

# SERVICE MANUAL

# RA-3B CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KP-43T90</b>	RM-Y906	US/Canada/Mexico	SCC-P62A-A
<b>KP-48V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62D-A
<b>KP-53V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62C-A
<b>KP-61V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62B-A



KV-53V90



RM-Y906

COLOR REAR VIDEO PROJECTOR

**SONY**®

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# SPECIFICATIONS

**Power Requirements** 120V AC, 60Hz

**Power Consumption (W)**

**In Use (Max)** 170W  
**In Standby** 1 W

**Inputs/Outputs Video 1 IN**

**Video 2 INPUT (front)**

**Video 3 IN**

S Video IN (4-pin mini DIN)  
 Y: 1 Vp-p 75 ohms unbalanced, sync negative  
 C: 0.286 Vp-p (Burst signal), 75 ohms,

Video (phono jack)  
 1.0 Vp-p, 75 ohms, sync negative;

Audio (phono jacks)  
 500 mVrms (100% modulation), Impedance: 47 kilohms

**Video 4 IN**

Y: 1 Vp-p, 75 ohms, sync negative  
 PB: 0.7 Vp-p, 75 ohms  
 PR: 0.7 Vp-p, 75 ohms

Audio (phono jacks)  
 500 mVrms (100% modulation), Impedance: 47 kilohms

**Audio (VAR/FIX) Out (phono jacks)**  
 500 mVrms (100% modulation), Impedance: 470 ohms

**Control S Out**  
 minijack

	KP-43T90	KP-48V90	KP-53V90	KP-61V90
<b>Speaker Woofer (2) Tweeter (2)</b>	100 mm (4 in)	100 mm (4 in)	100 mm (4 in)	160 mm (6 <sup>7</sup> / <sub>8</sub> in) 66 mm (2 <sup>5</sup> / <sub>8</sub> in)
<b>Speaker Output (W)</b>	17W x 2	17W x 2	17W x 2	17W x 2
<b>Dimensions (W x H x D)</b>				
<b>mm</b>	965 x 1058 x 570 mm	1,105 x 1,338 x 579 mm	1,216 x 1,417 x 632 mm	1,370 x 1,560 x 670 mm
<b>in</b>	38 x 41 <sup>5</sup> / <sub>8</sub> x 22 <sup>1</sup> / <sub>2</sub> in	43 <sup>1</sup> / <sub>2</sub> x 52 <sup>5</sup> / <sub>8</sub> x 22 <sup>3</sup> / <sub>4</sub> in	47 <sup>7</sup> / <sub>8</sub> x 55 <sup>3</sup> / <sub>4</sub> x 24 <sup>7</sup> / <sub>8</sub> in	54 x 61 <sup>3</sup> / <sub>8</sub> x 26 <sup>3</sup> / <sub>8</sub> in
<b>Mass kg</b>	53.2 kg	64.4 kg	66 kg	92.6 kg
<b>lbs</b>	117 lbs	142 lbs	145 lbs	204 lbs 8 oz

**Television system**

American TV standard

**Channel coverage**

VHF: 2-13/ VHF: 14-69/ CATV: 1-125

**Picture tube**

7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system.

**Screen size (measured diagonally)**

43 inches (KP-43T90)  
 48 inches (KP-48V90)  
 53 inches (KP-53V90)  
 61 inches (KP-61V90)

**Antenna**

75 ohm external terminal for VHF/UHF

**Supplied Accessories**

Remote Control RM-Y906  
 Batteries (2) size AA (R6)

**Optional Accessories**

Connecting Cables  
 RK-G34, RK-74A, RK-G69HG, VMC-10HG, VMC-720M,  
 VMC-810S/820S, YC-15V/30V  
 U/V mixer EAC-66

## WARNINGS AND CAUTIONS


### CAUTION

Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

### WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

### SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and  mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.


---

### ATTENTION!!

Après avoir déconnecté le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au châssis métallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'éviter tout risque d'électrocution provenant d'un châssis sous tension, un transformateur d'isolement doit être utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

### ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifiés par une trame et par une marque  sur les schémas de principe, les vues explosées et les listes de pièces sont d'une importance critique pour la sécurité du fonctionnement. Ne les remplacer que par des composants Sony dont le numéro de pièce est indiqué dans le présent manuel ou dans des suppléments publiés par Sony. Les réglages de circuit dont l'importance est critique pour la sécurité du fonctionnement sont identifiés dans le présent manuel. Suivre ces procédures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.



## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

### How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

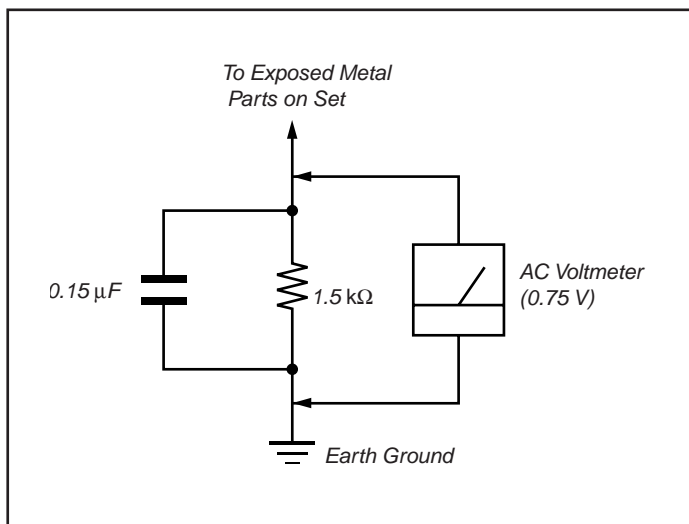


Figure A. Using an AC voltmeter to check AC leakage.

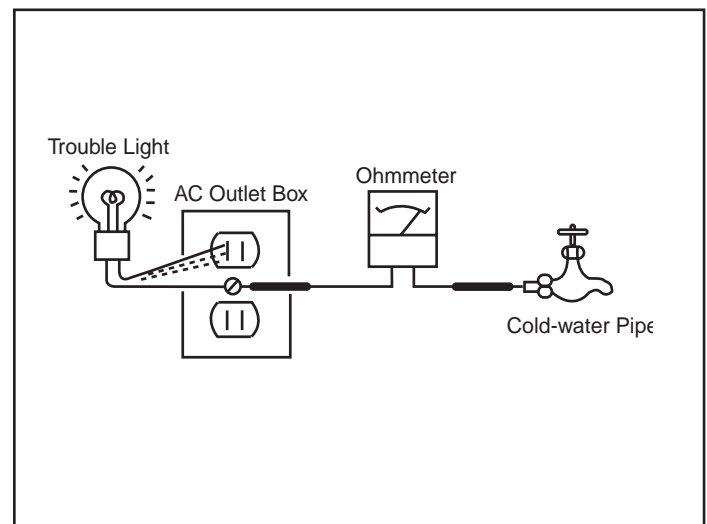


Figure B. Checking for earth ground.

## SELF-DIAGNOSTIC FUNCTION



The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

### Diagnostic Test Indicators

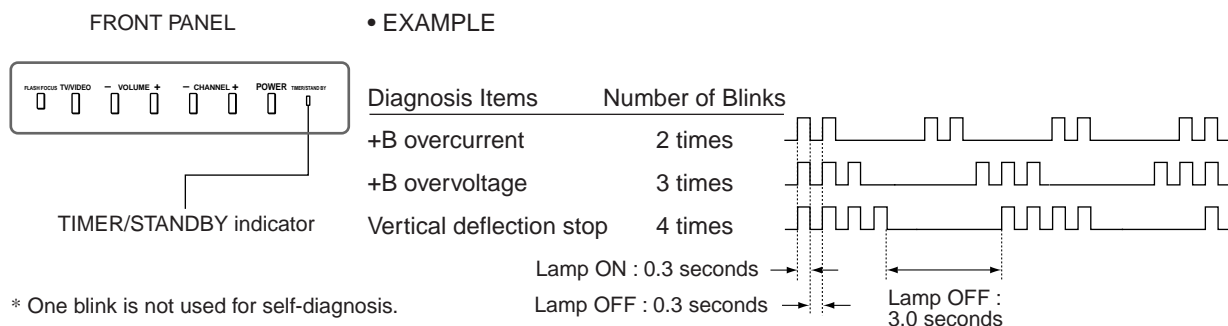
When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", no error has occurred.

Diagnostic Item	STANDBY/TIMER flashes	Possible Problem Location	Condition	Detected Symptoms
Power not On	0	[Standby Power Supply System] F601 open R607 open Q601 short circuit [Main Power Supply System] IC601 and R612 are broken VDR601 short-circuit	Cannot turn on the power LED doesn't blink	
+B OCP Detection	2 times	Short circuit of power supply in each circuit	Goes to the standby mode Short circuit of the +B line	2: +B OCP 000
+B OVP Detection	3 times	T603 pin 7 to pin 8 is open	Goes to the standby mode	3: +B OVP 000
Vertical Deflection Stop	4 times	IC 1509 (V OUT) is broken Q1505 (V Pulse Buffer) is broken	Raster goes to one line horizontally A and then video signal is muted.	4: V Stop 000
Video Out Abnormality Detection	5 times	Video Out, Q705, 732, 761, and others in C board	STANDBY/TIMER LED blinks approx. 30 secs, then blinks for the diagnosis	5: AKB 000
Horizontal Deflection Stop	6 times	C515, 516 open. IC206 (YC Jungle) is broken.	Raster does not appear.	6: H Stop 000
Audio Abnormality Detection	8 times	IC 406 (Audio amp.) is broken. PS401, 402 open	The sound is not out. Goes to the standby mode	8: Audio 000

Note: 000 the range of values for number of operations is 000 - 255. For 256 or higher, the number remains as 255.

### Display of Standby/Timer LED Flash Count



### Release of TIMER/STANDBY indicator blinking.

The TIMER/STANDBY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

### Self-diagnosis screen displays

In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

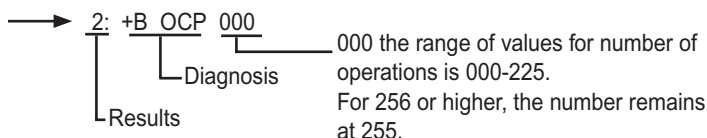
### Screen Display Method

Quickly press the remote command button in the following order from the standby state.

[Display] → Channel [5] → Sound Volume\* [ ] → Power ON

\*Note that this differs from entering the service mode (sound volume [+])

SELF DIAGNOSIS	
2: +B OCP	000
3: +B OVP	000
4: VSTOP	000
5: AKB	000
101: WDT	000



### Self-Diagnosis Screen Display

The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to " 0 ".

If the results display is not returned to " 0 " it will not be possible to judge a new malfunction after completing repairs.

### Method of Clearing Results Display

1. Power off (Set to the standby mode.)
2. [Display] → Channel [5] → Sound Volume [+ ] → Power ON (Service Mode)
3. Channel [8] → [ENTER] (Test reset = Factory preset condition)

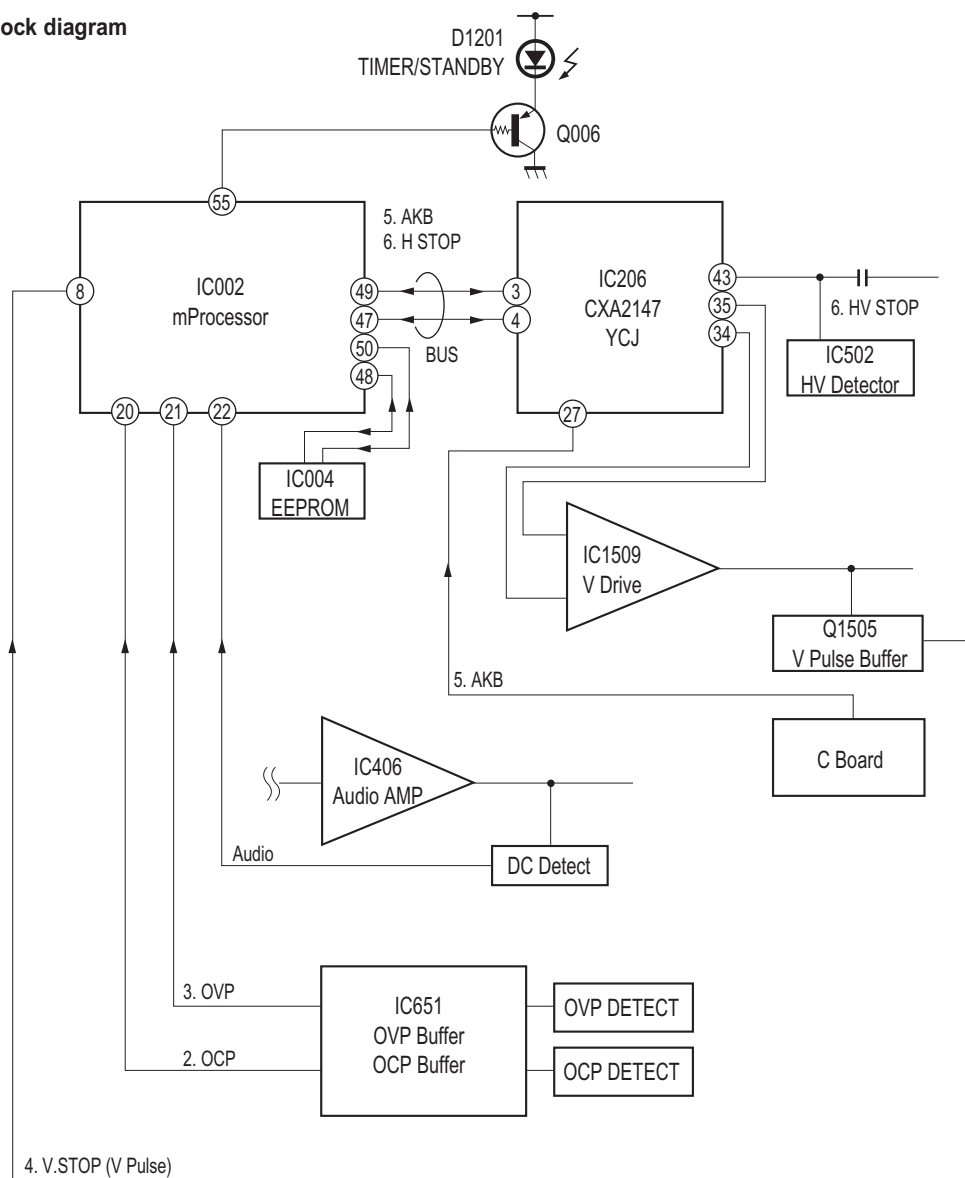
### Method of Ending Self Diagnosis Screen

When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

**Self-diagnosis function operation**

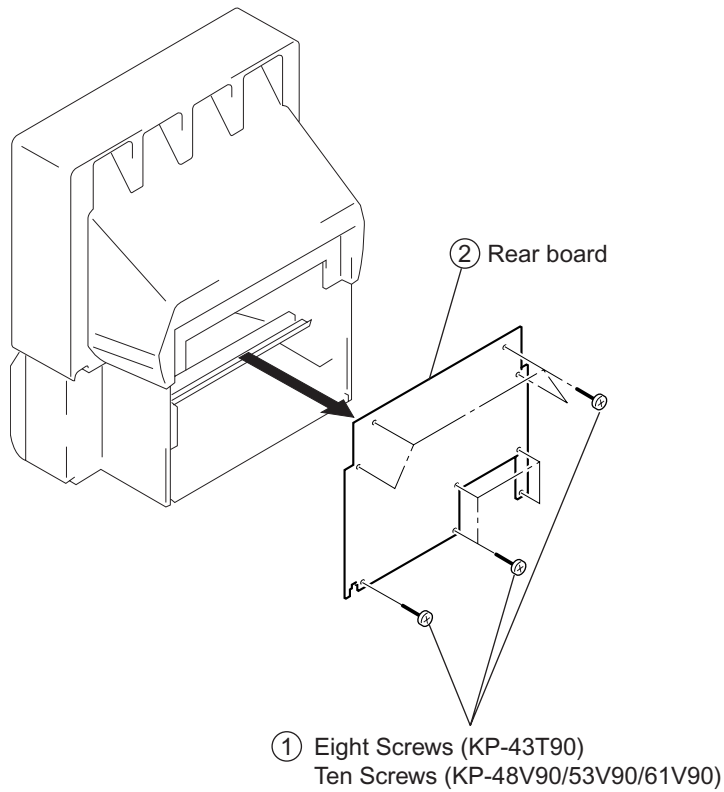
- OCP Low B and +B line detect DET SHORT, and shut-down POWER ON RELAY.  
Reset by turning power on/off.  
In case of +B is loaded approx. 1.3A or more, microcomputer detects it via IC651.
- OVP In case of +B becomes approx. 150V or more, POWER ON RELAY shuts down and microcomputer detects it via IC651.  
Reset by turning power on/off just the same as OCP.
- V Stop In case of microcomputer detects 2 seconds or more interval of V Pulse, Reference Pulse turns off by turning off the picture signal in YC Jungle IC (IC206).  
After the picture signal turns off, V Pulse is regenerated 2 seconds or more, the picture signal turns on.
- AKB IK detection. Makes LED blinking in case of microcomputer doesn't detect IK returns of IC206 CXA2147Q 30 seconds or more.
- H Stop In case of HV becomes 33kV or more, IC502 detects it and shut-down H Drive Pulse.  
Microcomputer receives H Stop data from IC206 and makes LED blinking.
- Audio In case of DC component overlaps the output of Audio Amp., microcomputer detects it and makes LED blinking.  
Microcomputer forces to shut down the power.

**Self-diagnosis block diagram**

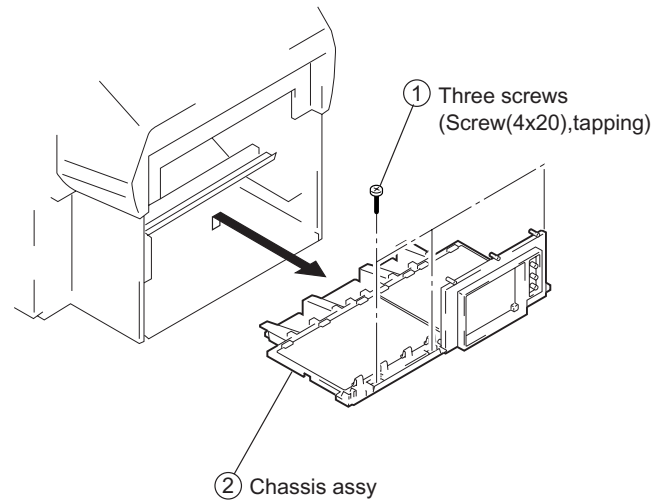


# SECTION 1: DISASSEMBLY

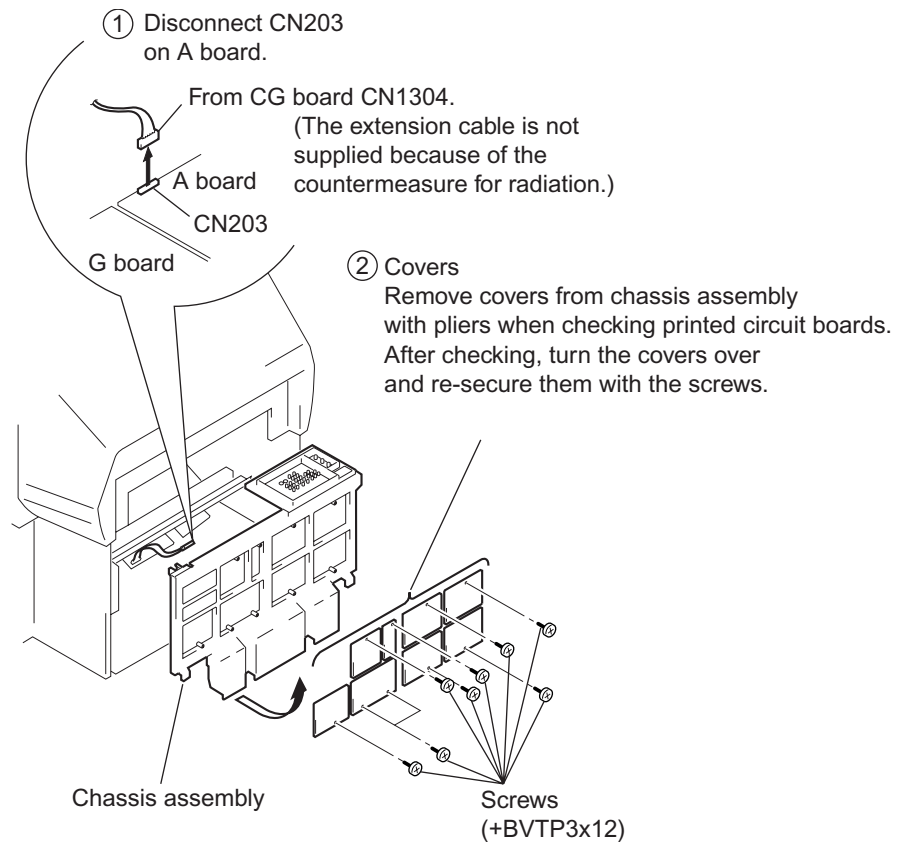
## 1-1. REAR BOARD REMOVAL



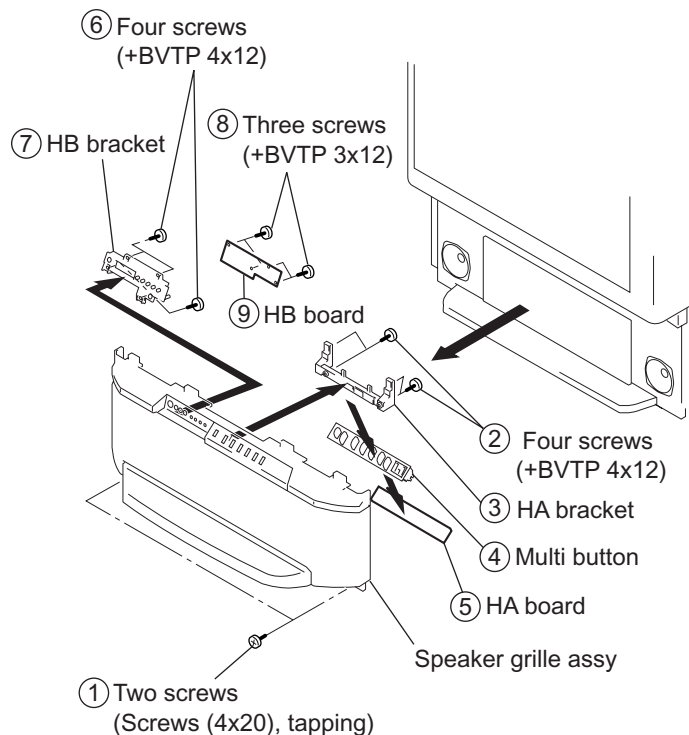
## 1-2. CHASSIS ASSEMBLY REMOVAL



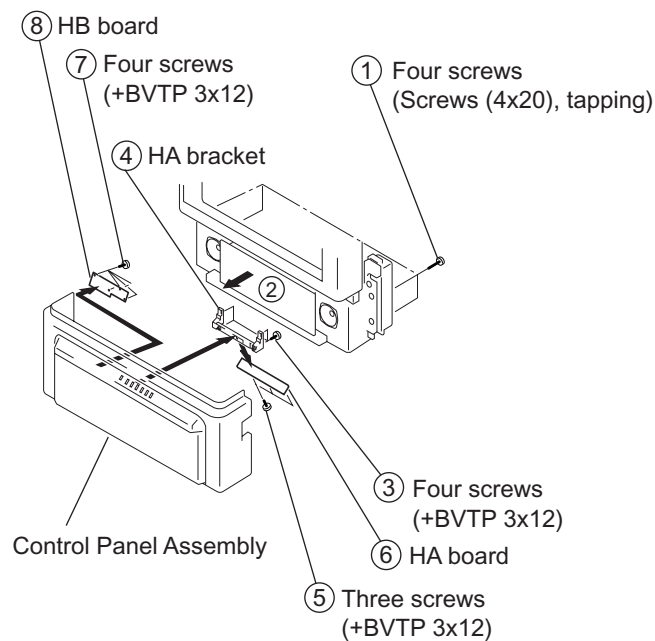
## 1-3. SERVICE POSITION



### 1-4. HA AND HB BOARD REMOVAL (EXCEPT KP-43T90)

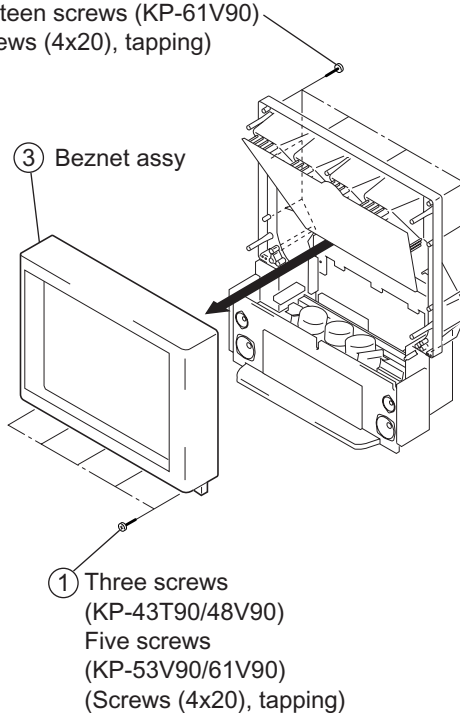


### 1-5. HA AND HB BOARD REMOVAL (KP-43T90 ONLY)

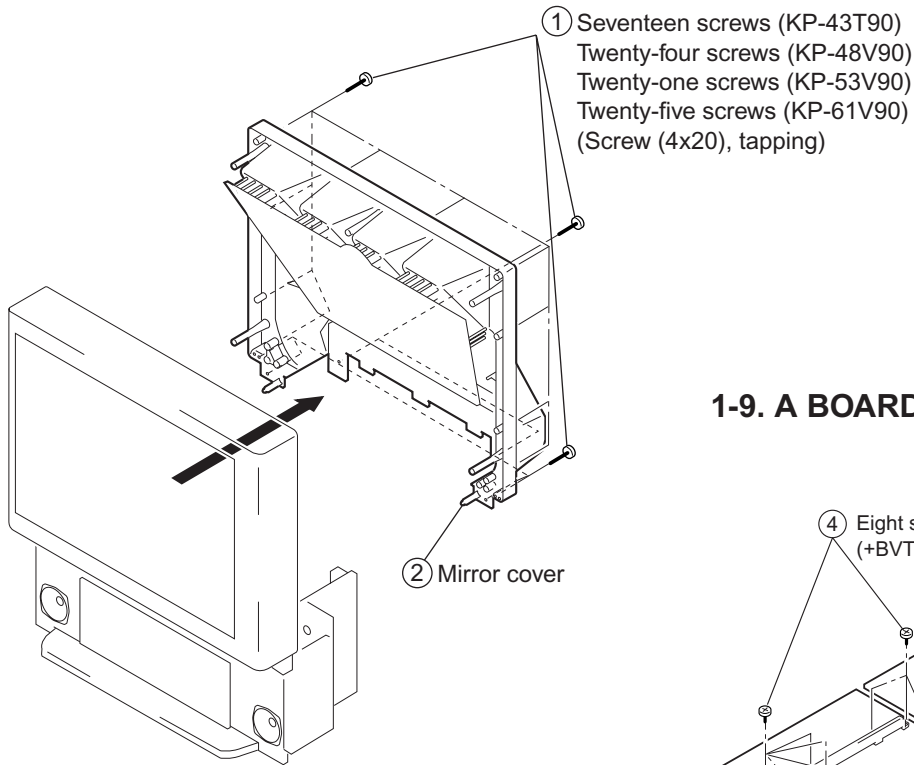


### 1-6. BEZNET ASSY REMOVAL

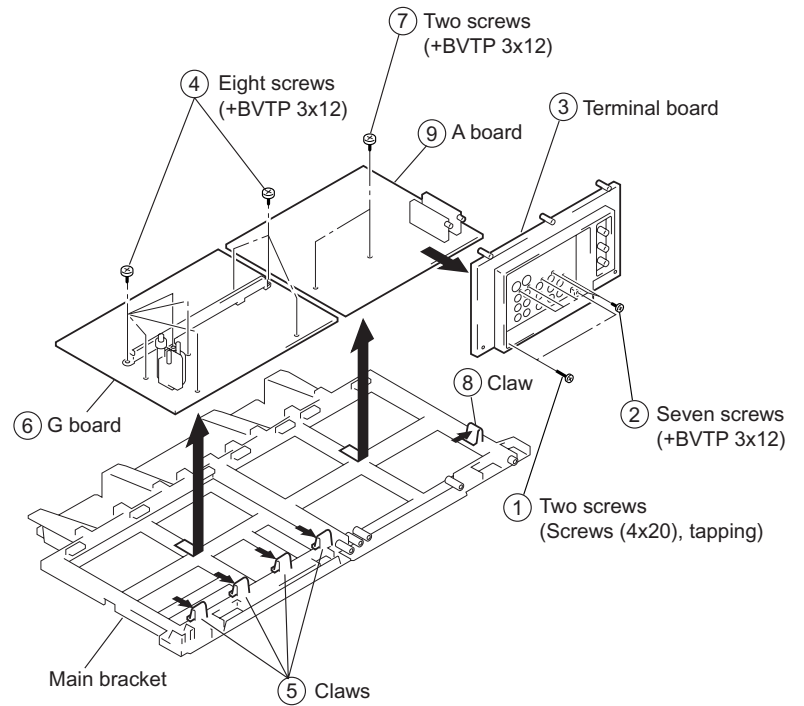
- ② Eleven screws (KP-43T90)  
Twelve screws (KP-48V90)  
Fifteen screws (KP-53V90)  
Fourteen screws (KP-61V90)  
(Screws 4x20), tapping)



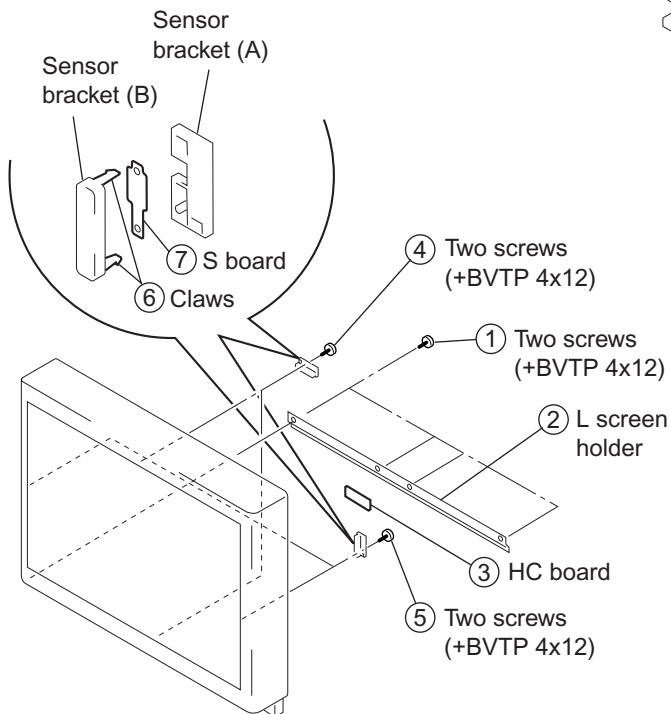
### 1-7. MIRROR COVER REMOVAL



### 1-9. A BOARD AND G BOARD REMOVAL

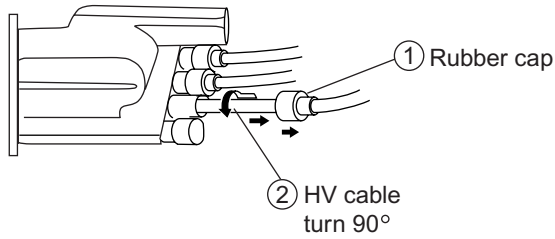


### 1-8. HC BOARD AND S BOARD REMOVAL

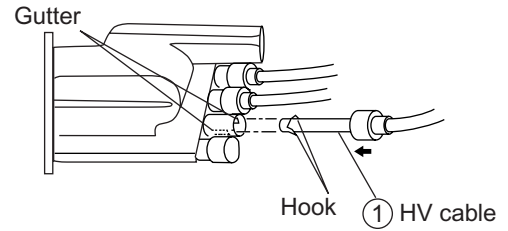


## 1-10. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Removal

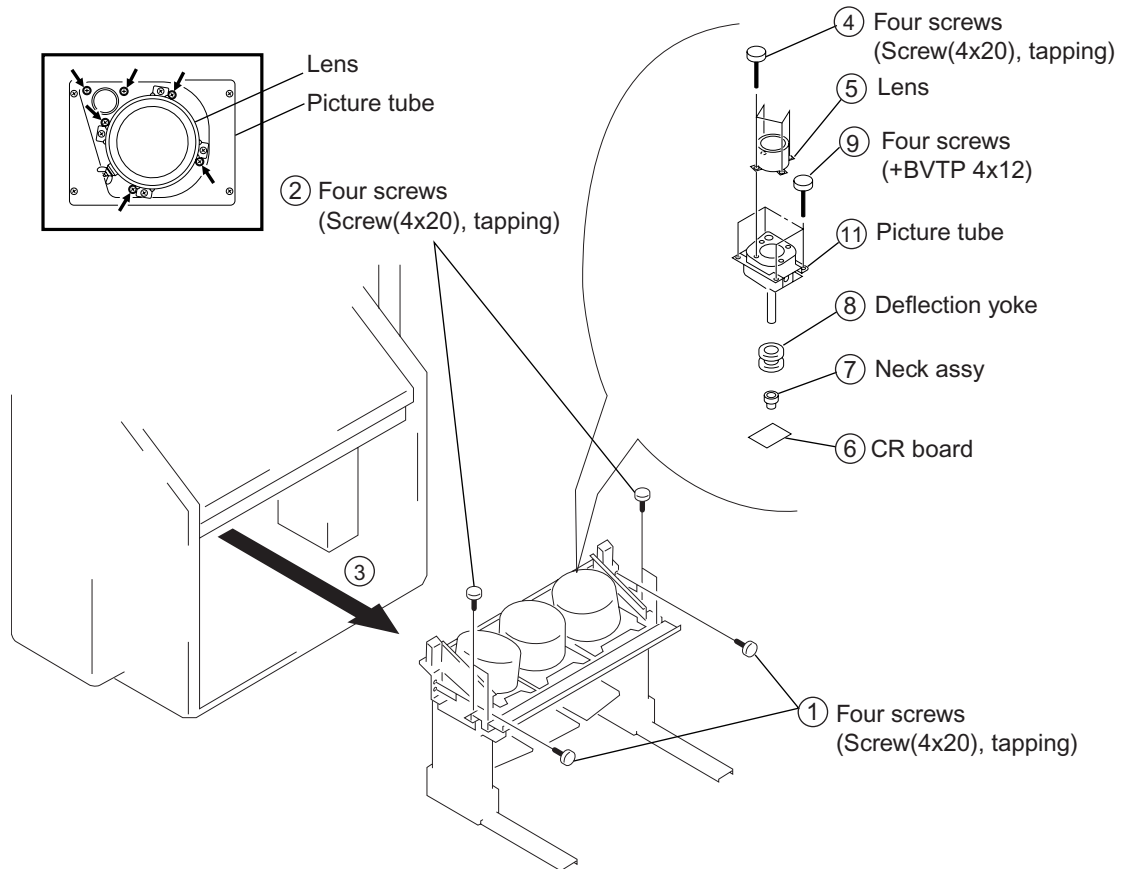


(2) Installation



## 1-11. PICTURE TUBE REMOVAL

**CAUTION:** Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid to spill.

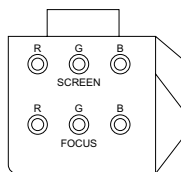




## SECTION 2: SET-UP ADJUSTMENTS

### 2-1. SCREEN VOLTAGE ADJUSTMENT (COARSE ADJUSTMENT)

1. Select a video input with no signal applied (the screen must be black, and the room must be as dark as possible. You may use a heavy blanket over the screen to block out ambient light).
2. Select picture mode "Personal 1" or "Personal 2", and set BRIGHTNESS to 50% and PICTURE to minimum.
3. Turn the green SCREEN control on the focus block all the way to the left and then gradually turn it to the right until the retrace line is barely visible.
4. Gradually turn the control to the left until the retrace line just disappears.
5. Repeat steps 1 through 4 for the red and blue CRTs.

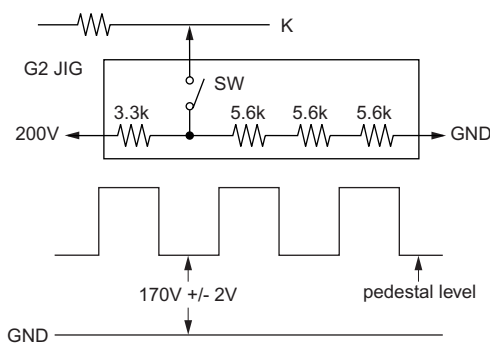


FOCUS block

### 2-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

If the jig described below is available, it is recommended that the G2 Fine Mode Adjustment be performed to set the screen controls to their optimal condition. If desired, you can build the jig illustrated below, using 3-watt resistors. Please note that if the proper voltage is not obtained with the listed resistor's values, then increase or decrease one of the values in the resistor network to obtain the correct voltage.

1. Select VIDEO-1 mode no signal applied (the screen must be black).
2. Connect the G2 JIG.
3. Switch on the JIG.
4. Connect an oscilloscope to the TP701(KR), TP732(KG) and TP761(KB) of CR board, CG board and CB board.
5. Adjust red, green, and blue screen voltage to 168-172V with SCREEN controls on the focus block, as shown below.



