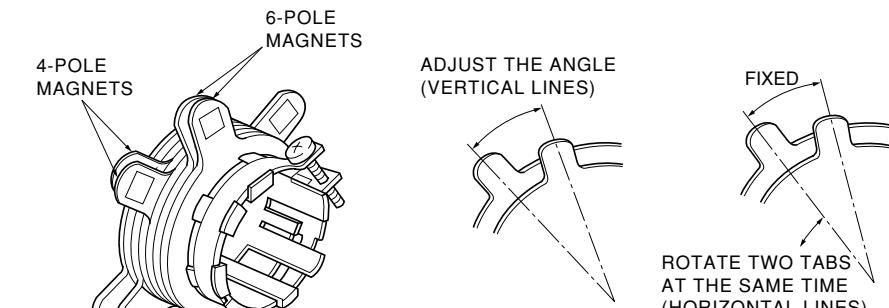
Figure 1.

CONVERGENCE ADJUSTMENTS

NOTE: Before attempting any convergence adjustments, the receiver should be operated for at least fifteen minutes.

CENTER CONVERGENCE ADJUSTMENT

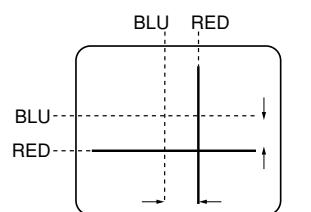
1. Use the cross-dot pattern from among the built-in test signals.
2. Set the brightness and contrast for well defined pattern.
3. Adjust two tabs of the 4-Pole Magnets to change the angle between them (See figure 2.) and superimpose red and blue vertical lines in the center area of the picture screen.
4. Turn the both tabs at the same time keeping the angle constant to superimpose red and blue horizontal lines at the center of the screen.
5. Adjust two tabs of 6-Pole Magnets to superimpose red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affects the horizontal lines.
6. Repeat adjustments 3, 4, 5 keeping in mind red, green and blue movement, because 4-Pole Magnets and 6-Pole Magnets have mutual interaction and make dot movement complex.



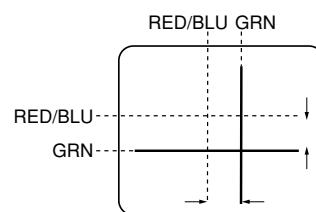
CONVERGENCE MAGNET ASSEMBLY

ADJUSTMENT OF MAGNETS

Figure 2.

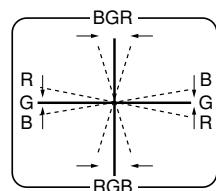


4-POLE MAGNETS MOVEMENT

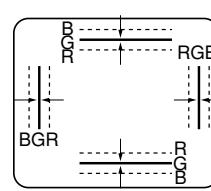


6-POLE MAGNETS MOVEMENT

Center Convergence by Convergence Magnets



INCLINE THE YOKE UP (OR DOWN)



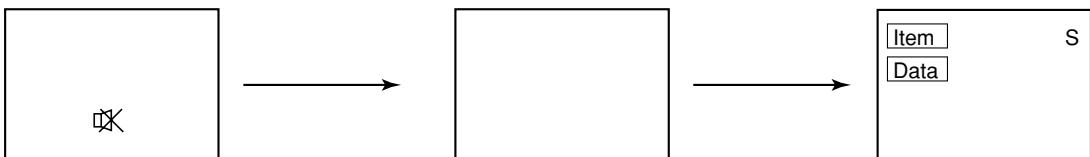
INCLINE THE YOKE RIGHT (OR LEFT)

Circumference Convergence by DEF Yoke

Figure 3. Dot Movement Pattern

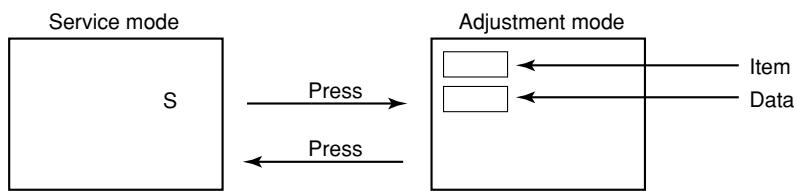
SERVICE MODE

1. ENTERING TO SERVICE MODE

- 1) Press  button once on Remote Control.
 - 2) Press  button again to keep pressing.
 - 3) While pressing the  button, press MENU button on TV set.
- 
- (Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

- 1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

| | |
|---|--|
| A single horizontal line ON/OFF: | - / - - button (on Remote) or  button (on TV) |
| Test signal selection : |  |
| Selection of the adjustment items : | Channel  |
| Change of the data value : | Volume  |
| Adjustment menu mode ON/OFF : | MENU button (on TV) |
| Initialization of the memory (QA02) : | CALL + Channel button on TV () |
| Reset the count of operating protect circuit to "00": | CALL + Channel button on TV () |
| "RCUT" selection : | 1 button |
| "GCUT" selection : | 2 button |
| "BCUT" selection : | 3 button |
| "CNTX" (or "SCNT") selection : | 4 button |
| "COLC" selection : | 5 button |
| "TNTC" selection : | 6 button |
| Test audio signal ON/OFF (1kHz) : | 8 button |
| Self diagnostic display ON/OFF : | 9 button |
| | Color thickness correction note: Displayed differently as shown below, depending on the setting of the receiving color system. COLP (PAL) COLC (NTSC) COLS (SECAM) |

CAUTION : Never try to perform initialization unless you have changed the memory IC.

* The key function marked with  are not usable to control in the Test signal for some model.

4. SELECTING THE ADJUSTING ITEMS

- 1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2.
(▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 13)

5. ADJUSTING THE DATA

- 1) Pressing of VOLUME $\triangleleft \triangleright$ +/- button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

- 1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02

After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the CALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been completed.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
Perform "Auto search Memory" on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

7. TEST SIGNAL SELECTION

- 1) Every pressing of \odot button on the Remote Control changes the built-in test patterns on screen as described below in SERVICE MODE.

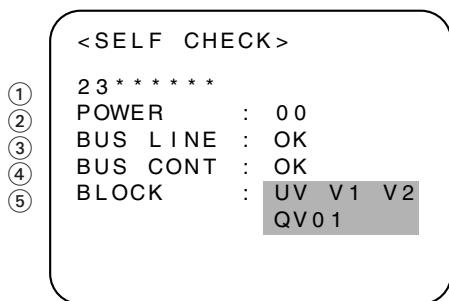
Signal off \longrightarrow NTSC signals (14 patterns)
 \longleftarrow PAL signals (14 patterns) \longleftarrow

| Signals | Picture |
|---|---------|
| <ul style="list-style-type: none"> • Red raster • Green raster • Blue raster • All Black • All White | |
| <ul style="list-style-type: none"> • Black & White | |
| <ul style="list-style-type: none"> • Black cross-bar • White cross-bar • Black cross-bar on green raster | |
| <ul style="list-style-type: none"> • Black cross-hatch • White cross-hatch | |
| <ul style="list-style-type: none"> • Black cross-dot • White cross-dot | |
| <ul style="list-style-type: none"> • H signal (white) • H signal (black) | |

* The signals marked with are not usable to display in the Test signal for some model.

8. SELF DIAGNOSTIC FUNCTION

- 1) Press "9" button on Remote Control during display of adjustment menu in the service mode.
The diagnosis will begin to check if interface among IC's are executed properly.
- 2) During diagnosis, the following displays are shown.



- ① Part number of microcomputer (QA01)
- ② Operation number of protecting circuit ----"00" is normal.
When indication is other than "00", overcurrent apts to flow, and circuit parts may possibly be damaged.
- ③ BUS LINE CHECK ----"OK" is normal.
"SDA1-GND" ----- SDA-GND short circuit.
"SCL1-GND" ----- SCL-GND short circuit.
"SCL1-SDA1" ----- SCL-SDA short circuit.
- ④ BUS CONT ----"OK" is normal.
When indication shows "Q〇〇 NG", the device with the number may possibly be damaged.
- ⑤ BLOCK
UV : TV reception mode
V1 : VIDEO 1 input mode (-①)
V2 : VIDEO 2 input mode (-②)

Indicated color of mode now selected : Green and Red
Indicated color of other modes : White

Green : Normal

Red : The microcomputer operates to provide judgement of no video signal. The red color is still indicated though the signal is input, failure may exist in input signal line including QV01.

QV01 : In case of indication green ---Normal
In case of indication red with input signal----
Failure may exist in output line including QV01.

NOTE: Component which controls character display on screen is QT01 (TELETEXT IC.). If this display function fails to operate due to damage in QT01, self diagnosis procedure is as follows.

- (1) In case that power indicator is blinking with interval of 0.5 seconds; it means protecting circuit (Current limiter) is operating, and circuit components may possibly be damaged. Check related components.
- (2) In case that power indicator is blinking with interval of 1 second; Protecting circuit does not operate, but a part of Bus line does not operate normally. Check Bus line.

* The items marked with ■ are not usable to display in the SELF DIAGNOSTIC FUNCTION for some model.

DESIGN MODE

1. ENTERING TO DESIGN MODE

- 1) Select the Service mode.
- 2) While pressing \times (or CALL) button on Remote and press MENU button on TV.
- 3) Press MENU button on TV.



When QA02 is initialized, items “OPT0” and “OPT1” of DESIGN MODE are set to the data of the representative model of this chassis family.

Therefore, because ON-SCREEN specification remains in the state of the representative of model. This model is required to reset the data of items “OPT0” and “OPT1”.

2. SELECTING THE ADJUSTING ITEMS

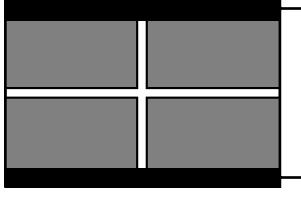
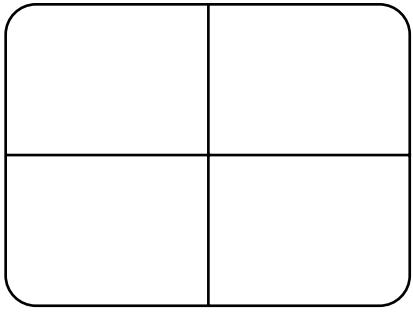
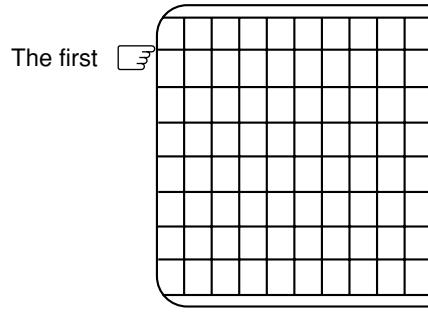
Every pressing of CHANNEL ▼ button in the design mode changes the adjustment items in the order of table-3.
(▲ button for reverse order)

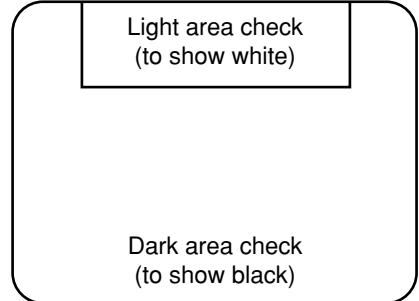
Refer to table-3 for data of design mode.
(See SETTING & ADJUSTING DATA on page 13)

3. ADJUSTING THE DATA

Pressing of VOLUME ▲ or ▼ button will change the value of data.

ELECTRICAL ADJUSTMENTS

| ITEM | ADJUSTMENT PROCEDURE |
|--|---|
| FOCUS VR ADJ | <ol style="list-style-type: none"> 1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen. |
| SUB-BRIGHTNESS (BRTC) | <p>Note: Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT).</p> <ol style="list-style-type: none"> 1. Set CONTRAST to minimum, and BRIGHTNESS to center by adjusting user controls. 2. Set the TV in service mode to get white cross-bar of inside pattern. 3. Select BRTC (brightness correction), and adjust the $\triangle -/+$ button to reduce the value so that white portion of inside pattern slightly light. 4. Adjust $\triangle -/+$ button to increase the data value of BRTC, and set it just before the difference between the belt of vertical retrace and the border of black portion of inside pattern is visible. <p>After that, return vertical height and contrast.</p>  <p style="text-align: right;">Belt of vertical retrace</p> |
| HORIZONTAL POSITION ADJUSTMENT (HPOS) VERTICAL POSITION ADJUSTMENT (VPOS) | <ol style="list-style-type: none"> 1. Set the TV in service mode, and get black or white cross-bar signal with VIDEO button on remote hand unit. 2. Select either HPOS (Horizontal picture phase) or VPOS (Vertical picture phase) with CHANNEL \blacktriangle, ∇ buttons, and adjust horizontal or vertical picture position in the center of screen with VOLUME $\triangle -/+$ buttons.  |
| VERTICAL AMPLITUDE ADJUSTMENT (HIT) | <ol style="list-style-type: none"> 1. Set the TV in service mode, and get black or white cross-hatch signal with VIDEO button on remote hand unit. 2. Select HIT (Vertical amplitude) with CHANNEL \blacktriangle, ∇ buttons, and adjust vertical amplitude with VOLUME $\triangle -/+$ buttons so that vertical amplitude lacks a little. 3. Adjust vertical amplitude with VOLUME $\triangle -/+$ buttons so that the first bar on cross-hatch signal touches edge of screen.  |

| ITEM | ADJUSTMENT PROCEDURE |
|--|---|
| WHITE BALANCE ADJUSTMENT ● CUTOFF ADJUSTMENT (RCUT) (GCUT) (BCUT) ● DRIVE ADJUSTMENT (GDRV) (BDRV) | <p>1. Set Contrast to 40, and brightness to +20 by picture control. 2. Set the TV in service mode, and get the inside W/B adjusting signal with VIDEO button. 3. Select RCUT, GCUT and BCUT with CHANNEL ▲, ▼ buttons, to set individual values to Initial reference data, and to set GDRV and BDRV to Initial reference data with VOLUME ▲-/+ buttons (See page 19). 4. Press [-/-] button on the remote control and rotate Screen VR to get one slight horizontal line on screen. Note: Every pressing of [-/-] button provides Horizontal line picture and Normal picture alternately. 5. Press [-/-] button to release horizontal line picture, and select the two other colors which did not light in the above step with CHANNEL ▲, ▼ buttons. Then tap VOLUME ▲-/+ buttons so that three colors slightly light in the same level.</p> <p>※ To correct white balance in light area, select GDRV and BDRV with CHANNEL ▲, ▼ buttons to adjust. ※ To correct white balance in dark area, perform fine adjustment of RCUT, GCUT and BCUT.</p>  |

NOTE: It is released built-in test pattern by changing the adjustment item for some model.

In this case, select the adjustment item with channel ▲▼ button first and then select the built-in test pattern with [-/-] button.

CIRCUIT CHECK

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below (B) kV.

Refer to table-1 for high voltage (B).
(See SETTING & ADJUSTING DATA on page 13)

4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【SAFETY INSTRUCTIONS】

| | | |
|----------------------------|-----|-----------|
| | | 29" |
| HIGH VOLTAGE AT ZERO BEAM: | (A) | 32.8 KV |
| MAX HIGH VOLTAGE: | (B) | 33.0 KV |
| AC VOLTAGE | (C) | 110~240 V |

Table-1

【SERVICE MODE】

ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE:

| Item | Adjustment | Reference data |
|------|---------------------|----------------|
| RCUT | R CUTOFF (B/W) | 20H |
| GCUT | G CUTOFF (B/W) | 20H |
| BCUT | B CUTOFF (B/W) | 20H |
| GDRV | G DRIVE | 80H |
| BDRV | B DRIVE | 80H |
| BRTC | SUB BRIGHT CEN | 80H |
| COLC | SUB COLOR CEN NTSC | 80H |
| TNTC | SUB TINT CEN | 40H |
| COLP | SUB COLOR CEN PAL | F6H |
| COLS | SUB COLOR CEN SECAM | F6H |
| SCNT | SUB CONTRAST | 07H |
| HPOS | 50Hz H-POSITION | 12H |
| VPOS | V-POSITION | 03H |
| HIT | HEIGHT | 20H |
| VLIN | V-LINEARITY | 07H |
| WID | PICTURE WIDTH | 2CH |
| PARA | E-W PARABOLA | 2BH |
| TRAP | TRAPEZIUM | 0BH |
| BELL | SECAM BELL FILTER | 01H |
| SRY | SECAM R-Y | 08H |
| SBY | SECAM-B-Y | 08H |

Table-2

【DESIGN MODE】

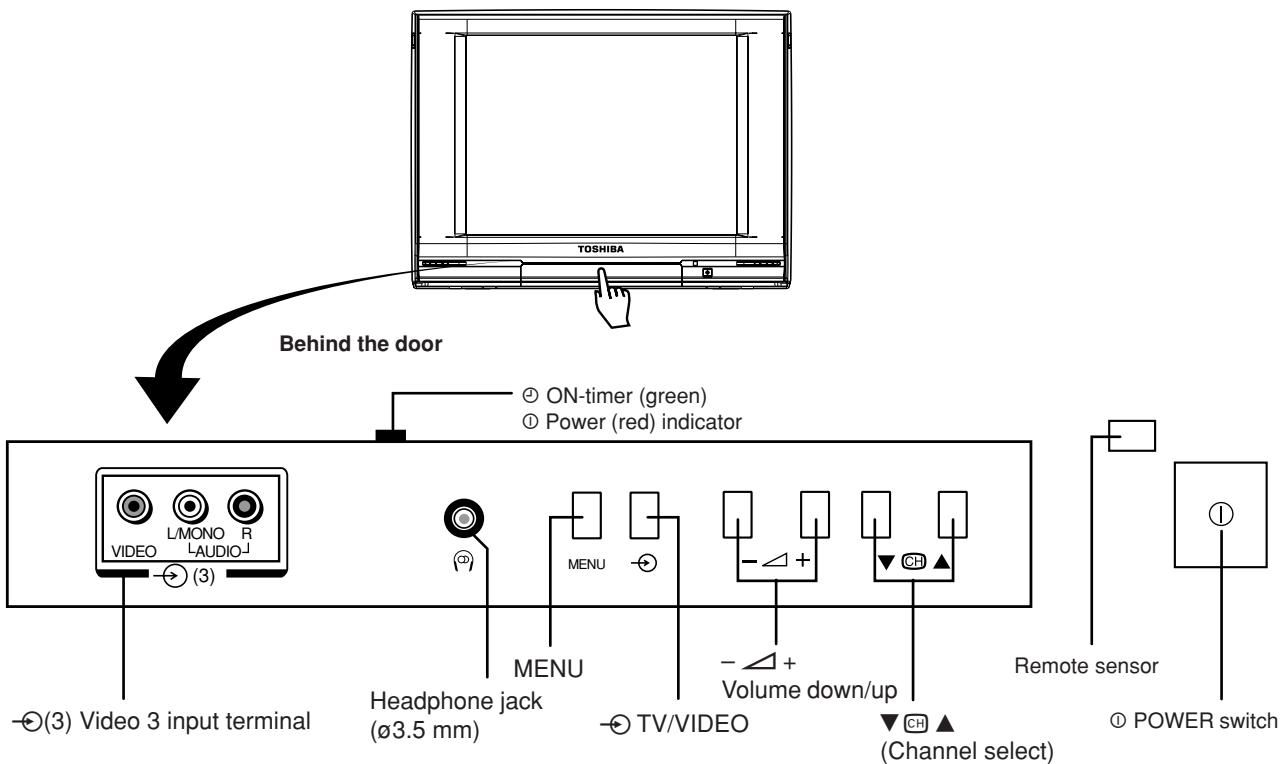
ADJUSTING ITEMS AND DATAS IN THE DESIGN MODE:

| Item | Name of adjustment | Preset Data | Data | Remarks |
|-------|--------------------|-------------|------|---------|
| OPT 1 | OPTION 1 | 05H | 22H | |
| OPT 2 | OPTION 2 | 10H | 1DH | |