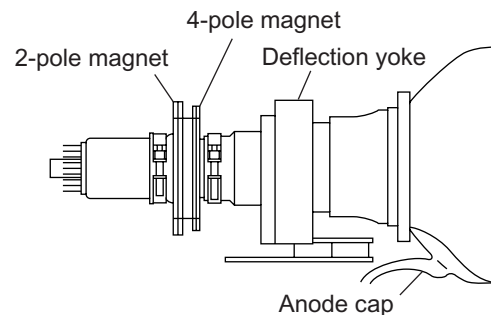
### 2-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Display a cross-hatch pattern
2. Enter the service mode.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Loosen the green CRT's deflection yoke set screw and align the tilt of the deflection yoke so that the horizontal bars at the center of the cross-hatch pattern are parallel to the top and bottom edges of the screen.
5. After aligning the deflection yoke fasten it securely, making sure it is fully forward on the neck of the CRT.
6. The tilt of the deflection yoke for red and blue are aligned the same way as the green CRT.

Cover the green and blue CRT lenses with lens caps (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 4 and 5 for the red CRT.

Cover the green and red CRT lenses with lens caps (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 4 and 5 for the blue CRT.

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "1" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).



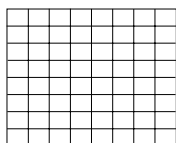
## 2-4. FOCUS LENS ADJUSTMENT

In this adjustment, use the remote commander while in service mode. For details on the usage of the service mode and the remote commander, please refer the item 2-9. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER.

1. Loosen the lens wing nut.
2. Enter the service mode.
3. Display a white raster.
4. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
5. Select adjustment category "PJE", then press 6 to display the test signal (crosshatch)\*.

\* Every time 6 is pressed, the test signal changes to: "crosshatch+video signal" → "dots+video signal" → "crosshatch only" → "dots only" → black screen → "crosshatch+video signal" → ....etc.

6. Rotate the green lens assembly to adjust to the optimum focus point with the test signal being displayed
7. Tighten the lens wing nut.
8. Cover the green and blue CRT lenses with the lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
9. Make sure the cross-hatch is still being displayed; if not, follow step 5 above.
10. Adjust the red CRT lens the same way as the green CRT lens.
11. Cover the green and red CRT lenses with the lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).



Test Signal

12. Make sure the cross-hatch is still being displayed; if not, follow step # 5 above.
13. Adjust the blue CRT lens the same way as the green and red CRT lenses.
14. After adjusting the items 2-5 "Focus VR Adjustment", 2-6 "2-Pole Magnet Adjustment" and 2-7 "4-Pole Magnet Adjustment", reconfirm the optimum focus point and adjust again if necessary.

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "1" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).

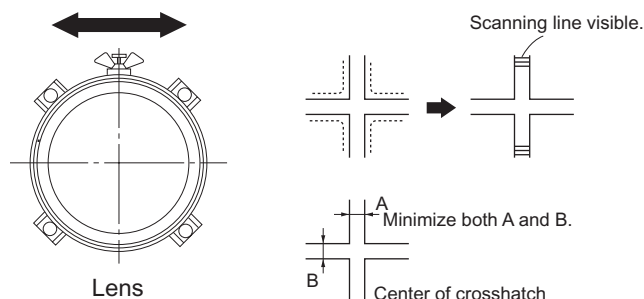
## 2-5. FOCUS CONTROL ADJUSTMENT

1. Enter the service mode.
2. Display a white raster.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Select adjustment category "PJE", then press 6 to display the test signal (crosshatch)\*.

\* Every time 6 is pressed, the test signal changes to: "crosshatch+video signal" → "dots+video signal" → "crosshatch only" → "dots only" → black screen → "crosshatch+video signal" → ....etc.

5. Adjust the green focus control on the focus block to achieve the optimum focus point with the test signal being displayed.
6. Cover the green and blue picture lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
7. Make sure the cross-hatch is still being displayed; if not, follow step 4 above.
8. Adjust the red focus control on the focus block to achieve the optimum focus point with the test signal being displayed.
9. Cover the green and red picture lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
10. Make sure the cross-hatch is still being displayed; if not, follow step # 4 above.
11. Adjust the blue focus control on the focus block to achieve the optimum focus point with the test signal being displayed.
12. Repeat steps 1 through 11 after adjusting items 2-4. "Focus Lens Adjustment", 2-6 "2-pole Magnet Adjustment", 2-7 "4-Pole Magnet Adjustment"

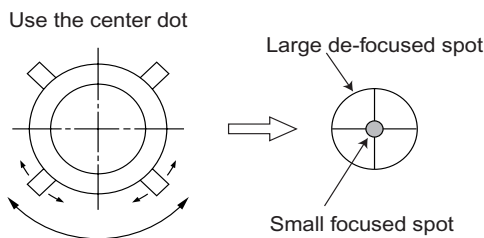
**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).



## 2-6. 2-POLE MAGNET ADJUSTMENT (GREEN, RED)

1. Display a dot pattern (see the details of using the internal test patterns at the end of the previous section).
2. Enter the service mode.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the green focus control on the focus block to the right and set it to overfocus to enlarge the spot (the dot). See figure at the end of Section 2-3 for the location of the 2-pole magnet adjusting tabs.
5. Adjust the green CRT's 2-pole magnet so that the small bright spot is in the center of the large defocused spot.
6. Adjust the green focus control on the focus block and set it for the best focus.
7. Repeat steps 1 through 6 for the red CRT, except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "1" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).



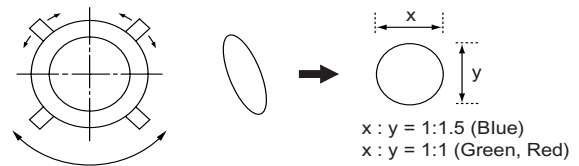
## 2-7. 4-POLE MAGNET ADJUSTMENT (GREEN, RED, BLUE)

1. Display a dot pattern (see the details of using the internal test patterns at the end of section 2-5, item 4).
2. Enter the service mode.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the green focus control on the focus block to the left and set it to under-focus to enlarge the spot.
5. Adjust the 4-pole magnet so that the enlarged spot in the center of the screen becomes a perfect circle.
6. Adjust the green focus control on the focus block and set it for the best focus.
7. Repeat steps 1 through 6 for the red CRT, except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.

8. Repeat steps 1 through 6 for the blue CRT, except now cover the green and red CRT lenses with lens caps to allow only blue to show. Adjust the blue focus control on the focus block (or use the method shown in the note below for turning off the CRTs individually without using lens caps). However, for the blue CRT do not make the enlarged spot a perfect circle as indicated in step 5; instead, adjust the 4-pole magnet so that the height of the enlarged blue spot in the center of the screen is approx. 1.5 times the width of the spot.

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "1" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).

Use the center dot



## 2-8. DEFOCUS ADJUSTMENT (BLUE)

**Note:** Adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Select the video menu and set the picture mode to "VIVID".
2. Enter service mode.
3. Change TV mode to the video-1 input mode.
4. Select adjustment category "PJE", and press 6 as many times as necessary to display the dot pattern on the screen.
5. Adjust the blue focus control on the focus block to adjust the diameter of the dots in the center of the screen as shown in the figure below.

**FOCUS ADJUSTMENT POINT:**



Screen Size	43"	53"	61"
Diameter	6mm	8mm	9mm

## 2-9. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER.

By using Remote Commander (RM-Y906), all circuit adjustments can be made.

**NOTE :** The following test equipment is required:

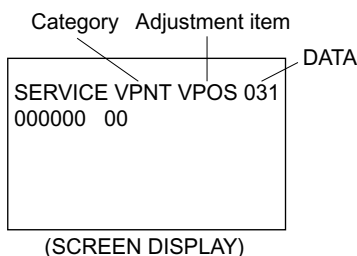
1. Pattern Generator (with RF, composite, and component outputs)
2. Digital multimeter

### 2-9-1. METHOD OF ENTERING THE SERVICE ADJUSTMENT MODE

#### SERVICE MODE PROCEDURE

1. TV must be in Standby mode. (Power off)
2. Press "DISPLAY", 5, "Volume +", then "TV Power" on the Remote Commander.  
(Press each button within 1 second of pressing the previous button.)

#### SERVICE MODE ADJUSTMENT



3. The screen displays the adjustment category and the item being adjusted within that category.
4. Press 1 or 4 to select the adjustment item
5. Press 3 or 6 to change the data
6. Press 2 or 5 to select the adjustment category
7. If you want to go back to the most recently saved value, press "0" then "ENTER" to read the memory.
8. Press "MUTING" then "ENTER" to write the new adjustment data into memory.
9. Turn power off when you want to exit the service mode.

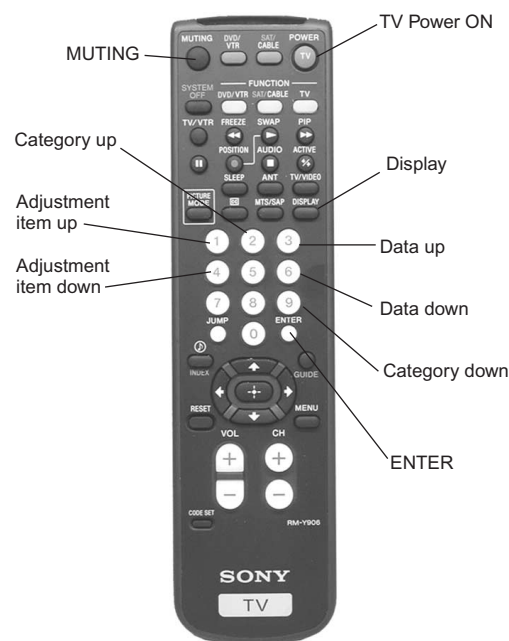
**Note:** Press "8" then "ENTER" to restore the factory settings for user controls and channel memories (this will also turn set off and then on to exit the service mode).

### 2-9-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, remove the plug from the AC outlet, and then replace the plug in the AC outlet again.
2. Turn the power switch ON and enter the Service Mode.
3. Cycle through the adjusted items again and confirm that the adjustments were saved.

### 2-9-3. ADJUSTING BUTTONS AND INDICATOR

**Note:** When the PJE mode (which displays an internally generated signal) is activated, several buttons on the remote commander will have different functions than the ones listed above. Therefore, when in the PJE mode, refer to section 2-10 for button functions.



RM-Y906

## 2-9-4. SERVICE MODE LISTS

### VPNT (Video Processor NTSC)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	VPOS	0-63	(24)	V POSITION	VARIABLE
1	VSIZ	0-63	(30)	V SIZE	VARIABLE
2	VCOM	0-3	0	V COMP	FIXED
3	VLIN	0-15	(10)	V LINEARITY	VARIABLE
4	VSCO	0-15	7	V SCURVE CORRECTION	FIXED
5	HPOS	0-15	7	H POSITION	FIXED
6	HSIZ	0-63	(26)	H SIZE	VARIABLE
7	PAMP	0-63	(20)	PIN AMP	VARIABLE
8	UPIN	0-15	(7)	UPPER CORNER PIN DISTORTION	VARIABLE
9	LPIN	0-15	(7)	LOWER CORNER PIN DISTORTION	VARIABLE
10	PPHA	0-15	(7)	PIN PHASE	VARIABLE
11	AFC	0-3	2	AFC LOOP GAIN	FIXED
12	VBOW	0-15	7	V BOW	FIXED
13	VANG	0-15	7	V ANGLE	FIXED
14	REF	0-3	3	REFERENCE PULSE POSITION	FIXED
15	RDRV	0-63	(31)	RED DRIVE GAIN	VARIABLE
16	BDRV	0-63	(31)	BLUE DRIVE GAIN	VARIABLE
17	RCUT	0-15	(7)	RED CUTOFF	VARIABLE
18	BCUT	0-15	(7)	BLUE CUTOFF	VARIABLE
19	SCON	0-15	(7)	SUB CONTRAST	VARIABLE
20	SHUE	0-15	(9)	SUB HUE	VARIABLE
21	SCOL	0-15	(9)	SUB COLOR	VARIABLE
22	CDM2	0,1	0	COUNT DOWN MODE2	FIXED
23	DPIX	0,1	1	DYNAMIC PICTURE	FIXED
24	NOTC	0,1	0	Y CHROMA TRAP	FIXED
25	CROM	0-15	7	CHROMA TRAP F0	FIXED
26	TOT	0,1	0	CHROMA TOT FILTER	FIXED
27	SHPF	0-3	2	SHARPNESS F0	FIXED
28	RON	0,1	1	RED ON	FIXED
29	GON	0,1	1	GREEN ON	FIXED
30	BON	0,1	1	BLUE ON	FIXED
31	DCOL	0,1	1	DYNAMIC COLOR	FIXED
32	CDMD	0,1	0	V COUNT DOWN	FIXED
33	LBLK	0-15	13	LEFT-SIDE BLANK WIDTH	FIXED
34	RBLK	0-15	13	RIGHT-SIDE BLANK WIDTH	FIXED
35	PREC	0-3	1	PRE OVER LEVEL FOR COMP .V IN	FIXED
36	PREY	0-3	1	PRE OVER LEVEL FOR Y IN	FIXED

(-) = PREWRITE DATA

### VPNV (Video Processor NTSC Vivid)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	SBRV	0-63	(35)	SUB BRIGHTNESS FOR VIVID	VARIABLE
1	GMMV	0-3	2	GAMMA LEVEL FOR VIVID	FIXED
2	YDCV	0,1	1	Y-DC TRANSFER RATIO FOR VIVID	FIXED
3	ABLV	0,1	1	ABL MODE FOR VIVID	FIXED
4	AXIV	0,1	0	AXIS R-Y,G-Y FOR VIVID	FIXED

( ) = PREWRITE DATA

### VPNS (Video Processor NTSC Standard)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	SBRS	0-63	43T (29), 48V (23) 53V (30), 61V (27)	SUB BRIGHTNESS FOR STANDARD	VARIABLE
1	GMMS	0-3	0	GAMMA LEVEL FOR STANDARD	FIXED
2	YDCS	0,1	0	Y-DC TRANSFER RATIO FOR STANDARD	FIXED
3	ABLS	0,1	1	ABL MODE FOR STANDARD	FIXED
4	AXIS	0,1	0	AXIS R-Y,G-Y FOR STANDARD	FIXED

( ) = PREWRITE DATA

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	FDIS	0,1	0	SELECT REGI DATA DISPLAY OF FINE ADJ	FIXED
1	OSDH	1-255	32	PJED SERVICE MENU H POSITION	FIXED
2	OSDV	1-255	25	PJED SERVICE MENU V POSITION	FIXED
3	FVST	0-255	29	LINE NUMBER OF FINE ADJUST START	FIXED
4	V1ST	0-255	0	V1 START DATA	FIXED
5	V1CU	0-255	62	V1 COUNT UP DATA	FIXED
6	COHP	0-255	0	H-PHASE OF ROUGH ADJ	FIXED
7	FIHP	0-255	194	H-PHASE OF FINE ADJ	FIXED
8	TPHP	0-255	61	H-PHASE OF TEST PATTERN	FIXED
9	DFHP	0-255	225	H-PHASE OF DYNAMIC FOCUS	FIXED
10	DFHG	-128-127	-80	H-2 GAIN OF DYNAMIC FOCUS	FIXED
11	DFVG	-128-127	-30	V-2 GAIN OF DYNAMIC FOCUS	FIXED
12	PWM I	0-255	0	PWM I	FIXED
13	PWM2	0-255	30	H-PHASE OF AUTO REGI TEST PATTERN	FIXED
14	HBLD	0-255	238	H-PHASE OF RETURNED BLUE V LINE	FIXED
15	HBLW	0-63	23	PULSE WIDTH OF RETURNED BLUE V LINE	FIXED
16	BLKP	0-255	27	START BLANK PULSE	FIXED
17	COGV	-128-127	0	GREEN V CENT OFFSET DATA OF AUTO REGI	FIXED
18	CORV	-128-127	0	RED V CENT OFFSET DATA OF AUTO REGI	FIXED
19	COBV	-128-127	0	BLUE V CENT OFFSET DATA OF AUTO REGI	FIXED
20	COGH	-128-127	0	GREEN H CENT OFFSET DATA OF AUTO REGI	FIXED
21	CORH	-128-127	0	RED H CENT OFFSET DATA OF AUTO REGI	FIXED
22	COBH	-128-127	0	BLUE H CENT OFFSET DATA OF AUTO REGI	FIXED
23	SOGV	-128-127	0	GREEN V SKEW OFFSET DATA OF AUTO REGI	FIXED
24	SORV	-128-127	0	RED V SKEW OFFSET DATA OF AUTO REGI	FIXED
25	SOBV	-128-127	0	BLUE V SKEW OFFSET DATA OF AUTO REGI	FIXED
26	SOGH	-128-127	0	GREEN H SKEW OFFSET DATA OF AUTO REGI	FIXED
27	SORH	-128-127	0	RED H SKEW OFFSET DATA OF AUTO REGI	FIXED
28	SOBH	-128-127	0	BLUE H SKEW OFFSET DATA OF AUTO REGI	FIXED
29	ERR	FIXED	0	AUTO REGI ERROR CODE	FIXED
30	ADTM	0-255	144	TIMING TO GET A/D DATA OF AUTO REGI	FIXED
31	VUP	1-255	1	AUTO REGI PATTERN UPPER V POSITION	FIXED
32	VMID	1-255	104	AUTO REGI PATTERN MIDDLE V POSITION	FIXED
33	VLOW	1-255	208	AUTO REGI PATTERN LOWER V POSITION	FIXED
34	HPR	1-510	1	AUTO REGI PATTERN H POSITION	FIXED
GRN	CENT	-512-511	(000 / 000)	GREEN H/V CENT	VARIABLE
	SKEW	-512-511	(000 / 000)	GREEN H/V SKEW	VARIABLE
	SIZE	-512-511	(-50/-200)	GREEN H/V SIZE	VARIABLE
	LIN	-512-511	(xxx / xxx)	GREEN H/V LIN	VARIABLE
	KEY	-512-511	(xxx / xxx)	GREEN H/V KEY	VARIABLE
PIN	-512-511	(xxx / 230)	GREEN H/V PIN	VARIABLE	
BLU	CENT	-512-511	(000 / 000)	BLUE H/V CENT	VARIABLE
	SKEW	-512-511	(000 / -000)	BLUE H/V SKEW	VARIABLE
	SIZE	-512-511	(-050/-225)	BLUE H/V SIZE	VARIABLE
	LIN	-512-511	(-150/xxx)	BLUE H/V LIN	VARIABLE
	KEY	-512-511	(xxx/-100)	BLUE H/V KEY	VARIABLE
PIN	-512-511	(xxx/200)	BLUE H/V PIN	VARIABLE	
RED	CENT	-512-511	(000/000)	RED H/V CENT	VARIABLE
	SKEW	-512-511	(000/000)	RED H/V SKEW	VARIABLE
	SIZE	-512-511	(-050/-210)	RED H/V SIZE	VARIABLE
	LIN	-512-511	(150/xxx)	RED H/V LIN	VARIABLE
	KEY	-512-511	(xxx/100)	RED H/V KEY	VARIABLE
PIN	-512-511	(xxx/225)	RED H/V PIN	VARIABLE	

() = PREWRITE DATA  
 XXX: CANNOT CHANGE

## ID (Identification)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	SERS	0-3	1	SERIES ID	FIXED
1	LPWR	0-3	0	LAST POWER MEMORY	FIXED
2	LANG	0-3	0	LANGUAGE	FIXED

## CCD (Closed Caption Decoder)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	CCHP	0-63	38	OSD H POSI INDEX & CC/XD	FIXED
1	CCHN	0-63	29	NO FUNCTION	FIXED

## OP (Option)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	DISP	0-63	(9)	OSD H POSITION	VARIABLE
1	FWI	0-7	2	FIELD1 WINDOW	FIXED
2	FW2	0-7	3	FIELD2 WINDOW	FIXED
3	IDXT	0-255	2	MOTION PERIOD /INDEX	FIXED



**3DCM (3D Comb Filter)**

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	NRMD	0-3	0	NOISE REDUCER MODE	FIXED
1	DYCO	0-15	2	DY CORING LEVEL SETTING	FIXED
2	DYGA	0-15	10	DY GAIN SETTING	FIXED
3	DCCO	0-15	5	DC CORING LEVEL SETTING	FIXED
4	DCGA	0-15	5	DC GAIN SETTING	FIXED
5	SELD	0,1	1	SELECT DY SIGNAL FILTER	FIXED
6	D2GA	0-7	4	DY/C 2nd GAIN SETTING	FIXED
7	VTRH	0-3	1	VTR HSYNC HYSTERESIS SETTING	FIXED
8	VTRR	0-3	1	VTR HSYNC REFERENCE SETTING	FIXED
9	LDSR	0-3	2	LD SIGNAL REFERENCE	FIXED
10	VAPG	0-7	5	V APERTURE GAIN	FIXED
11	VAPI	0-31	11	V APERTURE INVERT POINT	FIXED
12	YPFT	0-3	0	Y PEAKING FILTER TAP	FIXED
13	YPFG	0-15	9	Y PEAKING FILTER GAIN	FIXED
14	V1PS	0-3	2	VERTICAL 1-LINE SELECTOR	FIXED
15	VEGS	0-3	1	VERTICAL EDGE SELECTOR	FIXED
16	CC3N	0,1	0	C SIGNAL 3-LINE COM FILTER	FIXED
17	HDP	0-7	4	HD HORIZONTAL PHASE	FIXED
18	CDL	0-7	5	C DELAY	FIXED
19	HSSL	0-15	12	H SYNC SLICE LEVEL	FIXED
20	VSSL	0-15	8	V SYNC SLICE LEVEL	FIXED
21	HPLF	0,1	1	H PLL FILTER	FIXED
22	BPLF	0,1	0	BURST PLL FILTER	FIXED
23	FSCF	0,1	1	FSC FILTER GAIN	FIXED
24	PLFG	0,1	1	PLL FILTER GAIN	FIXED
25	EXAD	0,1	0	EXTERNAL AD IN	FIXED
26	MSS	0,1	0	FORCED MOTION SIGNAL	FIXED
27	COUT	0-3	3	C SIGNAL OUTPUT	FIXED
28	YAPS	0-3	1	Y APERTURE	FIXED
29	NSDS	0-3	0	NON STD SIGNAL DETECT.	FIXED
30	CPP	0-3	2	CLAMP PULSE & AD RANGE	FIXED
31	YHCO	0-3	1	Y HIGH FREQ.SIGNAL CORING	FIXED
32	KILR	0-15	3	KILLER REFERENCE	FIXED
33	BGPS	0-15	4	BGP START POSITION	FIXED
34	BGPW	0-15	10	BGP WIDTH	FIXED
35	ADCL	0-3	1	AD CLOCK DELAY	FIXED
36	PWRF	0,1	0	PULSE WIDTH REFERENCE	FIXED
37	YHCG	0,1	0	Y HIGH FREQ.SIGNAL CORING 1/2 GAI	FIXED
38	CKG2	0,1	1	CLOCK GENERATOR TEST BIT N	FIXED
39	CKGE	0,1	0	CLOCK GENERATOR TEST BIT	FIXED
40	NSDS	0,1	0	NON STD SIGNAL DETECT	FIXED
41	SYPD	0,1	0	MEMORY POWER DOWN	FIXED
42	CNRO	0,1	0	CHROMA NOISE REDUCT TEST BIT	FIXED
43	YNRK	0,1	0	Y NOISE REDUCT FILTER GAIN	FIXED
44	YNRI	0,1	0	Y NOISE REDUCT FILTER CONV.	FIXED
45	YNRL	0-3	1	Y NOISE REDUCT FILTER LIMIT	FIXED
46	CNRK	0,1	0	CHR. NOISE REDUCT FILTER GAIN	FIXED
47	CNRI	0,1	0	CHR. NOISE REDUCT FILTER CONV.	FIXED
48	CNRL	0-3	1	CHROMA NOISE REDUCT LIMIT	FIXED
49	WSC	0-3	1	NOISE DETECTION CORING	FIXED

**TONE (Tone Control)**

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	RBAS	0-63	61V (39) Others (31)	RESET VALUE BASS DATA	VARIABLE
1	RTRE	0-63	61V (35) Others (31)	RESET VALUE TREBLE DATA	VARIABLE
2	BBEH	0-15	10	BBE HIGH FREQUENCY	FIXED
3	BBEL	0-11	6	BBE LOW FREQUENCY	FIXED
4	LOOP	7	1	LOOP EFFECT	FIXED
5	SUFE	7	1	SURROUND EFFECT	FIXED

**DAC (D/A Converter)**

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	UVSH	0-63	31	YUV SUB HUE	FIXED
1	UVSC	0-63	31	YUV SUB COLOR	FIXED

PIP (Picture In Picture)

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STANDARD DATA	SERVICE DATA NAME	ADJUSTM'T SETTING
0	FSEL	0-3	0	FIELD SELECT	FIXED
1	VACQ	0-15	2	VERTICAL ACQUISITION	VARIABLE
2	HACQ	0-15	4	HORIZONTAL ACQUISITION	VARIABLE
3	ISYS	0-3	0	INSET DISPLAY SYSTEM	FIXED
4	PSYS	0-3	0	PARENT SYSTEM	FIXED
5	FACT	0,1	0	FRAME MODE ACTIVATION	FIXED
6	HZM	0-7	0	HORIZONTAL ZOOM	FIXED
7	VPNR	0,1	0	V SYNC PULSE NOISE REDUCT	FIXED
8	VPDL	0-31	8	VERT SYNC PULSE DELAY	FIXED
9	FRSL	0,1	0	FRAME SELECT	FIXED
10	FRWH	0-7	2	FRAME WIDTH HORIZONTAL	FIXED
11	FRWV	0-3	1	FRAME WIDTH VERTICAL	FIXED
12	VERB	0,1	0	VERTICAL BLANKING MODE	FIXED
13	SELD	0-15	0	SELECT DELAY	FIXED
14	PCOR	0,1	1	POSITION CORRECTION	FIXED
15	CLDL	0-31	0	CLAMPING DELAY	FIXED
16	CLMD	0-3	3	CLAMPING DURATION	FIXED
17	CLMS	0-3	2	CLAMPING PULSE START	FIXED
18	POFV	0-7	(1)	POS. OFFSET FINE V VAR.	VARIABLE
19	POFH	0-31	(2)	POS. OFFSET FINE H VAR.	VARIABLE
20	VSHK	0-31	0	VERTICAL SHRINK	FIXED
21	HSHK	0-31	0	HORIZONTAL SHRINK	FIXED
22	CLPL	0-3	0	CLAMPING PULSE LENGTH	FIXED
23	REFI	0,1	0	REFRESH INTERVAL	FIXED

( ) = PREWRITE DATA

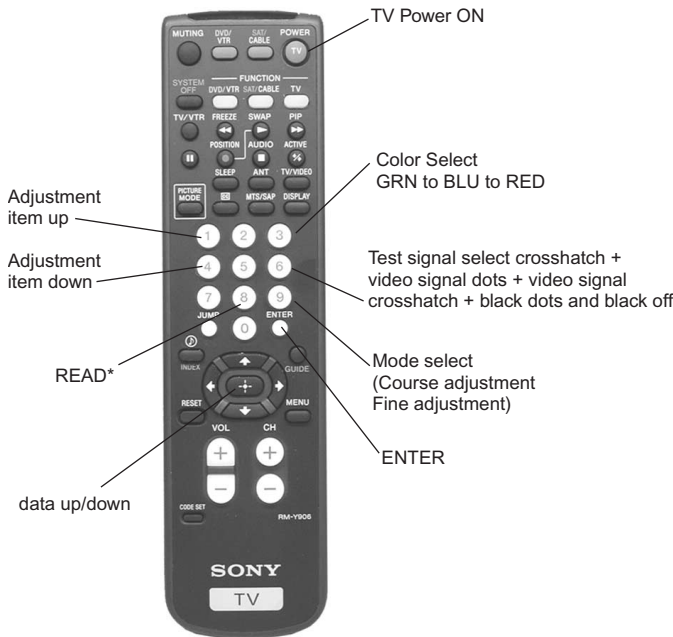
PYC

ITEM NUMBER	ADJUSTMENT ITEM	DATA RANGE	STD DATA	SERVICE DATA NAME	ADJ. SETTING
0	PSCN	0-15	(8)	PIP SUB CONTRAST	VARIABLE
1	PSC4	0-15	5	PIP SUB CONTRAST FOR VIDEO 4	FIXED
2	PHUE	0-63	(32)	PIP SUB HUE	VARIABLE
3	PCOL	0-15	(8)	PIP SUB COLOR	VARIABLE
4	PCL4	0-15	9	PIP SUB COLOR FOR VIDEO 4	FIXED
5	PBRT	0-15	1	PIP BRIGHTNESS	FIXED
6	PBT4	0-15	1	PIP BRIGHTNESS FOR VIDEO 4	FIXED
7	PYDR	0-255	192	PIP Y DRIVE	FIXED
8	PYD4	0-255	192	PIP Y DRIVE FOR VIDEO 4	FIXED
9	PUDR	0-255	180	PIP U DRIVE	FIXED
10	PUD4	0-255	180	PIP U DRIVE FOR VIDEO 4	FIXED
11	PVDR	0-255	120	PIP V DRIVE	FIXED
12	PVD4	0-255	120	PIP V DRIVE FOR VIDEO 4	FIXED
13	PYPD	0-15	1	PIP Y PEDESTAL	FIXED
14	PUPD	0-31	(15)	PIP U PEDESTAL	VARIABLE
15	PVPD	0-31	(15)	PIP V PEDESTAL	VARIABLE
16	AGCR	0,1	0	AUTO GAIN CONTROL RESET	FIXED
17	AGCM	0-3	3	AUTO GAIN CONTROL MODE	FIXED
18	AGCV	0-15	12	AUTO GAIN CONTROL VALUE	FIXED
19	AGC4	0-15	12	AUTO GAIN CNTRL FOR VIDEO 4	FIXED
20	LMOF	0-3	3	LUMINANCE OFFSET	FIXED
21	PLLI	0-3	0	INSET PLL TIME CONSTANT	FIXED
22	NRPL	0-3	0	NOISE REDUCTION INSET PLL	FIXED
23	PYDL	0-15	0	PIP Y/C DELAY	FIXED
24	CSTD	0-7	1	COLOR STANDARD	FIXED
25	CEXC	0-3	1	COLOR STANDARD EXCLUSION	FIXED
26	LKSP	0,1	0	STANDARD ID SPEED	FIXED
27	CKIL	0-3	0	COLOR KILLER THRESHOLD	FIXED
28	BGPS	0,1	0	BURST GATE PULSE START POS.	FIXED
29	CLON	0,1	0	COLOR ON	FIXED
30	ACCF	0,1	0	DISABLE AUTO CHROMA CONTROL	FIXED
31	IFFL	0-3	0	IF-COMPENSTATION FILTER	FIXED
32	STNR	0,1	0	SATELLITE NOISE REDUCTION	FIXED
33	FMAC	0,1	0	FRAME MODE ACTIVATION INSET	FIXED
34	CPLL	0,1	0	CHROMA PLL OFF	FIXED
35	SCAD	0-31	7	COLOR SUBCARRIER ADJ.	FIXED
36	FRMY	0-15	5	FRAME Y LEVEL	FIXED
37	YPEK	0-7	7	Y PEAKING ADJUSTMENT	FIXED
38	YCOR	0,1	0	Y CORING ENABLE	FIXED
39	CHBW	0-3	1	CHROMA BANDWIDTH	FIXED

( ) = PREWRITE DATA



## 2-10. REGISTRATION ADJUSTMENT (PJE) FUNCTION OF BUTTONS OF REMOTE COMMANDER FOR PJE MODE ONLY.

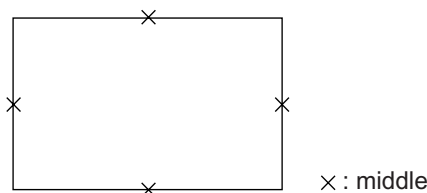


**Resetting the set to the factory shipping condition:** Press 8. "RESET" appears in green letters on the screen. Then press ENTER. This resets all customer adjustments, channel memories, and channel labels to the factory shipping settings.

**Note:** Internal patterns are used for geometry and convergence adjustments. However, sizing and centering must be done with the use of an external generator. The recommended pattern would be a monoscope, or equivalent pattern, which would provide the means to adjust both the linearity and the sizing of the picture. A cross-hatch pattern with sizing markers can be used in place of a monoscope.

### SETUP FOR ADJUSTMENT

- Current flow in circuit should be stable before attempting adjustment. Wait 5 minutes after turning on power to the set.
- At the 4 sides of the screen, locate the middle. Use a tape measure to identify the middle.



**NOTE:** The following steps # 1 through 8 are "main" deflection adjustments for sizing and centering. "Main" deflection adjustments affect all three CRTs at the same time. The "sub"-deflection adjustments that follow are made for each CRT individually. If the centering and sizing is performed correctly in "main" deflection adjustments, only minor touchups may be required for the green CRT in "sub"-deflection adjustment mode.

A pattern from an external pattern generator **must** be used for the main deflection adjustments.

1. Enter the service mode by quickly pressing the keys on the remote commander in the standby mode in the following order:  
Press "DISPLAY," 5, Volume +, and then "TV POWER"
2. Change from TV mode to video input mode.
3. Input a cross-hatch pattern from an external generator that allows you to properly center and size (over-scan) the pattern.
4. Select adjustment category "VPNT", adjustment item 0 "VPOS". Adjust the data so that the external pattern is centered vertically.
5. Select adjustment category "VPNT", adjustment item 1 "VSIZ". Adjust the data so that the external pattern is correctly sized vertically. "Correctly sized" means that the picture is overscanned by 7.5%, i.e. only 92.5% of the picture is on the viewable area of the screen. Confirm that the pattern is still correctly centered vertically.
6. Select adjustment category "VPNT", adjustment item 5 "HPOS". Adjust the data so that the external pattern is centered horizontally.
7. Select adjustment category "VPNT", adjustment item 6 "VSIZ". Adjust the data so that the external pattern is correctly sized horizontally. "Correctly sized" means that the picture is overscanned by 7.5%, i.e. only 92.5% of the picture is on the viewable area of the screen. Confirm that the pattern is still correctly centered horizontally.
8. Write the new sizing and centering data to memory by pressing "MUTING" and then "ENTER".
9. Change the VPNT mode to "PJE 00 FDIS" (press "2" on the remote until "PJE" appears on the top left corner of the screen). If "FDIS" is not displayed below "PJE", press "4" until it does appear.

PJE	00	00
FDIS		

10. Press the remote joystick button up arrow to set the FDIS data to "01" to display the registration data of each area of the screen in the fine adjustment mode.

PJE	00	01
FDIS		

11. Press 6 to display the test signal (crosshatch) on the screen.
12. Select GRN CENT(\*) with the 1 and 4 keys on the remote commander.

	(H)	(V)
GRN	###	###
CENT		

\*: In the factory preset, "GRN CENT" appears on the screen first. To change the color to red or blue, press the 3 key.

- Cover the red and blue picture lenses with lens caps to allow only green to show, or use the method shown in the note below to turn the CRTs off individually.

Display	Adjustment item	Adjustment type		
		G	R	B
		H/V*	H/V*	H/V*
CENT	CENTER	-/-	O/O	O/O
SKEW	SKEW	O/O	O/O	O/O
SIZE	SIZE	-/-	O/O	O/O
LIN	LINEARITY	-/-	O/-	O/-
KEY	KEY STONE	-/-	-/O	-/O
PIN	PIN CUSHION	-/O	-/O	-/O

\* H = Horizontal V = Vertical O = Yes - = No

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from "1" to "0" in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).

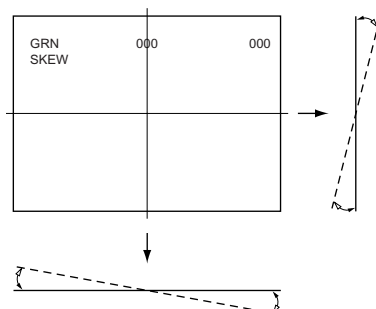
## 2-11. GREEN REGISTRATION ADJUSTMENT

### GREEN CENTER, GREEN SIZE

The sizing and centering that was performed in the previous section (section 2-10) should have correctly sized and centered the green CRT. The sizing and centering (coarse adjustment mode) of the red and blue CRTs in following sections are performed so that the red and blue patterns overlay the green pattern as close as possible prior to the fine mode adjustments. The fine-mode adjustments are made for all 3 colors so that the cross-hatch lines are straight vertically and horizontally, and the linearity and convergence is correct.

### GREEN SKEW

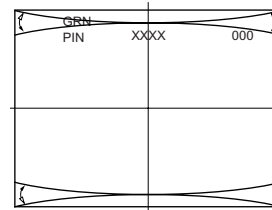
- Display a cross-hatch pattern from an external generator.
- Confirm that category "PJE" is selected (refer to step 9 in the previous section, section 2-10).
- Make sure that only the external pattern is displayed. If the internal cross-hatch is displayed, press the 6 button on the remote until only the external pattern is displayed.
- Select GRN SKEW with the 1 and 4 buttons on the remote commander.
- Using the joystick buttons on the remoter commander, adjust the crosshatch lines so that they go straight vertically and horizontally, not slanting.



- Press "MUTING" then "ENTER" to write the new adjustment data into memory.

### GREEN PINCUSHION

- Select GRN PIN with the 1 and 4 buttons on the remote commander.
- Adjust the top and bottom crosshatch lines so that they are straight.



**Note:** These are required when either severe misadjustment or data loss has occurred.

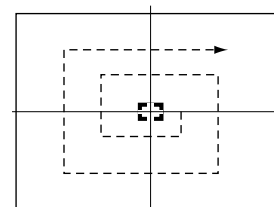
- Press "MUTING" then "ENTER" to write the new adjustment data into memory.