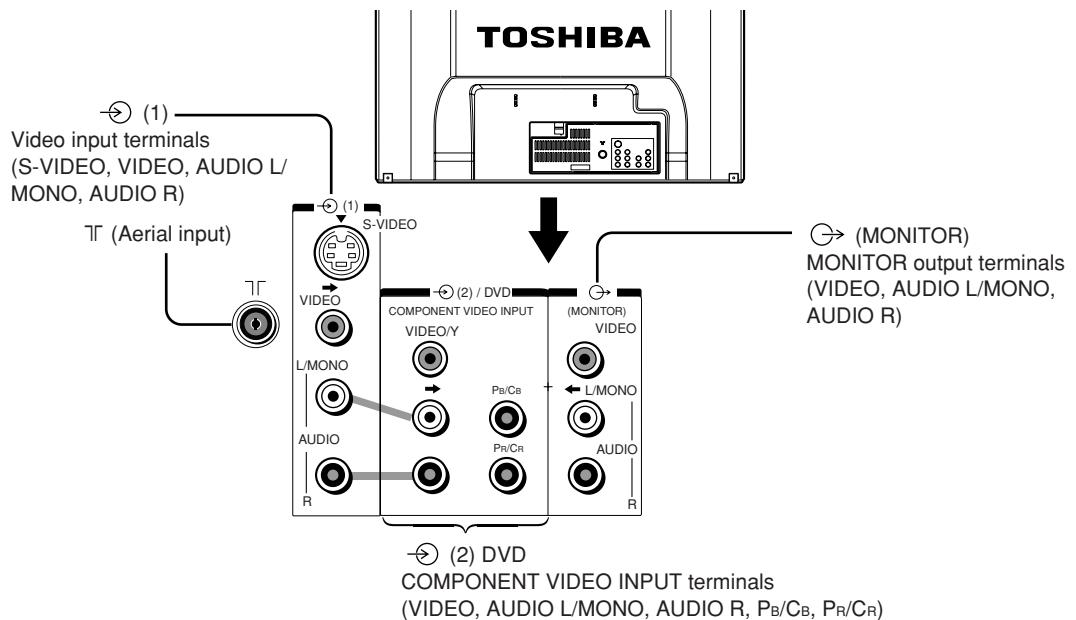
Table-3

LOCATION OF CONTROLS

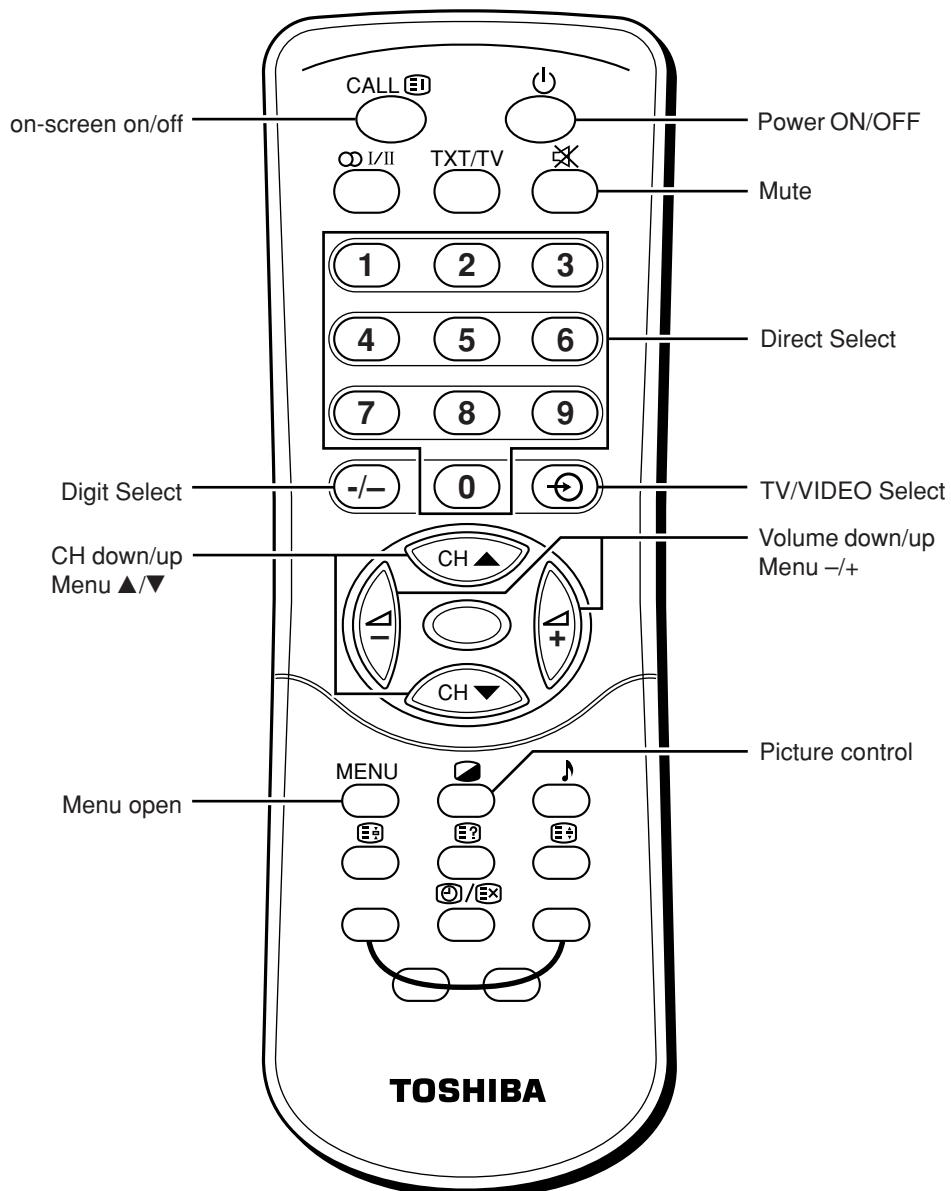
Front



Back



Remote



PROGRAMMING CHANNEL MEMORY

- First, use the ASM (Automatic Search Memory) function to preset all the active channels in your area automatically.

Then, arrange the preset channels with the MANUAL SEARCH , MFT (Manual Fine Tuning) and SKIP functions so that you can tune into only desired channels.

To preset channels (ASM)

ASM (Automatic Search Memory)

- 1** Select the head of the position number to start the ASM with the **CH ▼/▲** buttons or the direct select buttons.
- 2** Press the **MENU** button and press the **MENU -/+** buttons to call up the SET UP menu on the screen.
- 3** Confirm that "COLOR" is set to "AUTO" and "SOUND" is set to proper system.
If not, press the **MENU ▼/▲** buttons to move the cursor (►) to "COLOR" or "SOUND" and press the **MENU -/+** buttons to select each proper system.
- 4** Select the TUNING menu page, and move the cursor (►) to "ASM".
- 5** Press the **MENU +** button to start the ASM. All active channels will be preset automatically.
When presetting is complete, the initial position number will reappear.

After presetting

- Check the preset channels by pressing the **CH ▼/▲** buttons.
- If the picture or sound of a certain channel is not good, retune the channel using the ASM or MANUAL SEARCH or MFT function.
 - If the color of a certain channel is abnormal, automatic color system selection (AUTO) may malfunction, or sound system selection is wrong. In such a case, select another color and/or sound system.

To preset channels (Manual search) and to skip unnecessary position numbers

Manual search

- 1** Select a desired position number with the **CH ▼/▲** or direct select buttons.
- 2** Press the **MENU** button and press the **MENU -/+** buttons to call up the TUNING menu on the screen.
- 3** Press the **MENU ▼/▲** buttons to move the cursor (►) to "SEARCH".
- 4** Press the **MENU -/+** buttons to start searching.
The **MENU -** button searches for lower-numbered channels; the **MENU +** button for higher-numbered channels.
Repeat this process until you can get the desired channel.
- 5** When the desired channel is shown, press the **MENU ▼/▲** buttons to move the cursor (►) to "MEMORY".
- 6** Press the **MENU +** button to store the channel at the current position.
- 7** When you desire to store another channel at another position, move the cursor (►) to "POSITION" with the **MENU ▼/▲** buttons and select a desired position number with the **MENU -/+** buttons.
Then, press the **MENU ▼/▲** buttons to move the cursor (►) to "SEARCH" and repeat the steps 4 to 7, or repeat the steps 1 to 7 after display disappears.

- The adjustments below are not necessary under normal conditions. However, in areas of inferior broadcast conditions where adjustment is necessary for a better picture, adjust the tuning with the MFT (Manual Fine Tuning). The AFT OFF status automatically keeps the condition adjusted with the MFT function.
- The AFT (Auto Fine Tuning) function automatically corrects slight fluctuations when receiving signals.
- When using Manual Search to preset the channel, the AFT will automatically turn ON and SKIP to OFF.

MFT (Manual Fine Tuning) and AFT (Auto Fine Tuning)

To skip a position number

After presetting the channels, you may skip unnecessary position numbers so that only the channels you want to watch are selected.

- 1** Select the position number to be skipped with the **CH ▼/▲** buttons or direct select buttons.
- 2** Press the **MENU** button and select SET UP menu on the screen.
- 3** Press the **MENU ▼/▲** buttons to move the cursor (►) to "SKIP".
- 4** Press the **MENU -/+** buttons to select "SKIP ON".
- 5** Press the **CALL** button to turn off the SET UP menu display.
Select the position number to be skipped with the direct select buttons. The * mark appears to the left of the position number.
The position number will then be skipped when you select channels with the **CH ▼/▲** buttons.

To restore a skipped position number

- 1 Select the position number you want to restore with the direct select buttons.
- 2 Press the **MENU** button and select the SET UP menu display and press the **MENU ▼/▲** buttons to move the cursor (►) to "SKIP".
- 3 Press the **MENU -/+** buttons to select "SKIP OFF".

MFT (Manual Fine Tuning)

- 1** Select the position number you want to fine-tune with the position down▼/up▲ buttons or digit/direct select buttons.
- 2** Press the **MENU** and select the TUNING menu on the screen.
- 3** Press the **▼/▲** buttons to move the cursor (►) to "MFT".
- 4** Press the **MENU -/+** buttons until the best possible picture and sound are obtained.

Note

When operating the MFT function, the AFT status is automatically set to OFF.

AFT (Auto Fine Tuning)

- 1** Select the position number you want to fine-tune with the position down▼/up▲ buttons or digit/direct select buttons.
- 2** Press the **MENU** button and press the **MENU -/+** buttons to call up the TUNING menu on the screen.
- 3** Press the **▼/▲** buttons to move the cursor (►) to "AFT". Press the **MENU -/+** buttons to select the "ON" indication.

Note

When position is set to AFT OFF status, the "■" mark appears to the left of the position number.
When the channel is set to AFT ON status, the position number is displayed without the "■" mark.

CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with *mark is no longer available after the end of the production.

Model : 29VZ6DE, 29VZ6DA, 29VZ6SH

| | | | |
|------------------|------------------------|-------------------------|-----------------------|
| Capacitors | CD : Ceramic Disk | PF : Plastic Film | EL : Electrolytic |
| Resistors | CF : Carbon Film | CC : Carbon Composition | MF : Metal Film |
| | OMF : Oxide Metal Film | VR : Variable Resistor | FR : Fusible Resistor |

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

| Location No. | Parts No. | Description |
|-------------------|-----------|----------------------------------|
| CAPACITORS | | |
| C100 | 24669478 | ELECTROLYTIC, 50V 0.47UF M 3A |
| C101 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C102 | 24669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C103 | 24794221 | ELECTROLYTIC, 16V 220UF M |
| C104 | 24669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C105 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C106 | 24669010 | ELECTROLYTIC, 50V 1.0UF M 3A |
| C107 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C108 | 24794221 | ELECTROLYTIC, 16V 220UF M |
| C109 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C110 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C111 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C112 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C113 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C120 | 24666100 | ELECTROLYTIC, 10V 10UF M 3A |
| C121 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C129 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C131 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C132 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C135 | 24212222 | CERAMIC DISC, 50V B 2200PF K |
| C136 | 24206228 | ELECTROLYTIC, 50V 0.22UF M 7L 3A |
| C139 | 24212101 | CERAMIC DISC, 50V B 100PF K |
| C190 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C191 | 24539474 | PLASTIC FILM, 50V 0.47UF J |
| C201 | 24212103 | CERAMIC DISC, 50V B 10000PF K |
| C202 | 24212103 | CERAMIC DISC, 50V B 10000PF K |
| C210 | 24591104 | PLASTIC FILM, 50V 0.1UF J |
| C213 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C214 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C215 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C216 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C221 | 24473100 | CERAMIC, 50V 10PF J |
| C222 | 24473100 | CERAMIC, 50V 10PF J |
| C223 | 24473100 | CERAMIC, 50V 10PF J |
| C224 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C226 | 24539104 | PLASTIC FILM, 50V 0.1UF J |
| C227 | 24539104 | PLASTIC FILM, 50V 0.1UF J |
| C241 | 24669010 | ELECTROLYTIC, 50V 1.0UF M 3A |
| C242 | 24436181 | CERAMIC DISC, 50V SL 180PF J |
| C243 | 24666330 | ELECTROLYTIC, 16V 33UF M 3A |
| C244 | 24212222 | CERAMIC DISC, 50V B 2200PF K |

| Location No. | Parts No. | Description |
|--------------|-----------|--------------------------------------|
| C245 | 24212472 | CERAMIC DISC, 50V B 4700PF K |
| C304 | 24214471 | CERAMIC DISC, 500V B 470PF K |
| C305 | 24669010 | ELECTROLYTIC, 50V 1.0UF M 3A |
| C306 | 24667222 | ELECTROLYTIC, 25V 2200UF M 3A |
| C308 | 24669221 | ELECTROLYTIC, 50V 220UF M 3A |
| C309 | 24669010 | ELECTROLYTIC, 50V 1.0UF M 3A |
| C310 | 24669222 | ELECTROLYTIC, 50V 2200UF M 3A |
| C311 | 24212272 | CERAMIC DISC, 50V B 2700PF K |
| C313 | 24082057 | PLASTIC FILM, 100V 220000PF J |
| C318 | 24666101 | ELECTROLYTIC, 16V 100UF M 3A |
| C320 | 24669101 | ELECTROLYTIC, 50V 100UF M 3A |
| C336 | 24082056 | PLASTIC FILM CF922 M 100V 180000PF J |
| C341 | 24797101 | ELECTROLYTIC, 50V 100UF M |
| C342 | 24795100 | ELECTROLYTIC CE04G 25V 10UF M |
| C361 | 24794220 | ELECTROLYTIC, 16V 22UF M |
| C403 | 24591562 | PLASTIC FILM, 50V 5600PF J |
| C403 | 24795102 | ELECTROLYTIC, 25V 1000UF M |
| C404 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C413 | 24214821 | CERAMIC DISC, 500V B 820PF K |
| C416 | 24678229 | ELECTROLYTIC, 200V 2.2UF M 3A |
| C417 | 24214391 | CERAMIC DISC, 500V B 390PF K |
| C420 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C420 | 24829223 | PLASTIC FILM, 400V 0.022U J |
| C430 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C431 | 24763102 | ELECTROLYTIC, 16V 1000UF M |
| C432 | 24353181 | CERAMIC DISC, 50V CH 180PF J |
| C433 | 24539104 | PLASTIC FILM, 50V 0.1UF J |
| C436 | 24793102 | ELECTROLYTIC, 10V 1000UF M |
| C439 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C441 | 24693472 | PLASTIC FILM, 100V 4700PF J |
| C442 | 24082917 | PLASTIC FILM, 315V 0.3UF J |
| C443 | 24082591 | PLASTIC FILM, 1500VH 0.01UF H |
| C444 | 24082952 | PLASTIC FILM CF92 T 1500VH 6200PF H |
| C445 | 24828563 | PLASTIC FILM, 200V 56000PF J |
| C446 | 24829753 | PLASTIC FILM, 400V 75000PF J |
| C447 | 24679330 | ELECTROLYTIC, 250V 33UF M 3A |
| C448 | 24640908 | ELECTROLYTIC, 160V 33UF M 3A LI |
| C449 | 24214331 | CERAMIC DISC, 500V B 330PF K |
| C463 | 24212222 | CERAMIC DISC, 50V B 2200PF K |
| C464 | 24640872 | ELECTROLYTIC, 100V 10UF M 3A |
| C466 | 24214181 | CERAMIC DISC, 500V B 180PF K |
| C467 | 24820433 | PLASTIC FILM, 630V 0.043UF J |

| Location No. | Parts No. | Description | Location No. | Parts No. | Description |
|--------------|-----------|---------------------------------|--------------|-----------|---|
| C470 | 24666470 | ELECTORLYTIC, 16V 47UF M 3A | C829 | 24591272 | PLASTIC FILM, 50V 2700PF J |
| C472 | 24539474 | PLASTIC FILM, 50V 0.47UF J | C831 | 24794470 | ELECTORLYTIC, 16V 47UF M |
| C473 | 24797010 | ELECTROLYTIC, 50V 1UF M | C833 | 24797229 | ELECTROLYTIC, 50V 2.2UF M |
| C475 | 24820333 | PLASTIC FILM, 630V 33000PF J | C841 | 24797100 | ELECTROLYTIC, 50V 10UF M |
| C478 | 24539103 | PLASTIC FILM, 50V 0.01UF J | C842 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C479 | 24539104 | PLASTIC FILM, 50V 0.1UF J | C843 | 24591104 | PLASTIC FILM, 50V 0.1UF J |
| C498 | 24591472 | PLASTIC FILM, 50V 4700PF J | C846 | 24591224 | PLASTIC FILM, 50V 0.22MF J |
| C502 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C884 | 24086916 | ELECTROLYTIC, 160V 330UF M 3D |
| C505 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C885 | 24214471 | CERAMIC DISC, 500V B 470PF K |
| C512 | 24797010 | ELECTROLYTIC, 50V 1UF M | C887 | 24214471 | CERAMIC DISC, 500V B 470PF K |
| C513 | 24797010 | ELECTROLYTIC, 50V 1UF M | C889 | 24668222 | ELECTROLYTIC, 35V 2200UF M 3A |
| C516 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C893 | 24092337 | CERAMIC DISC, 2KV 220PF K |
| C517 | 24794101 | ELECTROLYTIC, 16V 100UF M | C895 | 24676470 | ELECTROLYTIC, 100V 47UF M 3A |
| C523 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C897 | 24212272 | CERAMIC DISC, 50V B 2700PF K |
| C524 | 24794101 | ELECTROLYTIC, 16V 100UF M | C898 | 24539224 | PLASTIC FILM, 50V 0.22UF J |
| C526 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C902 | 24092345 | CERAMIC DISC, 2KV 1000PF K |
| C565 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | C903 | 24436121 | CERAMIC DISC, 50V SL 120PF J |
| C621 | 24794470 | ELECTORLYTIC, 16V 47UF M | C904 | 24436331 | CERAMIC DISC, 50V SL 330PF J |
| C622 | 24794100 | ELECTROLYTIC, 16V 10UF M | C905 | 24436391 | CERAMIC DISC, 50V SL 390PF J |
| C623 | 24794100 | ELECTROLYTIC, 16V 10UF M | C906 | 24436121 | CERAMIC DISC, 50V SL 120PF J |
| C661 | 24591102 | PLASTIC FILM, 50V 1000PF J | C907 | 24436471 | CERAMIC DISC, 50V SL 470PF J |
| C662 | 24591102 | PLASTIC FILM, 50V 1000PF J | C908 | 24436121 | CERAMIC DISC, 50V SL 120PF J |
| C663 | 24766100 | ELECTROLYTIC, 50V 10UF M | C909 | 24679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C665 | 24797229 | ELECTROLYTIC, 50V 2.2UF M | C910 | 24797478 | ELECTROLYTIC, 50V 0.47UF M |
| C666 | 24797229 | ELECTROLYTIC, 50V 2.2UF M | C911 | 24203100 | ELECTORLYTIC, 16V 10UF M 7L 3A |
| C667 | 24539473 | MT PLA CAP M 50V 473J MUL | C912 | 24794102 | ELECTROLYTIC, 16V 1000UF M |
| C668 | 24539473 | MT PLA CAP M 50V 473J MUL | C913 | 24794220 | ELECTROLYTIC, 16V 22UF M |
| C673 | 24669229 | ELECTROLYTIC, 50V 2.2UF M 3A | C914 | 24212103 | CERAMIC DISC, 50V B 10000PF K |
| C676 | 24591104 | PLASTIC FILM, 50V 0.1UF J | C930 | 24214101 | CERAMIC DISC, 500V B 100PF K |
| C677 | 24591104 | PLASTIC FILM, 50V 0.1UF J | C931 | 24214101 | CERAMIC DISC, 500V B 100PF K |
| C679 | 24795470 | ELECTROLYTIC, 25V 47UF M | C932 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C681 | 24668102 | ELECTROLYTIC, 35V 1000UF M 3A | C933 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C683 | 24668102 | ELECTROLYTIC, 35V 1000UF M 3A | CA03 | 24353220 | CERAMIC DISC, 50V CH 22PF J |
| C684 | 24668101 | ELECTROLYTIC, 35V 1000UF M 3A | CA04 | 24353220 | CERAMIC DISC, 50V CH 22PF J |
| C688 | 24797229 | ELECTROLYTIC, 50V 2.2UF M | CA20 | 24212101 | CERAMIC DISC, 50V B 100PF K |
| C690 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | CA30 | 24353270 | CERAMIC DISC, 50V CH 27PF J |
| C693 | 24667470 | ELECTROLYTIC, 25V 47UF M 3A | CA41 | 24212101 | CERAMIC DISC, 50V B 100PF K |
| C694 | 24795470 | ELECTROLYTIC, 25V 47UF M | CA42 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C704 | 24591822 | PLASTIC FILM, 50V 8200PF J | CA43 | 24212101 | CERAMIC DISC, 50V B 100PF K |
| C705 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z | CA45 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C707 | 24795470 | ELECTROLYTIC, 25V 47UF M | CA53 | 24539223 | PLASTIC FILM, 50V 0.022UF J MUL |
| C712 | 24795470 | ELECTROLYTIC, 25V 47UF M | CA68 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C713 | 24790100 | ELECTROLYTIC, 160V 10UF M | CA69 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C714 | 24436101 | CERAMIC DISC, 50V SL 100PF J | CB02 | 24744470 | ELECTROLYTIC, 16V 47UF M |
| C715 | 24214472 | CERAMIC DISC, 500C B 4700PF K | CB20 | 24353101 | CERAMIC DISC, 50V CH 100PF J (29VZ6DE/29VZ6DA) |
| C716 | 24436101 | CERAMIC DISC, 50V SL 100PF J | CB21 | 24353221 | CERAMIC DISC, 50V CH 220PF J (29VZ6DE/29VZ6DA) |
| C717 | 24214472 | CERAMIC DISC, 500C B 4700PF K | CB22 | 24591272 | PLASTIC FILM, 50V 2700PF J (29VZ6DE/29VZ6DA) |
| C718 | 24794470 | ELECTORLYTIC, 16V 47UF M | CC14 | 24591103 | PLASTIC FILM, 50V 0.01UF J |
| C719 | 24435560 | CERAMIC DISC, 500V SL 56PF J | CC23 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C720 | 24790100 | ELECTROLYTIC, 160V 10UF M | CC24 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C721 | 24794470 | ELECTORLYTIC, 16V 47UF M | CS01 | 24073077 | ELECTROLYTIC, 50V 0.1UF M 3A |
| C722 | 24436561 | CERAMIC DISC, 50V SL 560PF J | CS02 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C726 | 24212102 | CERAMIC DISC, 50V B 1000PF K | CS03 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| △ C801 | 24503002 | PLASTIC FILM, AC275V 0.22UF M | CS04 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| △ C802 | 24503002 | PLASTIC FILM, AC275V 0.22UF M | CS05 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C805 | 24092281 | CERAMIC DISC, AC250V E 4700PF | CS06 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C806 | 24092281 | CERAMIC DISC, AC250V E 4700PF | CS07 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| C808 | 24795331 | ELECTROLYTIC CE04G 25V 330UF M | CS10 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C810 | 24086857 | ELECTROLYTIC, 400V 560UF | CS11 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| △ C813 | 24092567 | CERAMIC DISC, AC250V E 1000PF M | CS14 | 24797478 | ELECTROLYTIC, 50V 0.47UF M |
| △ C814 | 24092567 | CERAMIC DISC, AC250V E 1000PF M | CS29 | 24666220 | ELECTROLYTIC, 16V 22UF M 3A |
| C817 | 24092339 | CERAMIC DISC, 2KV 330PF K | CT01 | 24794221 | ELECTROLYTIC, 16V 220UF M (29VZ6DE/29VZ6DA) |
| C818 | 24095931 | PLASTIC FILM, 1250VH 2200PF J | | | |
| C819 | 24676220 | ELECTROLYTIC, 100V 22UF M 3A | | | |
| C821 | 24214471 | CERAMIC DISC, 500V B 470PF K | | | |
| C822 | 24539474 | PLASTIC FILM, 50V 0.47UF J | | | |
| C823 | 24214471 | CERAMIC DISC, 500V B 470PF K | | | |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| CT02 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CT03 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CT04 | 24794101 | ELECTROLYTIC, 16V 100UF M (29VZ6DE/29VZ6DA) |
| CT05 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT06 | 24794470 | ELECTORLYTIC, 16V 47UF M (29VZ6DE/29VZ6DA) |
| CT07 | 24794100 | ELECTROLYTIC, 16V 10UF M (29VZ6DE/29VZ6DA) |
| CT08 | 24353560 | CERAMIC DISC, 50V CH 56PF J (29VZ6DE/29VZ6DA) |
| CT09 | 24353560 | CERAMIC DISC, 50V CH 56PF J (29VZ6DE/29VZ6DA) |
| CT10 | 24794470 | ELECTORLYTIC, 16V 47UF M (29VZ6DE/29VZ6DA) |
| CT11 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT12 | 24794470 | ELECTORLYTIC, 16V 47UF M (29VZ6DE/29VZ6DA) |
| CT13 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT14 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT16 | 24353220 | CERAMIC DISC, 50V CH 22PF J (29VZ6DE/29VZ6DA) |
| CT17 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT20 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CT21 | 24795101 | ELECTROLYTIC, 25V 100UF M (29VZ6DE/29VZ6DA) |
| CT22 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CT23 | 24797478 | ELECTROLYTIC, 50V 0.47UF M |
| CT24 | 24797478 | ELECTROLYTIC, 50V 0.47UF M |
| CT25 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| CT26 | 24794470 | ELECTORLYTIC, 16V 47UF M |
| CT27 | 24212222 | CERAMIC DISC, 50V B 2200PF K |
| CT28 | 24797010 | ELECTROLYTIC, 50V 1UF M |
| CT29 | 24212102 | CERAMIC DISC, 50V B 1000PF K |
| CT30 | 24212101 | CERAMIC DISC, 50V B 100PF K |
| CV01 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| CV02 | 24797220 | ELECTROLYTIC, 50V 22UF M |
| CV03 | 24539473 | MT PLA CAP M 50V 473J MUL |
| CV04 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV05 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV06 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV07 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV08 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV09 | 24591104 | PLASTIC FILM, 50V 0.1UF J (29VZ6DE/29VZ6DA) |
| CV10 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CV11 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CV12 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z (29VZ6DE/29VZ6DA) |
| CV13 | 24794470 | ELECTORLYTIC, 16V 47UF M (29VZ6DE/29VZ6DA) |
| CV19 | 24073077 | ELECTROLYTIC, 50V 0.1UF M 3A |

| Location No. | Parts No. | Description |
|------------------|-----------|---|
| CV20 | 24073077 | ELECTROLYTIC, 50V 0.1UF M 3A |
| CV22 | 24073077 | ELECTROLYTIC, 50V 0.1UF M 3A |
| CV30 | 24085982 | ELECTRORYTIC, NONPOLAR, 50V 0.1UF M |
| CV32 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| CV33 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| CV34 | 24762471 | ELECTROLYTIC, 10V 470UF M |
| CV36 | 24794221 | ELECTROLYTIC, 16V 220UF M |
| CZ02 | 24794220 | ELECTROLYTIC, 16V 22UF M |
| CZ03 | 24353120 | CERAMIC DISC, 50V CH 12PF J |
| RESISTORS | | |
| R101 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R101 | 24382183 | OXIDE METAL FILM, 1W 18K OHM J |
| R102 | 24366683 | CARBON FILM, 1/6W 68K OHM J |
| R103 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R124 | 24366303 | CARBON FILM, 1/6W 30K OHM J |
| R130 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R131 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| R132 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R133 | 24366333 | CARBON FILM, 1/6W 33K OHM J |
| R135 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R136 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R153 | 24552271 | OXIDE METAL FILM, 1/2W 270 OHM J |
| R163 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R164 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R165 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R202 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R214 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R216 | 24366224 | CARBON FILM, 1/6W 220K OHM J |
| R217 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R217 | 24367103 | CARBON FILM, 1/6W 10K OHM G |
| R228 | 24366271 | CARBON FILM, 1/6W 270 OHM J |
| R228 | 24367562 | CARBON FILM, 1/6W 5.6K OHM G |
| R229 | 24366271 | CARBON FILM, 1/6W 270 OHM J |
| R230 | 24366271 | CARBON FILM, 1/6W 270 OHM J |
| R241 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| R242 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R243 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| R244 | 24366394 | CARBON FILM, 1/6W 390K OHM J |
| R245 | 24366333 | CARBON FILM, 1/6W 33K OHM J |
| R246 | 24366123 | CARBON FILM, 1/6W 12K OHM J |
| R247 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J |
| R248 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J |
| R249 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| R301 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R305 | 24323109 | OXIDE METAL FILM, 2W 1 OHM J |
| R306 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R307 | 24366912 | CARBON FILM, 1/6W 9.1K OHM J |
| R310 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R311 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R312 | 24383102 | OXIDE METAL FILM, 2W 1K OHM J |
| R313 | 24366513 | CARBON FILM, 1/6W 51K OHM J |
| R314 | 24366103 | CARBON FILM, 1/6W 10K OHM J (29VZ6DE/29VZ6DA) |
| R314 | 24366105 | CARBON FILM, 1/6W 1M OHM J |
| R315 | 24366824 | CARBON FILM, 1/6W 820K OHM J |
| R316 | 24366154 | CARBON FILM, 1/6W 150K OHM J |
| R317 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| R318 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| R319 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| R328 | 24339159 | OXIDE METAL FILM, 2W 1.5 OHM J |
| R331 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R336 | 24383181 | OXIDE METAL FILM, 2W 180 OHM J |
| R341 | 24366182 | CARBON FILM, 1/6W 1.8K OHM J |

SPECIFIC INFORMATIONS

| Location No. | Parts No. | Description | Location No. | Parts No. | Description |
|--------------|-----------|--|--------------|-----------|----------------------------------|
| R342 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J | R502 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R343 | 24310159 | OXIDE METAL FILM, 1/2W 1.5 OHM J | R503 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R344 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J | R504 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R349 | 24366473 | CARBON FILM, 1/6W 47K OHM J | R505 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R361 | 24366272 | CARBON FILM, 1/6W 2.7K OHM J | R506 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R362 | 24366272 | CARBON FILM, 1/6W 2.7K OHM J | R507 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R363 | 24552682 | OXIDE METAL FILM, 1/2W 6.8K OHM J (29VZ6DE/29VZ6DA) | R508 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R364 | 24366101 | CARBON FILM, 1/6W 100 OHM J | R509 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R366 | 24366432 | CARBON FILM, 1/6W 4.3K OHM J | R509 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R367 | 24000370 | METAL FILM, 1/4W 3.3K OHM F | R620 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R369 | 24366391 | CARBON FILM, 1/6W 390 OHM J | R621 | 24366273 | CARBON FILM, 1/6W 27K OHM J |
| R400 | 24946561 | CARBON COMPOSITION, 1/2W 560 OHM K | R622 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R402 | 24366103 | CARBON FILM, 1/6W 10K OHM J | R623 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R403 | 24366203 | CARBON FILM, 1/6W 20K OHM J | R643 | 24552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R411 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R644 | 24552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R413 | 24366271 | CARBON FILM, 1/6W 270 OHM J | R661 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R415 | 24553272 | OXIDE METAL FILM, 1W 2.7K OHM J | R662 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R416 | 24019329 | OXIDE FILM 5W 3R3K J | R663 | 24366333 | CARBON FILM, 1/6W 33K OHM J |
| R420 | 24321229 | OXIDE METAL FILM, 1/2W 2.2 OHM J | R664 | 24366333 | CARBON FILM, 1/6W 33K OHM J |
| R425 | 24381471 | OXIDE METAL FILM, 1/2W 470 OHM J | R667 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R426 | 24366751 | CARBON FILM, 1/6W 750 OHM J | R668 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R427 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J | R669 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R428 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R676 | 24366229 | CARBON FILM, 1/6W 2.2 OHM J |
| R429 | 24552560 | OXIDE METAL FILM, 1/2W 56 OHM J | R677 | 24366229 | CARBON FILM, 1/6W 2.2 OHM J |
| R430 | 24366103 | CARBON FILM, 1/6W 10K OHM J | R695 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R431 | 24366103 | CARBON FILM, 1/6W 10K OHM J | R702 | 24366821 | CARBON FILM, 1/6W 820 OHM J |
| R432 | 24531560 | FUSIBLE, 1/2W 56 OHM J | R709 | 24366563 | CARBON FILM, 1/6W 56K OHM J |
| R433 | 24366681 | CARBON FILM, 1/6W 680 OHM J | R713 | 24366393 | CARBON FILM, 1/6W 39K OHM J |
| R435 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R715 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| R436 | 24366241 | CARBON FILM, 1/6W 240 OHM J | R716 | 24366273 | CARBON FILM, 1/6W 27K OHM J |
| R437 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J | R717 | 24366333 | CARBON FILM, 1/6W 33K OHM J |
| R438 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J | R719 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J |
| R439 | 24366102 | CARBON FILM, 1/6W 1K OHM J | R720 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J |
| R440 | 24366473 | CARBON FILM, 1/6W 47K OHM J | R721 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R441 | 24532102 | FUSIBLE, 1W 1K OHM J | R722 | 24552471 | OXIDE METAL FILM, 1/2W 470 OHM J |
| R447 | 24382472 | OXIDE METAL FILM, 1W 4.7K OHM J | R723 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| R448 | 24338398 | OXIDE METAL FILM, 1W 0.39 OHM J | R724 | 24366470 | CARBON FILM, 1/6W 47 OHM J |
| R456 | 24366101 | CARBON FILM, 1/6W 100 OHM J | R725 | 24366182 | CARBON FILM, 1/6W 1.8K OHM J |
| R460 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J | R730 | 24552100 | OXIDE METAL FILM, 1/2W 10 OHM J |
| R461 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R731 | 24552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R462 | 24366392 | CARBON FILM, 1/6W 3.9K OHM J | R732 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| R463 | 24322399 | OXIDE METAL FILM, 1W 3.9 OHM J | R733 | 24366683 | CARBON FILM, 1/6W 68K OHM J |
| R464 | 24366103 | CARBON FILM, 1/6W 10K OHM J | R734 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| R465 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J | R735 | 24366683 | CARBON FILM, 1/6W 68K OHM J |
| R466 | 24366103 | CARBON FILM, 1/6W 10K OHM J | R736 | 24366620 | CARBON FILM, 1/6W 62 OHM J |
| R467 | 24381393 | OXIDE METAL FILM, 1/2W 39K OHM J | R737 | 24366152 | CARBON FILM, 1/6W 1.5K OHM J |
| R470 | 24338568 | OXIDE METAL FILM, 1W 0.56 OHM J | R738 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R471 | 24531271 | FUSIBLE, 1/2W 270 OHM J | R739 | 24366152 | CARBON FILM, 1/6W 1.5K OHM J |
| R476 | 24381333 | OXIDE METAL FILM, 1/2W 33K OHM J | R740 | 24366620 | CARBON FILM, 1/6W 62 OHM J |
| R477 | 24366101 | CARBON FILM, 1/6W 100 OHM J | R741 | 24366279 | CARBON FILM, 1/6W 2.7 OHM J |
| R479 | 24366101 | CARBON FILM, 1/6W 100 OHM J | R742 | 24366279 | CARBON FILM, 1/6W 2.7 OHM J |
| R480 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R743 | 24554221 | OXIDE METAL FILM, 2W 220 OHM J |
| R481 | 24366154 | CARBON FILM, 1/6W 150K OHM J | R744 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R482 | 24366223 | CARBON FILM, 1/6W 22K OHM J | R745 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R483 | 24366154 | CARBON FILM, 1/6W 150K OHM J | R760 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R484 | 24366183 | CARBON FILM, 1/6W 18K OHM J | R775 | 24366182 | CARBON FILM, 1/6W 1.8K OHM J |
| R485 | 24366561 | CARBON FILM, 1/6W 560 OHM J | △ R801 | 24009954 | METAL FILM, 1/2W 2.2M OHM J |
| R486 | 24366102 | CARBON FILM, 1/6W 1K OHM J | R802 | 24383123 | OXIDE METAL FILM, 2W 12K J |
| R487 | 24366563 | CARBON FILM, 1/6W 56K OHM J | R803 | 24383123 | OXIDE METAL FILM, 2W 12K J |
| R488 | 24366561 | CARBON FILM, 1/6W 560 OHM J | R804 | 24366334 | CARBON FILM, 1/6W 330K OHM J |
| R490 | 24366471 | CARBON FILM, 1/6W 470 OHM J | R805 | 24366681 | CARBON FILM, 1/6W 680 OHM J |
| R491 | 24366102 | CARBON FILM, 1/6W 1K OHM J | R807 | 24366334 | CARBON FILM, 1/6W 330K OHM J |
| R492 | 24366102 | CARBON FILM, 1/6W 1K OHM J | △ R808 | 24019484 | THERMISTOR, PTC, AC265 4R5A |
| R497 | 24366154 | CARBON FILM, 1/6W 150K OHM J | R809 | 24366393 | CARBON FILM, 1/6W 39K OHM J |
| R498 | 24366563 | CARBON FILM, 1/6W 56K OHM J | R811 | 24366225 | CARBON FILM, 1/6W 2.2M OHM J |
| R501 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J | R812 | 24510479 | CERAMIC COVERED, 5W 4.7 OHM J |
| | | | R813 | 24007061 | CERAMIC COVERED, 2W 1.8 OHM K |

| Location No. | Parts No. | Description |
|--------------|-----------|-----------------------------------|
| R814 | 24366682 | CARBON FILM, 1/6W 6.8K OHM J |
| R815 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R818 | 24019459 | METAL PLATE, 2W 0.12 OHM J |
| R819 | 24310829 | OXIDE METAL FILM, 1/2W 8.2 OHM J |
| R820 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R822 | 24552103 | OXIDE METAL FILM, 1/2W 10K OHM J |
| R823 | 24552392 | OXIDE METAL FILM, 1/2W 3.9K OHM J |
| R824 | 24569689 | CERAMIC COVERED, 10W 6.8 OHM J |
| R827 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R828 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R829 | 24321109 | OXIDE METAL FILM, 1/2W 1 OHM J |
| R830 | 24548399 | FUSIBLE, 2W 3.9 OHM J |
| R837 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| R838 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R839 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R841 | 24531120 | FUSIBLE, 1/2W 12 OHM J |
| R842 | 24552392 | OXIDE METAL FILM, 1/2W 3.9K OHM J |
| R846 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R847 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R849 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R880 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| R881 | 24366561 | CARBON FILM, 1/6W 560 OHM J |
| △ R899 | 24005015 | METAL GLAZE, 1W 8.2M OHM J |
| R901 | 24376102 | CARBON FILM, 1/2W 1K OHM J |
| R902 | 24376102 | CARBON FILM, 1/2W 1K OHM J |
| R903 | 24376102 | CARBON FILM, 1/2W 1K OHM J |
| R904 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R905 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| R912 | 24366221 | CARBON FILM, 1/6W 220 OHM J |
| R914 | 24366561 | CARBON FILM, 1/6W 560 OHM J |
| R915 | 24366121 | CARBON FILM, 1/6W 120 OHM J |
| R916 | 24366390 | CARBON FILM, 1/6W 39 OHM J |
| R917 | 24366391 | CARBON FILM, 1/6W 390 OHM J |
| R918 | 24366270 | CARBON FILM, 1/6W 27 OHM J |
| R919 | 24366221 | CARBON FILM, 1/6W 220 OHM J |
| R920 | 24000945 | FUSIBLE, 2W 1.8 OHM J |
| R921 | 24366561 | CARBON FILM, 1/6W 560 OHM J |
| R922 | 24366121 | CARBON FILM, 1/6W 120 OHM J |
| R924 | 24366270 | CARBON FILM, 1/6W 27 OHM J |
| R925 | 24366391 | CARBON FILM, 1/6W 390 OHM J |
| R926 | 24366221 | CARBON FILM, 1/6W 220 OHM J |
| R928 | 24366561 | CARBON FILM, 1/6W 560 OHM J |
| R929 | 24366121 | CARBON FILM, 1/6W 120 OHM J |
| R930 | 24366270 | CARBON FILM, 1/6W 27 OHM J |
| R932 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R934 | 24366681 | CARBON FILM, 1/6W 680 OHM J |
| R935 | 24366272 | CARBON FILM, 1/6W 2.7K OHM J |
| R936 | 24545150 | FUSIBLE, 1/4W 15 OHM J |
| R937 | 24366391 | CARBON FILM, 1/6W 390 OHM J |
| R942 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J |
| R943 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J |
| R944 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J |
| R945 | 24366390 | CARBON FILM, 1/6W 39 OHM J |
| R946 | 24366390 | CARBON FILM, 1/6W 39 OHM J |
| R960 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R961 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R962 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R963 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R964 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R965 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R977 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J |
| R992 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| RA20 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| RA21 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA22 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| RA23 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| RA24 | 24366102 | CARBON FILM, 1/6W 1K OHM J |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| RA30 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RA31 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RA35 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RA36 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA38 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA39 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA41 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA61 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA62 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RA71 | 24367163 | CARBON FILM, 1/6W 16K OHM G |
| RA72 | 24367113 | CARBON FILM, 1/2W 11K OHM J |
| RA73 | 24367562 | CARBON FILM, 1/6W 5.6K OHM G |
| RA74 | 24367303 | CARBON FILM, 1/6W 30K OHM G |
| RA75 | 24367114 | CARBON FILM, 1/6W 110K OHM G |
| RA89 | 24366470 | CARBON FILM, 1/6W 47 OHM J |
| RB09 | 24366470 | CARBON FILM, 1/6W 47 OHM J |
| RB10 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RB11 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RB12 | 24366271 | CARBON FILM, 1/6W 270 OHM J |
| RB13 | 24366221 | CARBON FILM, 1/6W 220 OHM J |
| RB14 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RB20 | 24366823 | CARBON FILM, 1/6W 82K OHM J (29VZ6DE/29VZ6DA) |
| RB21 | 24366103 | CARBON FILM, 1/6W 10K OHM J (29VZ6DE/29VZ6DA) |
| RB22 | 24366103 | CARBON FILM, 1/6W 10K OHM J (29VZ6DE/29VZ6DA) |
| RB27 | 24366103 | CARBON FILM, 1/6W 10K OHM J (29VZ6DE/29VZ6DA) |
| RB28 | 24366104 | CARBON FILM, 1/6W 100K OHM J (29VZ6DE/29VZ6DA) |
| RB30 | 24366682 | CARBON FILM, 1/6W 6.8K OHM J |
| RS01 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| RS02 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS03 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| RS04 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS05 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS06 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS07 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS08 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS09 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| RS10 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RS11 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RS14 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RS15 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RS17 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RS18 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RS19 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RS20 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| RS21 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RS22 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| RS23 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RS24 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RS27 | 24366561 | CARBON FILM, 1/6W 560 OHM J |
| RS28 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RS29 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS30 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS31 | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| RS38 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RS39 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RT01 | 24366101 | CARBON FILM, 1/6W 100 OHM J (29VZ6DE/29VZ6DA) |
| RT02 | 24366101 | CARBON FILM, 1/6W 100 OHM J (29VZ6DE/29VZ6DA) |
| RT03 | 24366102 | CARBON FILM, 1/6W 1K OHM J (29VZ6DE/29VZ6DA) |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| RT04 | 24366102 | CARBON FILM, 1/6W 1K OHM J (29VZ6DE/29VZ6DA) |
| RT05 | 24366100 | CARBON FILM, 1/6W 10 OHM J (29VZ6DE/29VZ6DA) |
| RT06 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RT07 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RT08 | 24366474 | CARBON FILM, 1/6W 470K OHM J |
| RT09 | 24366134 | CARBON FILM, 1/6W 130K OHM J |
| RT12 | 24366474 | CARBON FILM, 1/6W 470K OHM J |
| RT13 | 24366102 | CARBON FILM, 1/6W 1K OHM J (29VZ6DE/29VZ6DA) |
| RT14 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| RT15 | 24366333 | CARBON FILM, 1/6W 33K OHM J (29VZ6DE/29VZ6DA) |
| RT16 | 24366103 | CARBON FILM, 1/6W 10K OHM J (29VZ6DE/29VZ6DA) |
| RT17 | 24366561 | CARBON FILM, 1/6W 560 OHM J (29VZ6DE/29VZ6DA) |
| RT18 | 24366152 | CARBON FILM, 1/6W 1.5K OHM J (29VZ6DE/29VZ6DA) |
| RT19 | 24366122 | CARBON FILM, 1/6W 1.2K OHM J (29VZ6DE/29VZ6DA) |
| RT20 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| RT22 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| RT27 | 24367243 | CARBON FILM, 1/6W 24K OHM G (29VZ6DE/29VZ6DA) |
| RT28 | 24366101 | CARBON FILM, 1/6W 100 OHM J (29VZ6DE/29VZ6DA) |
| RT29 | 24366101 | CARBON FILM, 1/6W 100 OHM J (29VZ6DE/29VZ6DA) |
| RT32 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J (29VZ6DE/29VZ6DA) |
| RT33 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J (29VZ6DE/29VZ6DA) |
| RT34 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J (29VZ6DE/29VZ6DA) |
| RT38 | 24366151 | CARBON FILM, 1/6W 150 OHM J (29VZ6DE/29VZ6DA) |
| RT39 | 24366102 | CARBON FILM, 1/6W 1K OHM J (29VZ6DE/29VZ6DA) |
| RT40 | 24366151 | CARBON FILM, 1/6W 150 OHM J (29VZ6DE/29VZ6DA) |
| RT43 | 24366151 | CARBON FILM, 1/6W 150 OHM J (29VZ6DE/29VZ6DA) |
| RT46 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J (29VZ6DE/29VZ6DA) |
| RT47 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J (29VZ6DE/29VZ6DA) |
| RT48 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J (29VZ6DE/29VZ6DA) |
| RT50 | 24366681 | CARBON FILM, 1/6W 680 OHM J (29VZ6DE/29VZ6DA) |
| RT51 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J (29VZ6DE/29VZ6DA) |
| RV02 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV03 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV04 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| RV05 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| RV06 | 24366123 | CARBON FILM, 1/6W 12K OHM J (29VZ6DE/29VZ6DA) |
| RV07 | 24366563 | CARBON FILM, 1/6W 56K OHM J (29VZ6DE/29VZ6DA) |
| RV08 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV09 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV10 | 24366101 | CARBON FILM, 1/6W 100 OHM J |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| RV11 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RV12 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV13 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RV14 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV15 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV16 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV17 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| RV18 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV19 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV19 | 24366622 | CARBON FILM, 1/6W 6.2K OHM J (29VZ6DE/29VZ6DA) |
| RV20 | 24366102 | CARBON FILM, 1/6W 1K OHM J (29VZ6DE/29VZ6DA) |
| RV20 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV21 | 24366151 | CARBON FILM, 1/6W 150 OHM J |
| RV22 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV23 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV24 | 24552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| RV25 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV26 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV29 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| RV30 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| RV31 | 24366820 | CARBON FILM, 1/6W 82 OHM J |
| RV32 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV33 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV34 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV35 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| RV36 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RV36 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J (29VZ6DE/29VZ6DA) |
| RV90 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV91 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RZ03 | 24366821 | CARBON FILM, 1/6W 820 OHM J |
| RZ04 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| RZ05 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J |
| RZ06 | 24366102 | CARBON FILM, 1/6W 1K OHM J |