### GREEN FINE ADJUSTMENT

Press "MUTING" then "ENTER" often during the fine adjustment mode to save the adjustment data.

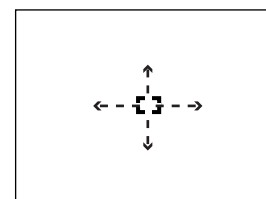
- Press the 6 button until the external pattern disappears and the TV's internal cross-hatch pattern appears.
- Press the 9 button on the remote commander to shift to the fine adjustment mode. The green cursor will appear in the center of the screen.
- Use the 1 and 4 buttons on the joystick on the remote commander to move the cursor (see below) to each area of the screen that you want to adjust, and adjust with the joystick arrow buttons on the remote.

Cursor movement by the 1 and 4 keys:

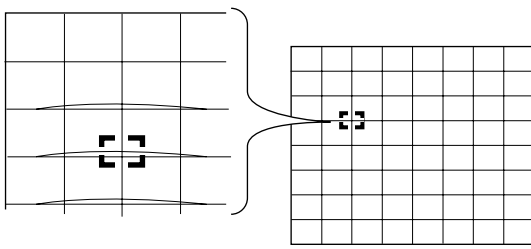


### Alternative method of moving the cursor.

Press the joystick center button once which will cause the cursor to change from green to white. When the cursor is white you can move it up or down, left or right, by using the joystick arrow buttons.



- Press the joystick center button once; the cursor will return to green (or red or blue, depending on the previously selected color). When the cursor is green, you can adjust the geometry of the area surrounding the cursor by using the joystick arrow buttons.



5. Press the 9 button on the remote commander to return to the coarse adjustment mode. If you need to return to the fine mode, just press the 9 button again, and the cursor will change from white to green or blue or red.
6. After the green lines are all straight, press “MUTING” and then “ENTER” to save the adjustment data.

## 2-12. RED REGISTRATION ADJUSTMENT

### RED CENTER, SKEW

1. Cover the blue picture lens with a lens cap to allow green and red to show (or use the method shown in the note below).
2. Press the 3 button on the remote commander to change the GRN mode to the RED mode.
3. Select RED CENT or RED SKEW with the 1 and 4 buttons on the remote commander and adjust while tracking each one alternately.
4. Adjust the red crosshatch lines using the joystick arrow buttons, so that they are straight vertically and horizontally, and overlap the green lines.
5. Press “MUTING” and then “ENTER” to save the adjustment data.

**Note:** If lens caps are unavailable, you can cut off the unnecessary color beams in the service mode by individually changing the data from “1” to “0” in category VPNT, item 28 RON (red), item 29 GON (green), or item 30 BON (blue).

### RED SIZE, LINEARITY

1. Alternately select RED SIZE (vertically and horizontally) or RED LIN (vertically) with the 1 and 4 buttons on the remote commander and adjust while tracking each one alternately.
2. Adjust the red crosshatch lines with the joystick on the remote commander until they are straight vertically and horizontally and they overlap the green lines.

### RED KEY, PINCUSHION

1. Select RED KEY or PINCUSHION with the 1 and 4 buttons on the remote commander and adjust each one while tracking each other.
2. Using the joystick arrow buttons, adjust the red crosshatch lines so that they are straight horizontally and vertically, and they overlap the green lines.

**Note:** These are required when either severe mis-adjustment or data loss occurred.

3. Press “MUTING” and then “ENTER” to save the adjustment data.

## FINE ADJUSTMENT

1. Press the 9 button on the remote commander to shift to the fine adjustment mode; the red cursor appears at the center of the screen. If the cursor is not red, press the 3 button until it is red.
2. Use the 1 and 4 buttons on the remote commander to move the cursor to each area of the screen you want to adjust.
3. Press “MUTING” and then “ENTER” to save the adjustment data.

## 2-13. BLUE REGISTRATION ADJUSTMENT

1. Remove the lens cap from the blue picture lens to show all colors (or use the method shown in the note above to turn on all 3 CRTs).
2. Press the 3 button on the remote commander to shift the RED mode to the BLU mode.
3. Adjust BLU CENT, BLU SKEW, BLU SIZE, BLU LIN, BLU KEY and BLU PIN the same way as the red registration adjustment.

## FINAL CHECK- IMPORTANT

**This must be performed before leaving the service mode!**

1. Store the final adjustment data by pressing MUTING and then ENTER.
2. Press the FLASH FOCUS button on the front panel.
3. If an error message appears, refer to the following.

If an error code is displayed after the set has been correctly adjusted, check the following items: position, tilt and sizing. If any of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns are being flashed on the screen for the sensors to read. Therefore, auto registration (called auto-focus) cannot operate properly, causing an error code to be displayed. In order for this function to operate properly, position, tilt and size must be adjusted properly.

**Note:** In case of replacing CRTs, adjust the set-up adjustments (items 2-1 to 2-8) and the registration adjustment (item 2-10). In the case of replacing multiple CRTs at the same time, replace and adjust them individually.

## 2-14. AUTO REGISTRATION ERROR CODE LIST

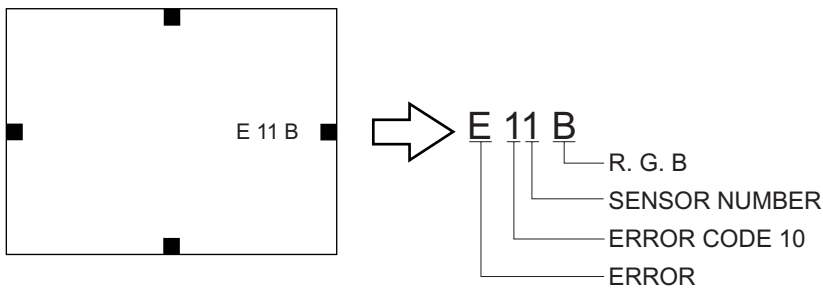
If an error code is displayed after the set has been correctly adjusted, check the following items: position, tilt and sizing. If any of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns are being flashed on the screen for the sensors to read. Therefore, auto registration (called auto-focus) cannot operate properly, causing an error code to be displayed. In order for this function to operate properly, position, tilt and size must be adjusted properly.

### ERROR CODE LIST

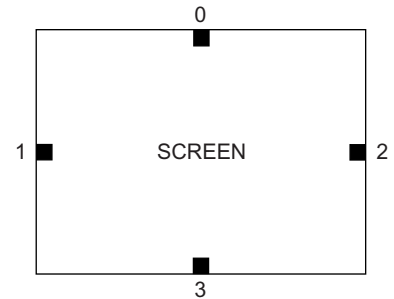
ERROR CODE	DESCRIPTION	NOTE
00	No Error	
10	Sensor Output Level Low	* Check wiring, beam position, sensor 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
20	Sensor Output Level High	* Check OP-amp circuit 0 : Upper Center 1 : Middle Left 2 : Middle Right 3 : Lower Center
30	Adjustment Loop Counter Overflow	* Check the registering information on the convergence board
40	Regi Data Overflow	* Check the convergence yoke driver ICs.  * Convergence patterns displayed are out of normal range.
50	Regi Data Overflow	
60	Offset Overflow	
70	Offset Overflow	

\* In the case of multiple errors, last error is displayed.

### • ERROR CODE SCREEN DISPLAY



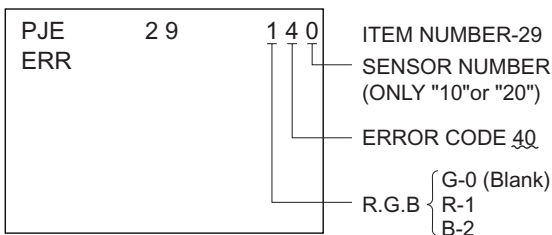
### SENSOR POSITION



- 0 : UPPER SENSOR
- 1 : LEFT SENSOR
- 2 : RIGHT SENSOR
- 3 : LOWER SENSOR

\* Error code will be displayed at the center of screen for 3 seconds.


### • ERROR CODE DISPLAY DURING AUTO-REGISTRATION IN SERVICE MODE





## SECTION 3: SAFETY-RELATED ADJUSTMENTS

### G BOARD

#### 3-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with a  on the schematic diagram always check the HV regulation, and if necessary re-adjust.

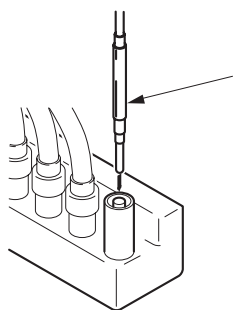
-  : C517
-  : C517, C521, C522, IC654, L504, T502, T504 (FBT), DY, A board, G board

##### OPERATION CHECK of 31.0KV +1.0 KV DC/ -2.5 KV DC

1. Connect an HV static voltmeter to the unused socket of the high-voltage block. (Fig. 3-1)
2. Power on the set.
3. Display a dot pattern through the VHF/UHF input (PICTURE and BRIGHTNESS set to minimum)
4. Check that the HV static voltmeter is reading 31.00 KV +1.0 KV DC / -2.5 KV DC.


##### HV Regulation adjustment



1. Connect a HV static voltmeter to the unused socket of the high-voltage block.
2. Power on the set.
3. Display a dot pattern through the VHF/UHF input (PICTURE and BRIGHTNESS to minimum).
4. If anode voltage is 31.95kV or higher, change the value of C517 from 470pF/2kV to 1,000pF/2kV, and confirm that the high voltage is within the range specified above.
5. If anode voltage is 29.45kV or lower, change the value of C517 from 470pF/2kV to 100pF/2kV, and confirm that the high voltage is within the range specified above.



Remove the cap from the unused terminal and connect a static voltmeter here.

#### 3-2. HV HOLD DOWN CIRCUIT OPERATION CHECK AND ADJUSTMENT

When replacing the following components marked with a  on the schematic diagram always check the hold-down voltage and re-adjust when necessary.

-  : R536, R545
-  : C516, C536, D506, D507, D522, IC206, IC502, IC654, L504, R511, R522, R536, R538, R545, R548, R584, T502, T504 (FBT), DY, A board, G board

##### OPERATION CHECK

1. Unplug connector CN652.
2. Connect an HV static voltmeter to the unused socket of the high-voltage block.
3. Connect a 220Ω/200W resistor, across pin 2 and pin 1 of CN652, and connect an external DC power supply (200V, class 2A) to pin 3 of CN652.
4. First, turn on the external power supply (+B=135V), then turn on the power to the set.
5. Display a dot pattern through the VHF/UHF input (PICTURE and BRIGHTNESS to minimum).
6. Gradually increase the value of the external DC power supply and check that the hold-down circuit operates at a static HV voltmeter reading of 33.5±1.0kVdc when the set shuts down.
7. Remove AC power from the set, then remove the 220Ω/200W resistor and reconnect CN652.

##### HV HOLD-DOWN ADJUSTMENT

1. Repeat steps 1-8 above.
2. If hold-down voltage is 34.5kV or higher, remove R536, mount a resistor (150kΩ, 1/4W : RN) onto R545 instead, and check again if the hold-down voltage is within the standard range.
3. If hold-down voltage is 32.5kV or lower, mount a resistor (220kΩ, 1/4W : RN) onto R536 and check again if the hold-down voltage is within the standard range.

**NOTE:** Finish the adjustment as soon as possible.

### **3-3.+B MAX VOLTAGE CONFIRMATION**

The following adjustments should always be performed when replacing IC654.

1. Supply 130V +/- 2V AC to the set.
2. Display a dot pattern through the video-1 input.
3. Set the PICTURE control and the BRIGHTNESS control to minimum.
4. Confirm the voltage of G BOARD test point TP135V is less than 137.0Vdc.
5. If step 4 is not satisfied, replace IC654 and repeat above steps.

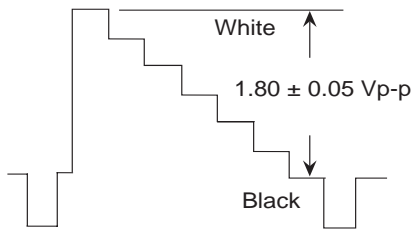
### **3-4.+B OVP CONFIRMATION**

1. Connect the voltmeter between test point TP OVP and ground.
2. Supply 120VAC to the set using an isolation transformer.
3. Set an adjustable external 150-Volt DC power supply to 120 VDc, and connect it to test point OVP.
4. Power on the set.
5. Set PICTURE and BRIGHTNESS controls to minimum.
6. Gradually adjust the external DC supply towards 150 VDc, and make sure the set shuts down when the external supply's voltage is between 139 VDC and 159 VDC.

## SECTION 3: CIRCUIT ADJUSTMENTS

### 4-1.TV INPUT SUB CONTRAST ADJUSTMENT (VPNT-SCON)

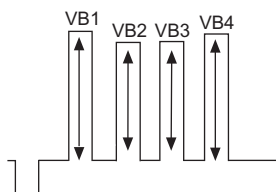
1. Display a color bar signal through the TV's VHF/UHF input.
2. Mode: Personal 1 or 2  
 PICTURE: maximum                      COLOR: minimum  
 BRIGHTNESS: center                      COLORTEMP: neutral
3. Enter the service mode.
4. Turn off the blue and red CRTs by changing the data from "1" to "0" in category VPNT item 28 RON (red), and item 30 BON (blue). If this step is not followed, the ABL circuit may prevent you from adjusting the peak-to-peak amplitude to 1.8 V.
5. Connect an oscilloscope between pin 7 of CN204 (A board) and ground.
6. Select adjustment category "VPNT" adjustment item 19 "SCON", and adjust using the 3 or 6 button on the remote so that the wave form level is  $1.80 \pm 0.05$  Vp-p.



7. Press "MUTING" and then "ENTER" to save the adjustment data.

### 4-2.VIDEO INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (VPNT-SHUE, SCOL)

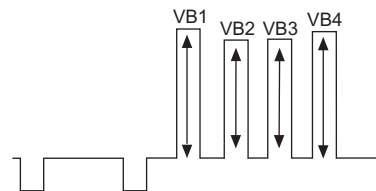
1. Display a color bar signal through a video input.
2. Mode: Personal 1 or 2  
 PICTURE: maximum                      COLOR: center  
 BRIGHTNESS: center                      COLORTEMP: neutral
3. Enter the service mode.
4. Connect an oscilloscope between pin 5 of CN204 (A board) and ground.
5. Alternately select adjustment category "VPNT" adjustment item #20 "SHUE" and item #21 "SCOL", and adjust them so that VB1 = VB4, and VB2 = VB3 as shown below.



6. Add 2 to the adjusted value of "SCOL".
7. Press "MUTING" and then "ENTER" to save the adjustment data.

### 4-3.COMPONENT INPUT SUB-HUE AND SUB-COLOR ADJUSTMENT (DAC-UVSH, UVSC)

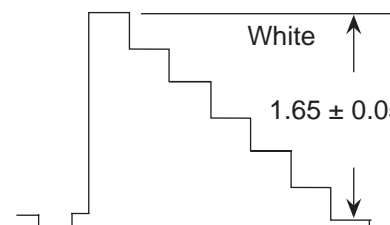
1. Select VIDEO 4 and display a color bar signal.
2. Mode: Personal 1 or 2  
 PICTURE: maximum                      COLOR: center  
 BRIGHTNESS: center                      COLORTEMP: neutral
3. Enter the service mode.
4. Connect an oscilloscope between pin 5 of CN204 (A board) and ground.
5. Alternately select adjustment category "DAC", adjustment item # 0 "UVSH" and item #1 "UVSC" and adjust them so that VB1 = VB4 and VB2 = VB3 as shown below.



6. Press "MUTING" and then "ENTER" to save the adjustment data.

### 4-4.PIP SUB CONTRAST ADJUSTMENT (PYC-PSCN)

1. Display a color bar signal through the TV's VHF/UHF input.
2. Mode: Personal 1 or 2  
 PICTURE: maximum                      COLOR: minimum  
 BRIGHTNESS: center                      COLORTEMP: neutral
3. Enter the service mode, and then select the PIP (Picture-in-Picture) mode.
4. Select an unused video input for the main picture (it must be black), and select the tuner for the small picture (it must be showing colorbars).
5. Connect an oscilloscope between pin 7 of CN204 (A board) and ground.
6. Select adjustment category "PYC", adjustment item # 0 "PSCN" and adjust so that the peak-to-peak voltage is  $1.65 \pm 0.05$  Vp-p as shown below.

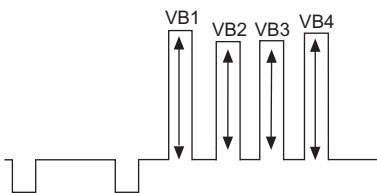


7. Press "MUTING" and then "ENTER" to save the adjustment data.



### 4-5.PIP SUB-HUE , SUB-COLOR ADJUSTMENT (PYC-PHUE, PYC-PCOL)

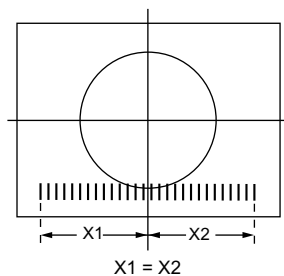
1. Display a color bar signal through the TV's VHF/UHF input.
2. Mode: Personal 1 or 2.  
 PICTURE: maximum                      COLOR: center  
 BRIGHTNESS: center                      COLORTEMP: neutral
3. Enter the service mode and select the PIP mode.
4. Connect an oscilloscope between pin 5 of CN204 (A board) and ground.
5. Select an unused video input for the main picture (it **must** be black), and select the tuner for the small picture (it **must** be showing colorbars).
6. Alternately select adjustment category "PYC", adjustment item # 2 "PHUE" and item #3 "PCOL" and adjust them so that VB1 = VB4 and VB2 = VB3 as shown below.



7. Press "MUTING" and then "ENTER" to save the adjustment data.

### 4-6.USER-CONTROL BAR GRAPH DISPLAY POSITION ADJUSTMENT (OP-DISP)

1. Select the video-1 input with no signal applied (the screen should be black).
2. Enter the service mode.
3. Press the "Volume +" button so that the volume bar graph is displayed.
4. Check to make sure the bar graph is centered on the screen horizontally. If necessary, select adjustment category "OP", adjustment item # 0 "DISP", and adjust so that the bar graph is centered. Adjust the data 1 step at a time, and then display the bar graph again to check its position.



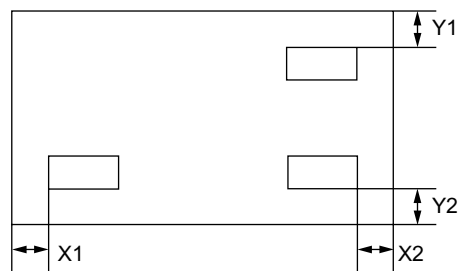
5. Write the data into memory, press "MUTING" and then "ENTER".

### 4-7.PIP POSITION ADJUSTMENT (PIP-POFV, POFH)

1. Select the PIP mode.
2. Display any signal in the PIP window.
3. Alternately select adjustment category "PIP", adjustment item # 18 "POFV" and item #19 "POFH" and adjust so that the PIP window is equally spaced from the screen edge in each position on the screen as shown below. Use the POSITION button on the remote to change the screen position of the PIP window.

$$X1-X2 \leq 0.25 \text{ sq}$$

$$Y1-Y2 \leq 0.25 \text{ sq}$$

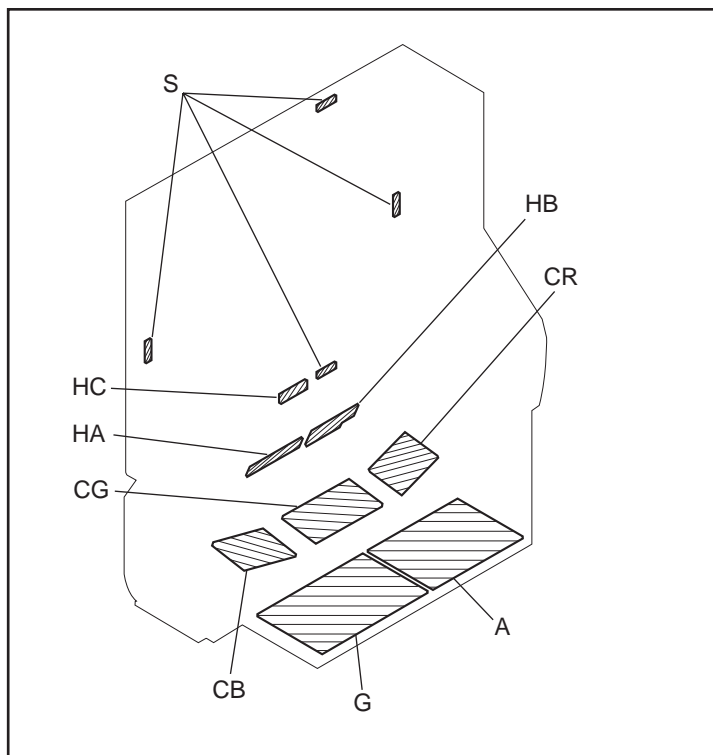


4. Write the data into memory, press "MUTING" and then "ENTER".



## SECTION 5: DIAGRAMS

### 5-1. CIRCUIT BOARDS LOCATION



### 5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} : \mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm

Rating electrical power :  $\frac{1}{4} \text{ W}$

$\frac{1}{4} \text{ W}$  in resistance,  $\frac{1}{10} \text{ W}$  and  $\frac{1}{8} \text{ W}$  in chip resistance.

: nonflammable resistor.

: fusible resistor.

: internal component.

: panel designation and adjustment for repair.

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a NTSC color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

: B+ line

: B-line. (Actual measured value may be different).

: signal path. (RF)

Circled numbers are waveform references.

The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by , make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.

(Refer to adjustments in Sections 3-1 and 3-2.)


When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced ()	Adjustment ()
A board, G board, C517, C521, C522, IC654, L504, T502, T504, DY,	HV Regulator (C517)
A board, G board, C516, C517, C521, C522, C536, D506, D507, D522, IC206, IC502, IC654, L504, R511, R522, R536, R538, R545, R548, R584, T502, T504, DY	HV HOLD-DOWN (R536, R545)


## REFERENCE INFORMATION

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RW	NONFLAMMABLE WIREWOUND
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: ⚡	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol  indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

Le symbole  indique une fusible à action rapide. Doit être remplacé par une fusible de même valeur, comme marqué.

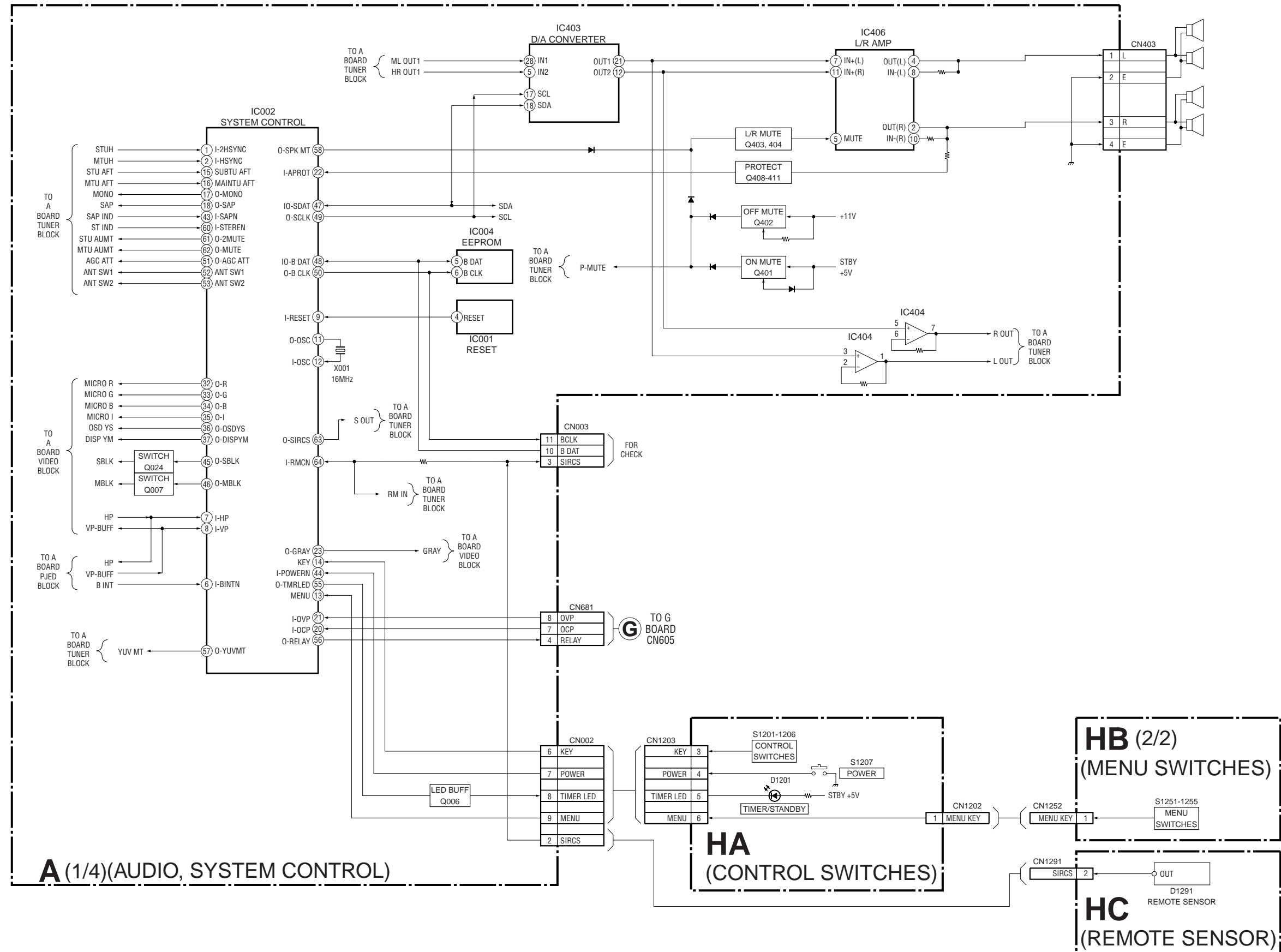
## Terminal name of semiconductors in silk screen printed circuit ( \* )

	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode Cathode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		Source Drain Gate	
⑯	Transistor		Emitter Collector Base	
⑰	Transistor		C2 B1 E1 E2 B2 C1	
⑱	Transistor		C1 B2 E2 E1 B1 C2	
⑲	Transistor		C1 B2 E2 E1 B1 C2	
⑳	Transistor		C1 B2 E2 E1 B1 C2	
㉑	Transistor		E2 B1 E1 C2 C1(B2)	
㉒	Transistor		(B2) B1 E1 E2 C1 C2	
㉓	Transistor		(B2) E2 E1 B1 C2 C1	
-	Discrete semiconductor			

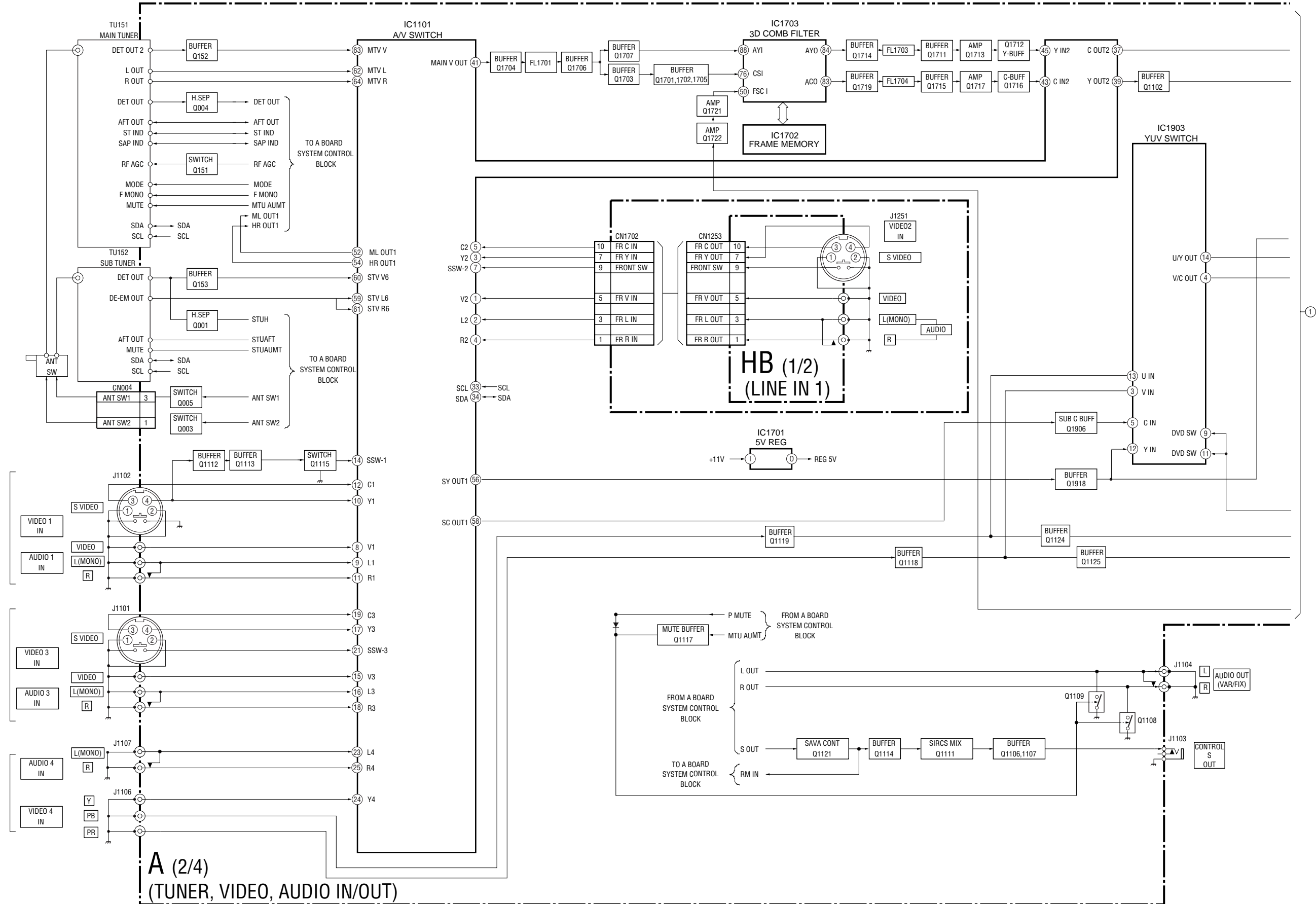
(Chip semiconductors that are not actually used are included.)

Ver.1.6

5-3. BLOCK DIAGRAM (1 OF 8)

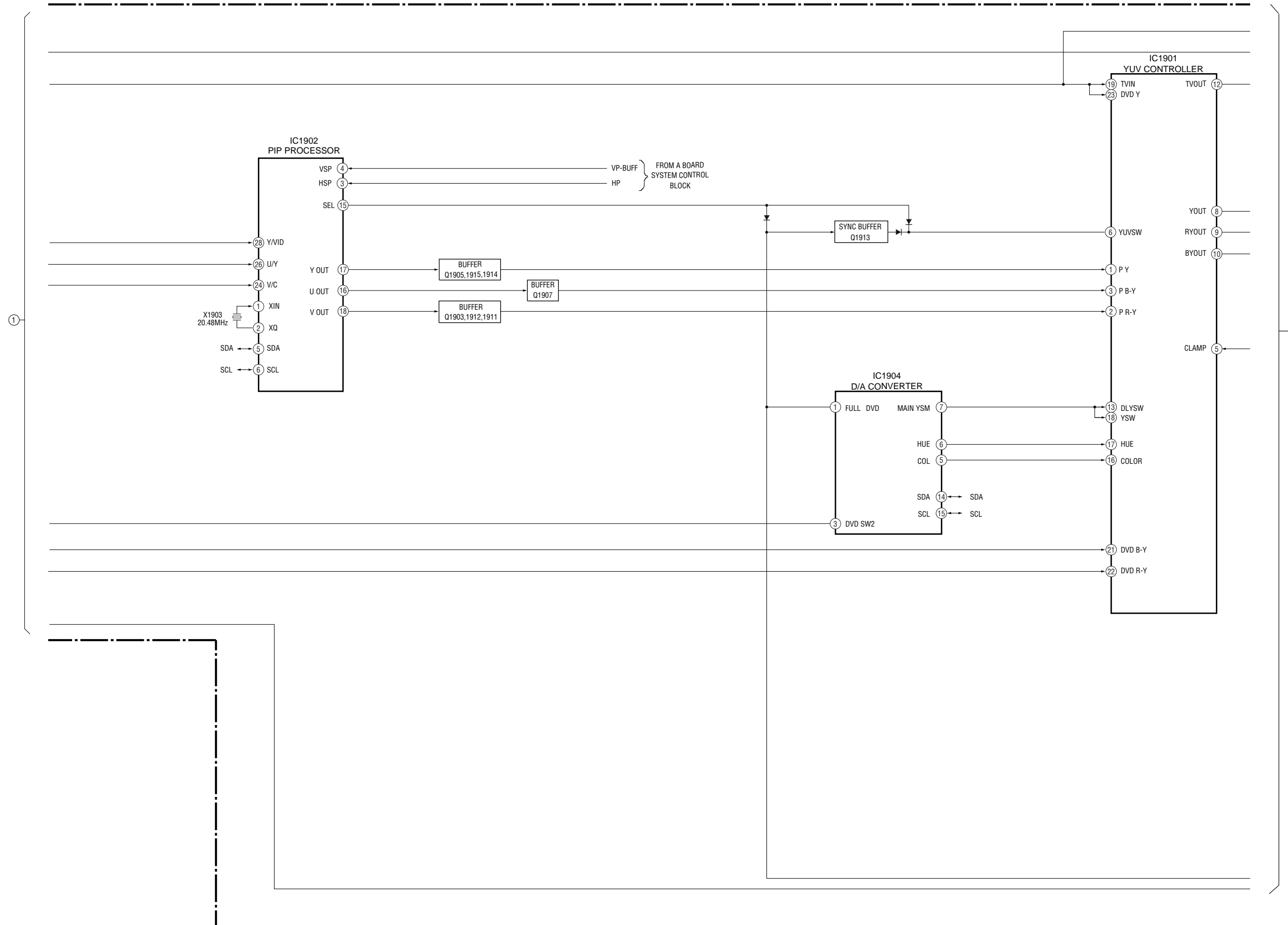


BLOCK DIAGRAM (2 OF 8)

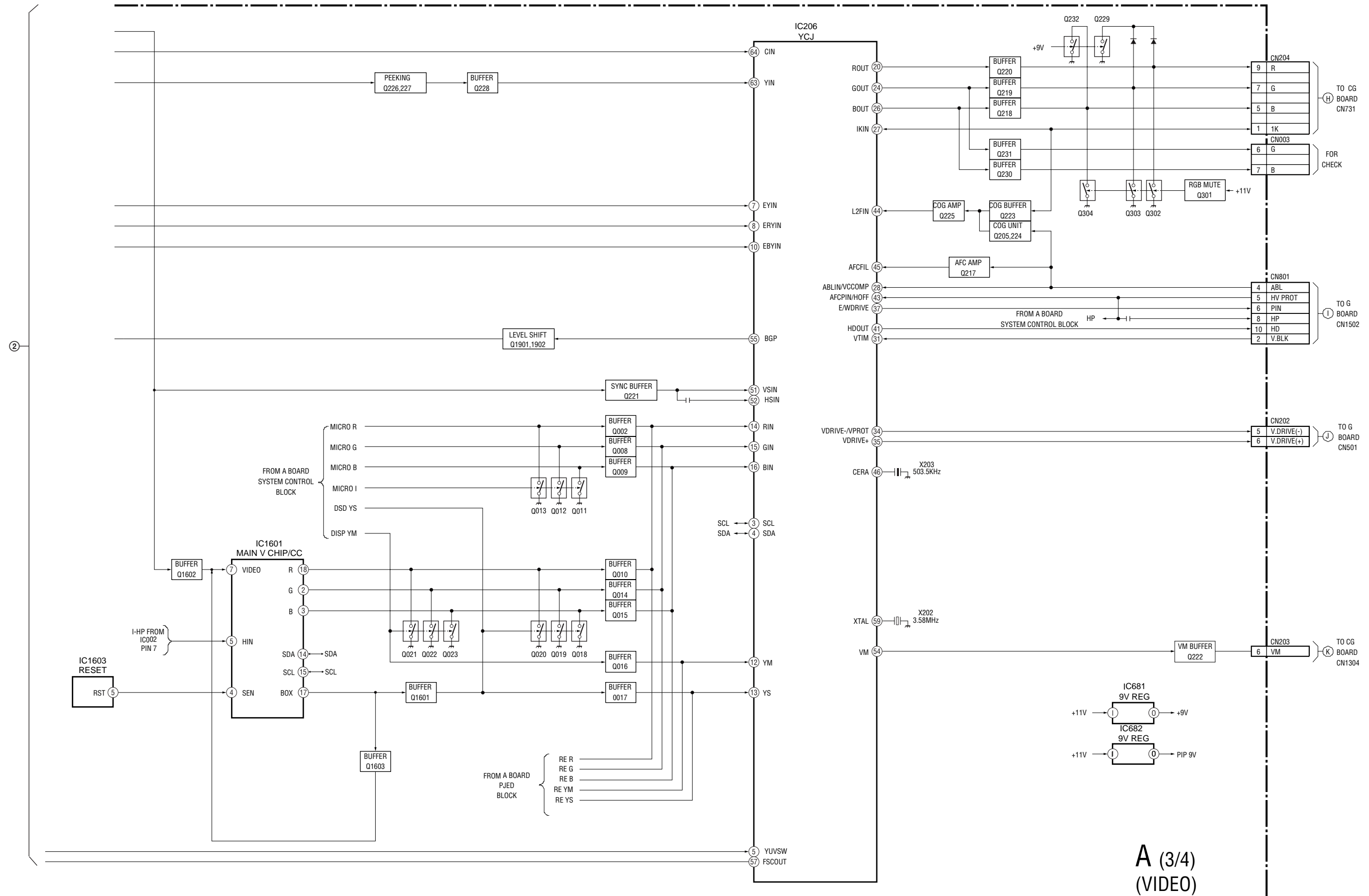


**A (2/4)**  
 (TUNER, VIDEO, AUDIO IN/OUT)

BLOCK DIAGRAM (3 OF 8)