COILS & TRANSFORMERS

| | | |
|-------|----------|--|
| L101 | 23248229 | COIL, CHOKE, TLN3040AC |
| L102 | 23238506 | COIL, PEAKING, TRF4229AJ |
| L103 | 23238506 | COIL, PEAKING, TRF4229AJ |
| L111 | 23289100 | COIL, PEAKING, TRF4100AF |
| L112 | 23289100 | COIL, PEAKING, TRF4100AF |
| L115 | 23289100 | COIL, PEAKING, TRF4100AF |
| L202 | 23289100 | COIL, PEAKING, TRF4100AF |
| L301 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L441 | 23233036 | COIL, HOLIZ LINEARITY, TLN2083AT |
| L442 | 23248121 | COIL, CHOKE, TLN3383D |
| L461 | 23248238 | COIL, CHOKE, TLN335AF |
| L462 | 23231337 | COIL, DEFLECTION YOKE, TDY-8294S, SEMCO 29PF |
| L462A | 23993696 | BOARD, CORRECTION |
| L462B | 23949616 | CONVER CORRECTOR, YV TC-R, TC-R(YV) |
| L462C | 23993081 | METAL SHEET, CONV. CORRECTION, TCRMXH01H |
| L462D | 23948535 | SHEET, MAGNETIC FERRITE, TC-U(PLUS) |
| L462E | 23948536 | SHEET, MAGNETIC FERRITE, TC-V(MINUS) |
| L463 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L502 | 23103852 | COIL, FILTER, TEM2028AH |
| L503 | 23103852 | COIL, FILTER, TEM2028AH |
| L702 | 23261974 | COIL, FERRITE BEAD, HC5-035 |
| L704 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L705 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L805 | 23248234 | COIL, CHOKE, TLN3481AC |
| L806 | 23248234 | COIL, CHOKE, TLN3481AC |
| L811 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L883 | 23221747 | COIL, CHOKE, TRF9253D |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| L885 | 23248073 | COIL, CHOKE, TLN3299D |
| L886 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L889 | 23280016 | COIL, PEAKING, TRF4100AZ |
| L896 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| △ L901 | 23200476 | COIL, DG0.40CU48T-8TYPE, TSB-2389AK |
| L902 | 23289221 | COIL, PEAKING, TRF4221AF |
| L903 | 23289221 | COIL, PEAKING, TRF4221AF |
| L904 | 23289221 | COIL, PEAKING, TRF4221AF |
| L905 | 23289390 | COIL, PEAKING, TRF4390AF |
| L906 | 23289390 | COIL, PEAKING, TRF4390AF |
| L907 | 23289390 | COIL, PEAKING, TRF4390AF |
| LA01 | 23289100 | COIL, PEAKING, TRF4100AF |
| LT01 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT02 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT03 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT04 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT05 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT06 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT07 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT08 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT09 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LT10 | 23238506 | COIL, PEAKING, TRF4229AJ (29VZ6DE/29VZ6DA) |
| LV01 | 23289100 | COIL, PEAKING, TRF4100AF (29VZ6DE/29VZ6DA) |
| LZ01 | 23289270 | COIL, PEAKING, TRF4270AF |
| T400 | 23224364 | TRANSFORMER, FOCUS, TLN2168AH |
| T401 | 23224367 | TRANSFORMER, HORIZ DRIVER, TLN1098AH |
| △ T461 | 23236712 | TRANSFORMER, FLYBACK, TFB4182AH |
| △ T801 | 23211724 | COIL, LINE FILTER, TRF3196AC |
| T802 | 23211732 | COIL, LINE FILTER, TRF3202AC |
| △ T862 | 23217551 | TRANSFORMER, CONVERTER, TRSTPW3491AE |

SEMICONDUCTORS

| | | |
|-------|----------|---|
| Q100 | 23009345 | IC, P/N 2IN1 VCD MICRO, 8807CPBN4H08 |
| Q241 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q242 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q243 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q301 | 23009353 | IC, VERTICAL AN5523 MATSUSHITA, AN5523 |
| Q301B | 70391356 | SCREW, BITTB3X10 SZN |
| Q310 | 23114462 | TRANSISTOR, RN1202 (29VZ6DE/29VZ6DA) |
| Q311 | 23114460 | TRANSISTOR, RN1204 (29VZ6DE/29VZ6DA) |
| Q317 | 23314962 | TRANSISTOR, KTA1266 Y (29VZ6DE/29VZ6DA) |
| Q318 | 23314962 | TRANSISTOR, KTA1266 Y (29VZ6DE/29VZ6DA) |
| Q319 | 23314962 | TRANSISTOR, KTA1266 Y (29VZ6DE/29VZ6DA) |
| Q340 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q360 | 23906596 | IC, BA4558 |
| Q402 | 23114755 | TRANSISTOR, 2SC2482FA-1 |
| Q404 | 23314969 | TRANSISTOR, 2SD2499(FA) |
| Q404B | 72471082 | SCREW, 3X10MM |
| Q420 | 23314141 | TRANSISTOR, 2SC3852 |
| Q420B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |

| Location No. | Parts No. | Description |
|--------------|-----------|---|
| Q421 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q430 | 23314141 | TRANSISTOR, 2SC3852 |
| Q430B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |
| Q431 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q432 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q460 | 23314938 | TRANSISTOR, 2SD2493(P) |
| Q460B | 23037312 | SCREW, BTBW3X12SZN |
| Q461 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q462 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q463 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q470 | 23114541 | TRANSISTOR, 2SA1320 |
| Q471 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q472 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q473 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q474 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q501 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q502 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q504 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q580 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q608 | 23114623 | TRANSISTOR, 2SC2878-A(TEM |
| Q609 | 23114623 | TRANSISTOR, 2SC2878-A(TEM |
| Q610 | 23318814 | IC, TA8211AH |
| Q610B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |
| Q621 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q706 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q707 | 23114437 | TRANSISTOR, 2SC752GTM-Y |
| Q709 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q710 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q711 | 23314909 | TRANSISTOR, 2SA1837 |
| Q712 | 23314912 | TRANSISTOR, 2SC4793 |
| Q719 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q720 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q773 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q801 | 23135008 | IC, STR-F6668B |
| Q802 | 23314141 | TRANSISTOR, 2SC3852 |
| Q821 | 23114462 | TRANSISTOR, RN1202 |
| △ Q826 | 23906937 | IC, PHOTO COUPLER, ON3171-R |
| Q827 | 23000352 | IC, SE125N, LF4 |
| Q830 | 23314141 | TRANSISTOR, 2SC3852 |
| Q830B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |
| Q840 | 23318299 | IC, L78MR05-FA |
| Q840B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |
| Q841 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q842 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q880 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q901 | 23314780 | TRANSISTOR, 2SC4544 |
| Q902 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q903 | 23314780 | TRANSISTOR, 2SC4544 |
| Q904 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q905 | 23314780 | TRANSISTOR, 2SC4544 |
| Q906 | 23314965 | TRANSISTOR, KTC3198 Y |
| Q907 | 23314962 | TRANSISTOR, KTA1266 Y |
| Q908 | 23114429 | TRANSISTOR, 2SC2120-Y(TE |
| QA02 | 23906923 | IC, CAT24WC08P |
| QB01 | 23314965 | TRANSISTOR, KTC3198 Y |
| QB02 | 23314962 | TRANSISTOR, KTA1266 Y |
| QB20 | 23114463 | TRANSISTOR, RN1201 (29VZ6DE/29VZ6DA) |
| QB21 | 23314965 | TRANSISTOR, KTC3198 Y (29VZ6DE/29VZ6DA) |
| QB30 | 23314965 | TRANSISTOR, KTC3198 Y |
| QS01 | 23314965 | TRANSISTOR, KTC3198 Y |
| QS02 | 23314965 | TRANSISTOR, KTC3198 Y |
| QS03 | 23114623 | TRANSISTOR, 2SC2878-A(TEM |

| Location No. | Parts No. | Description |
|--------------|-----------|--|
| QS04 | 23114623 | TRANSISTOR, 2SC2878-A(TEM |
| QS05 | 23114478 | TRANSISTOR, RN2004 |
| QT01 | 23009170 | IC, 8BIT TV/TEXT MCU 32K, SAA5561PS/M3/0615 (29VZ6DE/29VZ6DA) |
| QT02 | 23314965 | TRANSISTOR, KTC3198 Y (29VZ6DE/29VZ6DA) |
| QT03 | 23114437 | TRANSISTOR, 2SC752GTM-Y (29VZ6DE/29VZ6DA) |
| QT04 | 23314962 | TRANSISTOR, KTA1266 Y (29VZ6DE/29VZ6DA) |
| QT05 | 23314965 | TRANSISTOR, KTC3198 Y (29VZ6DE/29VZ6DA) |
| QT06 | 23009255 | IC, +3.3V 2% REG. TO-92, NJU7222L33 (29VZ6DE/29VZ6DA) |
| QT08 | 23009260 | IC, SYNC-SEPA WITH AFC, BA7046 |
| QV01 | 23000369 | IC, MM1495XD |
| QV02 | 23314965 | TRANSISTOR, KTC3198 Y |
| QV03 | 23314965 | TRANSISTOR, KTC3198 Y |
| QV04 | 23314965 | TRANSISTOR, KTC3198 Y |
| QV05 | 23906379 | IC, TA1287P (29VZ6DE/29VZ6DA) |
| QV06 | 23114437 | TRANSISTOR, 2SC752GTM-Y |
| QV07 | 23314965 | TRANSISTOR, KTC3198 Y (29VZ6DE/29VZ6DA) |
| QZ02 | 23314965 | TRANSISTOR, KTC3198 Y |
| QZ03 | 70200808 | IC, PQ3RD083 |
| D101 | 23115922 | IC, UPC574J |
| D224 | 23357341 | DIODE, 1SS133 |
| D301 | 23118094 | DIODE, EU2A |
| D303 | 23316794 | DIODE, SC570A |
| D306 | 23357341 | DIODE, 1SS133 |
| D308 | 23118479 | DIODE, BYD33J |
| D340 | 23118529 | DIODE, ZENER, RD5.6ES B2 |
| D360 | 23118528 | DIODE, ZENER, RD5.6ESA B3 |
| D406 | 23118479 | DIODE, BYD33J |
| D408 | 23316414 | DIODE, 3JH41(FALC3) |
| D420 | 23118524 | DIODE, ZENER, RD7.5ES B1 |
| D431 | 23118524 | DIODE, ZENER, RD7.5ES B1 |
| D441 | 23118516 | DIODE, ZENER, RD9.1ES B3 |
| D443 | 23357341 | DIODE, 1SS133 |
| D444 | 23316254 | DIODE, ERC06-15 |
| D461 | 23316582 | DIODE, ERC20-06 |
| D461B | 70391355 | SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN |
| D462 | 23357341 | DIODE, 1SS133 |
| D464 | 23118512 | DIODE, ZENER, RD12ES B1 |
| D467 | 23316472 | DIODE, RGP10J |
| D470 | 23118531 | DIODE, ZENER, RD5.1ESA B3 |
| D474 | 23118511 | DIODE, ZENER, RD12ES B2 |
| D477 | 23357341 | DIODE, 1SS133 |
| D478 | 23357341 | DIODE, 1SS133 |
| D616 | 23357341 | DIODE, 1SS133 |
| D617 | 23357341 | DIODE, 1SS133 |
| D618 | 23357341 | DIODE, 1SS133 |
| D619 | 23357341 | DIODE, 1SS133 |
| D620 | 23357341 | DIODE, 1SS133 |
| D621 | 23357341 | DIODE, 1SS133 |
| D622 | 23357341 | DIODE, 1SS133 |
| D624 | 23357341 | DIODE, 1SS133 |
| D625 | 23357341 | DIODE, 1SS133 |
| D704 | 23357341 | DIODE, 1SS133 |
| D705 | 23357341 | DIODE, 1SS133 |
| D715 | 23357341 | DIODE, 1SS133 |
| D720 | 23357341 | DIODE, 1SS133 |
| D721 | 23357341 | DIODE, 1SS133 |
| D801 | 23357041 | DIODE, LN6SB60-F05 |
| D801B | 72471082 | SCREW, 3X10MM |
| D804 | 23118505 | DIODE, ZENER, RD15ESA B2 |

| Location No. | Parts No. | Description |
|----------------------|-----------|--|
| D805 | 23357012 | DIODE, 1SS244 |
| D806 | 23118094 | DIODE, EU2A |
| D807 | 23118616 | DIODE, ZENER, RD27ESA B2 |
| D810 | 23118496 | DIODE, ZENER, RD22ESA B2 |
| D811 | 23357341 | DIODE, 1SS133 |
| D815 | 23118616 | DIODE, ZENER, RD27ESA B2 |
| D817 | 23357341 | DIODE, 1SS133 |
| D818 | 23118496 | DIODE, ZENER, RD22ESA B2 |
| D819 | 23118526 | DIODE, ZENER, RD6.8ES B2 |
| D821 | 23357341 | DIODE, 1SS133 |
| D828 | 23357341 | DIODE, 1SS133 |
| D831 | 23118506 | DIODE, RD15ES B1 |
| D832 | 23118519 | DIODE, ZENER, RD8.2ES |
| D833 | 23118538 | DIODE, ZENER, RD6.2ESA B2 |
| D883 | 23316803 | DIODE, FMU-G16S |
| D883B | 70391356 | SCREW, BITTB3X10 SZN |
| D885 | 23118052 | DIODE, RU4Z LF-L1 |
| D896 | 23118094 | DIODE, EU2A |
| D901 | 23357341 | DIODE, 1SS133 |
| D903 | 23357341 | DIODE, 1SS133 |
| D904 | 23357341 | DIODE, 1SS133 |
| D905 | 23357341 | DIODE, 1SS133 |
| D906 | 23357341 | DIODE, 1SS133 |
| D907 | 23357341 | DIODE, 1SS133 |
| D908 | 23357341 | DIODE, 1SS133 |
| D909 | 23357341 | DIODE, 1SS133 |
| D910 | 23357341 | DIODE, 1SS133 |
| D911 | 23118479 | DIODE, BYD33J |
| DB01 | 23358567 | LED, LAMP RED/GREEN, L-59EGW |
| DB30 | 23357341 | DIODE, 1SS133 |
| DV01 | 23118517 | DIODE, ZENER, RD9.1ES |
| DV02 | 23118517 | DIODE, ZENER, RD9.1ES |
| DV03 | 23357341 | DIODE, 1SS133 |
| DZ01 | 23357341 | DIODE, 1SS133 |
| MISCELLANEOUS | | |
| B202 | 23037312 | SCREW, BTBW3X12SZN |
| B243 | 23035312 | SCREW, BTB3X12SZN |
| E912 | 23848729 | WEDGE, YOKE HOLDING, 3 REQUIRED |
| △ F470 | 23144647 | FUSE, CARTRIDGE 5X20, 250V 1.0A |
| F470A | 23165433 | FUSE HOLDER, 5.2 SOC |
| △ F801 | 23144508 | FUSE, CARTRIDGE 5.2X20, 250V 4.0A |
| F801A | 23165433 | FUSE HOLDER, 5.2 SOC |
| △ F802 | 23144651 | FUSE, CARTRIDGE 5X20, 250V 2.5A |
| F802A | 23165433 | FUSE HOLDER, 5.2 SOC |
| G303 | 24321109 | OXIDE METAL FILM, 1/2W 1 OHM J |
| G402 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| G472 | 24531680 | FUSIBLE, 1/2W 68 OHM J |
| G614 | 23289100 | COIL, PEAKING, TRF4100AF |
| G615 | 23289100 | COIL, PEAKING, TRF4100AF |
| G714 | 24545220 | FUSIBLE, 1/4W 22 OHM J |
| G810 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| G828 | 23103775 | COIL, FERRITE CHOKE, TEM2014 |
| G894 | 23289100 | COIL, PEAKING, TRF4100AF |
| G900 | 23289100 | COIL, PEAKING, TRF4100AF |
| GJ01 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| GJ02 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| GL511 | 23289120 | COIL, PEAKING, TRF4120AF |
| GL513 | 23289229 | COIL, PEAKING, TRF4229AF |
| GL514 | 23289470 | COIL, PEAKING, TRF4470AF |
| H002 | 23148342 | MODULE, IF, MVCS45F, MULTI IF MPX APRO |
| KB01 | 23009125 | IC, REMOTE PHOTO RECIEVER, RPM6938 |
| M461A | 23192964 | ANODE CAP ASSY, TCC5606CT |
| M461B | 23505089 | CABLE, FOCUS |
| M461C | 23505090 | CABLE, CABLE FOCUS |
| M461D | 23504204 | CABLE, SCREEN |