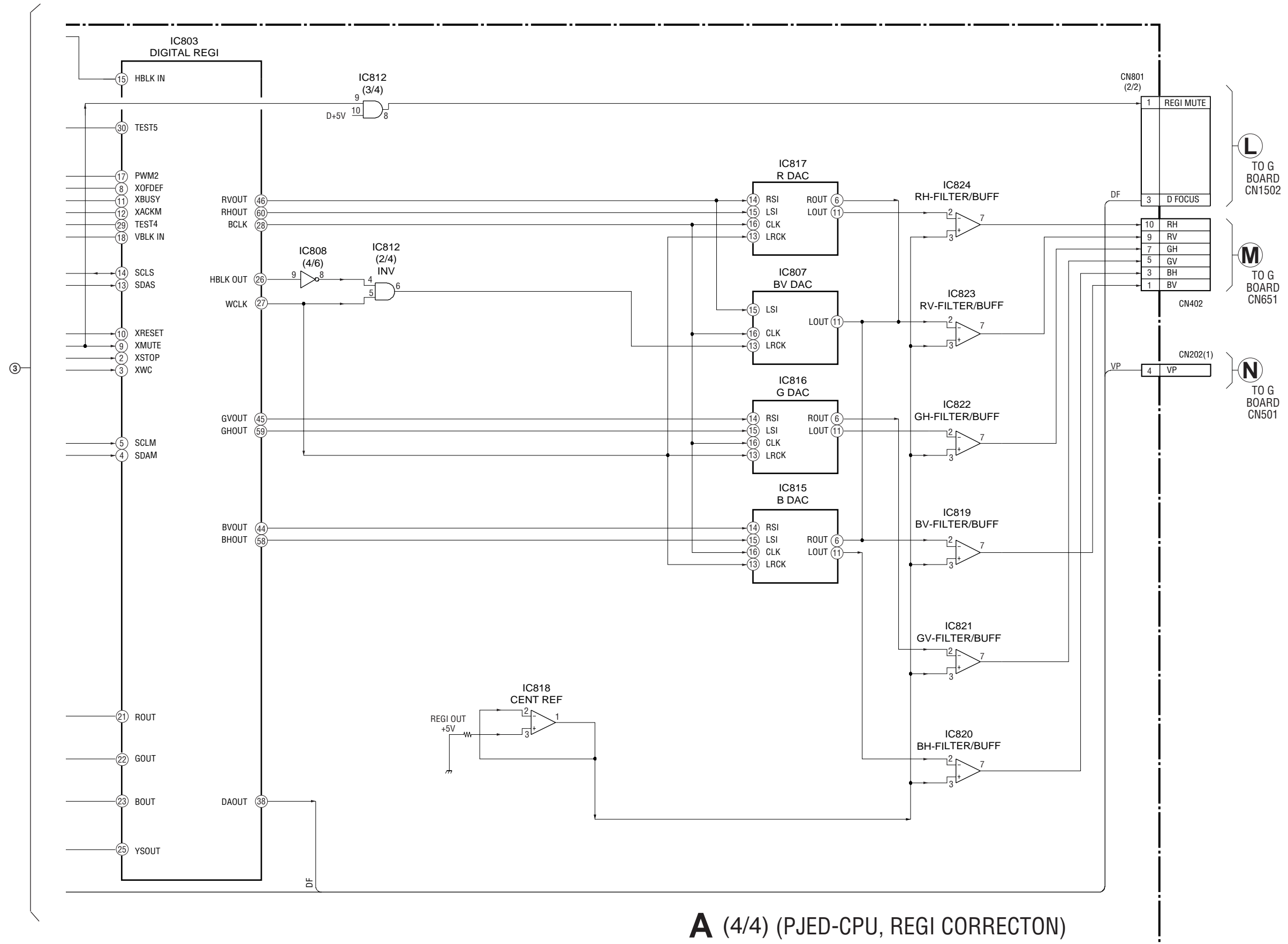
BLOCK DIAGRAM (4 OF 8)



A (3/4)  
(VIDEO)

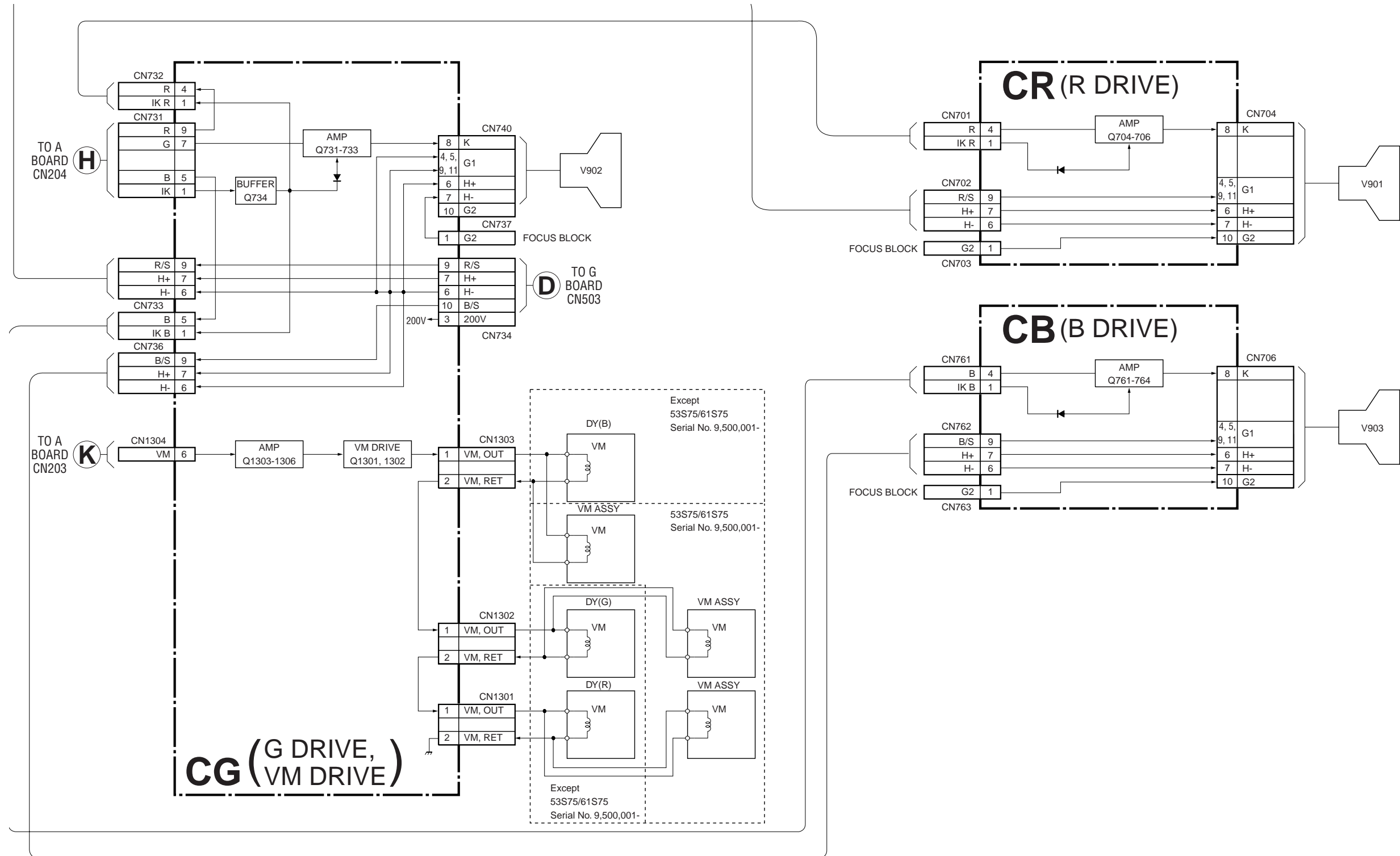


BLOCK DIAGRAM (6 OF 8)

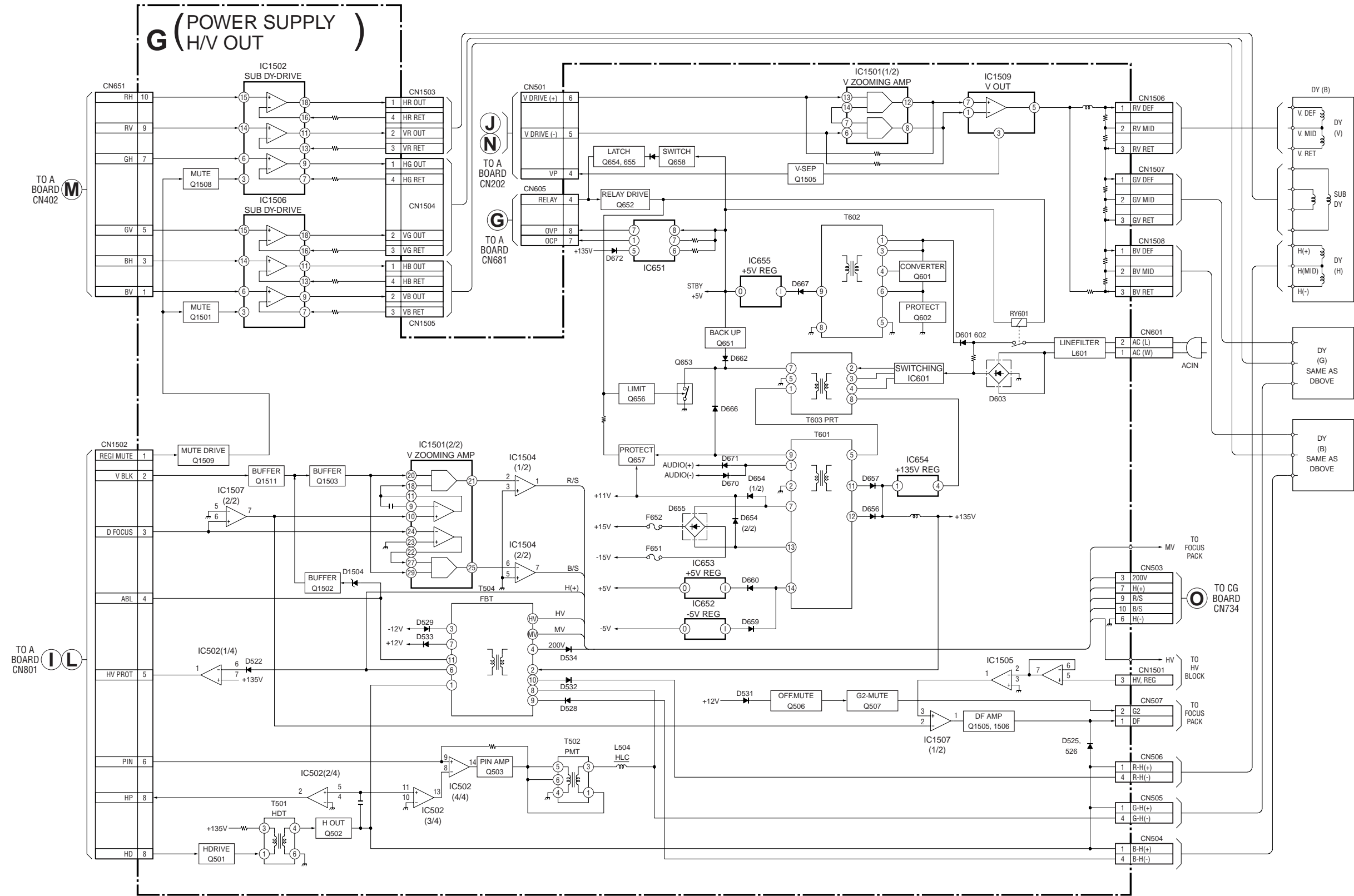




BLOCK DIAGRAM (7 OF 8)



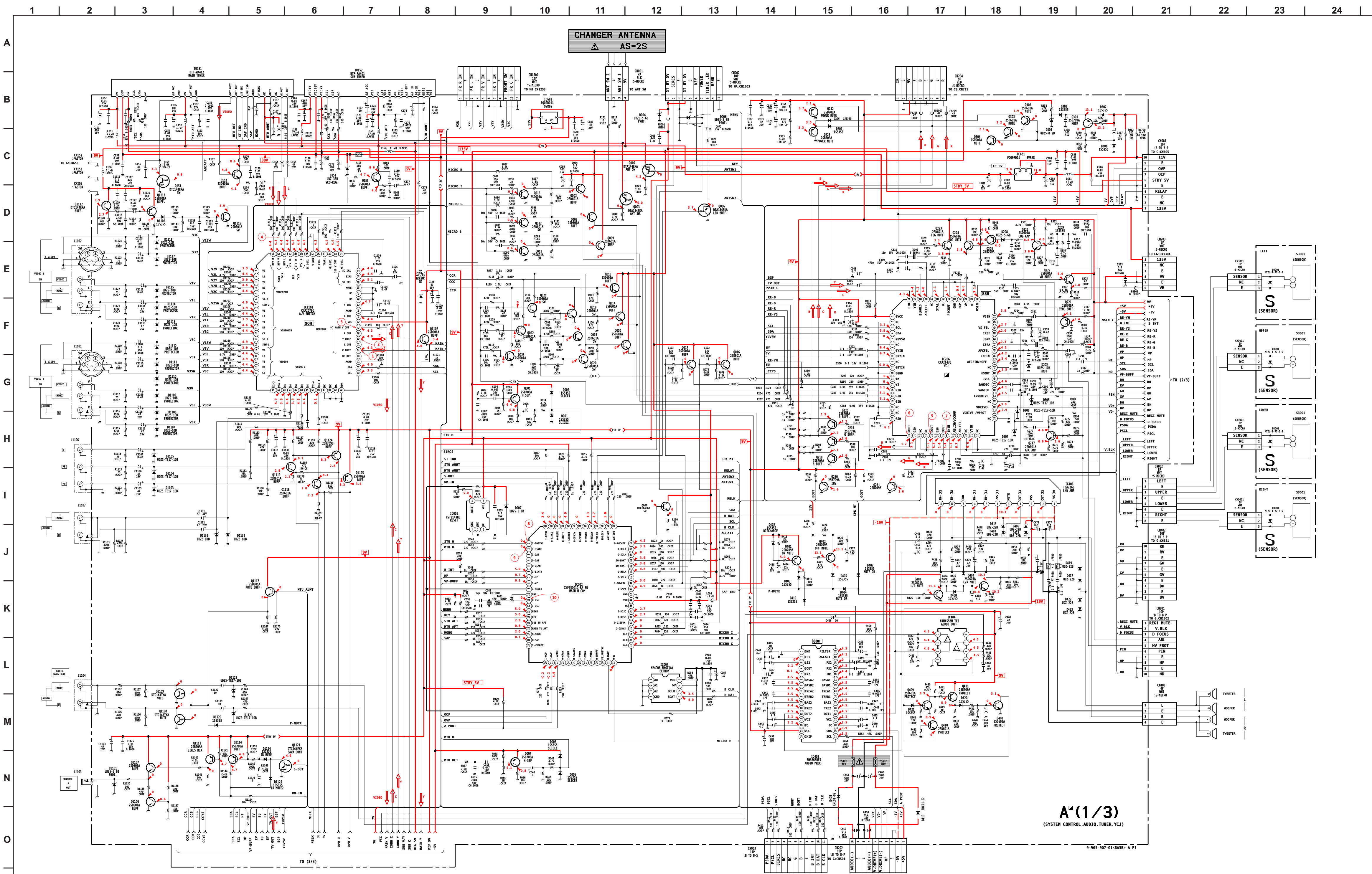
BLOCK DIAGRAM (8 OF 8)



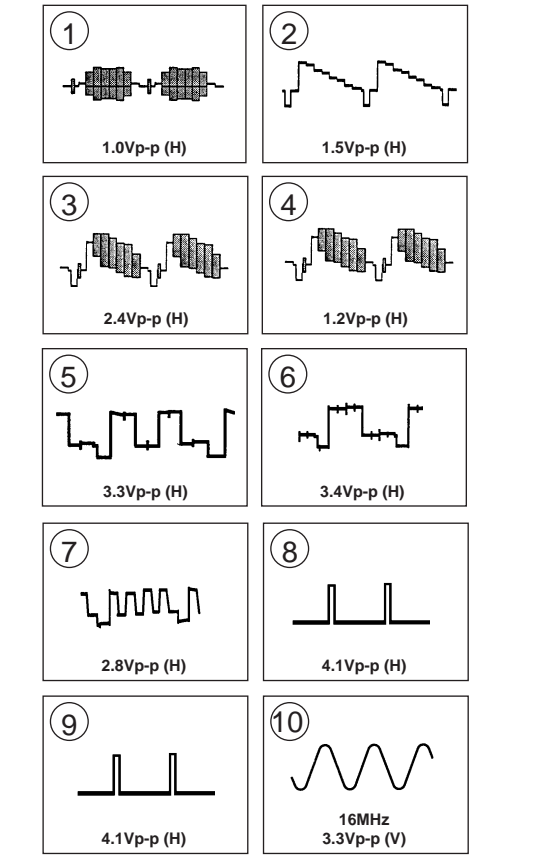




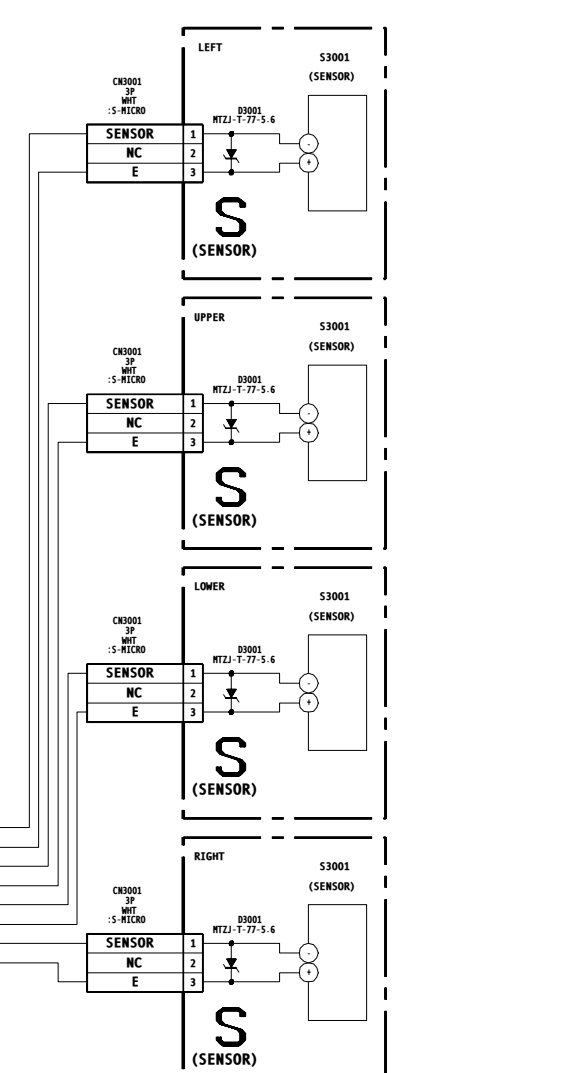
A BOARD SCHEMATIC DIAGRAM (1 OF 3)



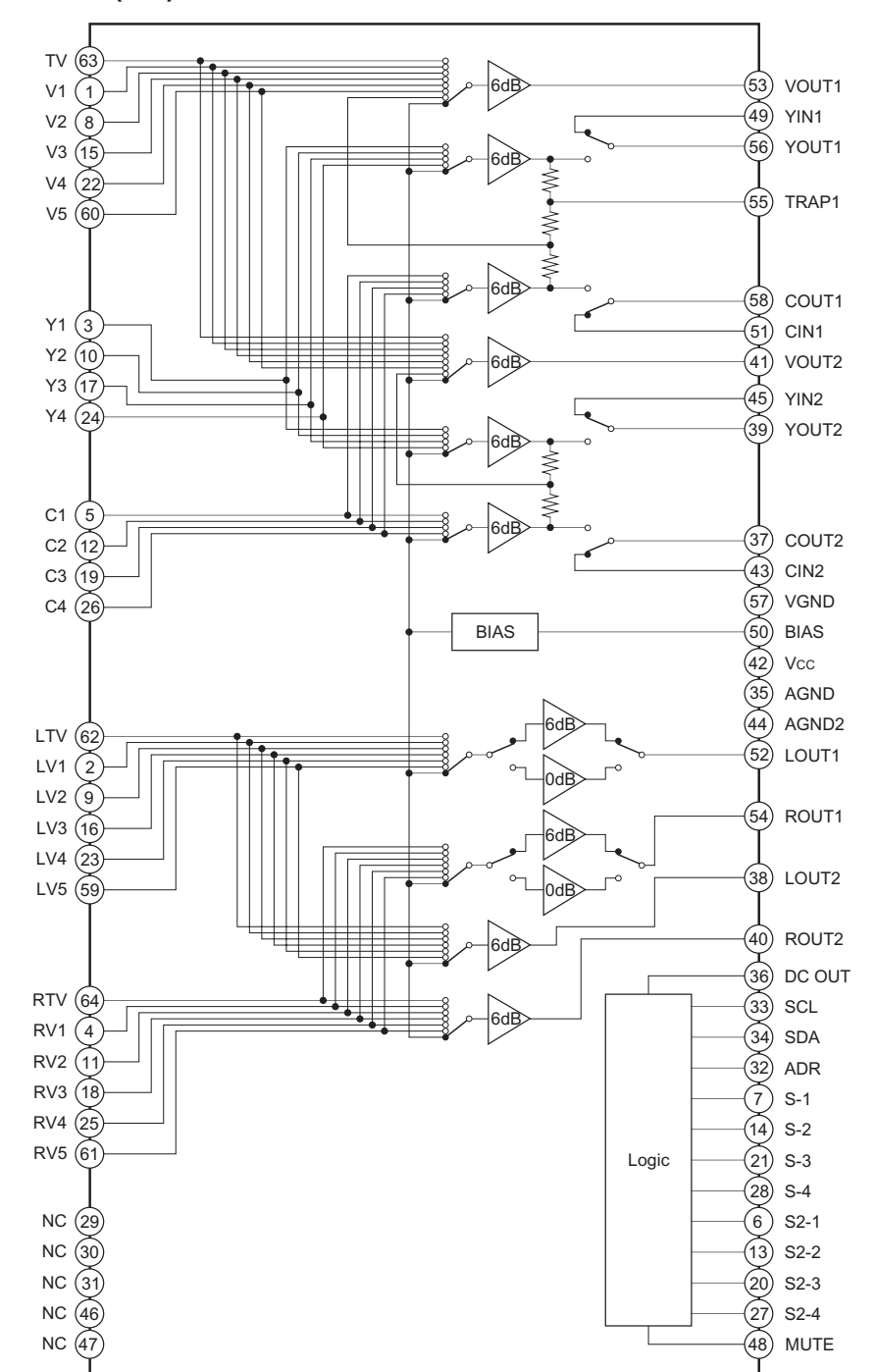
A (1/3) BOARD WAVEFORMS



A (1/3) BOARD : IC406 TDA7265



A (1/3) BOARD : IC1011 CXA2079Q

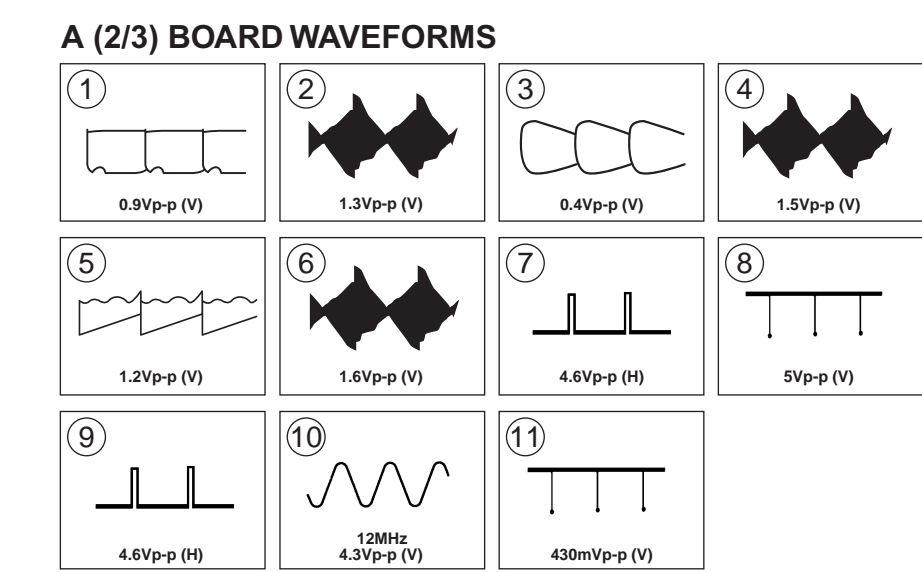
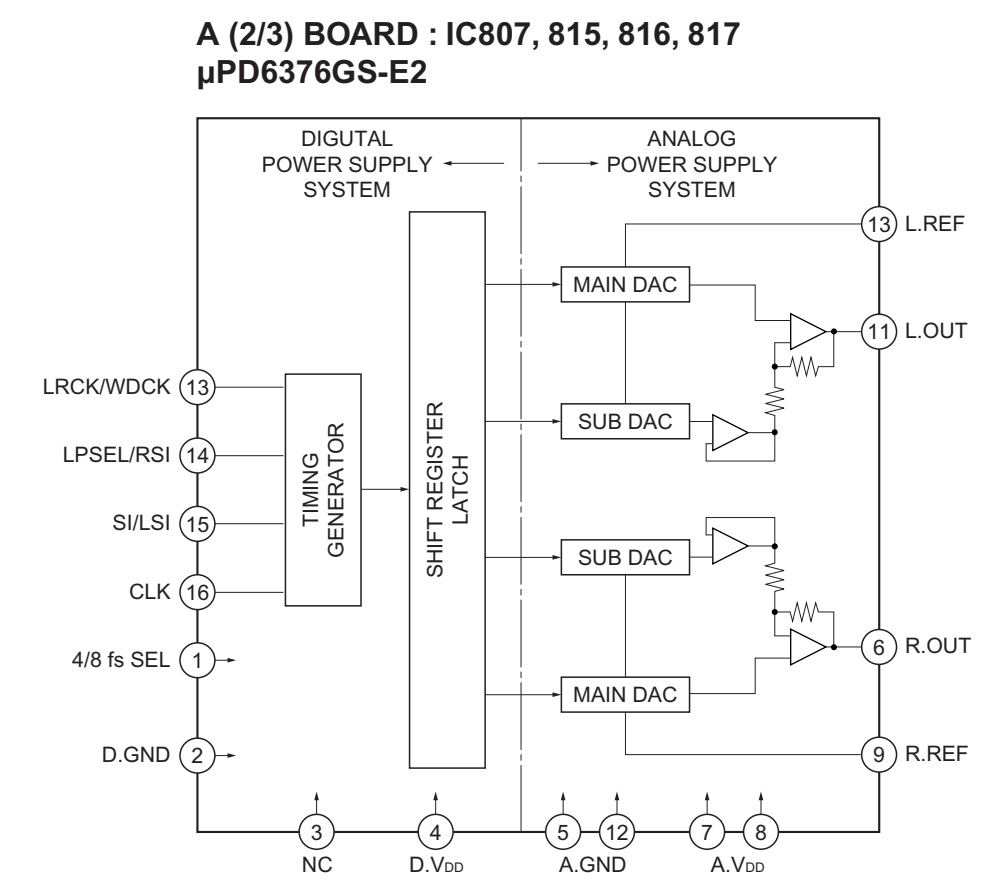
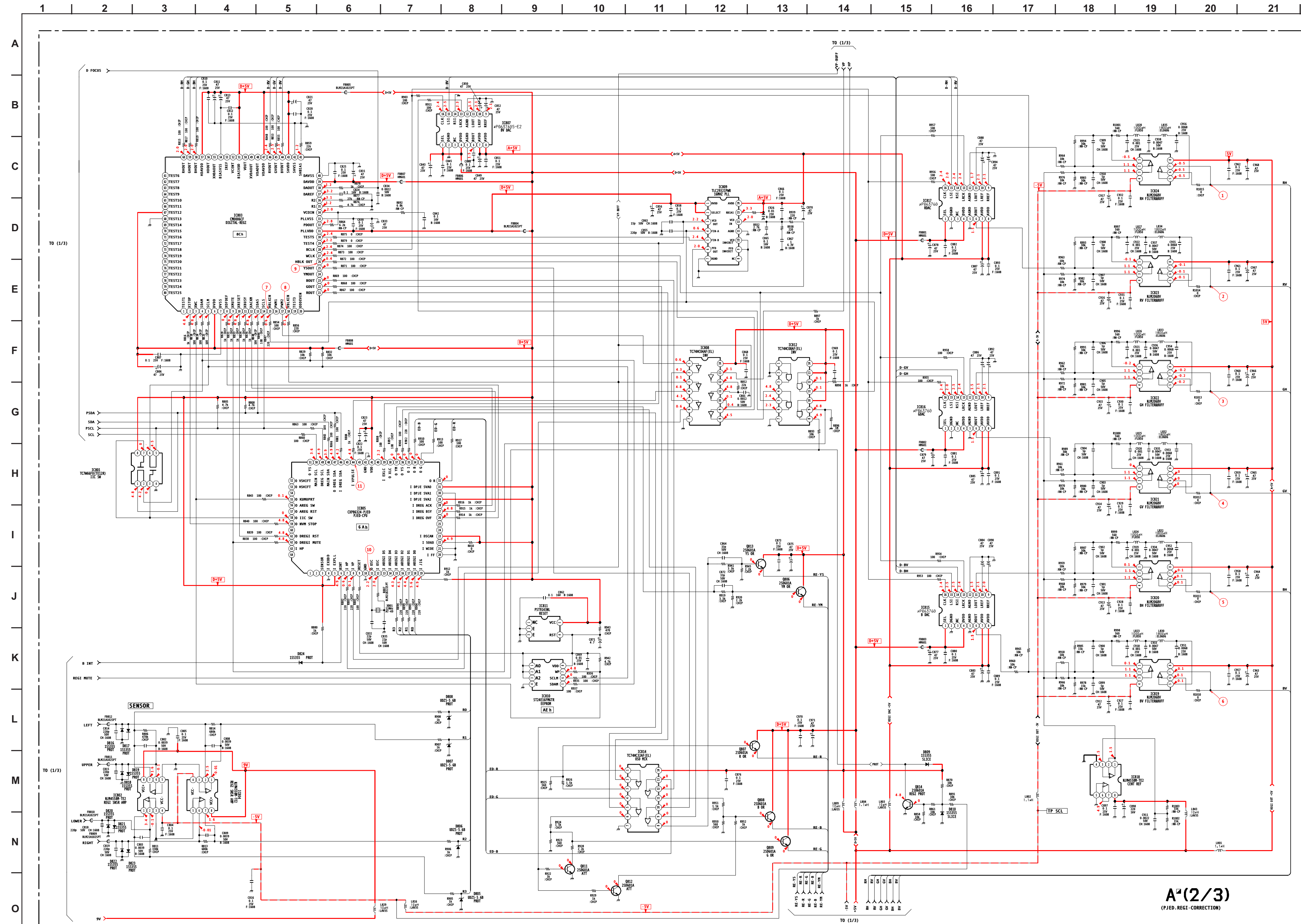


A(1/3)  
(SYSTEM CONTROL, AUDIO, TUNER, YC1)

9-945-907-01-8A3B-A P1

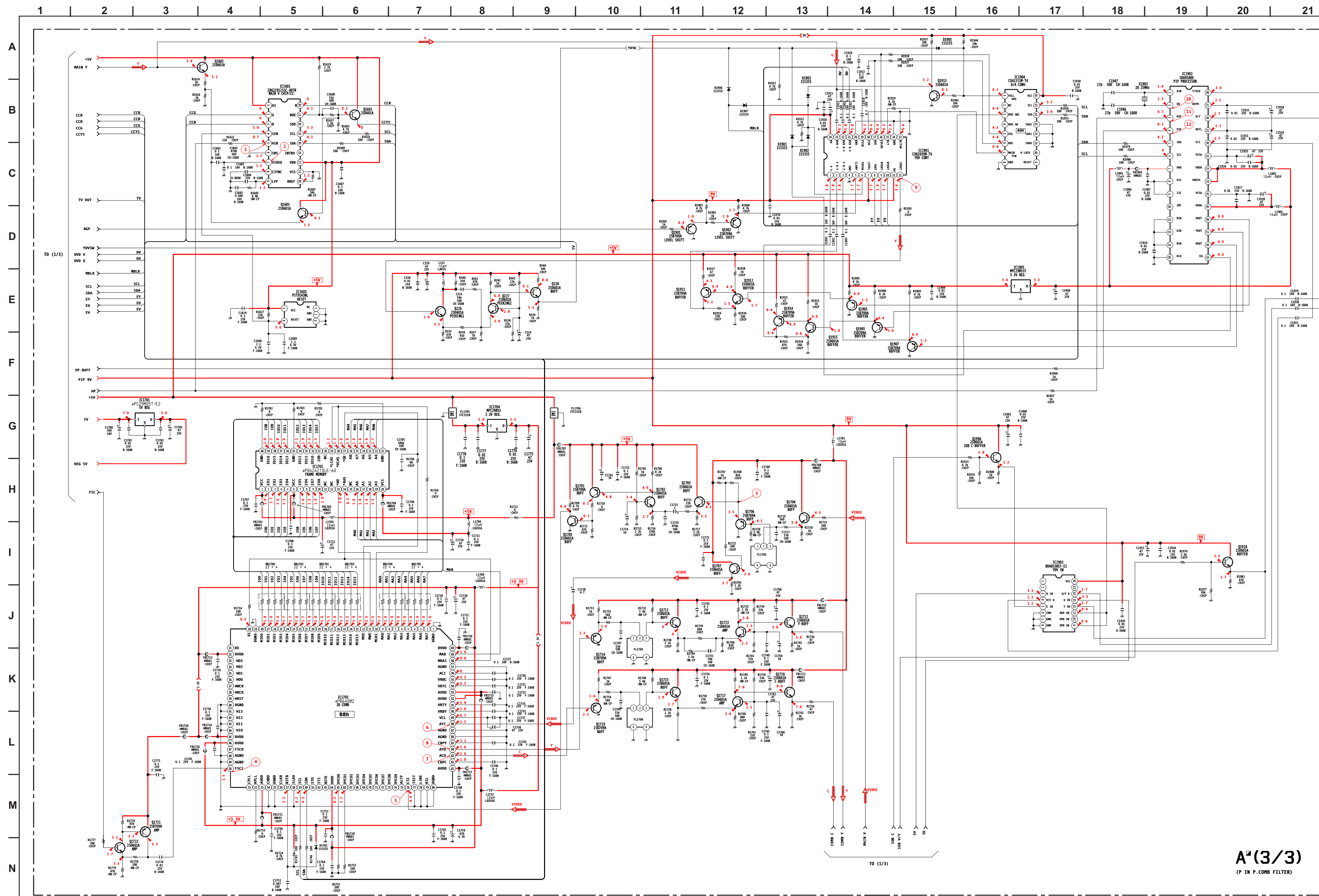


A BOARD SCHEMATIC DIAGRAM (2 OF 3)