| Location No. | Parts No. | Description |
|----------------------------|-----------|---|
| N724 | 23965900 | TAPE, GLASS-CLOTH, W/ADHESIVE W=18 T=0.18 |
| P661 | 23363607 | JACK, HEAD PHONE, 3.5MM |
| △ P801 | 23372159 | POWER CORD, CEE 250V 2.5A SILV 201 (29VZ6DE) |
| △ P801 | 23372157 | POWER CORD (29VZ6DA) |
| △ P801 | 23372168 | POWER CORD (29VZ6SH) |
| P802 | 23368249 | POWER CORD, 2P 11.88MM VH-JST |
| P910 | 23164725 | CONNECTOR, PLUG 2P |
| PB01A | 23902062 | CONNECTOR, SOCKET, B-B |
| PB01B | 23368004 | CONNECTOR, PLUG B-B 5P 2.5MM JST |
| PB02A | 23902654 | CONNECTOR, SOCKET, B-B 4P |
| PB02B | 23367723 | CONNECTOR, PLUG B-B, 4P |
| PB11A | 23368673 | PLUG, 2MM 26P JST PHD-TOP, B26B-PHDSS |
| PB11B | 23368673 | PLUG, 2MM 26P JST PHD-TOP, B26B-PHDSS |
| PB12A | 23368673 | PLUG, 2MM 26P JST PHD-TOP, B26B-PHDSS |
| PB12B | 23368673 | PLUG, 2MM 26P JST PHD-TOP, B26B-PHDSS |
| PV01 | 23023050 | JACK, 1S+3P JACK KUNMING ELECT. KM04016GP |
| PV02 | 23023049 | JACK, PIN JACK 8P KUN, HSP-269S10(P)-02 |
| PV03 | 23365763 | JACK, PIN, 3P |
| △ S801 | 23344481 | SWITCH, POWER, AAPY2211 |
| SA01 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| SA02 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| SA03 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| SA04 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| SA05 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| SA06 | 23344443 | SWITCH, TACTING SWITCH TSV TYP TSVB-1 |
| △ SR81 | 23146564 | RELAY, DC12V, TV5, DG-3 |
| SR83 | 23146570 | RELAY, DC12V, 2M OMR, G5PA-2 DC12 |
| UZ01 | 23148030 | MODULE, 3D-YCS COMB, MYCS01 |
| △ V901A | 23903145 | SOCKET, CRT, WFOCUS ISD35SE INCHANG ISD-35S-E |
| V901B | 23102959 | MAGNET, RUBBER |
| V901M | 23102492 | MAGNET, PURITY CONVERGENCE, MAG-1116 |
| XA01 | 23153752 | CRYSTAL, 8.000 40PPM 50OHM |
| XT01 | 23153930 | CRYSTAL, 12.000 25PPM 40OHM 7PF (29VZ6DE/29VZ6DA) |
| Z424 | 23144539 | PROTECTOR, 491SERIES, 125V 2A |
| Z889 | 23144542 | PROTECTOR, 491SERIES, 125V 4A |
| PC BOARD ASSEMBLIES | | |
| * U901 | 23787974 | CRT/D BOARD, PD0885 |
| * U902A | 23787950 | SIGNAL BOARD, PD0863-1 (29VZ6DE) |
| * U902A | 23788054 | SIGNAL BOARD, PD0912-1 (29VZ6DA) |
| * U902A | 23788059 | SIGNAL BOARD, PD0914-1 (29VZ6SH) |
| * U902B | 23787975 | RMT BOARD, PD0863-2 (29VZ6DE) |
| * U902B | 23788055 | RMT BOARD, PD0912-2 (29VZ6DA) |
| * U902B | 23788060 | RMT BOARD, PD0914-2 (29VZ6SH) |
| * U902C | 23787976 | LED BOARD, PD0863-3 (29VZ6DE) |
| * U902C | 23788056 | LED BOARD, PD0912-3 (29VZ6DA) |
| * U902C | 23788061 | LED BOARD, PD0914-3 (29VZ6SH) |
| * U902D | 23788065 | AV BOARD, PD0863-4 (29VZ6DE) |
| * U902D | 23788057 | AV BOARD, PD0912-4 (29VZ6DA) |
| * U902D | 23788062 | AV BOARD, PD0914-4 (29VZ6SH) |
| * U903 | 23787951 | POW/DEF BOARD, PD0864 (29VZ6DE) |
| * U903 | 23788058 | POW/DEF BOARD, PD0913 (29VZ6DA) |
| * U903 | 23788063 | POW/DEF BOARD, PD0915 (29VZ6SH) |
| PICTURE TUBE | | |
| △ V901 | 23312949 | PICTURE TUBE, PSDI 29PF, A68QCP891X0 (29VZ6DE/29VZ6SH) |
| △ V901 | 23324010 | PICTURE TUBE, A68QCP891X (29VZ6DA) |
| TUNER | | |
| H001 | 23321428 | TUNER, ASIA MLT IICPLL SANYO, ECA33LX8 |

| Location No. | Parts No. | Description |
|----------------------|-----------|--|
| ACCESSORIES | | |
| K902 | 23306459 | REMOCON HAND UNIT IR, CTPAL, CT-90119 |
| AT03 | 23588765 | BATTERY COVER, REMOCON, CT-90119 |
| Y101A | 23565740 | OWNER'S MANUAL, ENGLISH, 29VZ6DE |
| Y101A | 23565784 | OWNER'S MANUAL, ENGLISH, 29VZ6DA |
| Y101A | 23565785 | OWNER'S MANUAL, ENGLISH/TC, 29VZ6SH |
| Y120 | 23943846 | BAG, POLY |
| CABINET PARTS | | |
| A201 | 23530508 | COVER, FRONT COVER |
| A262 | 23428130 | DOOR, DOOR PROPER |
| A265 | 23445668 | BUTTON, BUTTON POWER |
| A267 | 23836867 | SPRING, COIL SPRING |
| A271 | 23436800 | HANDLE, HANDLE |
| A272 | 23451868 | PUSH CATCH |
| △ A401 | 23540911 | COVER, BACK COVER PROPER |
| A404 | 23845834 | LEAD CLAMPER |
| A503 | 23035412 | SCREW, BTB4X12SZN |
| A701A | 23064934 | CARTON, CASE TOP (29VZ6DE) |
| A701A | 23064967 | CARTON, CASE TOP (29VZ6DA) |
| A701A | 23064968 | CARTON, CASE TOP (29VZ6SH) |
| A701B | 23064653 | CARTON, CASE BOTTOM |
| A702A | 23946280 | PACKING, TOP PACKING |
| A702B | 23946281 | PACKING, BOTTOM PACKING |
| A710 | 23845450 | JOINT, 43G7UXC |

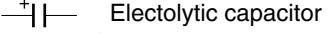
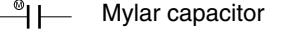
SCHEMATIC DIAGRAM

MODEL : 29VZ6DE / 29VZ6DA / 29VZ6SH

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "▲" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

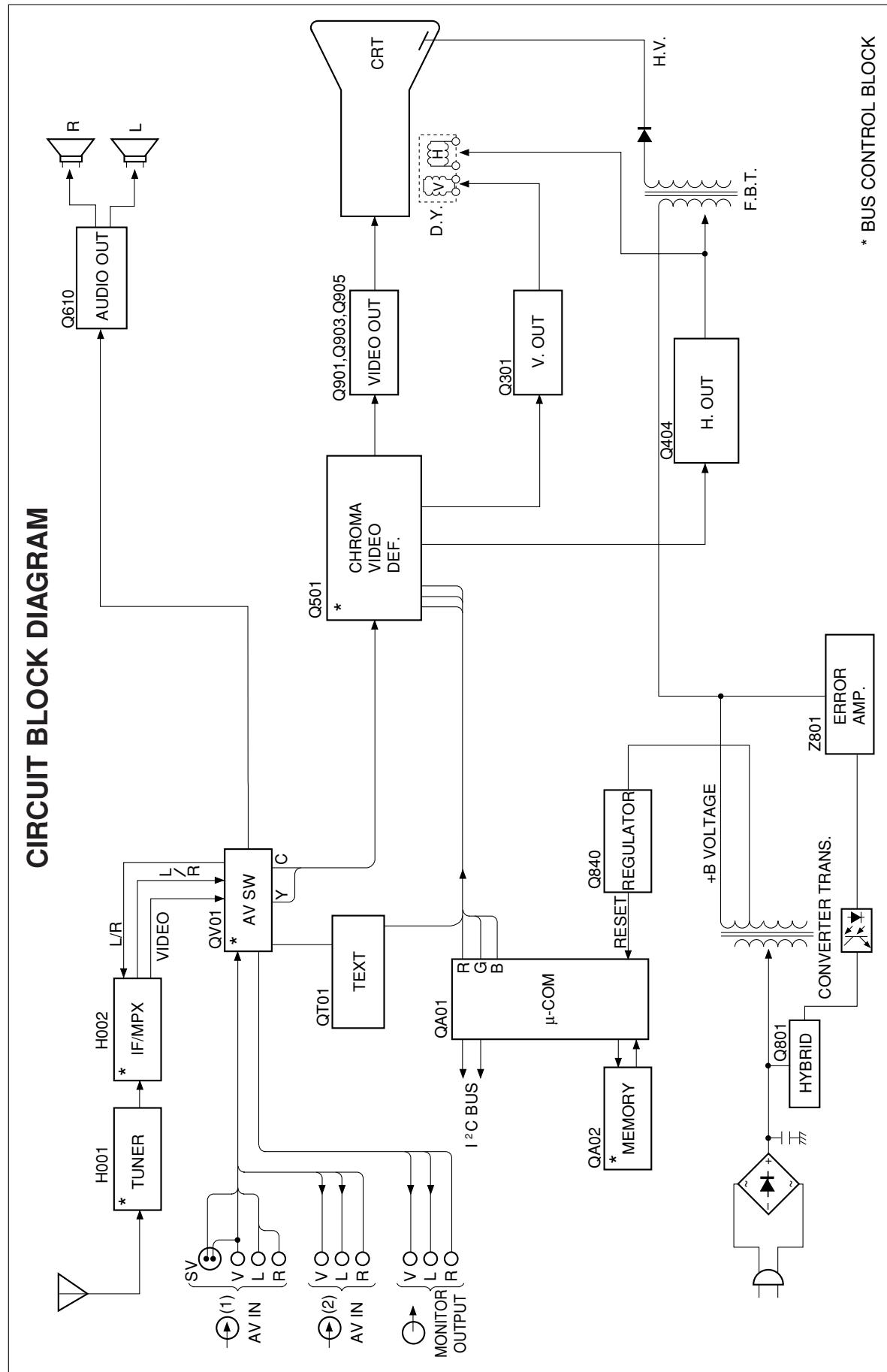
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF , and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
 Electrolytic capacitor  Mylar capacitor
3. The parts indicated with "▲" have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassis ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

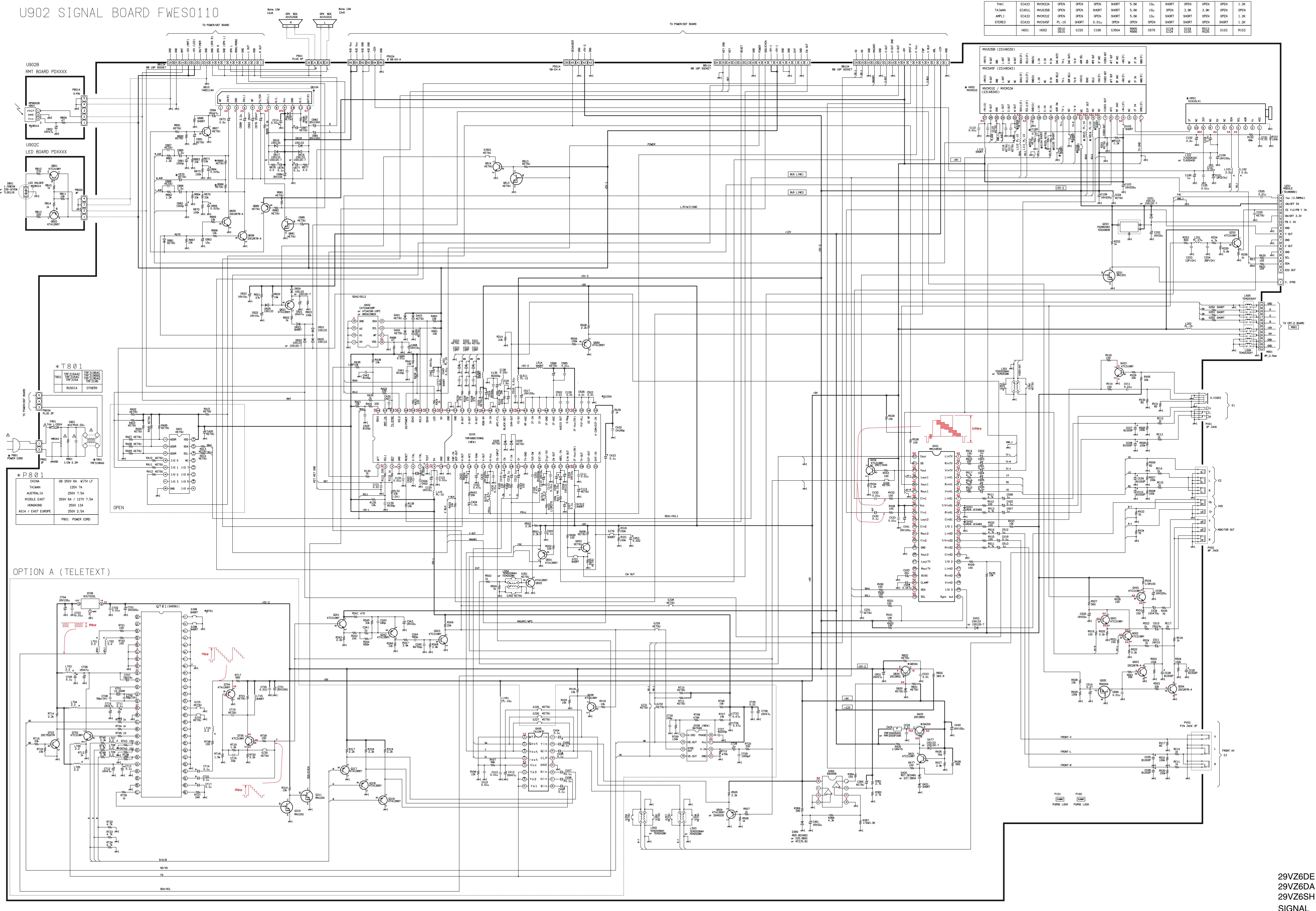
| | |
|--|-----|
| □ SIGNAL / RMT / LED Circuit | 1/2 |
| □ POWER / DEF / CRT DRIVE VM Circuit | 2/2 |

CIRCUIT BLOCK DIAGRAM



U902 SIGNAL BOARD FWES0110

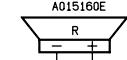
| | | | | | | | | | | | | |
|--------|---------|--------------|-------|-------|-------|--------------|------|--------------|--------------|--------------|-------|------|
| ECA33 | MVCM33A | OPEN | OPEN | OPEN | SHORT | 5.6K | 10u | SHORT | OPEN | OPEN | OPEN | 1.2K |
| ECA51L | MVUS35B | OPEN | OPEN | SHORT | SHORT | 5.6K | 10u | OPEN | 3.9K | 3.9K | OPEN | OPEN |
| ECA33 | MVCM31E | OPEN | OPEN | OPEN | SHORT | 5.6K | 10u | SHORT | SHORT | OPEN | OPEN | 1.2K |
| ECA33 | MVCS45F | PL-10 | SHORT | 0.01u | OPEN | OPEN | OPEN | SHORT | SHORT | OPEN | SHORT | 1.2K |
| H001 | H002 | G614 G615 | GJ20 | C190 | GJ604 | R665 R666 | C670 | GJ18 GJ24 | G104 G105 | RS12 RS25 | G103 | R103 |



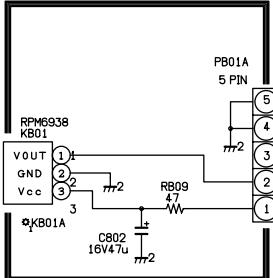
29VZ6DE
29VZ6DA
29VZ6SH
SIGNAL

U902 SIGNAL BOARD FWES0110

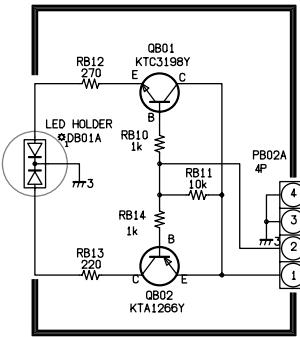
TO POWER/DEF BOARD

8ohm 10W
12x6

A

U902B
RMT BOARD PDXXXX

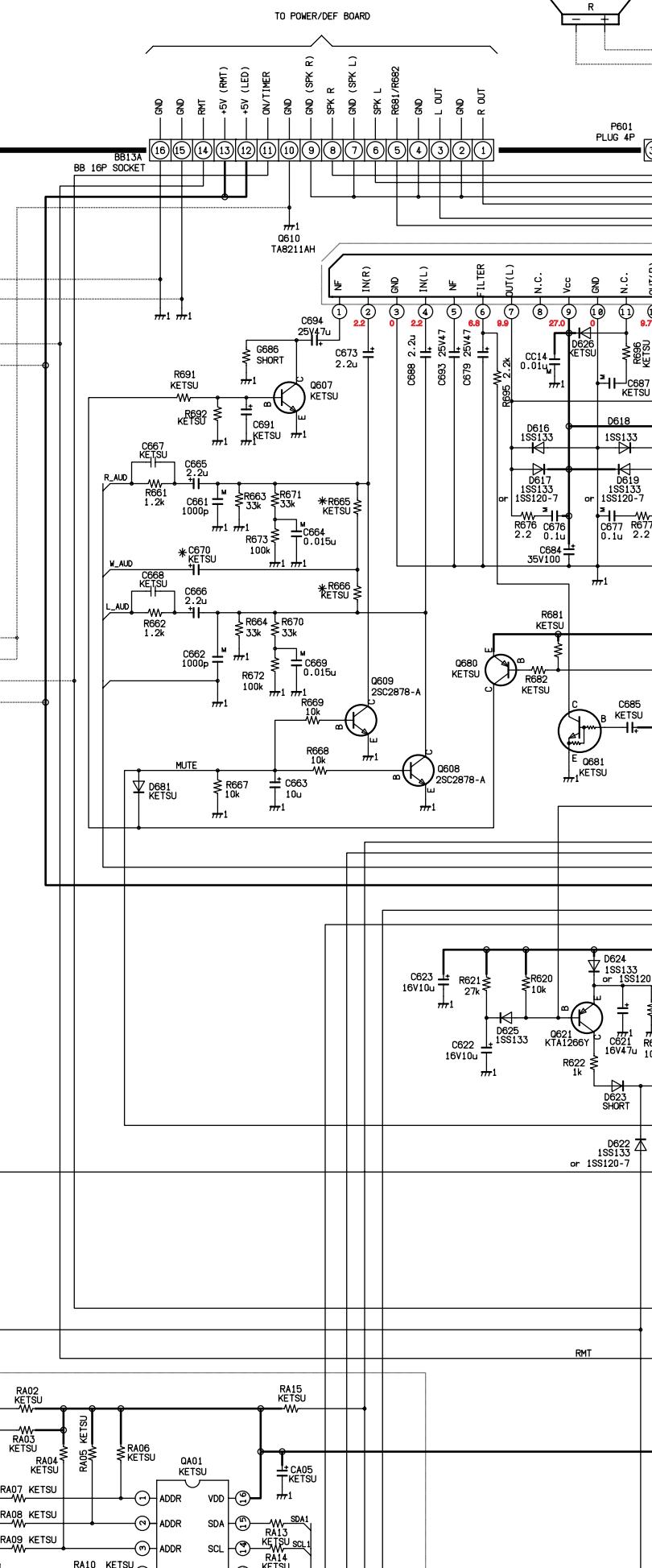
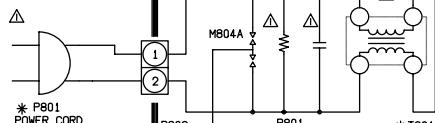
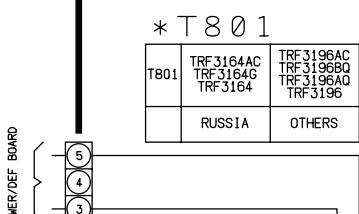
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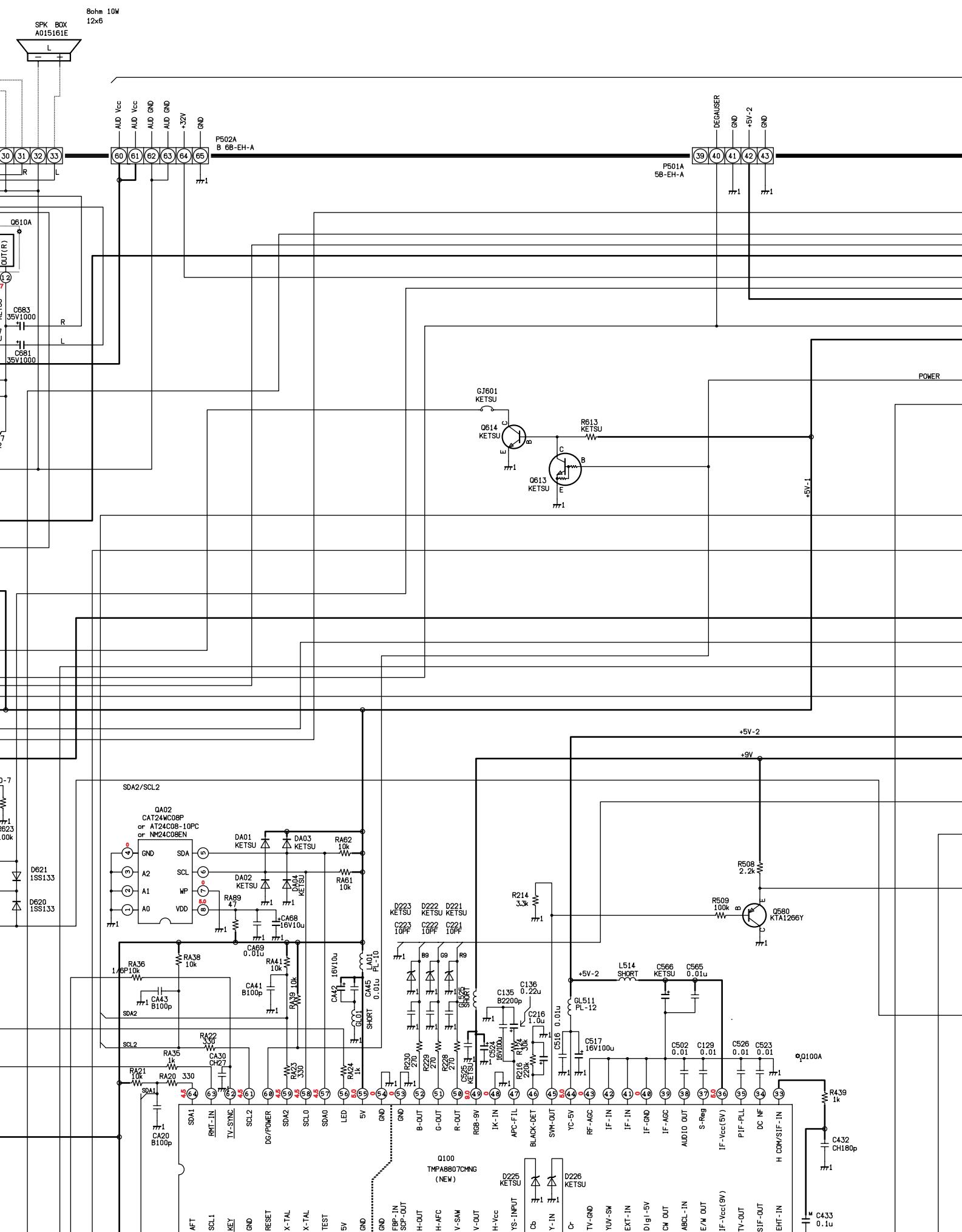
U902C
LED BOARD PDXXXX

C

D

E





TO POWER/DEF BOARD

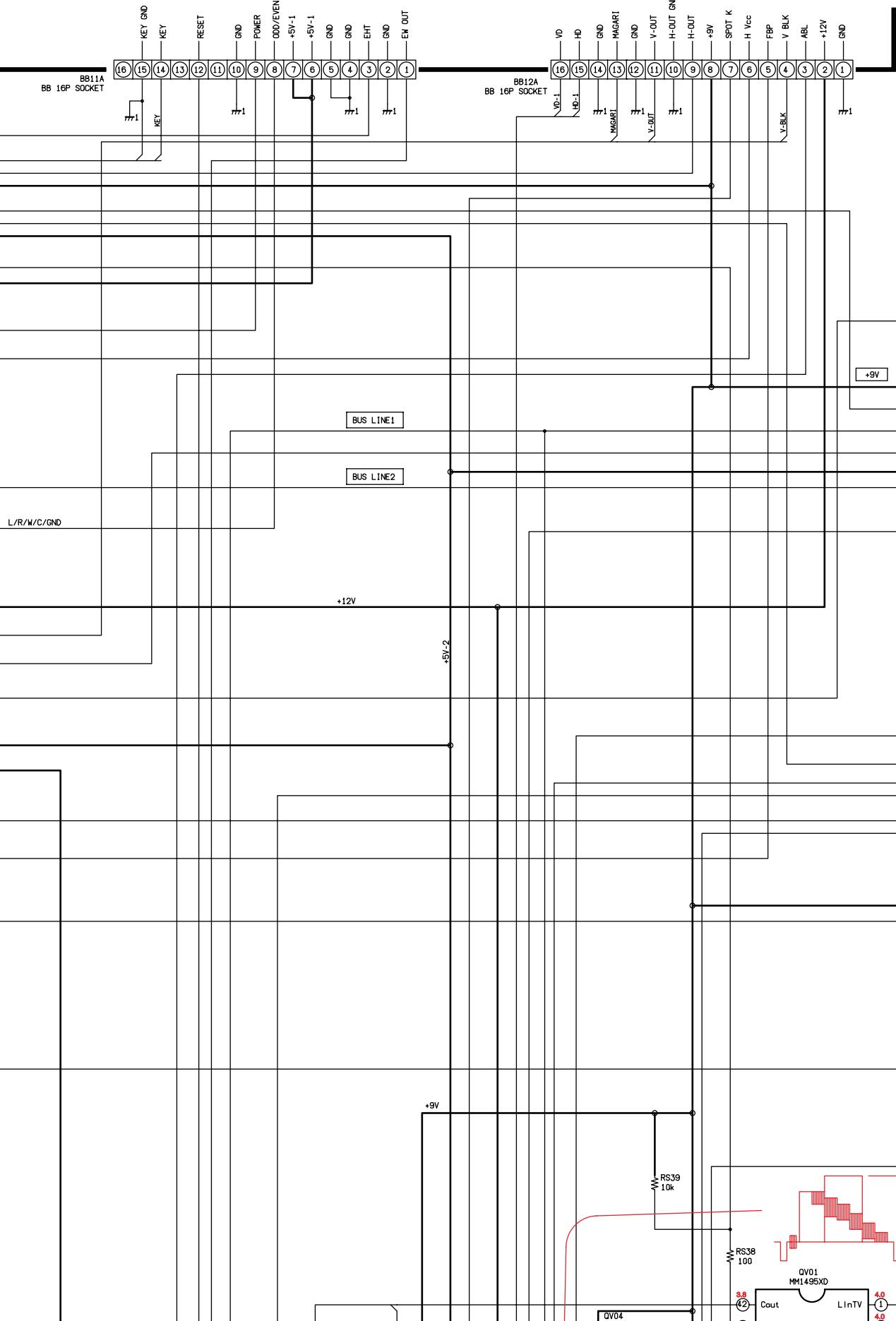
THAI
TAIWAN
AMPLI
STEREO

| |
|--|
| MVUS35B (23148330) |
| 19V(S) R-OUT GND L-OUT C-OUT |
| MVCS45F (23148342) |
| 19V(S) R-OUT GND L-OUT NC |

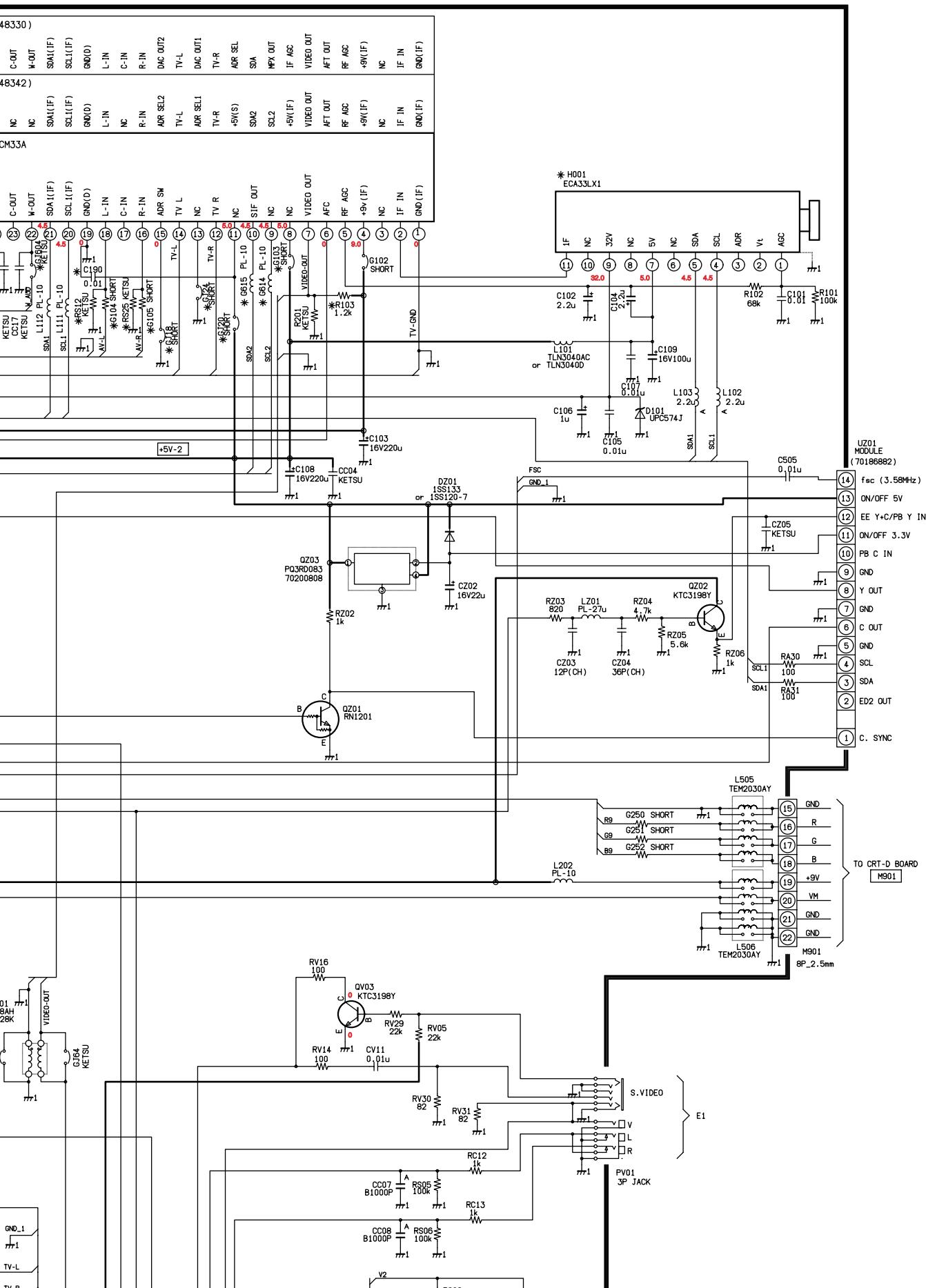
* H002
MVCM31E

MVCM31E / MVCM33A
(23148345)

19V(S)
R-OUT
GND
L-OUT
C-OUT



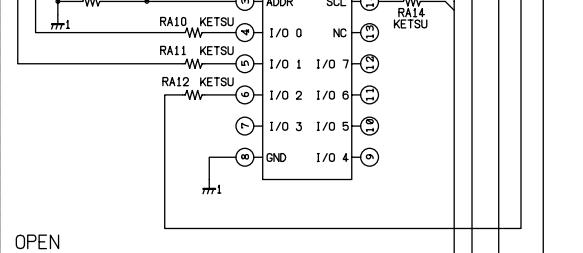
| | | | | | | | | | | | | | | |
|---|--------|---------|--------------|-------|-------|-------|--------------|------|--------------|--------------|--------------|-------|------|------|
| N | ECA33 | MVCM33A | OPEN | OPEN | OPEN | SHORT | 5.6K | 10u | SHORT | OPEN | OPEN | OPEN | OPEN | 1.2K |
| D | ECA51L | MVUS35B | OPEN | OPEN | SHORT | SHORT | 5.6K | 10u | OPEN | 3.9K | 3.9K | OPEN | OPEN | OPEN |
| D | ECA33 | MVCM31E | OPEN | OPEN | OPEN | SHORT | 5.6K | 10u | SHORT | SHORT | OPEN | OPEN | OPEN | 1.2K |
| D | ECA33 | MVCS45F | PL-10 | SHORT | 0.01u | OPEN | OPEN | OPEN | SHORT | SHORT | OPEN | SHORT | OPEN | 1.2K |
| | H001 | H002 | G614 G615 | GJ20 | C190 | GJ604 | R665 R666 | C670 | GJ18 GJ24 | G104 G105 | RS12 RS25 | G103 | R103 | |



* P801
POWER CORD
P802 2P GND R801 1/2W 2.2M * T801 TRF3196AQ

* P 801

| | |
|--------------------|---------------------|
| CHINA | GB 250V 6A WITH LF |
| TAIWAN | 125V 7A |
| AUSTRALIA | 250V 7.5A |
| MIDDLE EAST | 250V 6A / 127V 7.5A |
| HONGKONG | 250V 13A |
| ASIA / EAST EUROPE | 250V 2.5A |
| | P801 POWER CORD |



OPEN

KEY KEY GND

G

H

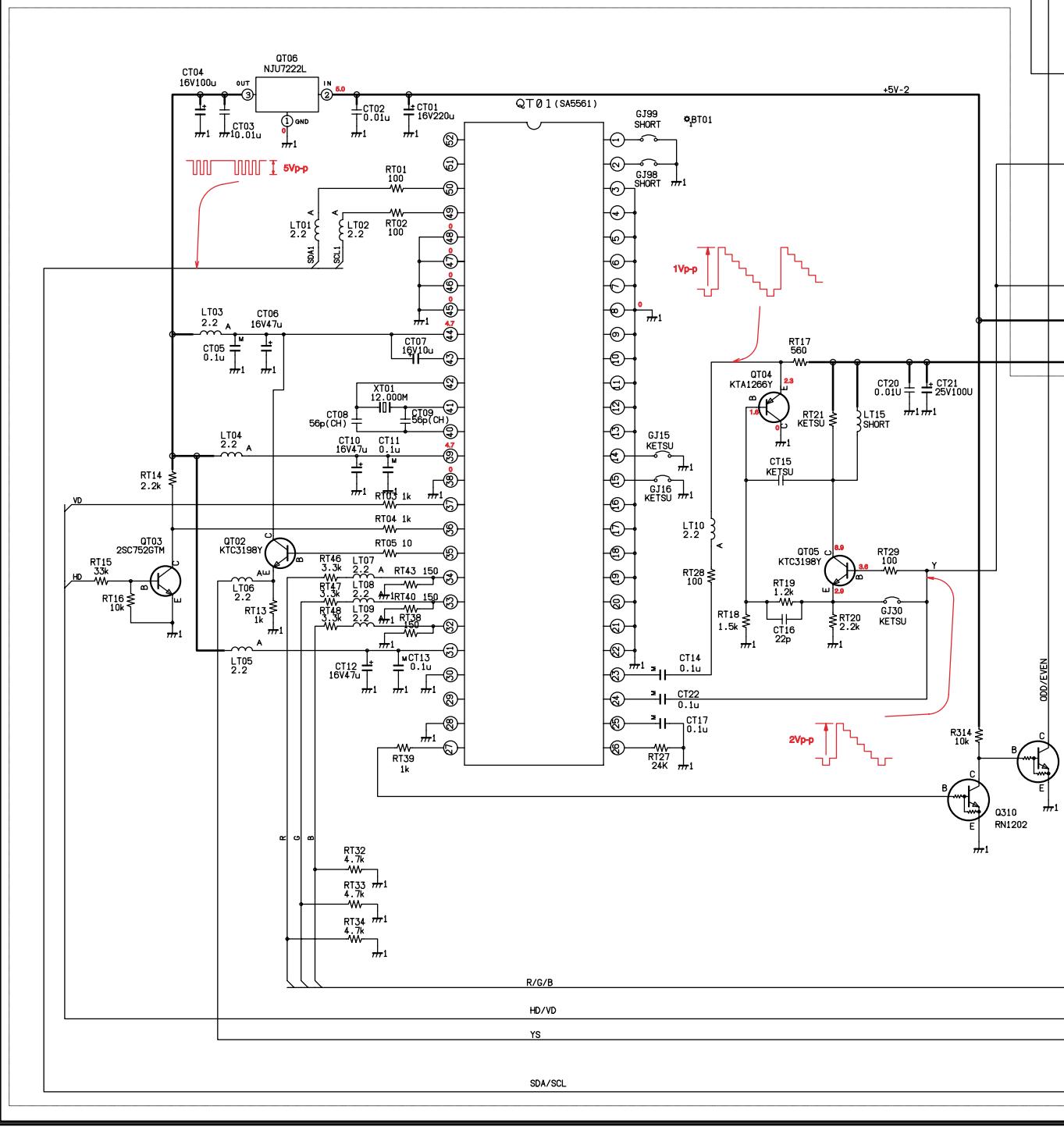
I

J

K

L

OPTION A (TELETEXT)