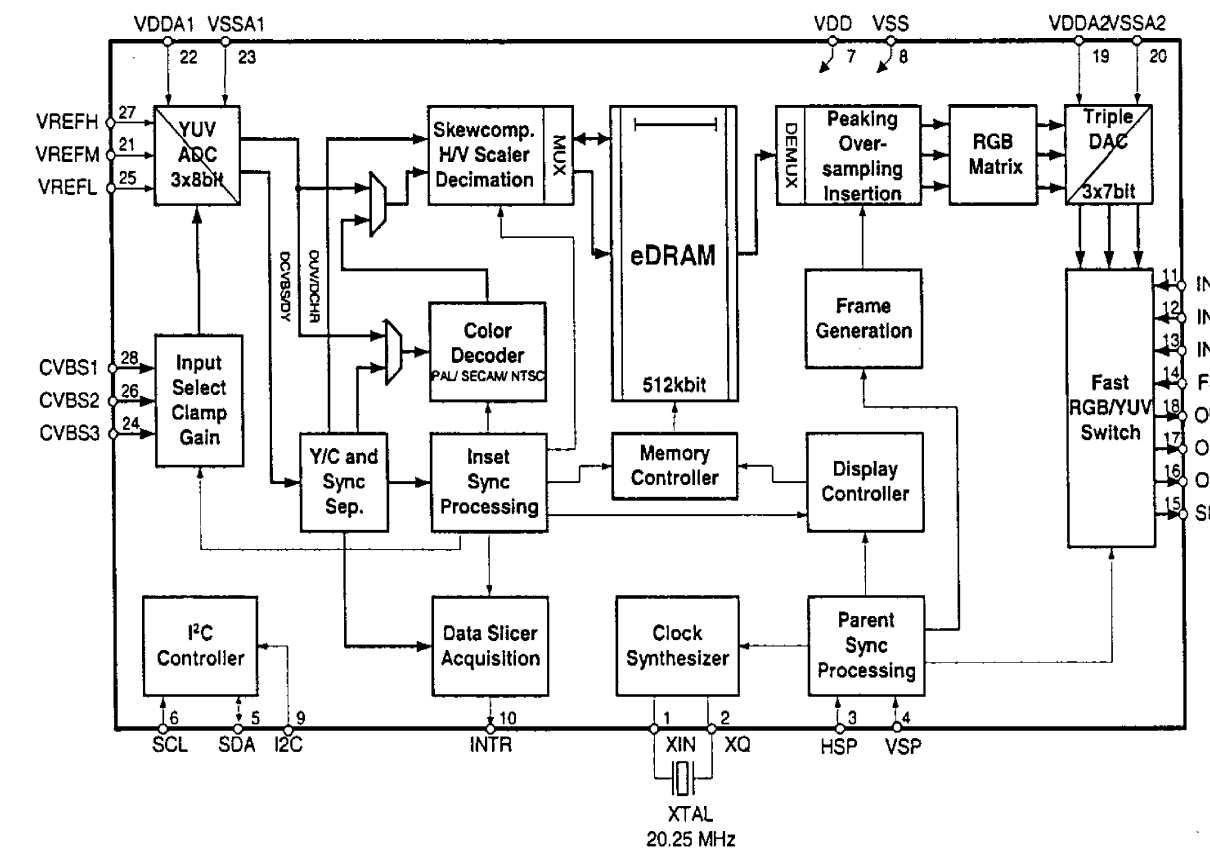


**A(2/3)**  
(P.F.I.D. REGI-CORRECTION)

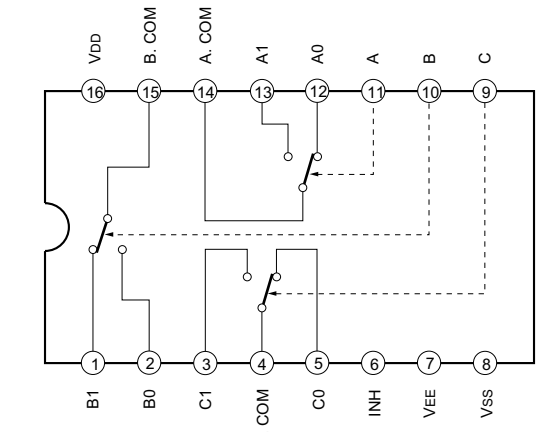
9-965-907-01(0A3B) A P2



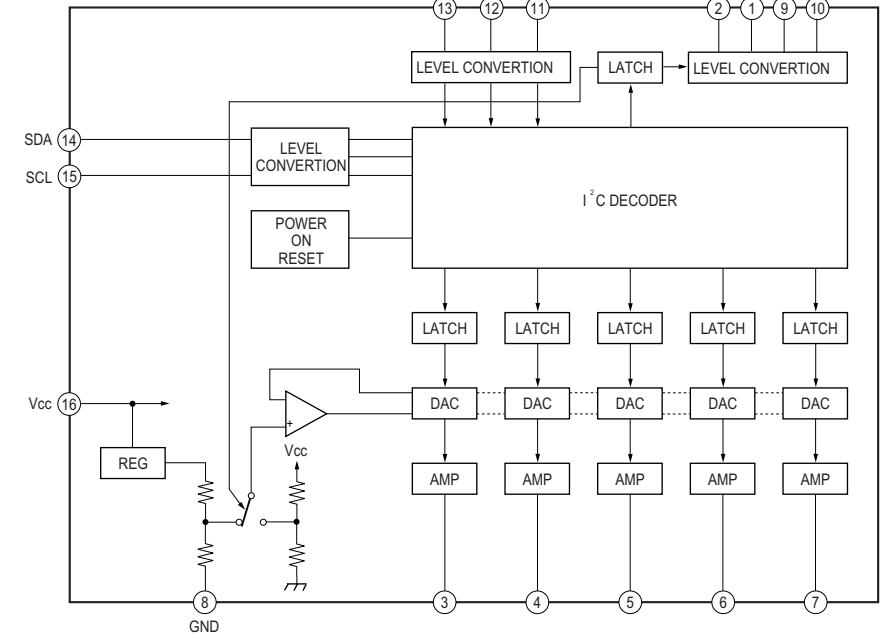
A (3/3) BOARD : IC1902 SDA9588X



A (3/3) BOARD : IC1903 BU4053BCF-T2



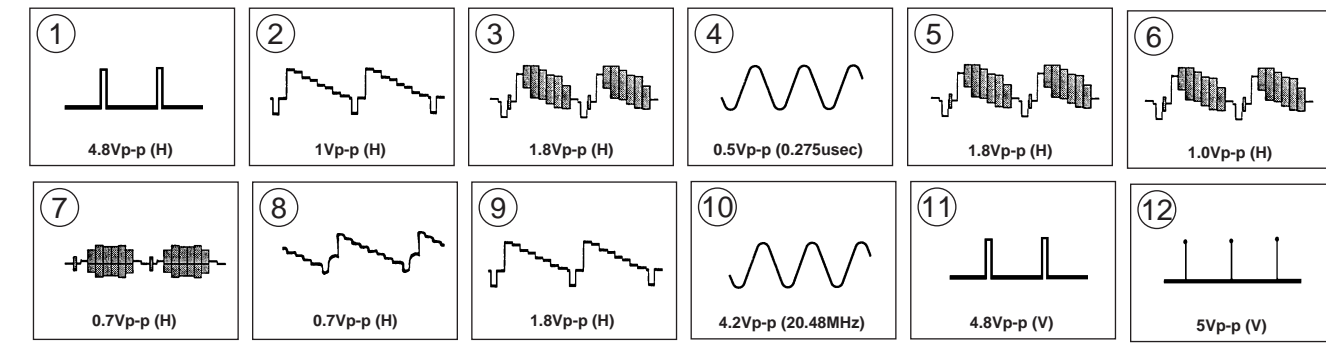
A (3/3) BOARD : IC1904 CXA1315M-T4



**A<sup>3</sup>(3/3)**  
(P IN P-COMB FILTER)

9-955-907-01-0A330-A 73

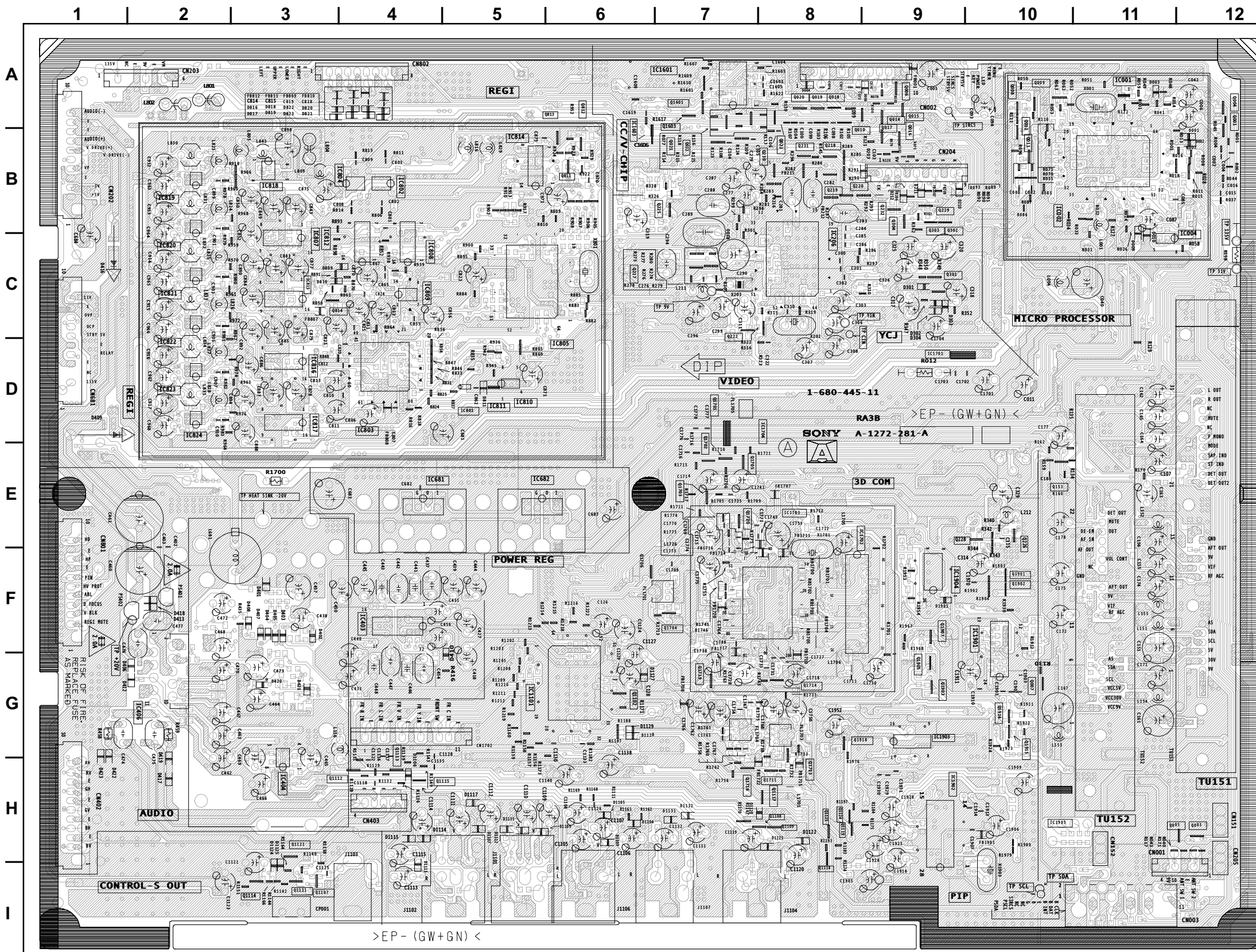
A (3/3) BOARD WAVEFORMS





**A** TUNER, YCJ, SYSTEM CONTROL, AUDIO, PJED, REGI-CORRECTION, P in P, COMB FILTER [COMPONENT SIDE]

**A BOARD LOCATOR LIST (COMPONENT SIDE)**



DIODE	IC	Q153	E-10		
D001	B-12	IC001	A-11	Q217	C-6
D002	B-12	IC002	B-10	Q218	B-8
D003	A-11	IC004	B-12	Q219	B-8
D004	A-8	IC206	C-8	Q220	B-8
D006	A-9	IC403	F-4	Q222	C-7
D301	C-9	IC404	H-3	Q225	B-7
D302	C-9	IC406	G-2	Q226	E-10
D303	C-9	IC681	E-4	Q228	E-9
D304	C-9	IC682	E-5	Q229	B-9
D402	F-3	IC801	D-5	Q230	B-8
D403	F-3	IC802	B-4	Q231	B-8
D404	F-3	IC803	D-4	Q232	B-9
D405	F-3	IC804	B-4	Q301	C-9
D406	G-2	IC805	D-6	Q302	C-9
D407	F-3	IC807	C-3	Q303	C-9
D408	F-3	IC808	C-4	Q304	C-9
D409	D-1	IC809	C-4	Q811	B-6
D410	G-5	IC810	D-5	Q812	A-6
D412	G-2	IC811	D-5	Q813	A-6
D413	F-2	IC812	C-3	Q814	C-3
D416	C-1	IC814	B-5	Q1102	G-6
D417	H-2	IC815	C-3	Q1107	I-3
D418	F-2	IC816	D-3	Q1108	H-8
D419	G-2	IC817	D-3	Q1109	H-8
D420	G-3	IC818	B-3	Q1111	I-3
D421	G-3	IC819	B-2	Q1112	H-3
D422	H-1	IC820	C-2	Q1113	H-4
D423	H-1	IC821	C-2	Q1114	I-2
D805	H-6	IC822	D-2	Q1115	H-4
D806	H-6	IC823	D-2	Q1117	H-8
D807	H-6	IC824	D-2	Q1118	I-8
D808	H-6	IC1101	G-6	Q1119	H-8
D809	C-3	IC1601	A-7	Q1121	H-3
D810	C-3	IC1603	B-6	Q1124	H-8
D816	A-3	IC1701	D-9	Q1125	H-8
D817	A-3	IC1702	E-8	Q1601	A-7
D818	A-3	IC1703	E-8	Q1602	I-7
D819	A-3	IC1704	E-8	Q1603	B-7
D820	A-3	IC1901	F-9	Q1701	D-7
D821	A-3	IC1902	H-9	Q1702	D-7
D822	A-3	IC1903	G-9	Q1703	E-7
D823	A-3	IC1904	F-9	Q1704	E-7
D1103	H-6	IC1905	H-10	Q1705	E-7
D1104	H-6	<b>TRANSISTOR</b>		Q1706	F-6
D1105	H-6	Q001	A-12	Q1711	H-8
D1106	H-4	Q004	A-12	Q1713	H-8
D1107	H-5	Q006	A-9	Q1716	H-7
D1109	H-6	Q007	G-10	Q1719	G-7
D1111	H-5	Q008	A-10	Q1901	F-10
D1112	H-5	Q009	A-10	Q1902	F-10
D1113	H-4	Q010	B-8	Q1903	G-9
D1114	H-4	Q011	B-10	Q1905	G-9
D1115	H-4	Q012	A-10	Q1907	F-9
D1120	H-7	Q014	B-9	Q1914	G-10
D1121	H-7	Q015	B-9	Q1915	G-10
D1117	H-5	Q016	B-9	Q1918	G-9
D1122	H-7	Q017	B-9		
D1124	H-3	Q018	A-8		
D1125	H-3	Q019	A-8		
D1127	G-6	Q020	A-8		
D1131	H-7	Q021	B-7		
D1132	H-7	Q022	B-7		
D1905	F-9	Q023	B-8		



**A**

TUNER, YCJ, SYSTEM CONTROL, AUDIO, PJED, REGI-CORRECTION, P in P, COMB FILTER [CONDUCTOR SIDE]

KP-43T90 / 48V90 / 53V90 / 61V90

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12

A

B

C

D

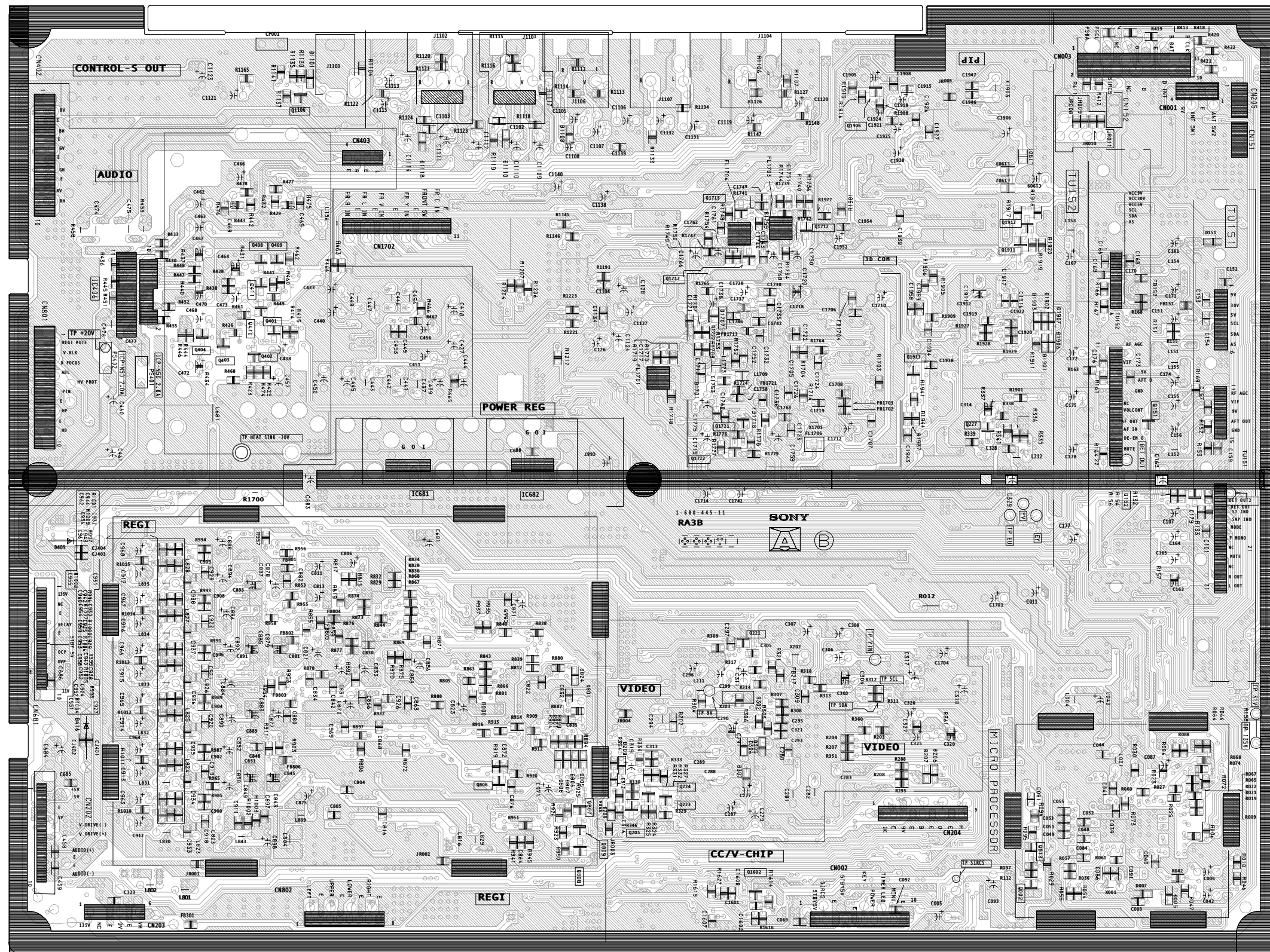
E

F

G

H

I



**A BOARD LOCATOR LIST  
(CONDUCTOR SIDE)**

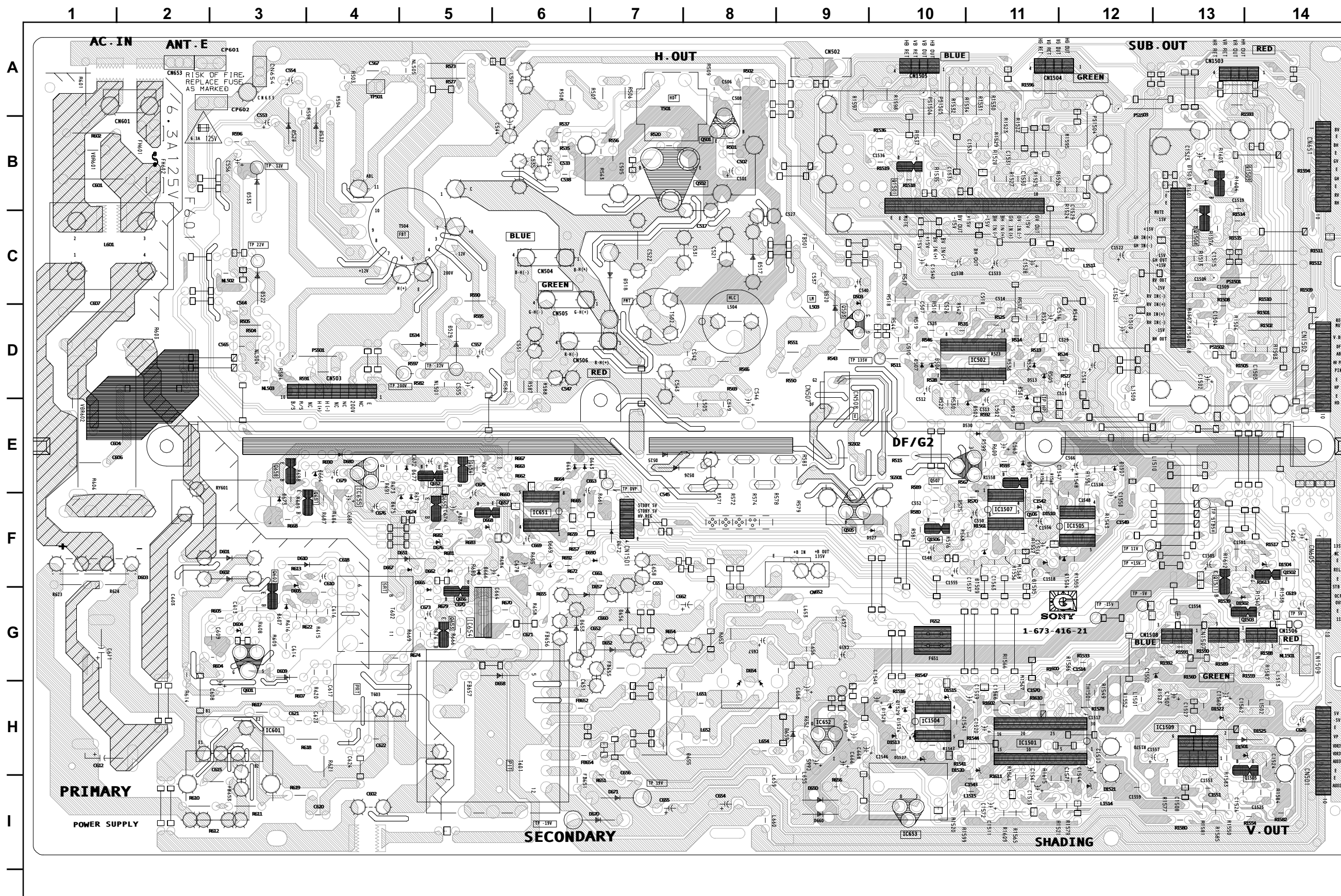
DIODE		TRANSISTOR	
D005	I-11	Q002	I-10
D007	I-11	Q003	H-12
D151	C-12	Q005	H-11
D202	G-7	Q013	H-10
D206	G-9	Q151	E-11
D207	G-9	Q152	E-11
D208	H-6	Q205	H-6
D209	H-6	Q221	F-7
D305	G-7	Q223	H-7
D306	G-7	Q224	H-7
D307	G-7	Q227	D-9
D824	G-6	Q401	D-3
D1101	A-4	Q402	D-3
D1108	B-6	Q403	D-2
D1110	B-5	Q404	D-2
D1118	B-4	Q408	C-3
D1701	D-7	Q409	C-3
D1901	D-10	Q410	D-3
D1902	D-10	Q411	C-3
D1903	D-10	Q806	H-5
D1906	D-10	Q807	H-6
D1907	D-10	Q808	H-6
		Q809	H-6
		Q1106	B-3
		Q1707	D-7
		Q1712	C-8
		Q1714	C-7
		Q1715	C-7
		Q1717	C-7
		Q1721	E-7
		Q1722	E-7
		Q1906	B-8
		Q1911	C-10
		Q1912	C-10
		Q1913	D-9







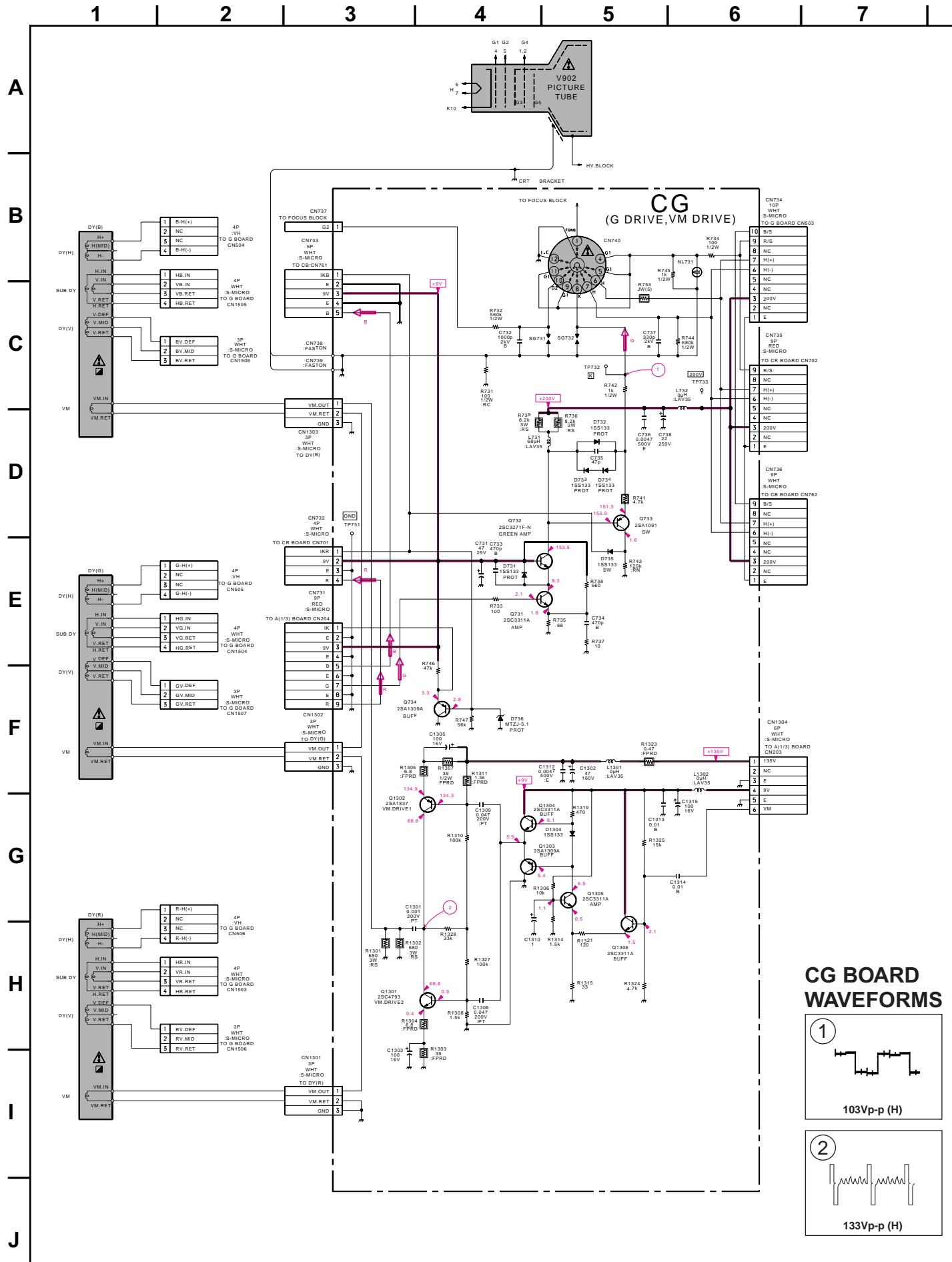
**G** [H/V, DY DRIVE, POWER SUPPLY]



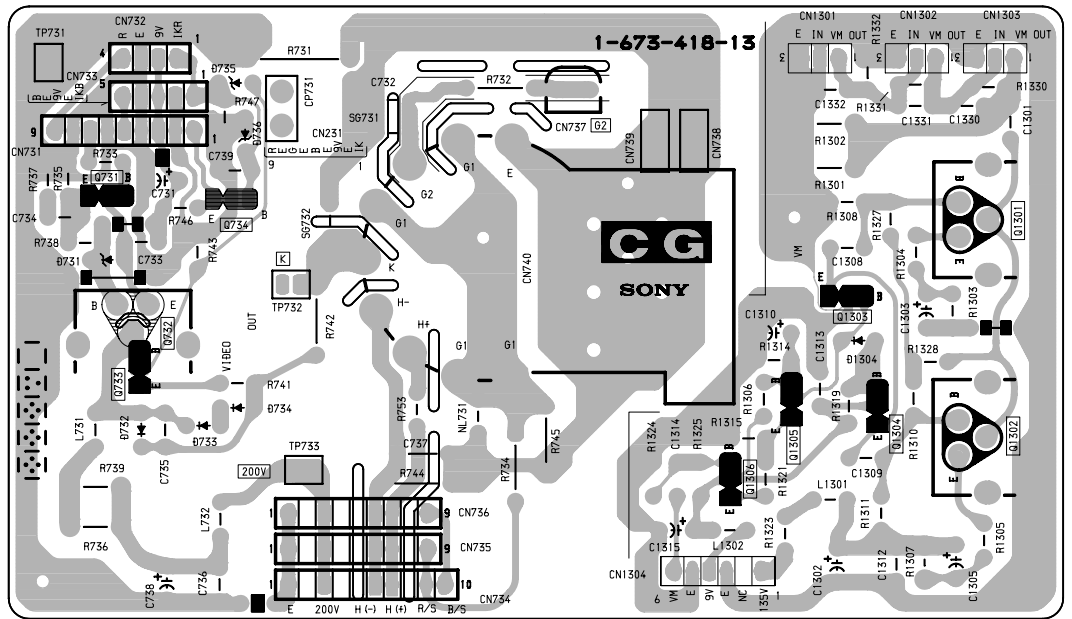
**G BOARD LOCATION LIST**

D501	D-11	D1504	F-14
D505	D-11	D1505	F-11
D506	D-10	D1506	F-12
D507	D-10	D1507	E-12
D513	D-11	D1509	F-11
D517	C-8	D1510	F-11
D518	C-7	D1513	H-10
D520	C-9	D1515	H-10
D522	C-3	D1520	H-11
D525	E-7	D1521	I-12
D526	E-7	D1522	H-13
D528	B-3	D1523	G-12
D529	D-5	D1525	H-13
D530	E-11	D1526	H-10
D531	E-11	D1527	H-10
D532	B-4	D1528	H-10
D533	B-3	<b>IC</b>	
D534	D-5	IC502	D-11
D601	F-3	IC601	H-3
D602	F-3	IC651	F-6
D603	F-2	IC652	H-9
D604	G-3	IC653	I-10
D605	F-3	IC654	G-5
D607	G-3	IC655	E-4
D609	G-3	IC1501	H-11
D610	F-4	IC1502	D-13
D650	I-9	IC1504	H-10
D651	F-5	IC1505	F-12
D652	F-5	IC1506	B-10
D653	G-6	IC1507	E-11
D654	G-8	IC1509	H-13
D655	H-7	<b>TRANSISTOR</b>	
D656	G-7	Q501	B-8
D657	G-6	Q502	B-7
D658	G-6	Q503	D-9
D659	H-9	Q505	F-9
D660	I-9	Q506	E-11
D661	E-6	Q507	E-11
D662	F-5	Q601	G-3
D663	E-6	Q602	G-3
D664	E-4	Q651	F-4
D665	F-5	Q652	E-5
D666	F-5	Q653	G-5
D667	F-5	Q654	E-5
D668	F-5	Q655	F-5
D669	F-6	Q656	G-5
D670	I-7	Q657	F-6
D671	I-7	Q658	E-3
D672	F-7	Q1501	B-10
D673	F-3	Q1502	F-14
D674	F-5	Q1503	G-13
D675	F-4	Q1505	H-14
D676	F-5	Q1506	E-11
D677	E-5	Q1508	C-13
D680	E-4	Q1509	B-13
D1501	H-13	Q1511	F-13
D1503	B-13		

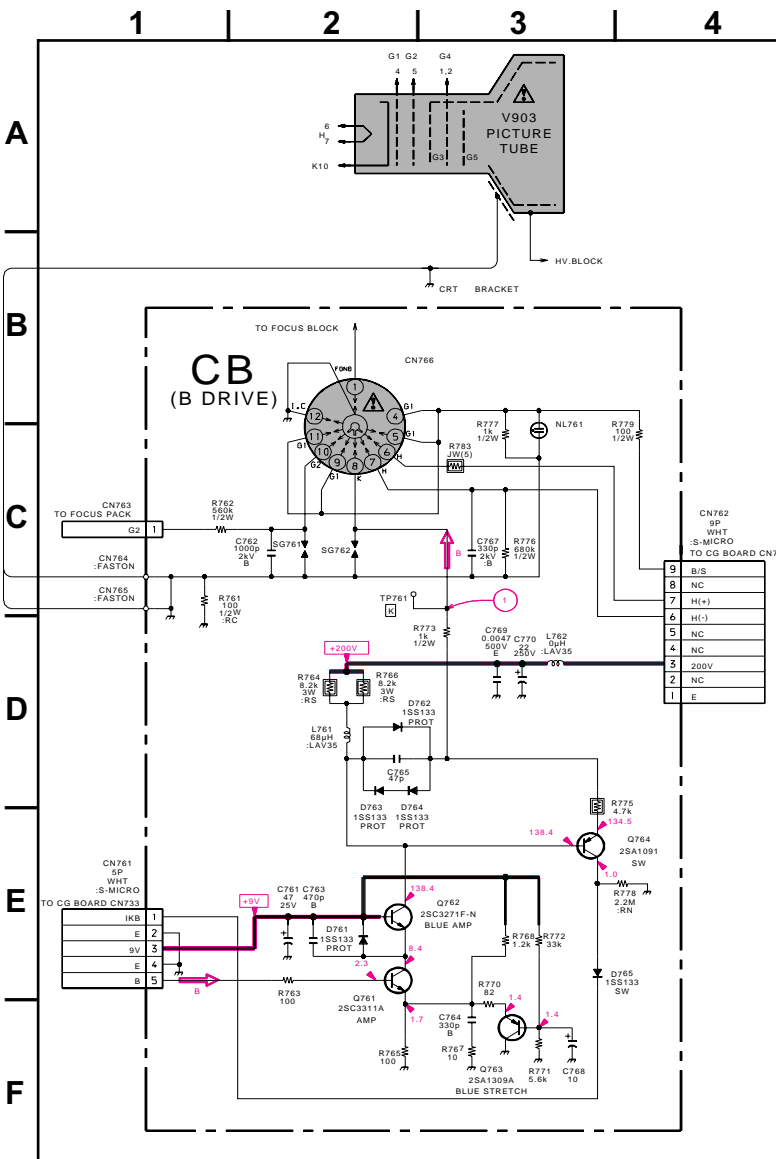




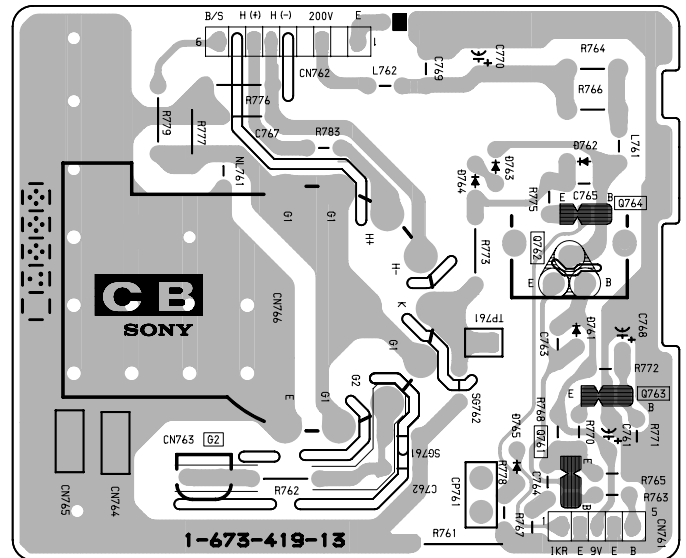
**CG** [G DRIVE, VM DRIVE]



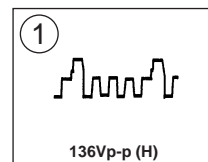
**CB BOARD SCHEMATIC DIAGRAM**



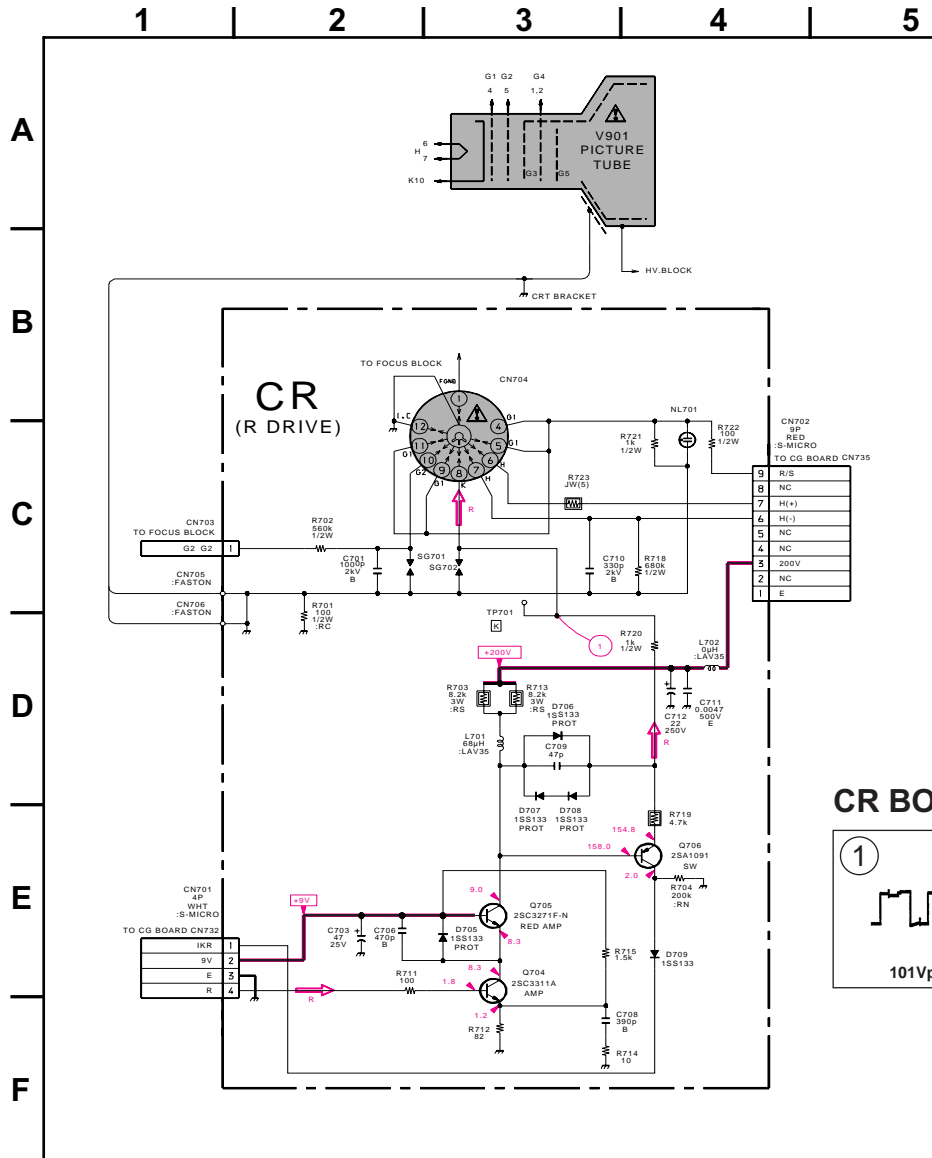
**CB** [B DRIVE]