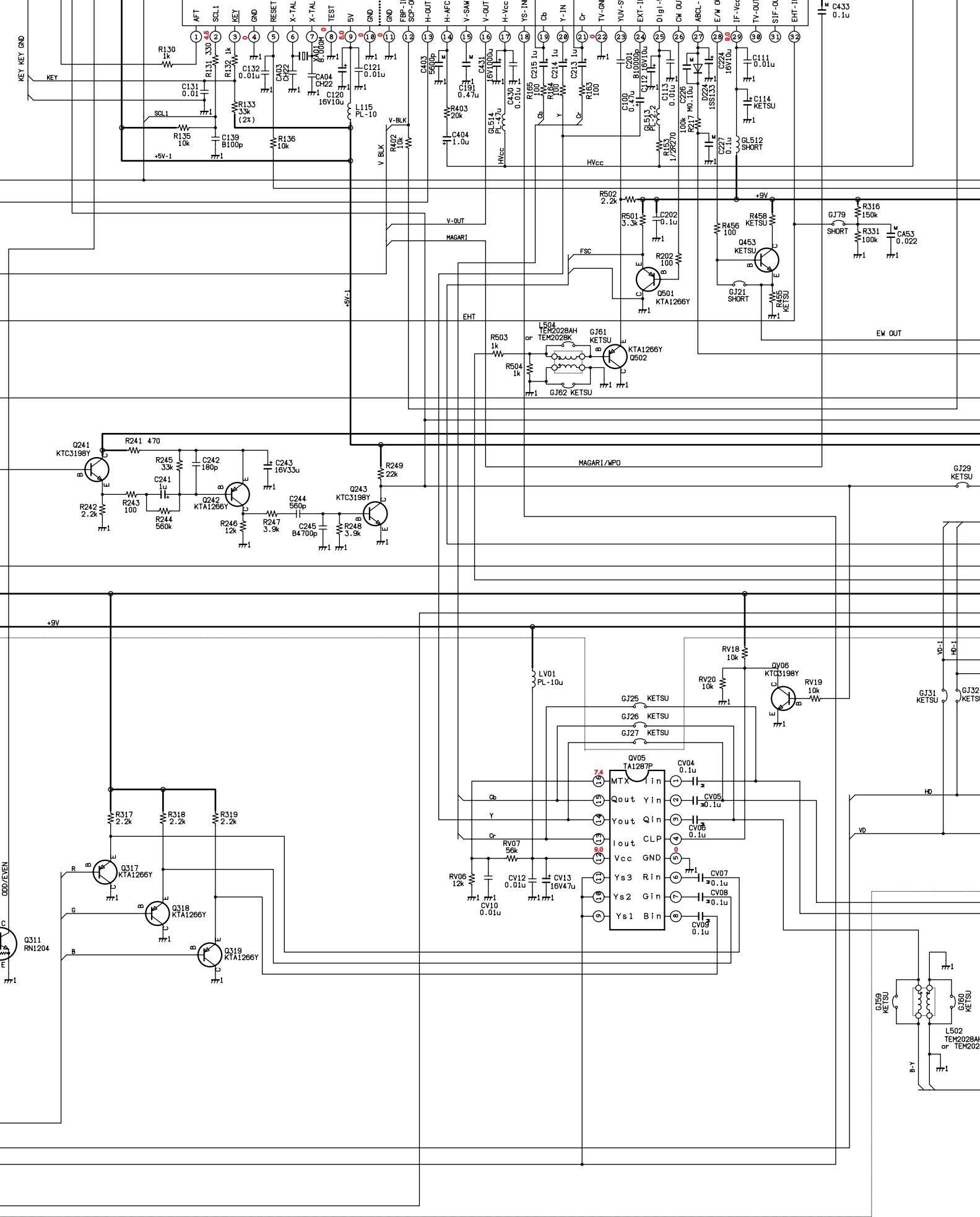


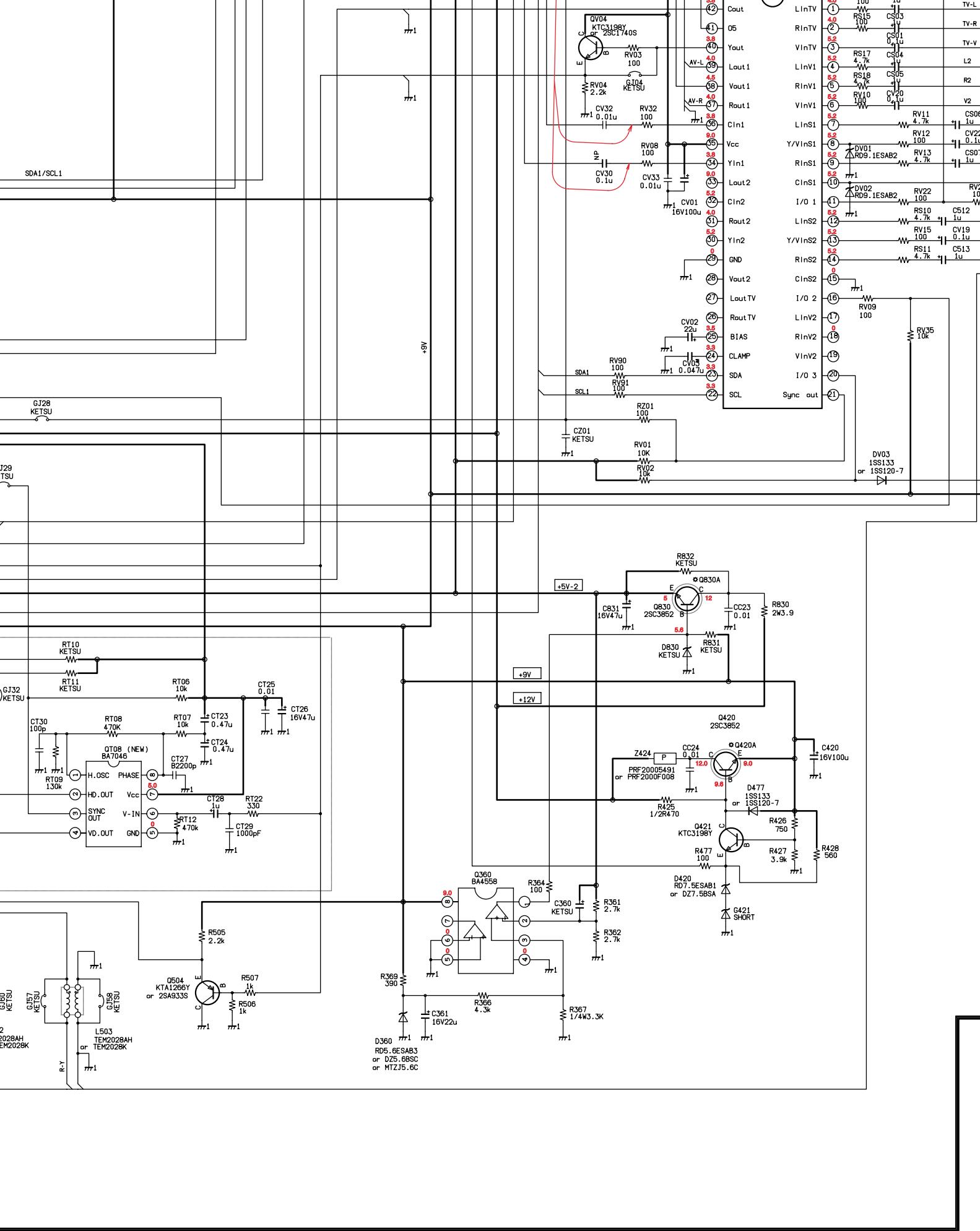
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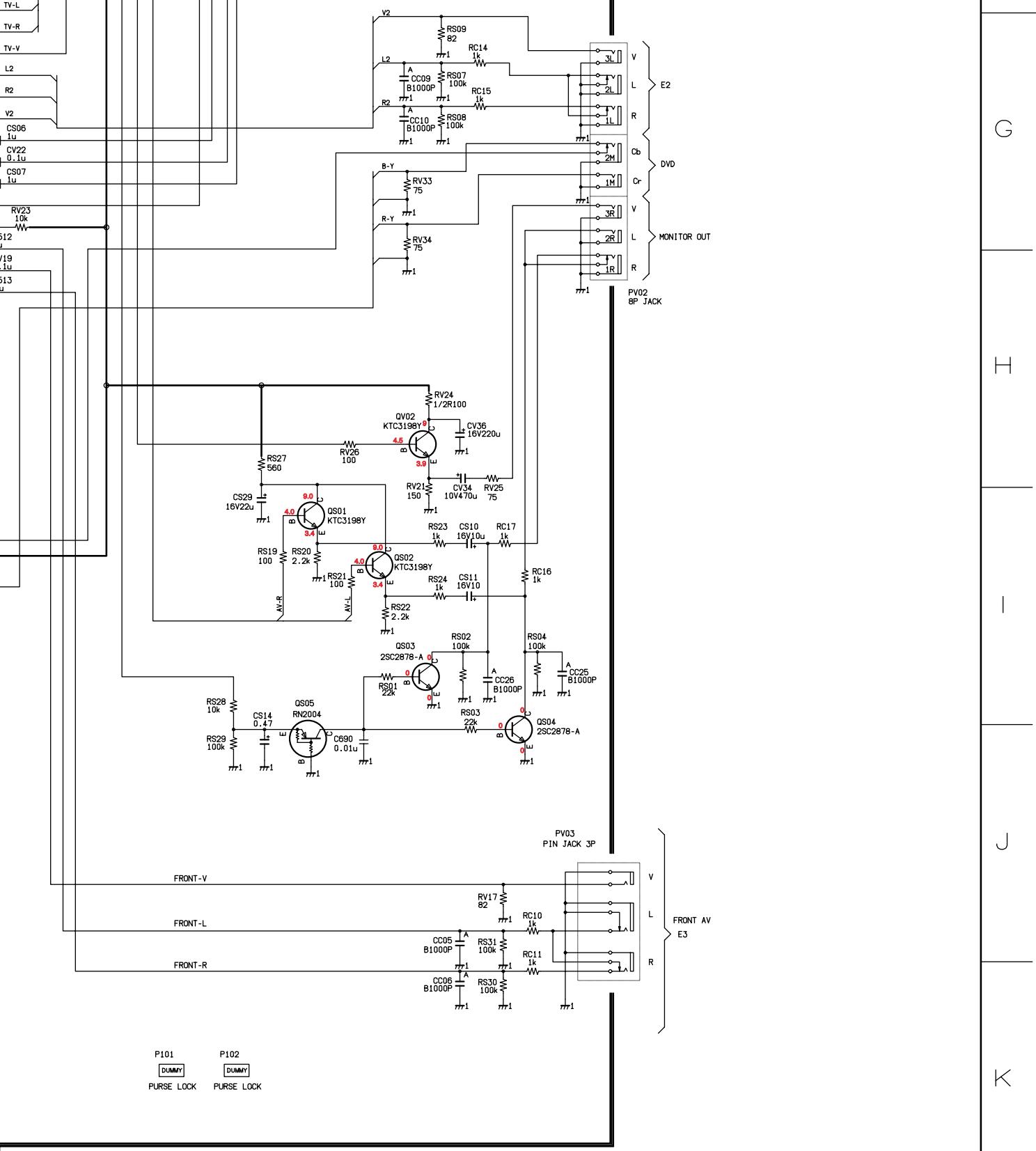
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3

4



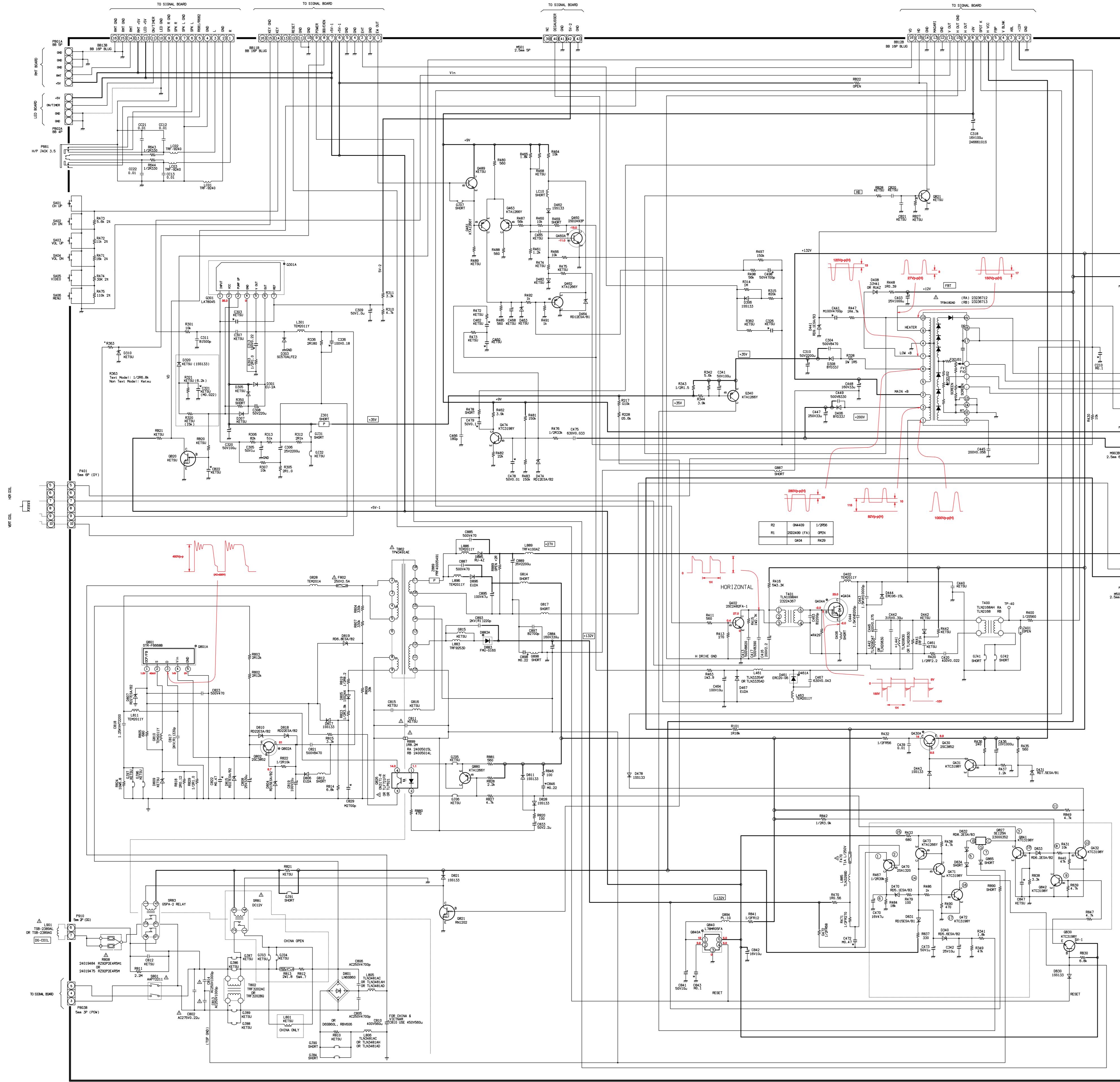




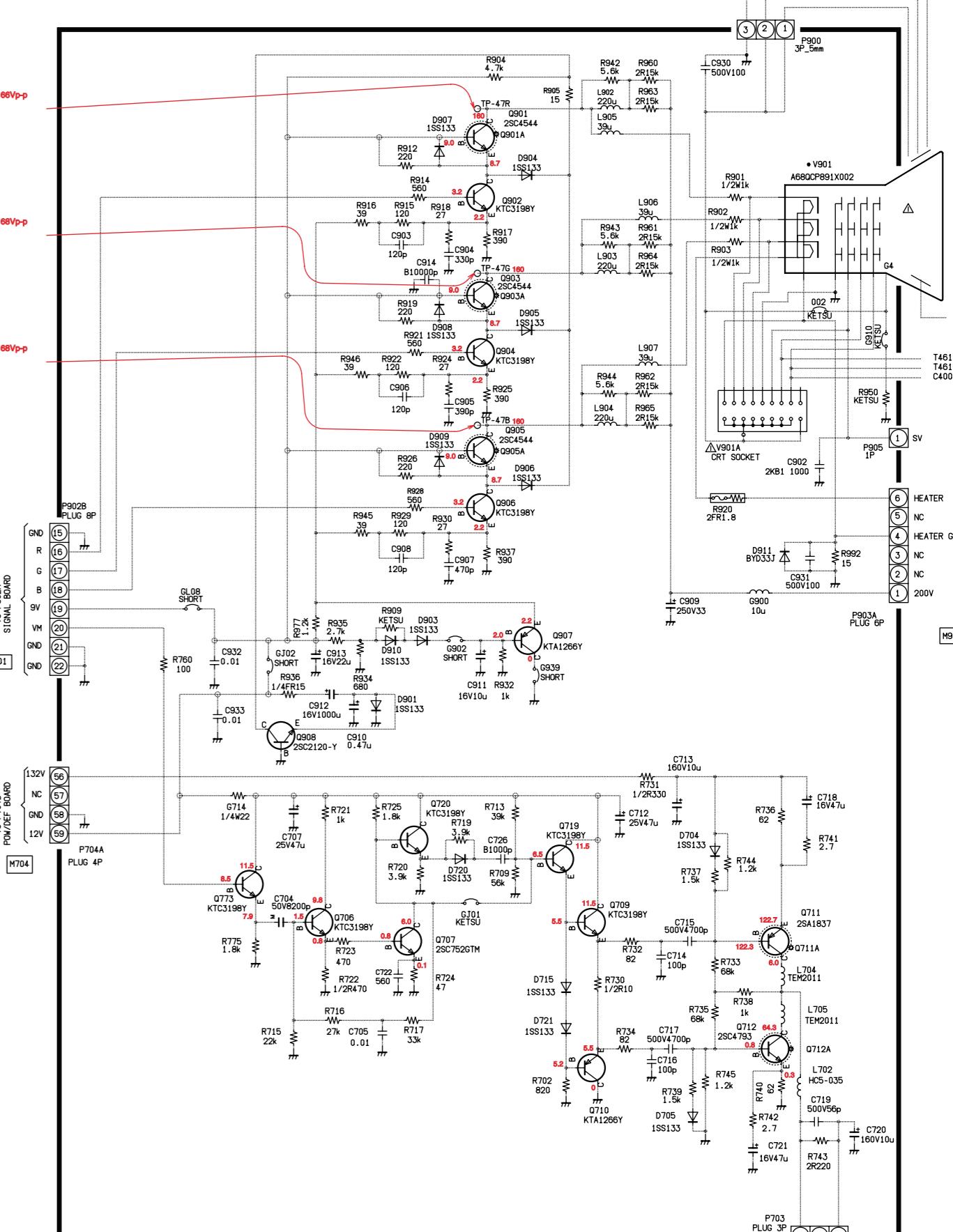
29VZ6DE
29VZ6DA
29VZ6SH
SIGNAL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

U903 POWER/DEF BOARD FWES0111



U901 CRT-D.VM BOARD PD0304



29VZ6DE
29VZ6DA
29VZ6SH
POWER-DEF
CRT-D.VM

1

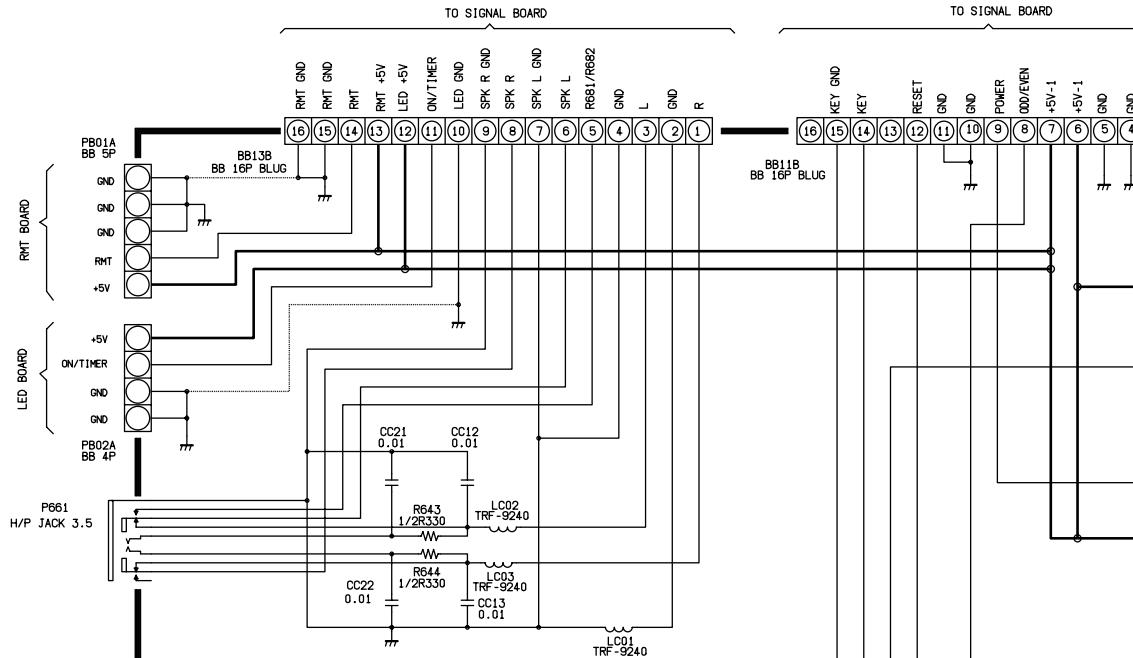
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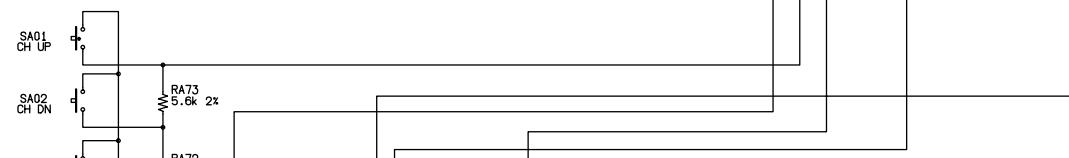
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U903 POWER/DEF BOARD FWES011

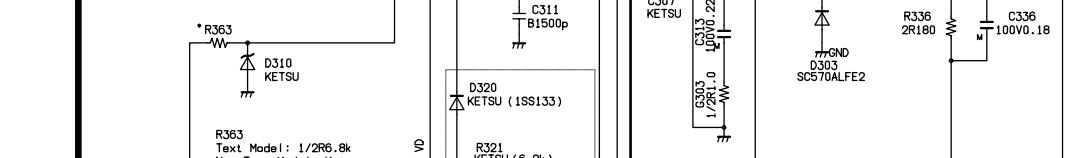
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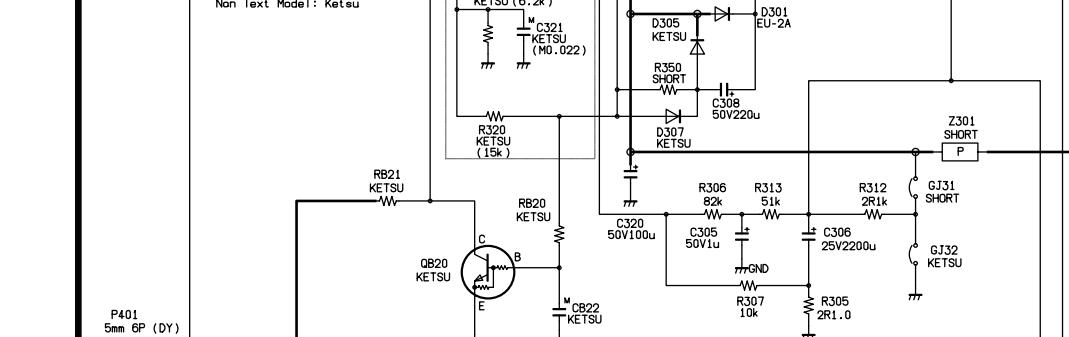
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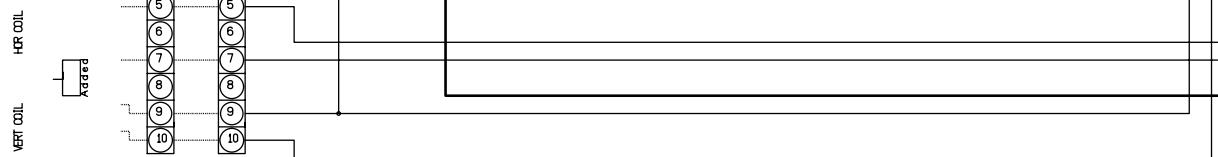
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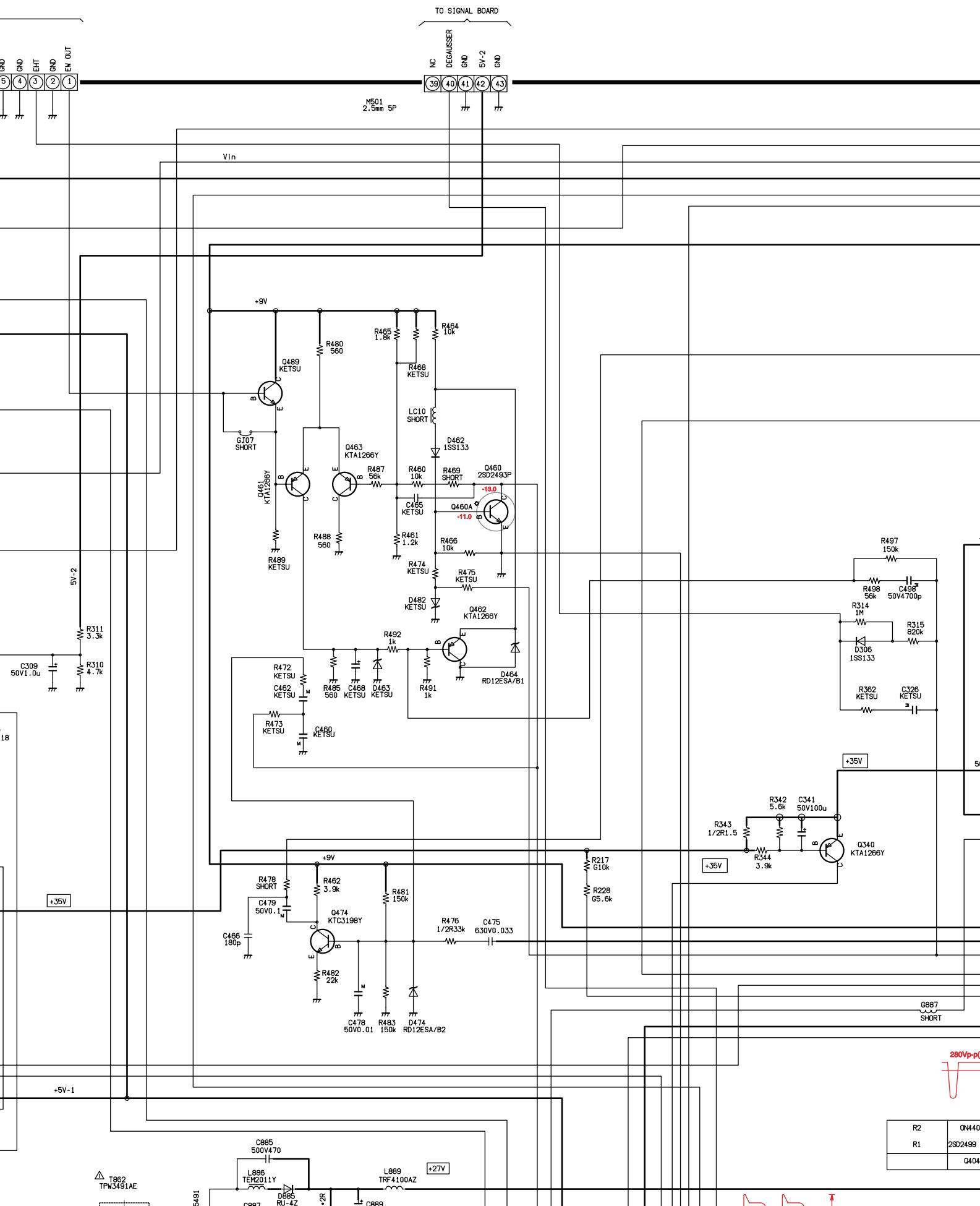
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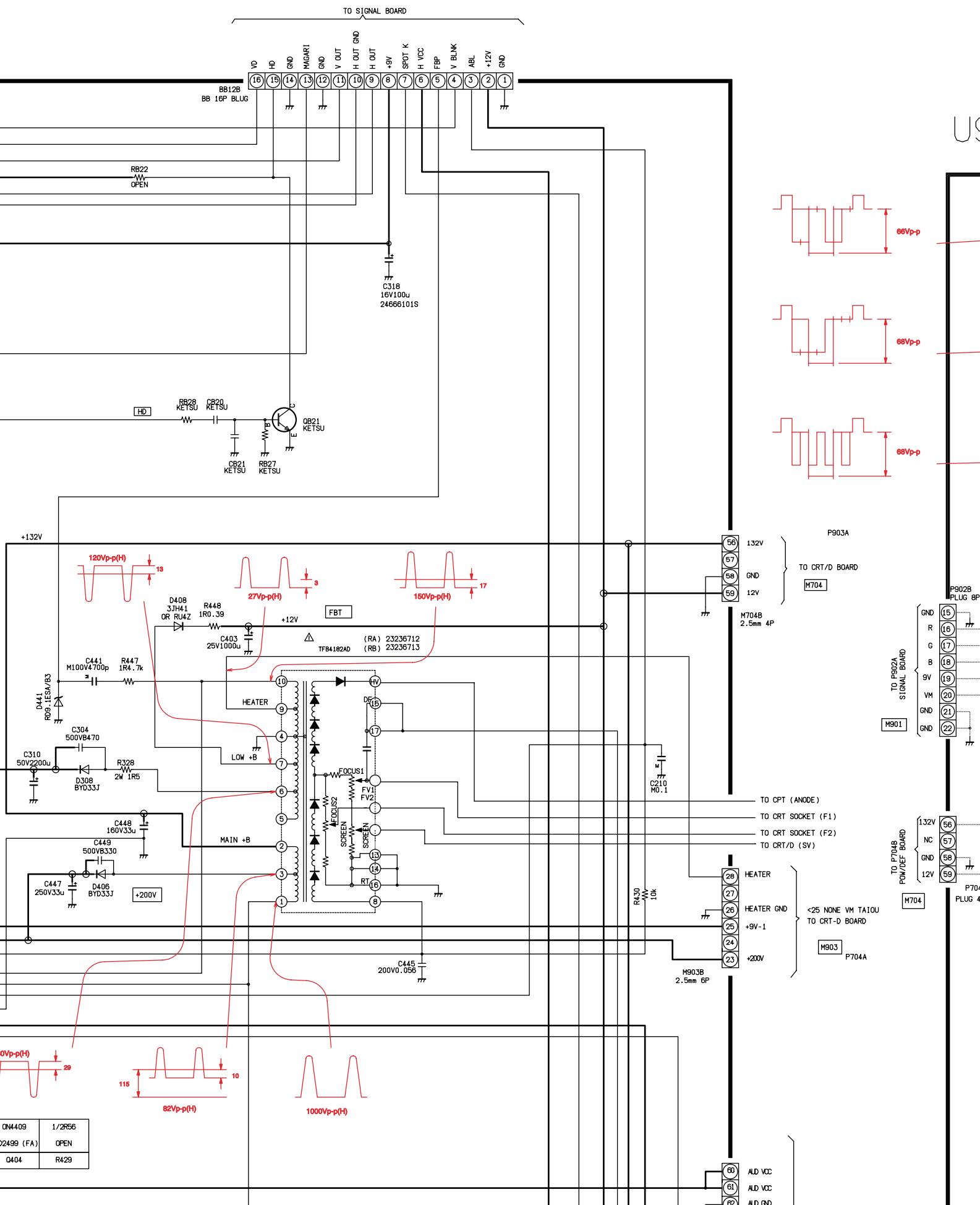


F

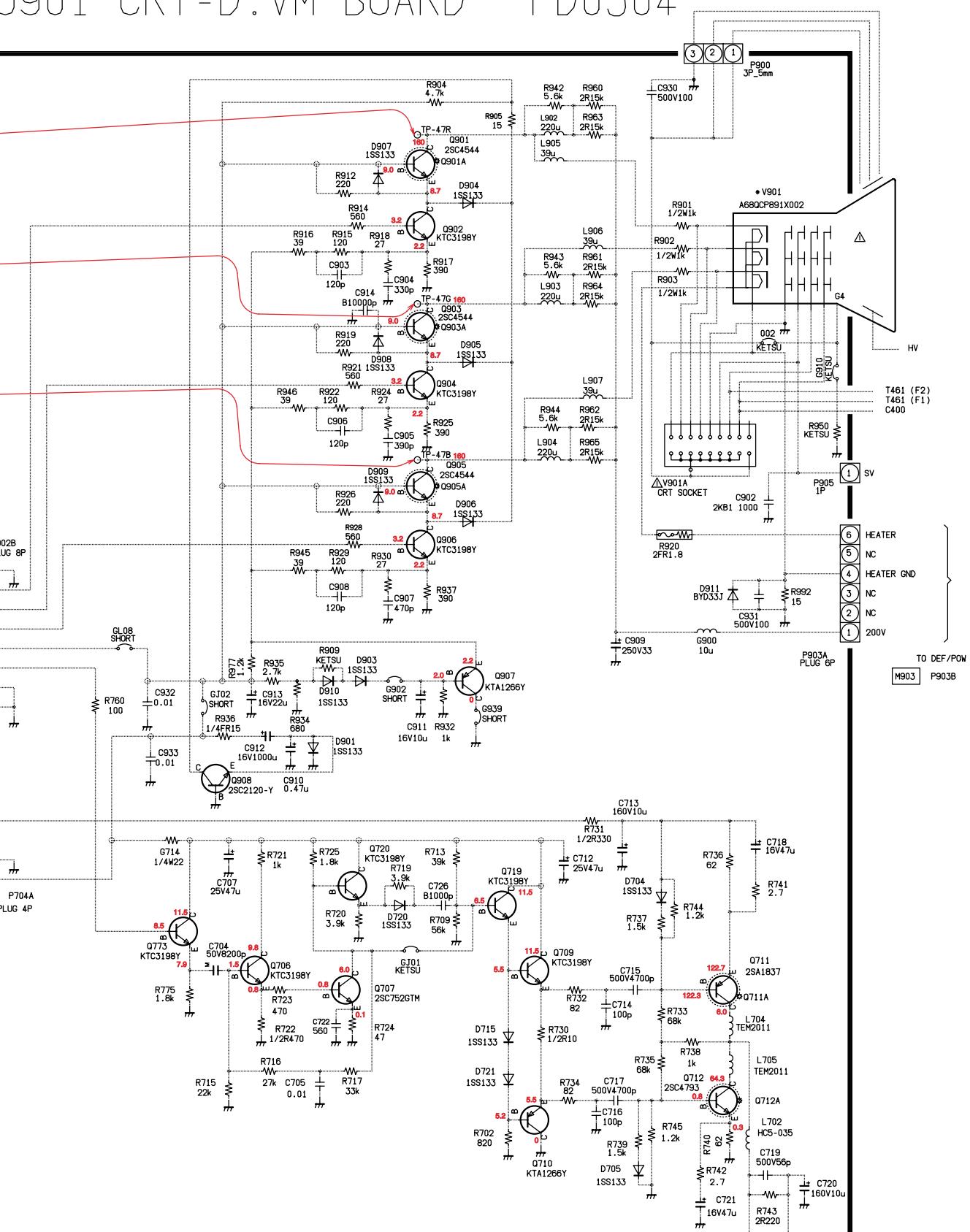


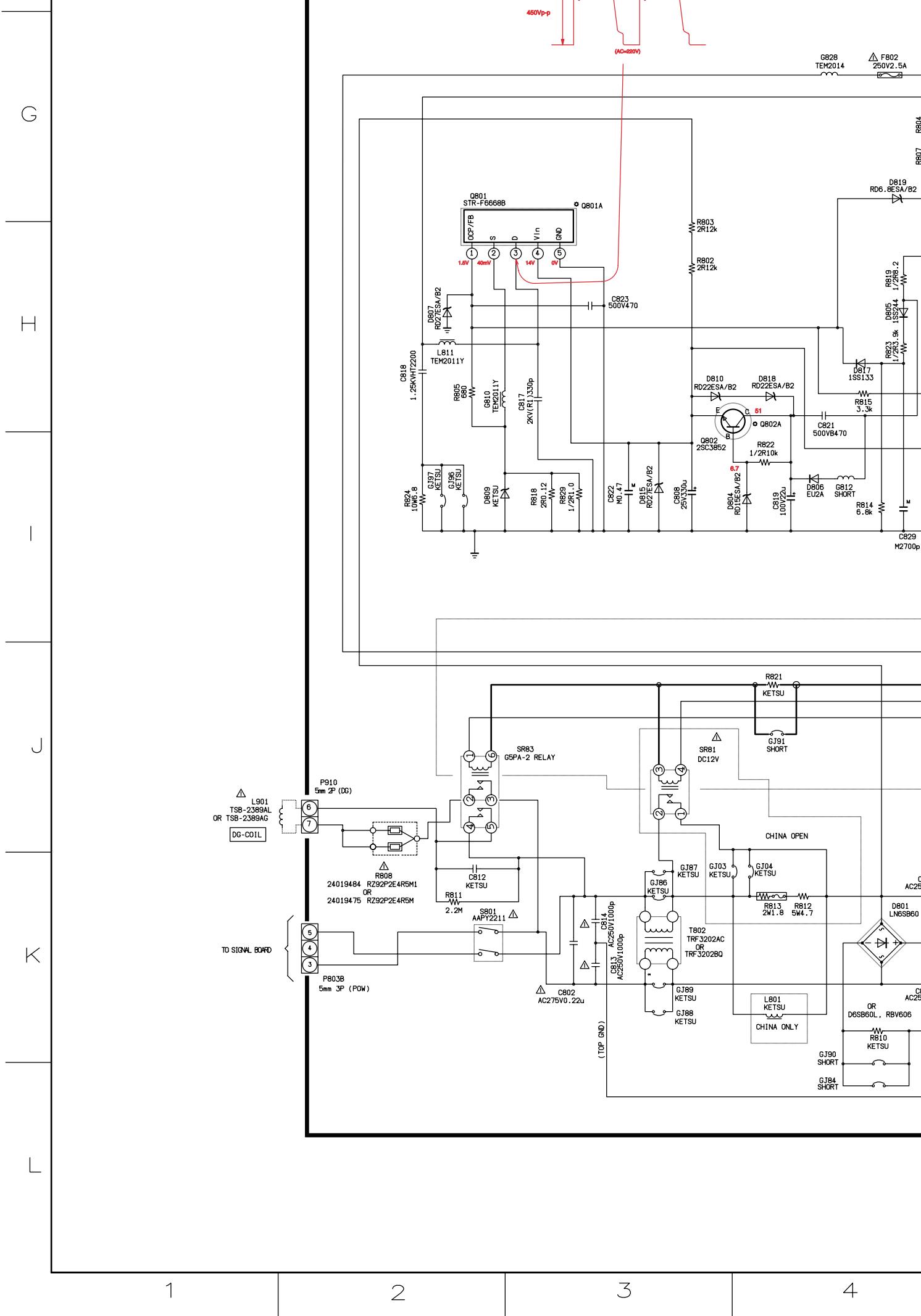
11





J901 CRT-D. VM BOARD PD0304



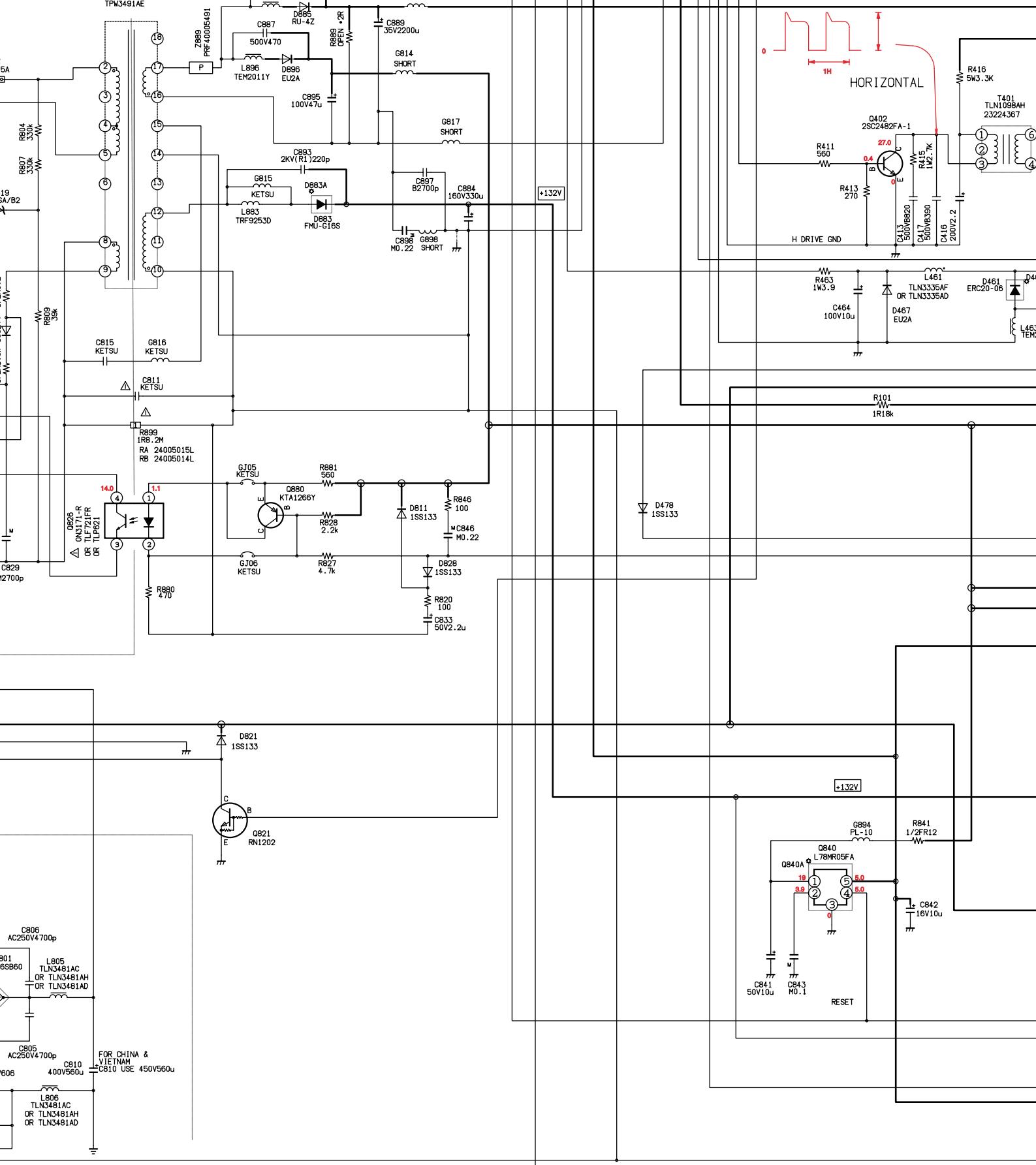


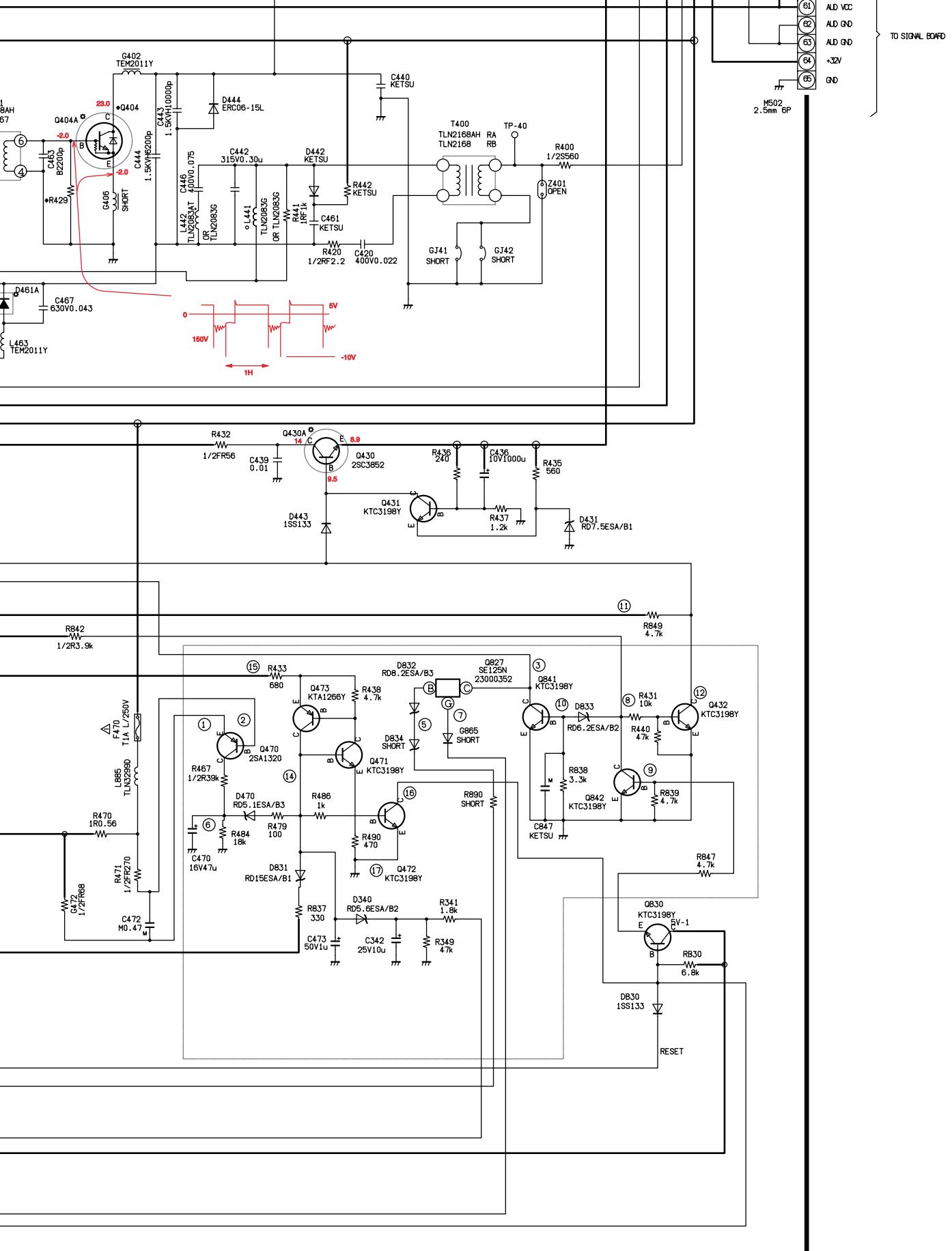
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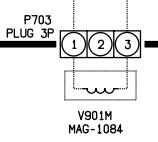
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3

4







G

H

I

J

K

L

29VZ6DE
29VZ6DA
29VZ6SH

POWER-DEF
CRT-D VM

13

14

15

16