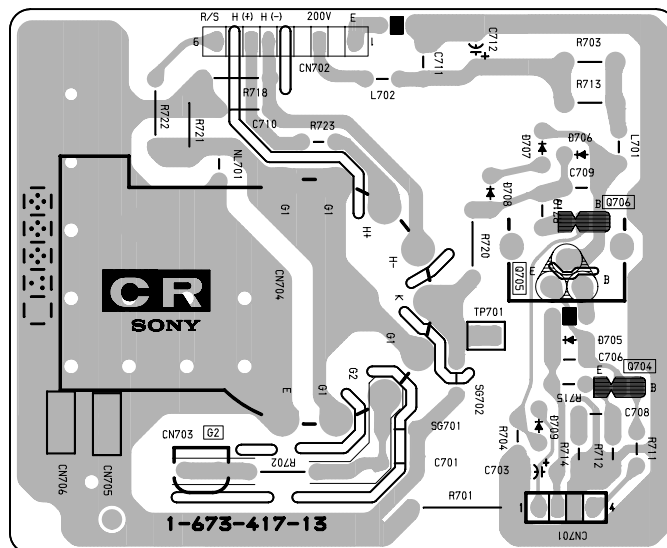
**CB BOARD WAVEFORM**



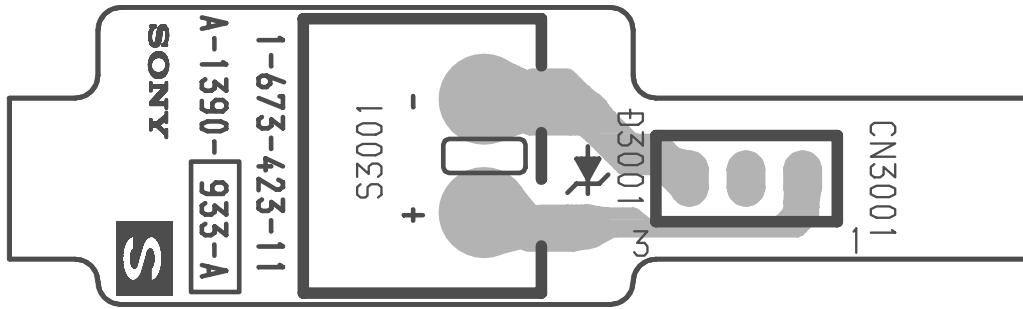
# CR BOARD SCHEMATIC DIAGRAM



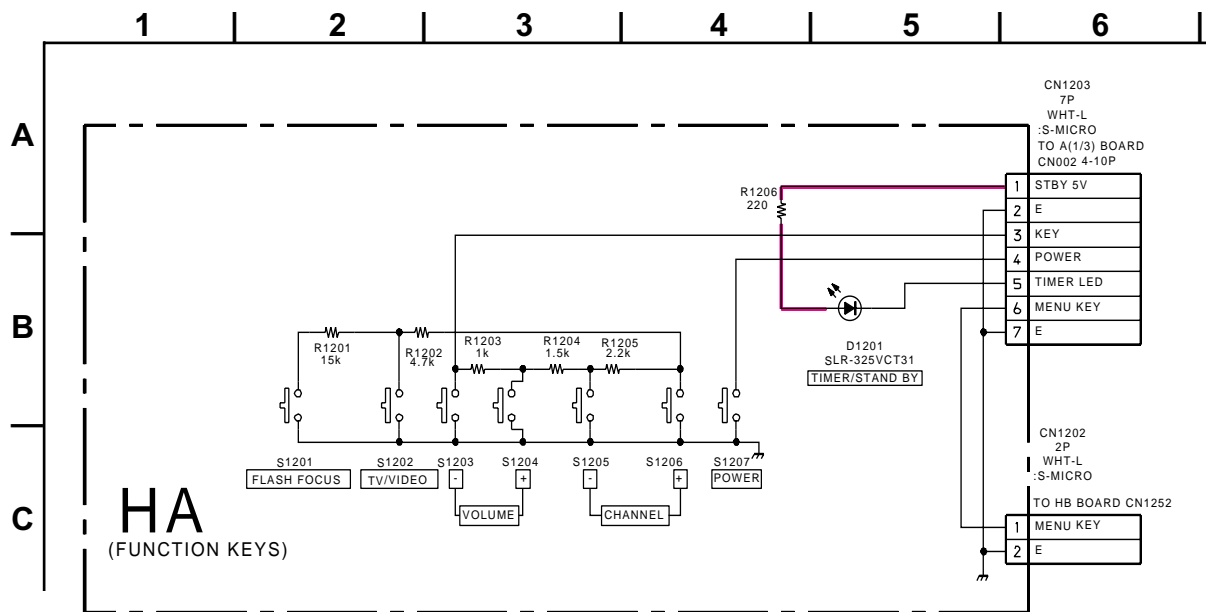
## CR [R DRIVE]



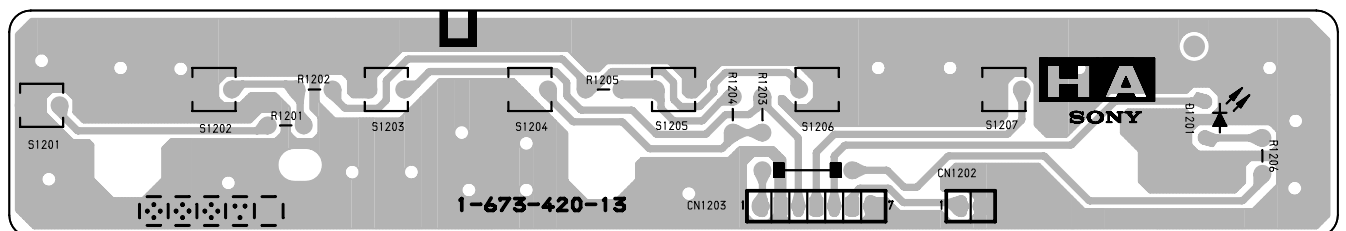
**S** [P in P, 3D COMB FILTER]



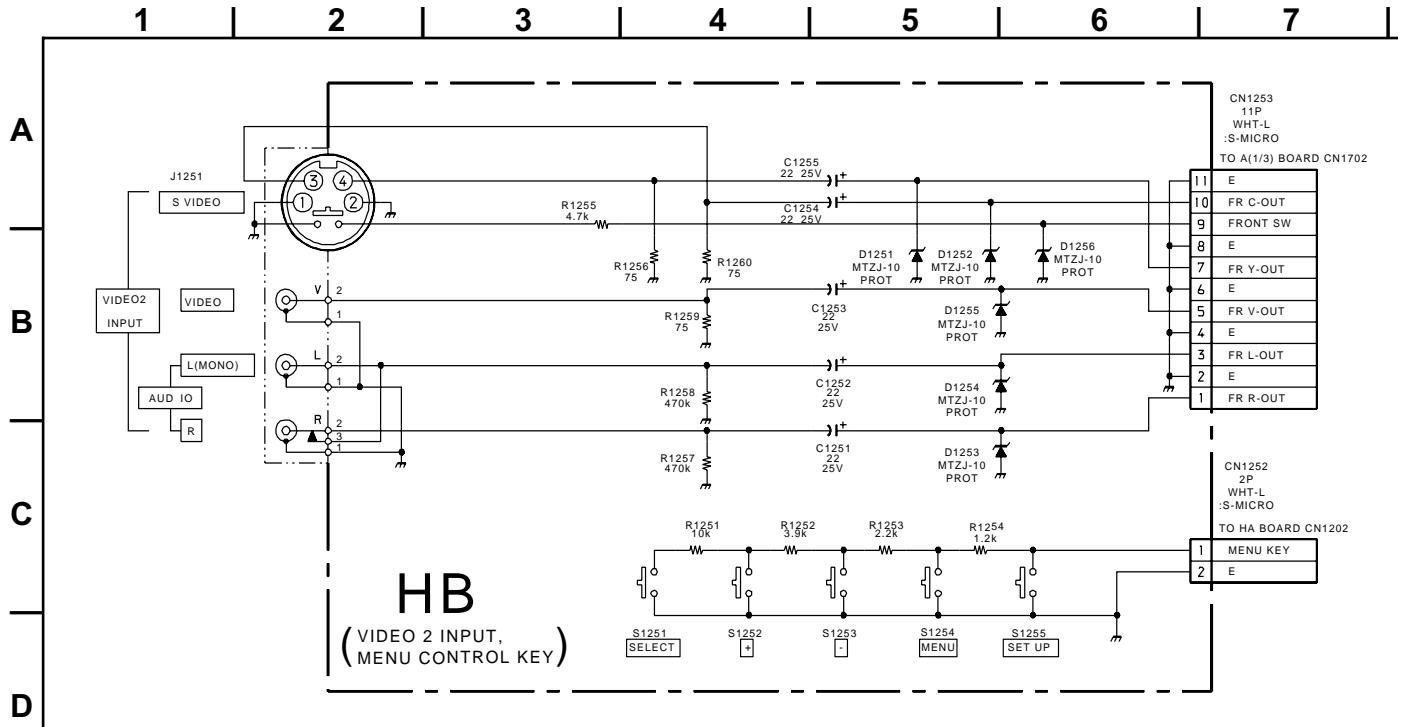
**HA BOARD SCHEMATIC DIAGRAM**



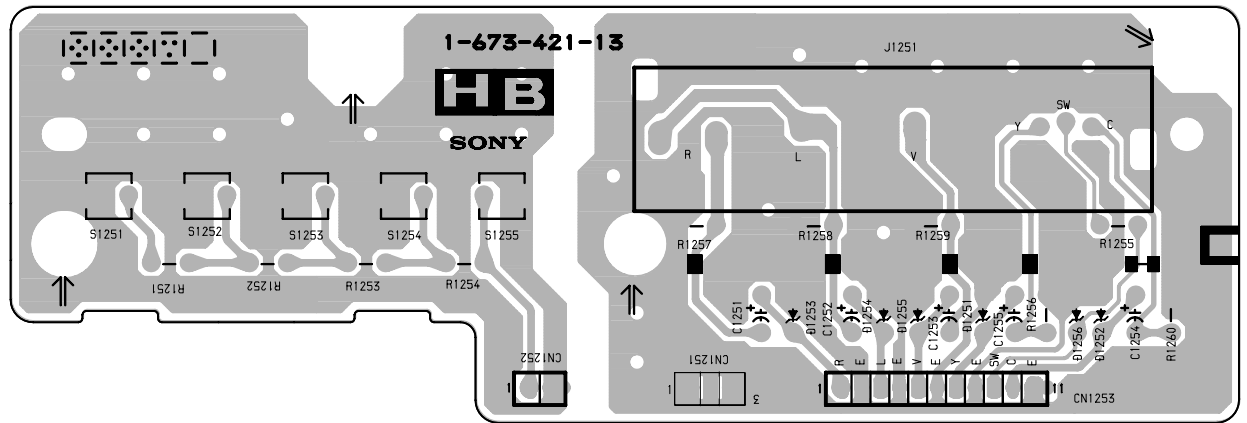
**HA** [FUNCTION KEY]



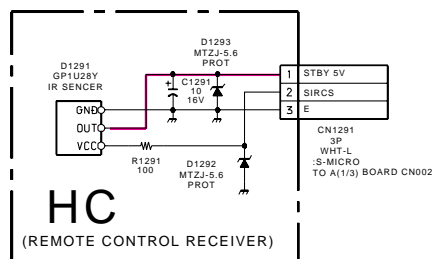
### HB BOARD SCHEMATIC DIAGRAM



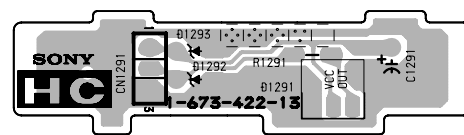
**HB** [VIDEO-2 INPUT, MENU CONTROL KEYS]



### HC BOARD SCHEMATIC DIAGRAM

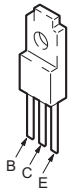


**HC** [REMOTE CONTROL RECEIVER]

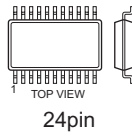


## 5-5. SEMICONDUCTORS

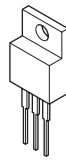
**BA05T**



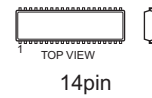
**CXA2039M-T6**



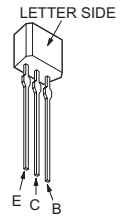
**NJM7805FA**



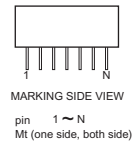
**UPC339C**



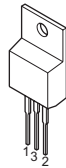
**2SA1175-HFE**  
**2SA1309A**  
**2SC2785-HFE**  
**2SC3311A**



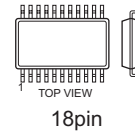
**DM-58**



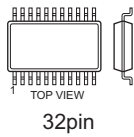
**NJM7905FA**



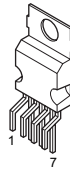
**Z8613012SSC-00TR**  
**Z8622912SSC-00TR**



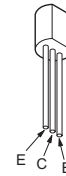
**BH3868FS-E2**  
**SDA9288XE**



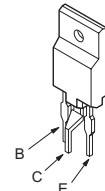
**LA78045**



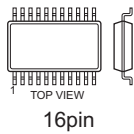
**2SA1091-O**



**2SC5022-02**

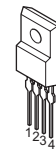


**BU4053BCF-T2**  
**CXA1315M**  
**UPD6376GS-E2**

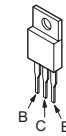


**M24C08-MN6T**  
**NJM2533M(TE2)**  
**NJM4558M-T2**  
**ST24E16FM6TR**  
**TC7W66FU(TE12R)**  
**UPCM4570G2**

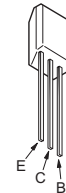
**PQ09RD11**



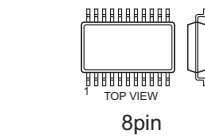
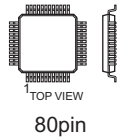
**2SA1837**  
**2SC4793**  
**IRF614**



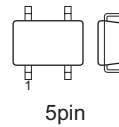
**2SD2144S-UVW**  
**2SD2144S-V**



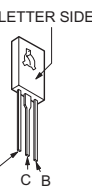
**CM0006CF**



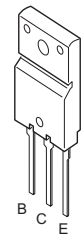
**PST9143NL**



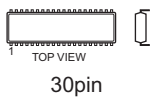
**2SC2611**  
**2SC2688-(5)LK**



**2SD2578-RF**

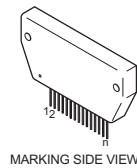


**CXA1726AS**

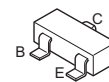


**MC74HC04AF**  
**MC74HC32AF**  
**NJM2058M-TE2**  
**TC74HC08AF(EL)**  
**TLC2932IPW**

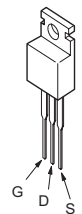
**STK392-150**



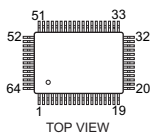
**2SA1162-G**  
**2SD601A-Q**  
**DTC143TKA-T146**  
**DTC144EKA-T146**



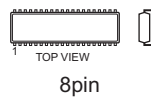
**2SK2663**



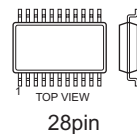
**CXA2079Q**  
**CXA2147Q**  
**CXP750010-026Q**  
**CXP86324-024Q**



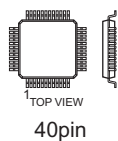
**NJM4558D**  
**UPC393C**



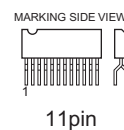
**TC90A53F**



**CXA2019AQ-T4**



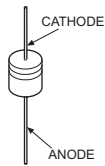
**TDA7265**



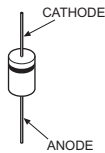


## 5-5. SEMICONDUCTORS (continued)

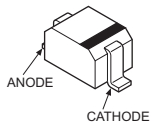
11ES2  
 D1N20R  
 D1NL20U  
 D2L20U  
 MTZJ-10B  
 MTZJ-13  
 MTZJ-15B  
 MTZJ-2.7A  
 MTZJ-3.9B  
 MTZJ-4.7C  
 MTZJ-5.1B  
 MTZJ-7.5B  
 MTZJ-T-77-15B  
 MTZJ-T-77-18B  
 MTZJ-T-77-24A  
 MTZJ-T-77-5.6B  
 MTZJ-T-77-6.2B  
 MTZJ-T-77-8.2B



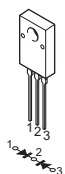
1SS133-T17  
 D3S6M-F  
 ERA22-08  
 ERC04-06SE  
 ERC06-15S  
 ERC91-02



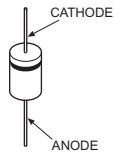
1SS355TE-17  
 UDZ-TE17-10B  
 UDZ-TE17-22B  
 UDZ-TE17-33B  
 UDZS-TE17-5.6B  
 UDZS-TE17-8.2B



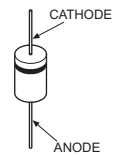
D10SC6M-4012



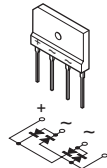
D1NL20U



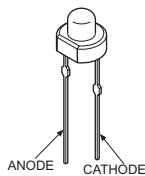
D1NS6  
 EL1Z  
 GP08DPKG23  
 RGP02-20EL-6394  
 RGP10GPKG23  
 RGP15J-6040G23



D4SBS4-F



SLR-325VCT31



## SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

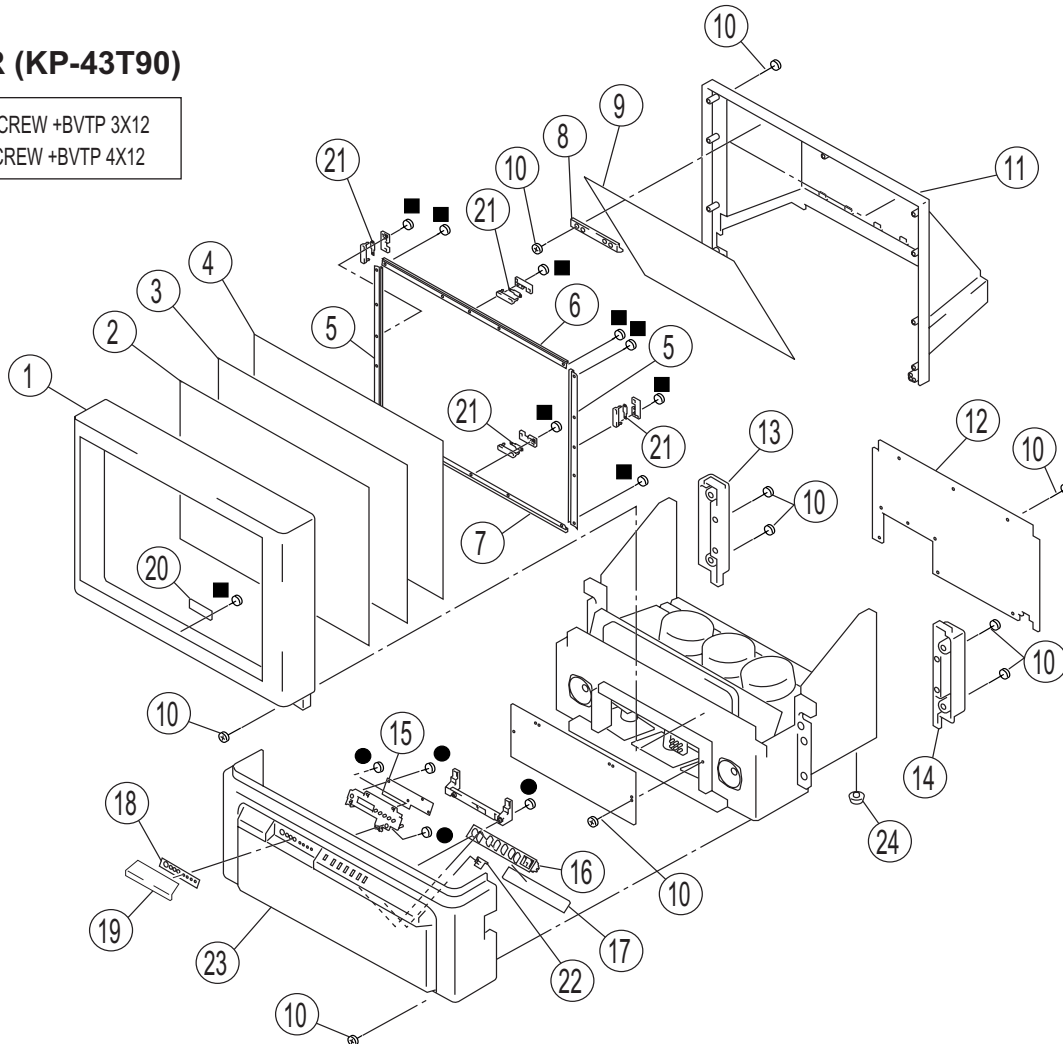
\* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by shading and mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-1. COVER (KP-43T90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-14 SCREW +BVTP 4X12



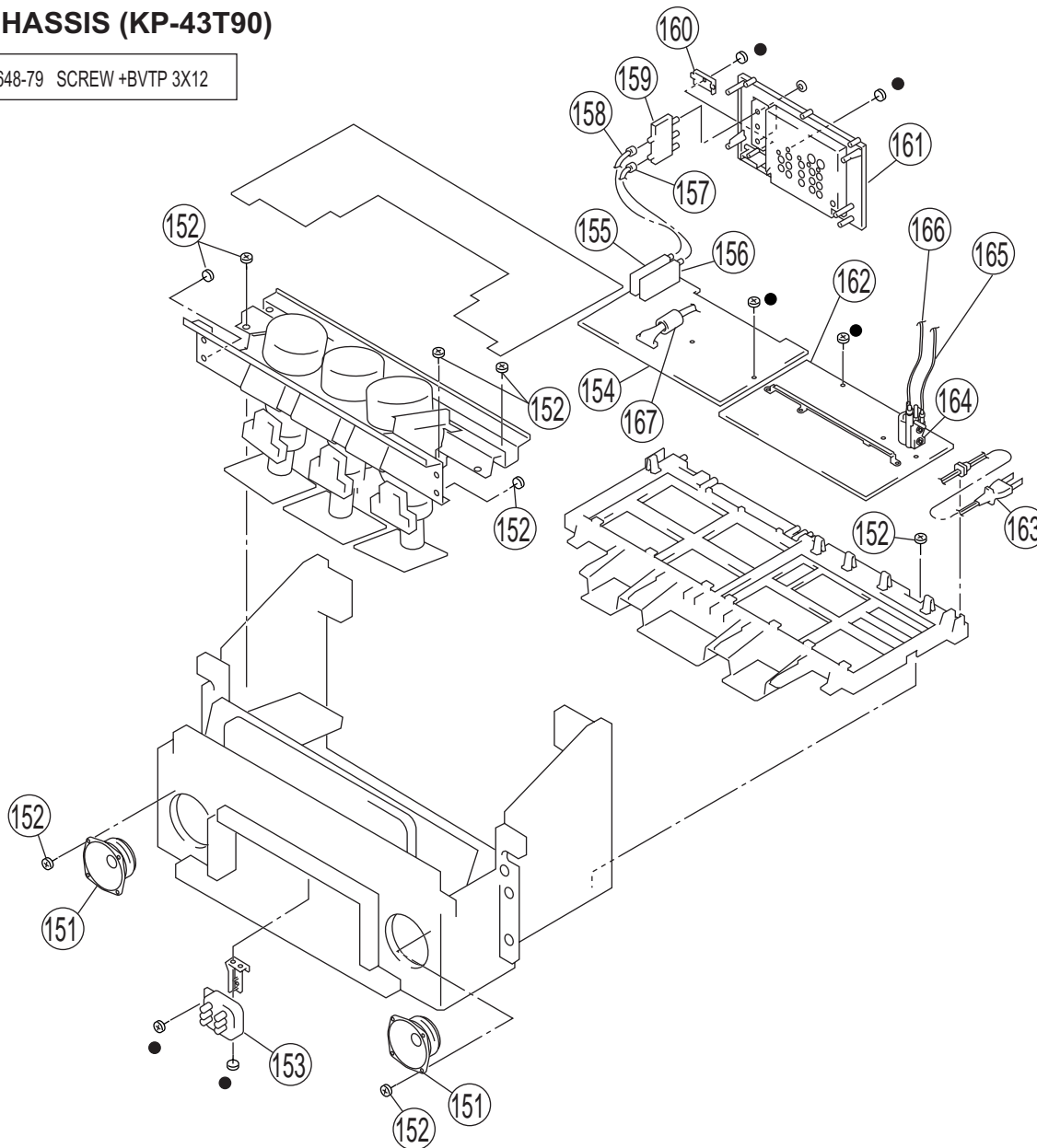
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	[ASS'Y INCLUDES]
1	X-4038-924-1	BEZNET ASSY	13	4-069-703-01	CAP (L), CONTROL	
2	4-081-064-11	SCREEN (43), CONTRAST	14	4-069-704-01	CAP (R), CONTROL	
3	4-070-284-11	PLATE (L), DIFFUSION	* 15	A-1372-620-A	HB BOARD, MOUNTED	
4	4-070-285-11	PLATE (43F), DIFFUSION	16	4-069-681-21	BUTTON, MULTI	
* 5	4-070-332-31	HOLDER (L), SCREEN (NC)	* 17	A-1372-619-A	HA BOARD MOUNTED	
* 6	4-070-333-21	HOLDER (S), SCREEN (NC)	18	4-072-529-01	LABEL (2), SPEAKER GRILLE	
* 7	4-070-333-31	HOLDER (S), SCREEN (NC)	19	4-073-437-31	DOOR (V), CONTROL	
* 8	4-081-501-01	HOLDER, MIRROR	* 20	A-1372-618-A	HC BOARD, MOUNTED	
9	4-082-889-01	MIRROR(43)	* 21	A-1390-933-A	S BOARD, MOUNTED	
10	4-081-063-01	SCREW, DOME WASHER HEX TAP (4X20)	22	4-069-682-01	GUIDE, LED	
* 11	4-081-500-01	COVER (43), MIRROR	* 23	X-4038-925-1	PANEL ASSY, CONTROL	[19]
* 12	4-082-892-01	BOARD, REAR	24	4-057-611-01	FOOT	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


### 6-2. CHASSIS (KP-43T90)

- 7-685-648-79 SCREW +BVTP 3X12

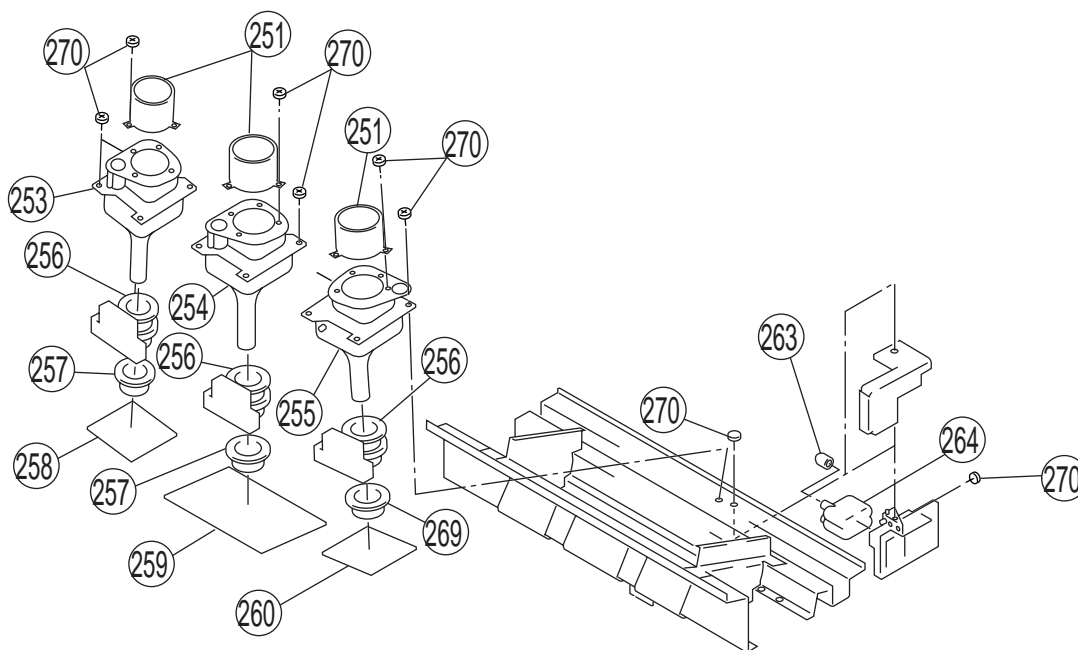









REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION		
	151	1-529-396-12	SPEAKER (10CM)	*	162	A-1316-475-A	G BOARD, COMPLETE
	152	4-081-063-01	SCREW, DOME WASHER HEX TAPPING (4 X 20)				The high voltage leads associated with the FBT on this board are not included and must be ordered separately. See items 165 and 166.
⚠	153	1-223-925-11	RESISTOR ASSY (HIGH-VOLTAGE)	⚠	163	1-790-001-11	CORD, AC POWER (WITH CONNECTOR)
*	154	A-1299-423-A	A BOARD, COMPLETE	⚠	164	1-453-238-31	FBT ASSY, NX-4007//X4P4
	155	8-598-542-50	TUNER, FSS BTF-WA412	⚠	165	1-900-249-96	FOCUS LEAD ASSY
	156	8-598-430-50	TUNER, FSS BTF-FA401	⚠	166	1-779-095-23	LEAD ASSY, HIGH-VOLTAGE
*	157	1-557-056-31	CABLE, P-P		167	1-500-021-11	CLAMP, SLEEVE FERRITE
*	158	1-556-945-21	CABLE, P-P				
⚠	159	8-598-414-20	CHANGER, ANTENNA AS-2F				
	160	4-069-675-01	CAP, TERMINAL BOARD				
⚠	161	4-069-674-22	TERMINAL BOARD				


NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.


NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-3. PICTURE TUBE (KP-43T90)



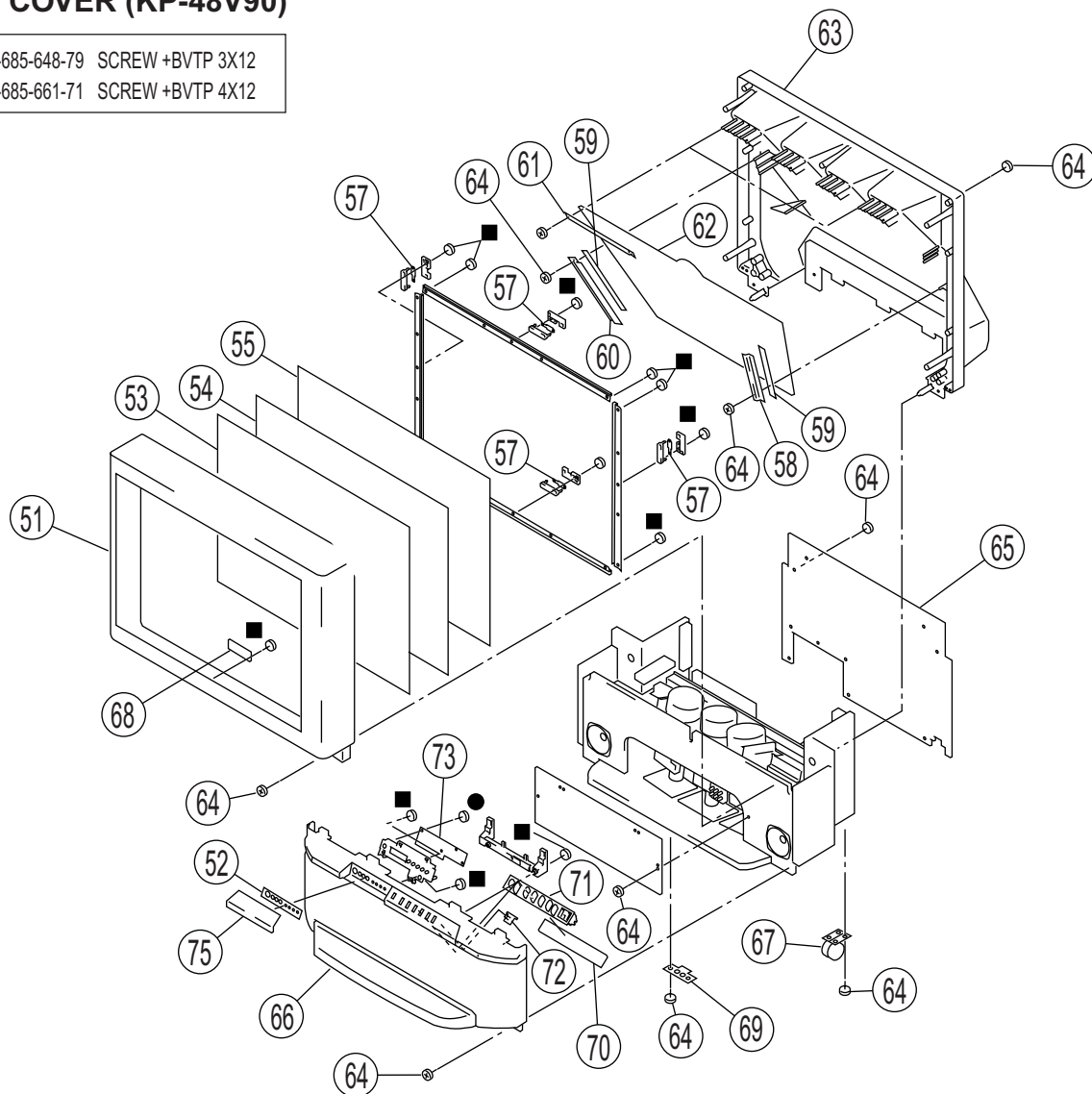
REF.NO.	PART NO.	DESCRIPTION
	251	4-056-258-11 LENS (DELTA 78)
	253	8-733-571-31 CRT 07MXC2(R)(NEW GUN)
	254	8-733-570-31 CRT 07MXC2(G)(NEW GUN)
	255	8-733-574-21 CRT 07MAC2(B)(C/D CPL)
	256	1-451-496-11 DEFLECTION YOKE
	257	1-452-790-21 NECK ASSY
	258	A-1331-922-A CR BOARD MOUNTED
*	259	A-1331-923-A CG BOARD MOUNTED
*	260	A-1331-924-A CB BOARD, MOUNTED
	263	4-373-137-01 CAP (Z), RUBBER
	264	8-598-955-31 BLOCK ASSY, HV HVB-1031
	269	1-452-909-41 MAGNET ASSY, 4 POLE
	270	4-052-894-01 SCREW (4X20) TAPPING

NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.


NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


### 6-4. COVER (KP-48V90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-71 SCREW +BVTP 4X12



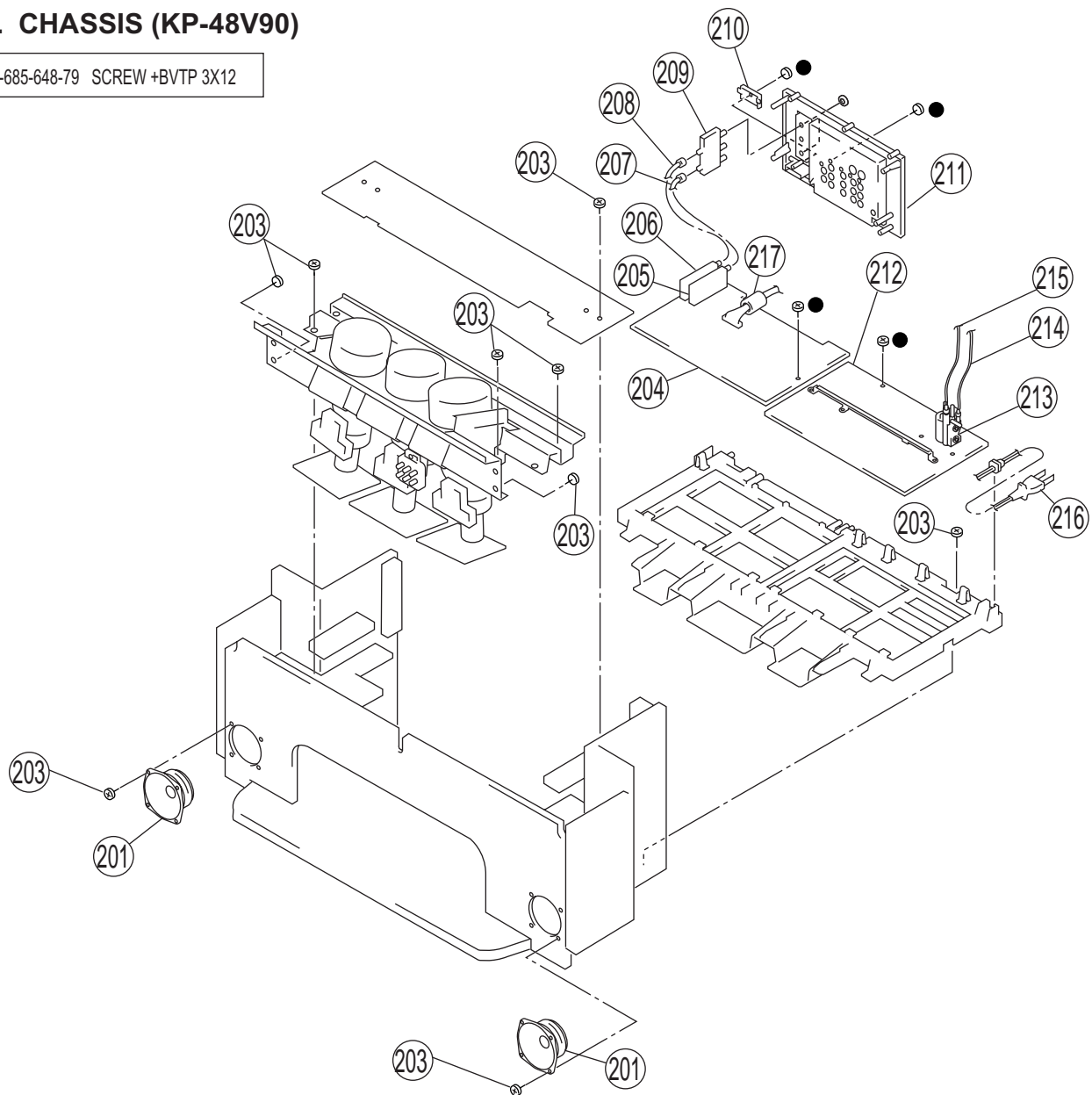
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	[ASS'Y INCLUDES]
51	X-4038-919-1	BEZNET ASSY (48V)	64	4-081-063-01	SCREW DOME WASHER, (4X20) TAPPING	
52	4-072-529-01	LABEL (2), SPEAKER GRILLE	*	65	4-071-126-01	BOARD, REAR (48)
53	4-081-066-11	SCREEN (48) CONTRAST	66	X-4038-922-1	GRILLE ASSY, SPEAKER	[75]
54	4-075-440-11	PLATE (48L), DIFFUSION	67	4-040-755-01	CASTER (DIA. 30)	
55	4-058-455-12	PLATE (F), DIFFUSION	*	68	A-1372-618-A	HC BOARD, MOUNTED
*	57	A-1390-933-A	69	4-075-020-01	FOOT, PLASTIC	
*	58	4-051-789-02	*	70	A-1372-619-A	HA BOARD, MOUNTED
*	59	4-049-098-01	71	4-069-681-21	BUTTON, MULTI	
*	60	4-051-790-02	72	4-069-682-01	GUIDE, LED	
*	61	4-070-345-21	*	73	A-1372-620-A	HB BOARD, MOUNTED
	62	4-071-048-02	75	4-069-671-41	DOOR (V), CONTROL	
*	63	4-057-610-03				







**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


### 6-5. CHASSIS (KP-48V90)

- 7-685-648-79 SCREW +BVTP 3X12



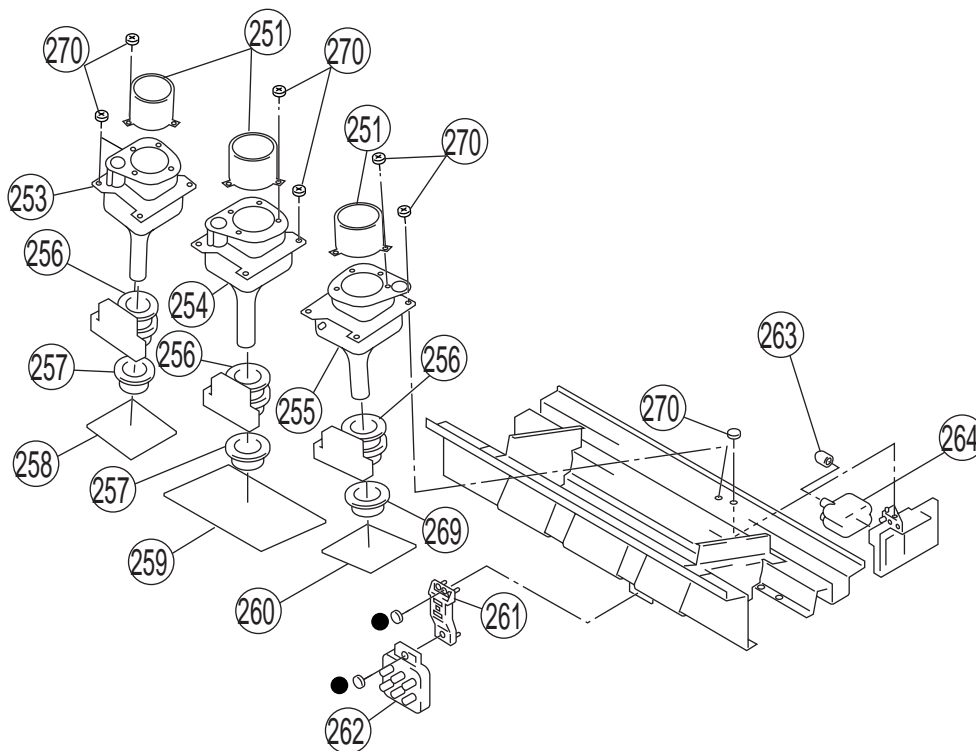
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
201	1-529-396-12	SPEAKER (10CM)	 211	4-069-674-22	TERMINAL BOARD
203	4-081-063-01	SCREW, DOME WASHER HEX TAPPING (4 X 20)	* 212	A-1316-498-A	G BOARD, COMPLETE The high voltage leads associated with the FBT on this board are not included and must be ordered separately. See items 214 and 215.
* 204	A-1299-423-A	A BOARD, COMPLETE	 213	1-453-238-31	FBT ASSY, NX-4007//X4P4
205	8-598-430-50	TUNER, FSS BTF-FA401	 214	1-900-249-96	FOCUS LEAD ASSY
206	8-598-542-50	TUNER, FSS BTF-WA412	 215	1-779-095-23	LEAD ASSY, HIGH-VOLTAGE
* 207	1-557-056-31	CABLE, P-P	 216	1-790-001-11	CORD, AC POWER (WITH CONNECTOR)
* 208	1-556-945-21	CABLE, P-P	217	1-500-021-11	CLAMP, SLEEVE FERRITE
 209	8-598-414-20	CHANGER, ANTENNA AS-2F			
210	4-069-675-01	CAP, TERMINAL BOARD			









**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.


### 6-6. PICTURE TUBE (KP-48V90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-71 SCREW +BVTP 4X12



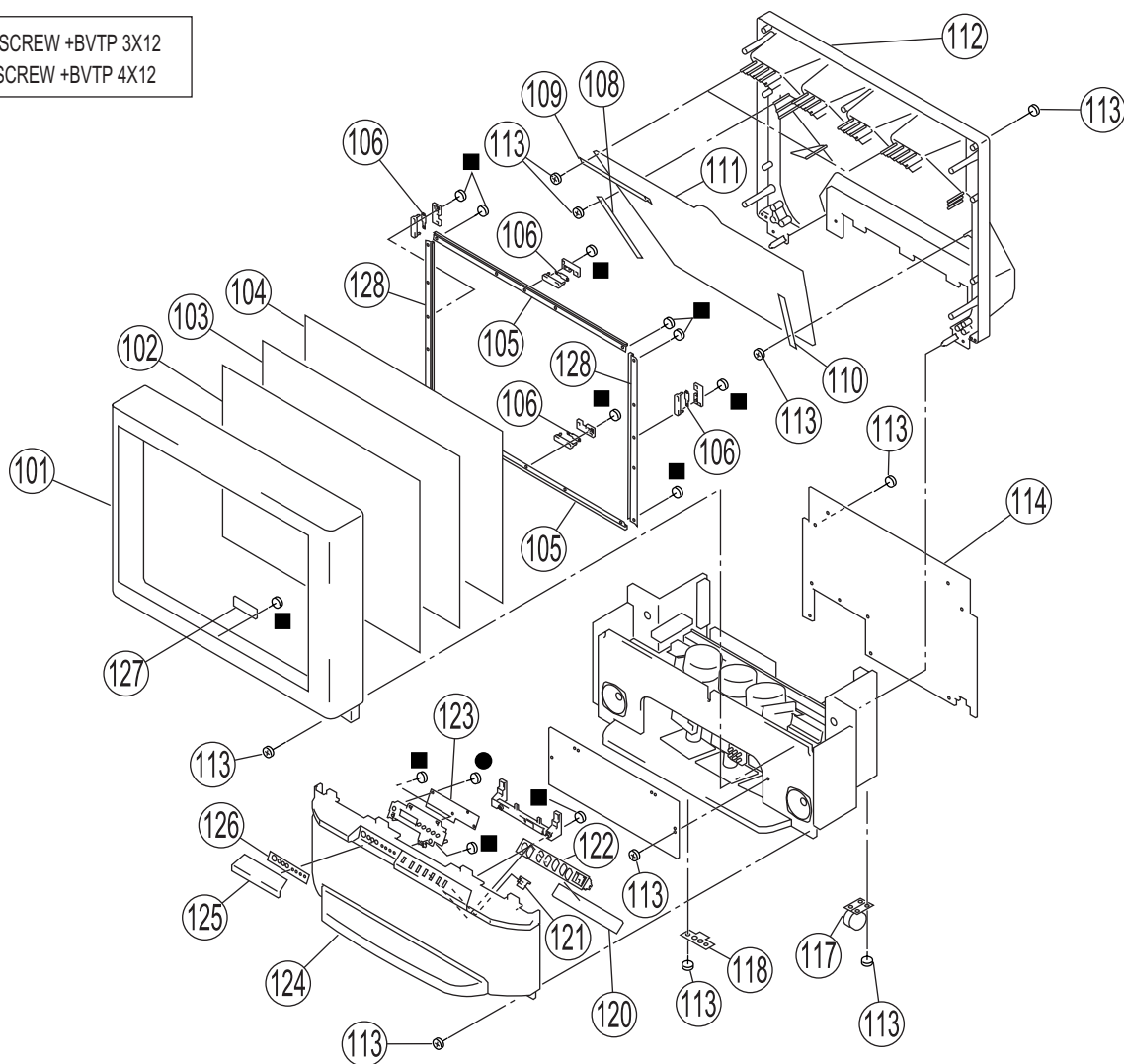
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
	251	4-056-258-11 LENS (DELTA 78)		262	1-223-925-81 RESISTOR ASSY (HIGH-VOLTAGE)
	253	8-733-572-31 CRT 07MXC3(R) (NEW GUN)		263	4-373-137-01 CAP (Z), RUBBER
	254	8-733-570-31 CRT 07MXC2(G) (NEW GUN)		264	8-598-955-31 BLOCK ASSY, HV HVB-1031
	255	8-733-575-21 CRT 07MAC3(B) (C/D CPL)		269	1-452-909-41 MAGNET ASSY, 4 POLE
	256	1-451-496-11 DEFLECTION YOKE		270	4-052-894-01 SCREW (4X20), HEAD TAPPING
	257	1-452-790-31 NECK ASSY			
*	258	A-1331-922-A CR BOARD, MOUNTED			
*	259	A-1331-923-A CG BOARD, MOUNTED			
*	260	A-1331-924-A CB BOARD, MOUNTED			
*	261	4-063-403-01 BRACKET, FOCUS PACK			

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-7. COVER (KP-53V90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-14 SCREW +BVTP 4X12



REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	[ASS'Y INCLUDES]
101	X-4038-921-1	BEZNET ASSY	*	114	4-082-770-01	BOARD REAR
102	4-081-065-11	SCREEN (53), CONTRAST		117	4-040-755-01	CASTER (DIA. 30)
103	4-070-525-01	PLATE (L), DIFFUSION		118	4-075-020-01	FOOT, PLASTIC
104	4-070-602-11	PLATE (F), DIFFUSION	*	120	A-1372-619-A	HA BOARD, MOUNTED
* 105	4-070-328-12	HOLDER (L), SCREEN YC		121	4-069-682-01	GUIDE, LED
* 106	A-1390-933-A	S BOARD, MOUNTED		122	4-069-681-21	BUTTON, MULTI
* 108	4-081-504-01	HOLDER (SL), MIRROR	*	123	A-1372-620-A	HB BOARD, MOUNTED
* 109	4-070-345-11	HOLDER (TOP), MIRROR		124	X-4038-922-1	GRILLE ASSY, SPEAKER [125]
* 110	4-081-505-01	HOLDER (SR), MIRROR		125	4-069-671-41	DOOR (V), CONTROL
111	4-070-344-01	MIRROR, REFLECTION		126	4-072-529-01	LABEL (2), SPEAKER GRILLE
* 112	4-081-503-01	COVER, MIRROR	*	127	A-1372-618-A	HC BOARD, MOUNTED
113	4-081-063-01	SCREW, DOME WASHER (4 X 20)	*	128	4-070-330-02	HOLDER (S), SCREEN YC

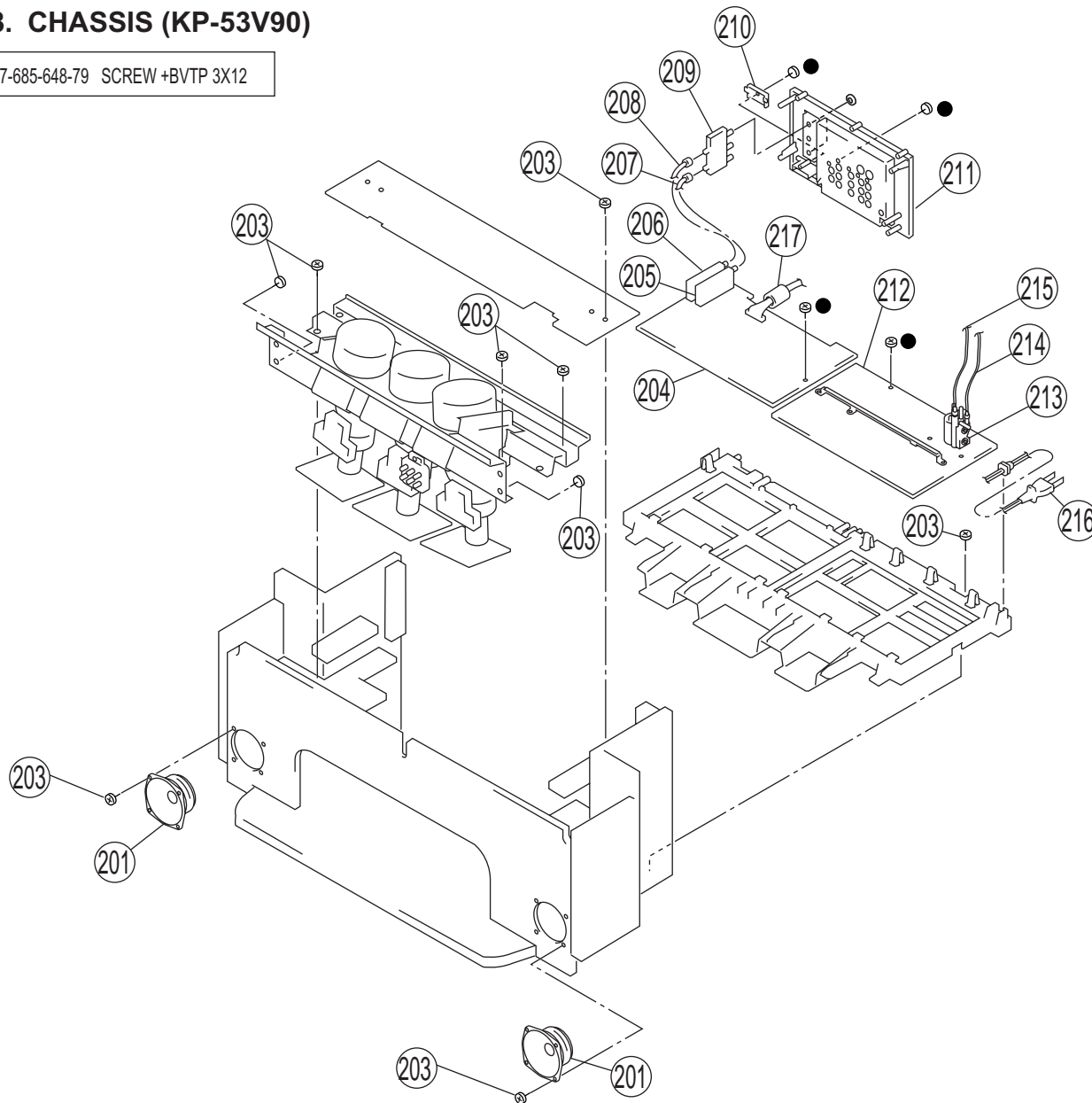


NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-8. CHASSIS (KP-53V90)

- 7-685-648-79 SCREW +BVTP 3X12



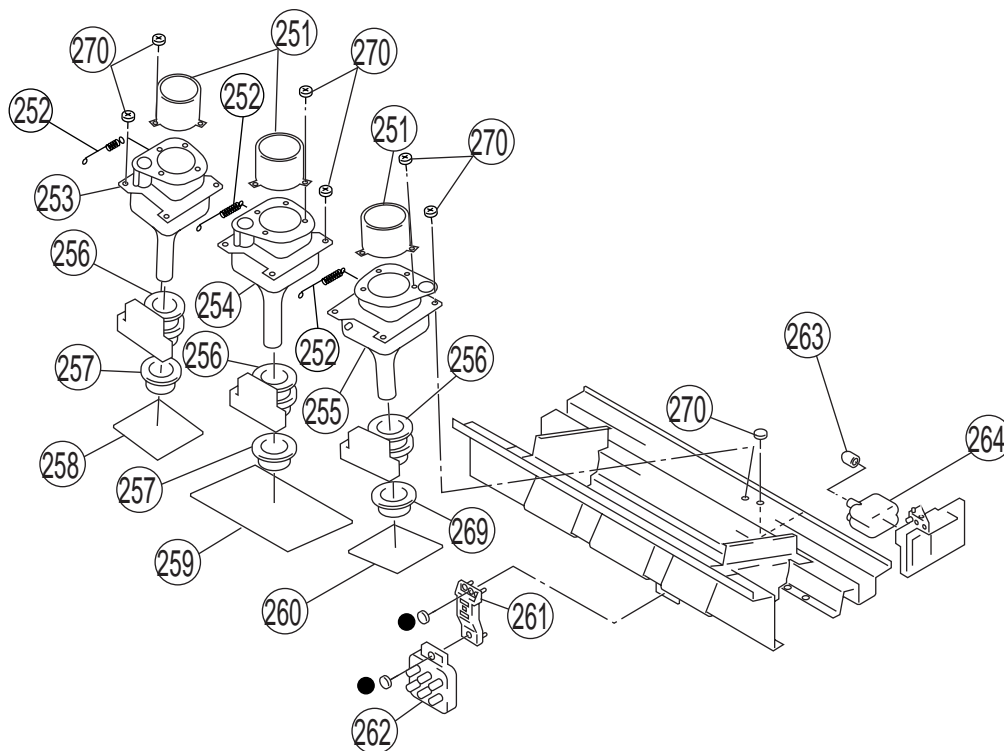
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
201	1-529-396-12	SPEAKER (10CM)	210	4-069-675-01	CAP, TERMINAL BOARD
203	4-081-063-01	SCREW, DOME WASHER HEX TAP 4X20	⚠ 211	4-069-674-22	TERMINAL BOARD
* 204	A-1299-423-A	A BOARD, COMPLETE	* 212	A-1316-499-A	G BOARD, COMPLETE
205	8-598-430-50	TUNER, FSS BTF-FA401	The high voltage leads associated with the FBT on this board are not included and must be ordered separately. See items 214 and 215.		
206	8-598-542-50	TUNER, FSS BTF-WA412	⚠ 213	1-453-238-31	FBT ASSY, NX-4007//X4P4
* 207	1-557-056-31	CABLE, P-P	⚠ 214	1-900-249-96	FOCUS LEAD ASSY
* 208	1-556-945-21	CABLE, P-P	⚠ 215	1-779-095-23	LEAD ASSY, HIGH-VOLTAGE
⚠ 209	8-598-414-20	CHANGER, ANTENNA AS-2F	⚠ 216	1-790-001-11	CORD, AC POWER (WITH CONNECTOR)
			217	1-500-021-11	CLAMP, SLEEVE FERRITE

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

### 6-9. PICTURE TUBE (KP-53V90)

- 7-685-648-79 SCREW +BVTP 3X12



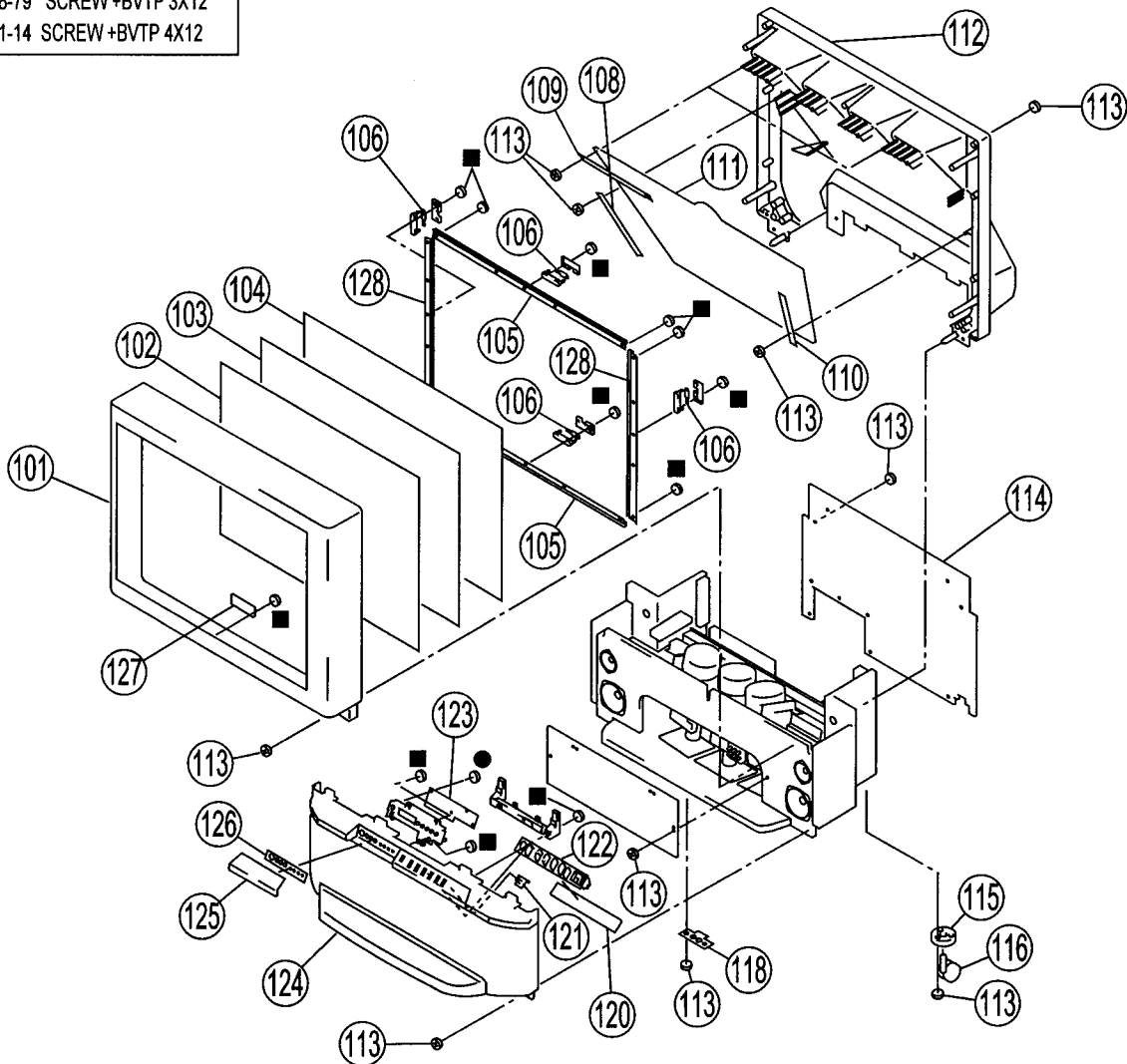
REF.NO.	PART NO.	DESCRIPTION
251	4-056-258-11	LENS (DELTA 78)
⚠ 253	8-733-572-31	CRT 07MXC3(R)(NEW GUN)
⚠ 254	8-733-575-21	CRT 07MAC3(B)(C/D CPL)
⚠ 255	8-733-570-31	CRT 07MXC2(G)(NEW GUN)
⚠ 256	1-451-496-11	DEFLECTION YOKE
⚠ 257	1-452-790-31	NECK ASSY
* 258	A-1331-922-A	CR BOARD, MOUNTED
* 259	A-1331-923-A	CG BOARD, MOUNTED
* 260	A-1331-924-A	CB BOARD, MOUNTED
⚠* 261	4-063-403-01	BRACKET, FOCUS PACK
⚠ 262	1-223-925-81	RESISTOR ASSY (HIGH-VOLTAGE)
263	4-373-137-01	CAP (Z), RUBBER
⚠ 264	8-598-955-31	BLOCK ASSY, HV HVB-1031
⚠ 269	1-452-909-41	MAGNET ASSY, 4 POLE
270	4-052-894-01	SCREW (4X20) TAPPING

NOTE: The components identified by shading and  $\triangle$  mark are critical for safety. Replace only with part number specified.


NOTE: Les composants identifiés par un trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


### 6-10. COVER (KP-61V90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-14 SCREW +BVTP 4X12



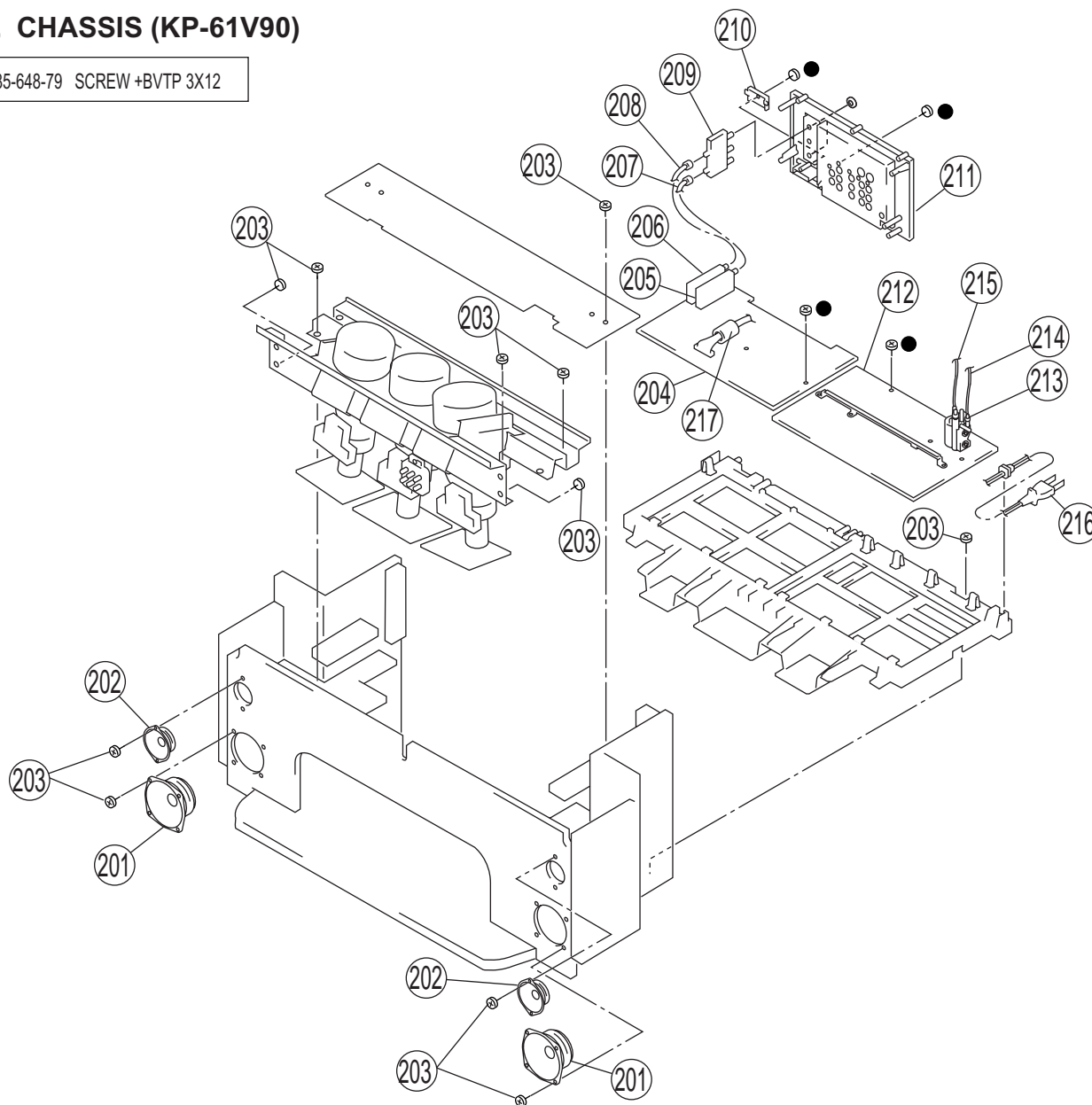
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	[ASS'Y INCLUDES]
101	X-4038-910-2	BEZNET ASSY	115	4-030-850-01	SOCKET, CASTER	
102	4-081-067-11	SCREEN (61), CONTRAST	116	4-039-546-01	CASTER	
103	4-070-283-11	PLATE (L), DIFFUSION	118	4-075-020-01	FOOT, PLASTIC	
104	4-079-449-11	PLATE (61FV), DIFFUSION	* 120	A-1372-619-A	HA BOARD, MOUNTED	
* 105	4-070-329-02	HOLDER (L), SCREEN YC	121	4-069-682-01	GUIDE, LED	
* 106	A-1390-933-A	S BOARD, MOUNTED	122	4-069-681-21	BUTTON, MULTI	
* 108	4-069-689-01	HOLDER (L), MIRROR	* 123	A-1372-620-A	HB BOARD, MOUNTED	
* 109	4-070-345-01	HOLDER (TOP), MIRROR	* 124	X-4038-911-1	GRILLE ASSY, SPEAKER	[125]
* 110	4-069-690-01	HOLDER (R), MIRROR	125	4-069-671-41	DOOR (V), CONTROL	
111	4-070-922-01	MIRROR, REFLECTION	126	4-072-529-01	LABEL (2), SPEAKER GRILLE	
113	4-081-063-01	SCREW, DOME WASHER HEX TAP 4X20	* 127	A-1372-618-A	HC BOARD, MOUNTED	
* 112	4-069-695-01	COVER, MIRROR	* 128	4-070-334-02	HOLDER (S), SCREEN YC	
* 114	4-070-920-02	BOARD, REAR				







NOTE: The components identified by shading and  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-11. CHASSIS (KP-61V90)

- 7-685-648-79 SCREW +BVTP 3X12



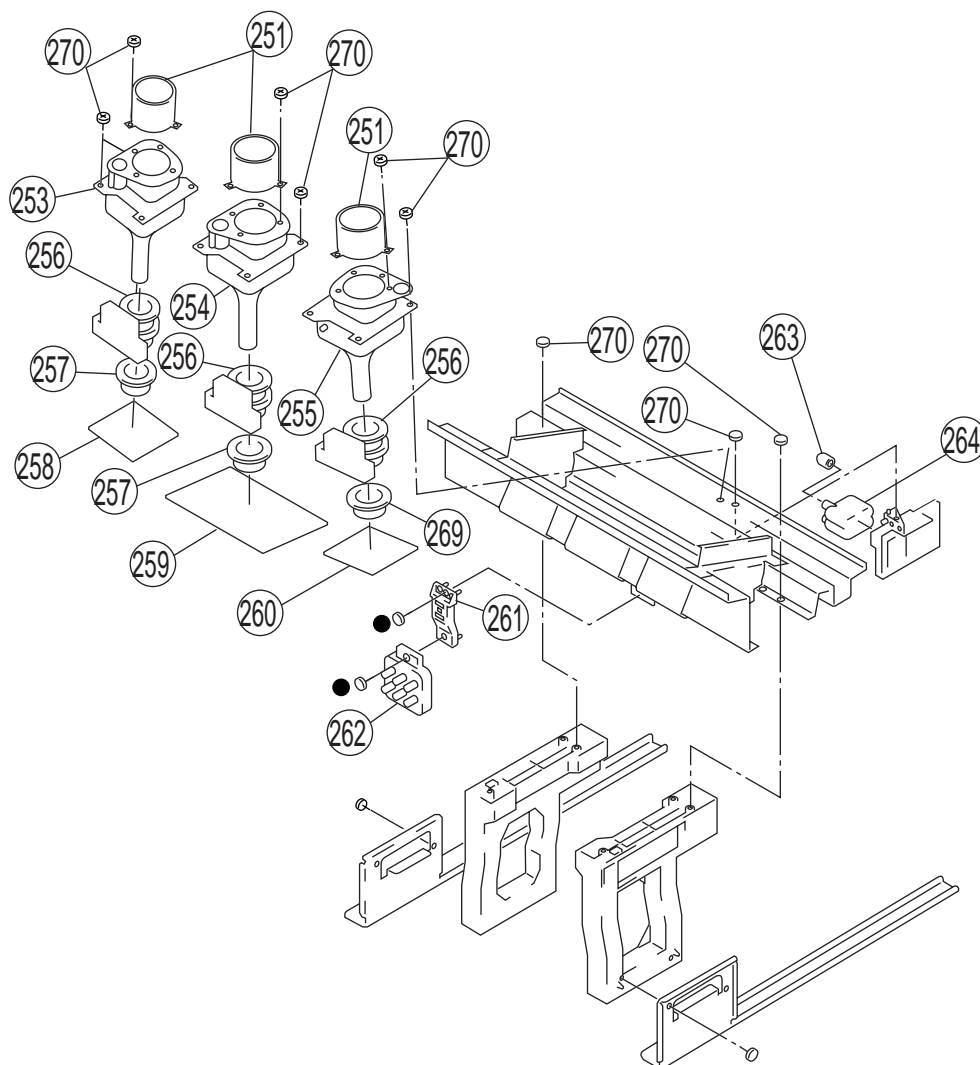
REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
201	1-529-402-11	SPEAKER (16CM)			
202	1-529-403-21	SPEAKER (6.6CM)			
203	4-052-894-01	SCREW (4 X 20) TAPPING			
* 204	A-1299-423-A	A BOARD, COMPLETE			
* 207	1-557-056-31	CABLE, P-P			
* 208	1-556-945-21	CABLE, P-P			
 209	1-771-787-11	SWITCH, RF ANTENNA			
210	4-069-675-01	CAP, TERMINAL BOARD			
 211	4-069-674-22	TERMINAL BOARD			
			* 212	A-1316-498-A	G BOARD COMPLETE The high voltage leads associated with the FBT on this board are not included and must be ordered separately. See items 214 and 215.
			 213	1-453-238-31	FBT ASSY, NX-4007/X4P4
			 214	1-900-249-96	FOCUS LEAD ASSY
			 215	1-779-095-23	LEAD ASSY, HIGH-VOLTAGE
			 216	1-790-001-11	CORD, AC POWER (WITH CONNECTOR)
			217	1-500-021-11	CLAMP, SLEEVE FERRITE

**NOTE:** The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.


### 6-12. PICTURE TUBE (KP-61V90)


● 7-685-648-79 SCREW +BVTP 3X12




REF.NO.	PART NO.	DESCRIPTION
	251	4-040-131-21 LENS (LINIT POINT 6)
⚠	253	8-733-573-31 CRT 07MXC4(R)(NEW GUN)
⚠	254	8-733-570-31 CRT 07MXC2(G)(NEW GUN)
⚠	255	8-733-576-21 CRT 07MAC4(B)(E)(C/D CPL)
⚠	256	1-451-496-11 DEFLECTION YOKE
⚠	257	1-452-790-31 NECK ASSY
*	258	A-1331-922-A CR BOARD, MOUNTED
*	259	A-1331-923-A CG BOARD, MOUNTED
*	260	A-1331-924-A CB BOARD, MOUNTED
⚠*	261	4-063-403-01 BRACKET, FOCUS PACK
⚠	262	1-223-925-81 RESISTOR ASSY (HIGH-VOLTAGE)
	263	4-373-137-01 CAP (Z), RUBBER
⚠	264	8-598-955-31 BLOCK ASSY, HV HVB-1031
⚠	269	1-452-909-41 MAGNET ASSY, 4 POLE

## SECTION 7: ELECTRICAL PARTS LIST

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When ordering parts by reference number, please include the board name.

The components in this manual identified by the following symbol:  indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.


Should replacement be required for one of these components, replace only with the value originally used.

\* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

### RESISTORS

- All resistors are in ohms
- F : nonflammable
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.



REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
	* A-1299-423-A	A BOARD, COMPLETE		C103	1-162-921-11	CERAMIC CHIP	33pF 5% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+)		C104	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V
		<b>CAPACITOR</b>		C105	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V
C002	1-164-816-11	CERAMIC CHIP	220pF 2% 50V	C106	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V
C003	1-107-826-11	CERAMIC CHIP	0.1µF 10% 16V	C107	1-104-664-11	ELECT	47µF 20% 25V
C004	1-165-176-11	CERAMIC CHIP	0.047µF 10% 16V	C126	1-104-664-11	ELECT	47µF 20% 25V
C005	1-126-935-11	ELECT	470µF 20% 6.3V	C128	1-104-664-11	ELECT	47µF 20% 25V
C006	1-126-960-11	ELECT	1µF 20% 50V	C151	1-126-935-11	ELECT	470µF 20% 16V
C015	1-164-816-11	CERAMIC CHIP	220pF 2% 50V	C152	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C016	1-165-176-11	CERAMIC CHIP	0.047µF 10% 16V	C153	1-162-974-11	CERAMIC CHIP	0.01µF 50V
C039	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	C154	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C040	1-126-916-11	ELECT	1000µF 20% 6.3V	C155	1-104-664-11	ELECT	47µF 20% 25V
C041	1-162-916-11	CERAMIC CHIP	12pF 5% 50V	C156	1-126-933-11	ELECT	100µF 20% 16V
C042	1-126-960-11	ELECT	1µF 20% 50V	C157	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C044	1-162-917-11	CERAMIC CHIP	15pF 5% 50V	C159	1-162-966-11	CERAMIC CHIP	0.0022µF 10% 50V
C072	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	C161	1-126-968-11	ELECT	100µF 20% 50V
C080	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C162	1-126-960-11	ELECT	1µF 20% 50V
C081	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C163	1-126-959-11	ELECT	0.47µF 20% 50V
C082	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C164	1-104-664-11	ELECT	47µF 20% 25V
C085	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	C165	1-104-664-11	ELECT	47µF 20% 25V
C086	1-162-916-11	CERAMIC CHIP	12pF 5% 50V	C166	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C087	1-126-964-11	ELECT	10µF 20% 50V	C167	1-126-935-11	ELECT	470µF 20% 16V
C091	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C168	1-162-974-11	CERAMIC CHIP	0.01µF 50V
C093	1-126-933-11	ELECT	100µF 20% 16V	C170	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C094	1-107-826-11	CERAMIC CHIP	0.1µF 10% 16V	C171	1-126-933-11	ELECT	100µF 20% 16V
C098	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C172	1-126-964-11	ELECT	10µF 20% 50V
C099	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C173	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
C100	1-162-915-11	CERAMIC CHIP	10pF 0.50pF 50V	C174	1-126-933-11	ELECT	100µF 20% 16V
C101	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V	C175	1-104-664-11	ELECT	47µF 20% 25V
C102	1-162-921-11	CERAMIC CHIP	33pF 5% 50V	C176	1-162-966-11	CERAMIC CHIP	0.0022µF 10% 50V
				C177	1-126-959-11	ELECT	0.47µF 20% 50V
				C178	1-126-960-11	ELECT	1µF 20% 50V
				C179	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V
				C180	1-162-970-11	CERAMIC CHIP	0.01µF 10% 25V



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
C276	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C325	1-126-964-11	ELECT	10µF	20%	50V
C277	1-126-959-11	ELECT	0.47µF	20%	50V	C326	1-104-664-11	ELECT	47µF	20%	25V
C279	1-126-959-11	ELECT	0.47µF	20%	50V	C327	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C280	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C281	1-130-495-00	MYLAR	0.1µF	5%	50V	C329	1-104-664-11	ELECT	47µF	20%	25V
C282	1-130-495-00	MYLAR	0.1µF	5%	50V	C418	1-126-964-11	ELECT	10µF	20%	50V
C283	1-130-495-00	MYLAR	0.1µF	5%	50V	C427	1-126-964-11	ELECT	10µF	20%	50V
C284	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C433	1-126-963-11	ELECT	4.7µF	20%	50V
C285	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C437	1-130-489-00	MYLAR	0.033µF	5%	50V
C286	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C438	1-104-664-11	ELECT	47µF	20%	25V
C287	1-126-964-11	ELECT	10µF	20%	50V	C439	1-126-960-11	ELECT	1µF	20%	50V
C288	1-130-495-00	MYLAR	0.1µF	5%	50V	C440	1-126-963-11	ELECT	4.7µF	20%	50V
C289	1-137-581-11	FILM	0.1µF	5%	100V	C441	1-130-477-00	MYLAR	0.0033µF	5%	50V
C290	1-126-935-11	ELECT	470µF	20%	16V	C442	1-130-489-00	MYLAR	0.033µF	5%	50V
C291	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C443	1-130-471-00	MYLAR	0.001µF	5%	50V
C293	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V	C444	1-126-963-11	ELECT	4.7µF	20%	50V
C294	1-130-495-00	MYLAR	0.1µF	5%	50V	C445	1-126-963-11	ELECT	4.7µF	20%	50V
C296	1-126-961-11	ELECT	2.2µF	20%	50V	C446	1-130-477-00	MYLAR	0.0033µF	5%	50V
C297	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C447	1-130-489-00	MYLAR	0.033µF	5%	50V
C299	1-126-959-11	ELECT	0.47µF	20%	50V	C448	1-130-471-00	MYLAR	0.001µF	5%	50V
C300	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C449	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C301	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C450	1-126-963-11	ELECT	4.7µF	20%	50V
C302	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C451	1-126-933-11	ELECT	100µF	20%	16V
C303	1-126-933-11	ELECT	100µF	20%	16V	C453	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C304	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C454	1-130-489-00	MYLAR	0.033µF	5%	50V
C305	1-162-968-11	CERAMIC CHIP	.0047µF	10%	50V	C456	1-126-933-11	ELECT	100µF	20%	16V
C306	1-126-959-11	ELECT	0.47µF	20%	50V	C457	1-126-934-11	ELECT	220µF	20%	16V
C307	1-126-959-11	ELECT	0.47µF	20%	50V	C458	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C308	1-126-963-11	ELECT	4.7µF	20%	50V	C459	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C309	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C460	1-126-943-11	ELECT	2200µF	20%	25V
C310	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C461	1-126-943-11	ELECT	2200µF	20%	25V
C311	1-126-960-11	ELECT	1µF	20%	50V	C462	1-126-961-11	ELECT	2.2µF	20%	50V
C312	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V	C463	1-126-961-11	ELECT	2.2µF	20%	50V
C313	1-164-816-11	CERAMIC CHIP	220pF	2%	50V	C464	1-126-933-11	ELECT	100µF	20%	16V
C314	1-104-664-11	ELECT	47µF	20%	25V	C465	1-104-664-11	ELECT	47µF	20%	25V
C315	1-162-924-11	CERAMIC CHIP	56pF	5%	50V	C466	1-104-664-11	ELECT	47µF	20%	25V
C316	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C467	1-104-664-11	ELECT	47µF	20%	25V
C317	1-104-664-11	ELECT	47µF	20%	25V	C468	1-126-963-11	ELECT	4.7µF	20%	50V
C318	1-126-933-11	ELECT	100µF	20%	16V	C469	1-104-664-11	ELECT	47µF	20%	25V
C319	1-126-964-11	ELECT	10µF	20%	50V	C470	1-104-664-11	ELECT	47µF	20%	25V
C320	1-126-934-11	ELECT	220µF	20%	16V	C473	1-104-665-11	ELECT	100µF	20%	25V
C321	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C474	1-130-495-00	MYLAR	0.1µF	5%	50V
C323	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C475	1-130-495-00	MYLAR	0.1µF	5%	50V
						C476	1-130-495-00	MYLAR	0.1µF	5%	50V





REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
C477	1-130-495-00	MYLAR	0.1μF	5%	50V	C850	1-104-664-11	ELECT	47μF	20%	25V
C681	1-104-664-11	ELECT	47μF	20%	25V	C851	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C682	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C852	1-104-664-11	ELECT	47μF	20%	25V
C683	1-126-935-11	ELECT	470μF	20%	16V	C855	1-162-960-11	CERAMIC CHIP	220pF	10%	50V
C684	1-126-933-11	ELECT	100μF	20%	16V	C856	1-104-664-11	ELECT	47μF	20%	25V
C685	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C858	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C686	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C862	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C687	1-104-664-11	ELECT	47μF	20%	25V	C863	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C688	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C864	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C801	1-164-730-11	CERAMIC CHIP	0.0012μF	10%	50V	C865	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C802	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V	C866	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C803	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V	C867	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V
C804	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C868	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C805	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C869	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C806	1-104-664-11	ELECT	47μF	20%	25V	C870	1-104-664-11	ELECT	47μF	20%	25V
C807	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C871	1-126-963-11	ELECT	4.7μF	20%	50V
C808	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V	C872	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C809	1-164-173-11	CERAMIC CHIP	0.0039μF	10%	50V	C873	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C810	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C875	1-104-664-11	ELECT	47μF	20%	25V
C811	1-104-664-11	ELECT	47μF	20%	25V	C876	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C812	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C877	1-104-664-11	ELECT	47μF	20%	25V
C813	1-104-664-11	ELECT	47μF	20%	25V	C878	1-104-664-11	ELECT	47μF	20%	25V
C814	1-164-816-11	CERAMIC CHIP	220pF	2%	50V	C879	1-104-664-11	ELECT	47μF	20%	25V
C815	1-164-816-11	CERAMIC CHIP	220pF	2%	50V	C880	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C816	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C881	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C818	1-164-816-11	CERAMIC CHIP	220pF	2%	50V	C882	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C819	1-164-816-11	CERAMIC CHIP	220pF	2%	50V	C883	1-104-664-11	ELECT	47μF	20%	25V
C820	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C884	1-104-664-11	ELECT	47μF	20%	25V
C821	1-104-664-11	ELECT	47μF	20%	25V	C885	1-104-664-11	ELECT	47μF	20%	25V
C822	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C886	1-104-664-11	ELECT	47μF	20%	25V
C823	1-104-664-11	ELECT	47μF	20%	25V	C887	1-104-664-11	ELECT	47μF	20%	25V
C824	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C888	1-104-664-11	ELECT	47μF	20%	25V
C825	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C889	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C830	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C890	1-104-664-11	ELECT	47μF	20%	25V
C831	1-104-664-11	ELECT	47μF	20%	25V	C891	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C832	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C892	1-104-664-11	ELECT	47μF	20%	25V
C833	1-104-664-11	ELECT	47μF	20%	25V	C893	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C834	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C894	1-104-664-11	ELECT	47μF	20%	25V
C835	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C897	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C842	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C898	1-126-934-11	ELECT	220μF	20%	16V
C843	1-104-664-11	ELECT	47μF	20%	25V	C899	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C845	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C900	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C848	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C901	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V
C849	1-104-664-11	ELECT	47μF	20%	25V						





REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
C902	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C959	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C903	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C960	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C904	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C961	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C905	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C962	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C906	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C963	1-104-664-11	ELECT	47μF	20%	25V
C907	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C964	1-104-664-11	ELECT	47μF	20%	25V
C908	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C965	1-104-664-11	ELECT	47μF	20%	25V
C909	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C966	1-104-664-11	ELECT	47μF	20%	25V
C910	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C967	1-104-664-11	ELECT	47μF	20%	25V
C911	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V	C968	1-104-664-11	ELECT	47μF	20%	25V
C912	1-104-664-11	ELECT	47μF	20%	25V	C969	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C913	1-104-664-11	ELECT	47μF	20%	25V	C970	1-164-156-11	CERAMIC CHIP	0.1μF	25V	
C914	1-104-664-11	ELECT	47μF	20%	25V	C971	1-104-664-11	ELECT	47μF	20%	25V
C915	1-104-664-11	ELECT	47μF	20%	25V	C1102	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C916	1-104-664-11	ELECT	47μF	20%	25V	C1103	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C917	1-104-664-11	ELECT	47μF	20%	25V	C1104	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C918	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1105	1-104-664-11	ELECT	47μF	20%	25V
C919	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1106	1-104-664-11	ELECT	47μF	20%	25V
C920	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1107	1-126-959-11	ELECT	0.47μF	20%	50V
C921	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1108	1-104-664-11	ELECT	47μF	20%	25V
C922	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1109	1-126-959-11	ELECT	0.47μF	20%	50V
C923	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V	C1110	1-126-959-11	ELECT	0.47μF	20%	50V
C926	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C1111	1-126-959-11	ELECT	0.47μF	20%	50V
C927	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1112	1-104-664-11	ELECT	47μF	20%	25V
C928	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1113	1-104-664-11	ELECT	47μF	20%	25V
C929	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1114	1-104-664-11	ELECT	47μF	20%	25V
C930	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1115	1-126-959-11	ELECT	0.47μF	20%	50V
C931	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1116	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C932	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1117	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C933	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1118	1-164-816-11	CERAMIC CHIP	220pF	2%	50V
C934	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1119	1-126-964-11	ELECT	10μF	20%	50V
C935	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1120	1-126-964-11	ELECT	10μF	20%	50V
C936	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1121	1-126-960-11	ELECT	1μF	20%	50V
C937	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1122	1-113-619-11	CERAMIC CHIP	0.47μF	10V	
C938	1-162-968-11	CERAMIC CHIP	.0047μF	10%	50V	C1123	1-104-664-11	ELECT	47μF	20%	25V
C951	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1124	1-126-959-11	ELECT	0.47μF	20%	50V
C952	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1125	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C953	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1126	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C954	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1127	1-126-959-11	ELECT	0.47μF	20%	50V
C955	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1128	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C956	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1129	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C957	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1130	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C958	1-164-156-11	CERAMIC CHIP	0.1μF	25V		C1131	1-104-664-11	ELECT	47μF	20%	25V
						C1132	1-104-664-11	ELECT	47μF	20%	25V



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
C1133	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C1735	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1134	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C1736	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1135	1-115-416-11	CERAMIC CHIP	0.001μF	5%	25V						
C1138	1-104-664-11	ELECT	47μF	20%	25V	C1737	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1139	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C1738	1-104-664-11	ELECT	47μF	20%	25V
C1140	1-104-664-11	ELECT	47μF	20%	25V	C1741	1-126-964-11	ELECT	10μF	20%	50V
						C1742	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1601	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C1743	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1602	1-164-315-11	CERAMIC CHIP	470pF	5%	50V						
C1603	1-110-563-11	CERAMIC CHIP	0.068μF	10%	16V	C1745	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1604	1-162-969-11	CERAMIC CHIP	0.0068μF	10%	25V	C1746	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1605	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C1747	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
						C1748	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1606	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C1749	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1607	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V						
C1608	1-162-921-11	CERAMIC CHIP	33pF	5%	50V	C1750	1-126-964-11	ELECT	10μF	20%	50V
C1609	1-164-505-11	CERAMIC CHIP	2.2μF		16V	C1751	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C1619	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1752	1-164-156-11	CERAMIC CHIP	0.1μF		25V
						C1753	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
C1701	1-104-664-11	ELECT	47μF	20%	25V	C1754	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1702	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V						
C1703	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C1758	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1704	1-126-933-11	ELECT	100μF	20%	16V	C1759	1-126-935-11	ELECT	470μF	20%	6.3V
C1705	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C1761	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
						C1762	1-104-664-11	ELECT	47μF	20%	25V
C1706	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1763	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1707	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C1708	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1764	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1709	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1765	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1710	1-104-664-11	ELECT	47μF	20%	25V	C1766	1-126-964-11	ELECT	10μF	20%	50V
						C1768	1-104-664-11	ELECT	47μF	20%	25V
C1711	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1771	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1712	1-104-664-11	ELECT	47μF	20%	25V						
C1714	1-126-964-11	ELECT	10μF	20%	50V	C1774	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C1715	1-126-960-11	ELECT	1μF	20%	50V	C1775	1-104-664-11	ELECT	47μF	20%	25V
C1716	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C1776	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
						C1777	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C1717	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C1778	1-164-156-11	CERAMIC CHIP	0.1μF		25V
C1718	1-104-664-11	ELECT	47μF	20%	25V						
C1720	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1901	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1721	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1902	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
C1722	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1903	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
						C1904	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C1725	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1905	1-104-664-11	ELECT	47μF	20%	25V
C1726	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C1727	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C1906	1-104-664-11	ELECT	47μF	20%	25V
C1728	1-126-963-11	ELECT	4.7μF	20%	50V	C1907	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C1730	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1908	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
						C1909	1-104-664-11	ELECT	47μF	20%	25V
C1731	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1910	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
C1732	1-164-156-11	CERAMIC CHIP	0.1μF		25V						
C1733	1-164-156-11	CERAMIC CHIP	0.1μF		25V	C1911	1-104-664-11	ELECT	47μF	20%	25V



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES
C1912	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1914	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1915	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1916	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1917	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1918	1-104-664-11	ELECT	47μF	20%	25V				
C1919	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1920	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1921	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1922	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1924	1-104-664-11	ELECT	47μF	20%	25V				
C1925	1-104-664-11	ELECT	47μF	20%	25V				
C1926	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1927	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1928	1-104-664-11	ELECT	47μF	20%	25V				
C1929	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1930	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1931	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V				
C1938	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1939	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1946	1-162-920-11	CERAMIC CHIP	27pF	5%	50V				
C1947	1-162-920-11	CERAMIC CHIP	27pF	5%	50V				
C1952	1-104-664-11	ELECT	47μF	20%	25V				
C1954	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
C1970	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V				
	<b>CONNECTOR</b>								
*	CN001	1-564-507-11	PLUG,CONNECTOR	4P					
*	CN002	1-764-333-11	PLUG,CONNECTOR	10P					
	CN003	1-573-979-21	CONNECTOR, BOARD TO BOARD	11P					
	CN151	1-695-915-11	TAB (CONTACT)						
*	CN202	1-779-892-11	CONNECTOR, BOARD TO BOARD	10P					
*	CN203	1-564-509-11	PLUG,CONNECTOR	6P					
*	CN204	1-564-512-11	PLUG,CONNECTOR	9P					
	CN205	1-695-915-11	TAB (CONTACT)						
*	CN402	1-779-892-11	CONNECTOR, BOARD TO BOARD	10P					
*	CN403	1-564-507-11	PLUG,CONNECTOR	4P					
*	CN681	1-779-892-11	CONNECTOR, BOARD TO BOARD	10P					
*	CN801	1-779-892-11	CONNECTOR, BOARD TO BOARD	10P					
*	CN802	1-564-511-11	PLUG,CONNECTOR	8P					
	CN1702	1-764-334-11	PLUG,CONNECTOR	11P					
							<b>DIODE</b>		
						D001	8-719-988-61	DIODE 1SS355TE-17	
						D002	8-719-988-61	DIODE 1SS355TE-17	
						D003	8-719-988-61	DIODE 1SS355TE-17	
						D004	8-719-069-55	DIODE UDZSTE-175.6B	
						D005	8-719-988-61	DIODE 1SS355TE-17	
						D006	8-719-069-55	DIODE UDZSTE-175.6B	
						D007	8-719-069-55	DIODE UDZSTE-175.6B	
						D151	8-719-083-87	DIODE UDZS-TE17-33B	
						D202	8-719-977-28	DIODE UDZSTE-1710B	
						D206	8-719-988-61	DIODE 1SS355TE-17	
						D207	8-719-988-61	DIODE 1SS355TE-17	
						D208	8-719-069-55	DIODE UDZSTE-175.6B	
						D209	8-719-988-61	DIODE 1SS355TE-17	
						D301	8-719-988-61	DIODE 1SS355TE-17	
						D302	8-719-988-61	DIODE 1SS355TE-17	
						D303	8-719-988-61	DIODE 1SS355TE-17	
						D304	8-719-056-85	DIODE UDZSTE-178.2B	
						D305	8-719-977-28	DIODE UDZSTE-1710B	
						D306	8-719-977-28	DIODE UDZSTE-1710B	
						D307	8-719-977-28	DIODE UDZSTE-1710B	
						D402	8-719-988-61	DIODE 1SS355TE-17	
						D403	8-719-988-61	DIODE 1SS355TE-17	
						D404	8-719-988-61	DIODE 1SS355TE-17	
						D405	8-719-988-61	DIODE 1SS355TE-17	
						D406	8-719-083-85	DIODE UDZS-TE17-22B	
						D407	8-719-988-61	DIODE 1SS355TE-17	
						D408	8-719-988-61	DIODE 1SS355TE-17	
						D409	8-719-920-67	DIODE ERC91-02	
						D410	8-719-988-61	DIODE 1SS355TE-17	
						D412	8-719-083-85	DIODE UDZS-TE17-22B	
						D413	8-719-083-85	DIODE UDZS-TE17-22B	
						D416	8-719-920-67	DIODE ERC91-02	
						D417	8-719-083-85	DIODE UDZS-TE17-22B	
						D418	8-719-083-85	DIODE UDZS-TE17-22B	
						D419	8-719-083-85	DIODE UDZS-TE17-22B	
						D420	8-719-988-61	DIODE 1SS355TE-17	
						D421	8-719-988-61	DIODE 1SS355TE-17	
						D422	8-719-083-85	DIODE UDZS-TE17-22B	
						D423	8-719-083-85	DIODE UDZS-TE17-22B	
						D805	8-719-069-55	DIODE UDZSTE-175.6B	
						D806	8-719-069-55	DIODE UDZSTE-175.6B	
						D807	8-719-069-55	DIODE UDZSTE-175.6B	





REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
D808	8-719-069-55	DIODE UDZSTE-175.6B		<b>FERRITE BEAD</b>			
D809	8-719-988-61	DIODE 1SS355TE-17		FB001	1-414-234-22	FERRITE	0μH
D810	8-719-988-61	DIODE 1SS355TE-17		FB151	1-414-234-22	FERRITE	0μH
D816	8-719-988-61	DIODE 1SS355TE-17		FB152	1-414-234-22	FERRITE	0μH
D817	8-719-988-61	DIODE 1SS355TE-17		FB206	1-216-017-91	RES-CHIP	47 5% 1/10W
D818	8-719-988-61	DIODE 1SS355TE-17		FB209	1-216-017-91	RES-CHIP	47 5% 1/10W
D819	8-719-988-61	DIODE 1SS355TE-17		FB212	1-216-295-91	SHORT	
D820	8-719-988-61	DIODE 1SS355TE-17		FB215	1-216-295-91	SHORT	
D821	8-719-988-61	DIODE 1SS355TE-17		FB216	1-216-295-91	SHORT	
D822	8-719-988-61	DIODE 1SS355TE-17		FB217	1-216-295-91	SHORT	
D823	8-719-988-61	DIODE 1SS355TE-17		FB301	1-216-295-91	SHORT	
D824	8-719-988-61	DIODE 1SS355TE-17		FB801	1-414-234-22	FERRITE	0μH
D1101	8-719-069-55	DIODE UDZSTE-175.6B		FB802	1-414-234-22	FERRITE	0μH
D1103	8-719-977-28	DIODE UDZSTE-1710B		FB803	1-414-234-22	FERRITE	0μH
D1104	8-719-977-28	DIODE UDZSTE-1710B		FB804	1-500-245-11	FERRITE	0μH
D1105	8-719-977-28	DIODE UDZSTE-1710B		FB805	1-500-245-11	FERRITE	0μH
D1106	8-719-988-61	DIODE 1SS355TE-17		FB806	1-414-234-22	FERRITE	0μH
D1107	8-719-977-28	DIODE UDZSTE-1710B		FB807	1-414-234-22	FERRITE	0μH
D1108	8-719-977-28	DIODE UDZSTE-1710B		FB808	1-414-234-22	FERRITE	0μH
D1109	8-719-977-28	DIODE UDZSTE-1710B		FB809	1-500-245-11	FERRITE	0μH
D1110	8-719-977-28	DIODE UDZSTE-1710B		FB810	1-500-245-11	FERRITE	0μH
D1111	8-719-977-28	DIODE UDZSTE-1710B		FB811	1-500-245-11	FERRITE	0μH
D1112	8-719-977-28	DIODE UDZSTE-1710B		FB812	1-500-245-11	FERRITE	0μH
D1113	8-719-977-28	DIODE UDZSTE-1710B		FB1702	1-414-234-22	FERRITE	0μH
D1114	8-719-977-28	DIODE UDZSTE-1710B		FB1703	1-414-234-22	FERRITE	0μH
D1115	8-719-977-28	DIODE UDZSTE-1710B		FB1704	1-414-234-22	FERRITE	0μH
D1117	8-719-977-28	DIODE UDZSTE-1710B		FB1707	1-414-234-22	FERRITE	0μH
D1118	8-719-977-28	DIODE UDZSTE-1710B		FB1708	1-414-234-22	FERRITE	0μH
D1120	8-719-988-61	DIODE 1SS355TE-17		FB1710	1-414-234-22	FERRITE	0μH
D1121	8-719-977-28	DIODE UDZSTE-1710B		FB1711	1-414-234-22	FERRITE	0μH
D1122	8-719-977-28	DIODE UDZSTE-1710B		FB1713	1-414-234-22	FERRITE	0μH
D1124	8-719-988-61	DIODE 1SS355TE-17		FB1714	1-414-234-22	FERRITE	0μH
D1125	8-719-988-61	DIODE 1SS355TE-17		FB1715	1-414-234-22	FERRITE	0μH
D1127	8-719-977-28	DIODE UDZSTE-1710B		FB1716	1-414-234-22	FERRITE	0μH
D1131	8-719-977-28	DIODE UDZSTE-1710B		FB1717	1-414-234-22	FERRITE	0μH
D1132	8-719-977-28	DIODE UDZSTE-1710B		FB1718	1-414-234-22	FERRITE	0μH
D1701	8-719-988-61	DIODE 1SS355TE-17		FB1720	1-414-234-22	FERRITE	0μH
D1901	8-719-988-61	DIODE 1SS355TE-17		FB1721	1-414-234-22	FERRITE	0μH
D1902	8-719-988-61	DIODE 1SS355TE-17		FB1722	1-414-234-22	FERRITE	0μH
D1903	8-719-988-61	DIODE 1SS355TE-17		FB1901	1-414-234-22	FERRITE	0μH
D1905	8-719-988-61	DIODE 1SS355TE-17		FB2007	1-216-017-91	RES-CHIP	47 5% 1/10W
D1906	8-719-988-61	DIODE 1SS355TE-17					
D1907	8-719-988-61	DIODE 1SS355TE-17					



REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
<b><u>FILTER</u></b>				IC1701	8-759-642-22	IC UPC29M05T-E2	
FL1701	1-239-847-11	FILTER, LOW PASS		IC1702	8-759-568-27	IC UPD424210LE-60-E2	
FL1703	1-239-847-11	FILTER, LOW PASS		IC1703	8-759-594-44	IC UPD64082GF-3BA	
FL1704	1-239-847-11	FILTER, LOW PASS		IC1704	8-759-559-82	IC UPC29M33T-E1	
FL1705	1-233-736-21	FILTER, EMI		IC1901	8-752-080-75	IC CXA2039M-T6	
FL1706	1-233-736-21	FILTER, EMI		IC1902	8-759-830-24	IC SDA9588XB23	
<b><u>IC</u></b>				IC1903	8-759-677-02	IC BU4053BCF-E2	
IC001	8-759-352-91	IC PST9143NL		IC1904	8-752-058-68	IC CXA1315M-T4	
IC002	8-752-921-41	IC CXP750010-039Q-TL		IC1905	8-759-559-82	IC UPC29M33T-E1	
IC004	8-759-675-64	IC M24C08-MN6T(A)		<b><u>JACK</u></b>			
IC206	8-752-091-25	IC CXA2147Q		J1101	1-794-119-11	TERMINAL BLOCK, S	4P
IC403	8-759-690-57	IC BH3868BFS-E2		J1102	1-794-119-11	TERMINAL BLOCK, S	4P
IC404	8-759-100-96	IC NJM4558M-TE2		J1103	1-507-667-00	JACK, MIC	
IC406	8-759-190-89	IC TDA7265		J1104	1-794-116-11	JACK BLOCK, PIN 2P	
IC681	8-759-459-99	IC PQ09RD11		J1106	1-794-117-11	JACK BLOCK, PIN 3P	
IC682	8-759-459-99	IC PQ09RD11		J1107	1-794-116-11	JACK BLOCK, PIN 2P	
IC801	8-759-488-29	IC TC7W66FU(TE12R)		<b><u>CHIP CONDUCTOR</u></b>			
IC802	8-759-100-96	IC NJM4558M-TE2		JR005	1-216-295-91	SHORT	
IC803	8-759-589-66	IC CM0006CF		<b><u>COIL</u></b>			
IC804	8-759-100-96	IC NJM4558M-TE2		L001	1-414-856-11	INDUCTOR	10µH
IC805	8-752-921-37	IC CXP86324-030Q-TL		L004	1-410-397-21	FERRITE	1.1µH
IC807	8-759-546-22	IC UPD6376GS-E2		L151	1-414-187-11	INDUCTOR	47µH
IC808	8-759-032-11	IC TC74HC04AF(EL)		L152	1-414-187-11	INDUCTOR	47µH
IC809	8-759-669-75	IC TLC2932IPWR		L153	1-414-187-11	INDUCTOR	47µH
IC810	8-759-468-90	IC ST24E16FM6TR		L154	1-414-856-11	INDUCTOR	10µH
IC811	8-759-352-91	IC PST9143NL		L155	1-414-187-11	INDUCTOR	47µH
IC812	8-759-235-19	IC TC74HC08AF(EL)		L156	1-414-856-11	INDUCTOR	10µH
IC814	8-759-032-20	IC TC74HC32AF(EL)		L211	1-414-857-11	INDUCTOR	100µH
IC815	8-759-546-22	IC UPD6376GS-E2		L212	1-414-856-11	INDUCTOR	10µH
IC816	8-759-546-22	IC UPD6376GS-E2		L681	1-406-975-21	INDUCTOR	47µH
IC817	8-759-546-22	IC UPD6376GS-E2		L801	1-410-397-21	FERRITE	1.1µH
IC818	8-759-100-96	IC NJM4558M-TE2		L802	1-410-397-21	FERRITE	1.1µH
IC819	8-759-830-08	IC NJM2068V-TE2		L803	1-414-856-11	INDUCTOR	10µH
IC820	8-759-830-08	IC NJM2068V-TE2		L804	1-410-397-21	FERRITE	1.1µH
IC821	8-759-830-08	IC NJM2068V-TE2		L809	1-414-856-11	INDUCTOR	10µH
IC822	8-759-830-08	IC NJM2068V-TE2		L816	1-414-856-11	INDUCTOR	10µH
IC823	8-759-830-08	IC NJM2068V-TE2		L823	1-410-494-11	INDUCTOR	1MH
IC824	8-759-830-08	IC NJM2068V-TE2		L824	1-410-494-11	INDUCTOR	1MH
IC1101	8-752-081-32	IC CXA2079Q		L825	1-410-494-11	INDUCTOR	1MH
IC1601	8-759-638-04	IC Z8622912SSC-00TR		L826	1-410-494-11	INDUCTOR	1MH
IC1603	8-759-352-91	IC PST9143NL					





**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.

REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
L827	1-410-494-11	INDUCTOR	1MH	Q019	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L828	1-410-494-11	INDUCTOR	1MH	Q020	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L829	1-414-856-11	INDUCTOR	10µH	Q021	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L830	1-407-495-00	INDUCTOR	1.8MH	Q022	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L831	1-407-495-00	INDUCTOR	1.8MH	Q023	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L832	1-407-495-00	INDUCTOR	1.8MH	Q151	1-801-806-11	TRANSISTOR DTC144EKA-T146	
L833	1-407-495-00	INDUCTOR	1.8MH	Q152	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L834	1-407-495-00	INDUCTOR	1.8MH	Q153	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L835	1-407-495-00	INDUCTOR	1.8MH	Q205	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
L843	1-414-856-11	INDUCTOR	10µH	Q217	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L1701	1-469-555-21	INDUCTOR	10µH	Q218	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
L1705	1-469-555-21	INDUCTOR	10µH	Q219	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
L1706	1-469-555-21	INDUCTOR	10µH	Q220	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
L1709	1-469-555-21	INDUCTOR	10µH	Q221	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
L1723	1-469-555-21	INDUCTOR	10µH	Q222	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L1901	1-469-555-21	INDUCTOR	10µH	Q223	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L1902	1-469-555-21	INDUCTOR	10µH	Q224	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L1903	1-469-555-21	INDUCTOR	10µH	Q225	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q226	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q227	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q228	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q229	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q230	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q231	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q232	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q302	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q303	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q304	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q401	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q402	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q403	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q404	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q408	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q409	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q410	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q411	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
				Q806	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q807	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q808	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q809	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q811	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q812	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
				Q813	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	

**IC LINK**

	PS401	1-532-984-11	LINK, IC 2A/90V
	PS402	1-532-984-11	LINK, IC 2A/90V

**TRANSISTOR**

Q001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q002	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q003	8-729-027-38	TRANSISTOR DTA144EKA-T146
Q004	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR
Q005	8-729-027-38	TRANSISTOR DTA144EKA-T146
Q006	8-729-027-38	TRANSISTOR DTA144EKA-T146
Q007	1-801-806-11	TRANSISTOR DTC144EKA-T146
Q008	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q009	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q010	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q011	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q012	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q013	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q014	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q015	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q016	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q017	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR
Q018	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR





REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
Q814	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		Q1912	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1102	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		Q1913	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1106	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1107	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		Q1914	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q1108	8-729-027-56	TRANSISTOR DTC143TKA-T146		Q1915	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1109	8-729-027-56	TRANSISTOR DTC143TKA-T146		Q1918	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q1111	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		<b>RESISTOR</b>			
Q1112	1-801-806-11	TRANSISTOR DTC144EKA-T146		R001	1-216-041-00	RES-CHIP	470 5% 1/10W
Q1113	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R002	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q1114	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R003	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q1115	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R004	1-216-121-11	RES-CHIP	1M 5% 1/10W
				R005	1-216-097-11	RES-CHIP	100K 5% 1/10W
Q1117	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R006	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1118	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1119	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R007	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q1121	1-801-806-11	TRANSISTOR DTC144EKA-T146		R008	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1124	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R009	1-216-033-00	RES-CHIP	220 5% 1/10W
				R010	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q1125	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R011	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q1601	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1602	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R012	1-216-427-00	METAL OXIDE	120 5% 1W
Q1603	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R013	1-216-073-91	RES-CHIP	10K 5% 1/10W
Q1701	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R014	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
				R015	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q1702	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R016	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1703	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1704	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R018	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1705	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R019	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1706	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R021	1-216-033-00	RES-CHIP	220 5% 1/10W
				R022	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1707	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R023	1-216-049-11	RES-CHIP	1K 5% 1/10W
Q1711	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1712	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R024	1-216-025-11	RES-CHIP	100 5% 1/10W
Q1713	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R025	1-216-025-11	RES-CHIP	100 5% 1/10W
Q1714	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R026	1-216-025-11	RES-CHIP	100 5% 1/10W
				R027	1-216-025-11	RES-CHIP	100 5% 1/10W
Q1715	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R028	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q1716	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR					
Q1717	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R029	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q1719	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R030	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1721	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R031	1-216-037-00	RES-CHIP	330 5% 1/10W
				R032	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1722	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R033	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1901	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR					
Q1902	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R034	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1903	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R035	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1905	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R037	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
				R040	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
Q1906	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R041	1-216-033-00	RES-CHIP	220 5% 1/10W
Q1907	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR					
Q1911	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR					



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R042	1-216-033-00	RES-CHIP	220	5%	1/10W	R094	1-216-113-00	RES-CHIP	470K	5%	1/10W
R043	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R095	1-216-017-91	RES-CHIP	47	5%	1/10W
R044	1-216-121-11	RES-CHIP	1M	5%	1/10W	R096	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R045	1-216-097-11	RES-CHIP	100K	5%	1/10W	R097	1-216-055-00	RES-CHIP	1.8K	5%	1/10W
R046	1-216-073-91	RES-CHIP	10K	5%	1/10W	R099	1-216-041-00	RES-CHIP	470	5%	1/10W
R047	1-216-073-91	RES-CHIP	10K	5%	1/10W	R100	1-216-041-00	RES-CHIP	470	5%	1/10W
R048	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R101	1-216-041-00	RES-CHIP	470	5%	1/10W
R049	1-216-049-11	RES-CHIP	1K	5%	1/10W	R102	1-216-113-00	RES-CHIP	470K	5%	1/10W
R050	1-216-049-11	RES-CHIP	1K	5%	1/10W	R103	1-216-113-00	RES-CHIP	470K	5%	1/10W
R051	1-216-049-11	RES-CHIP	1K	5%	1/10W	R104	1-216-113-00	RES-CHIP	470K	5%	1/10W
R052	1-216-049-11	RES-CHIP	1K	5%	1/10W	R105	1-216-017-91	RES-CHIP	47	5%	1/10W
R053	1-216-049-11	RES-CHIP	1K	5%	1/10W	R106	1-216-017-91	RES-CHIP	47	5%	1/10W
R054	1-216-033-00	RES-CHIP	220	5%	1/10W	R107	1-216-017-91	RES-CHIP	47	5%	1/10W
R055	1-216-033-00	RES-CHIP	220	5%	1/10W	R108	1-216-113-00	RES-CHIP	470K	5%	1/10W
R056	1-216-049-11	RES-CHIP	1K	5%	1/10W	R109	1-216-113-00	RES-CHIP	470K	5%	1/10W
R057	1-216-049-11	RES-CHIP	1K	5%	1/10W	R110	1-216-043-91	RES-CHIP	560	5%	1/10W
R058	1-216-089-91	RES-CHIP	47K	5%	1/10W	R111	1-216-043-91	RES-CHIP	560	5%	1/10W
R059	1-216-089-91	RES-CHIP	47K	5%	1/10W	R112	1-216-043-91	RES-CHIP	560	5%	1/10W
R060	1-216-049-11	RES-CHIP	1K	5%	1/10W	R113	1-216-113-00	RES-CHIP	470K	5%	1/10W
R061	1-216-041-00	RES-CHIP	470	5%	1/10W	R114	1-216-045-00	RES-CHIP	680	5%	1/10W
R062	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R115	1-216-045-00	RES-CHIP	680	5%	1/10W
R063	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R116	1-216-045-00	RES-CHIP	680	5%	1/10W
R064	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R117	1-216-295-91	SHORT			
R066	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R118	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R068	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R119	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R070	1-216-033-00	RES-CHIP	220	5%	1/10W	R120	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R071	1-216-033-00	RES-CHIP	220	5%	1/10W	R121	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R072	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R122	1-216-295-91	SHORT			
R073	1-216-295-91	SHORT				R123	1-216-017-91	RES-CHIP	47	5%	1/10W
R074	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R124	1-216-017-91	RES-CHIP	47	5%	1/10W
R075	1-216-061-91	RES-CHIP	3.3K	5%	1/10W	R125	1-216-017-91	RES-CHIP	47	5%	1/10W
R077	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R127	1-216-025-11	RES-CHIP	100	5%	1/10W
R078	1-216-025-11	RES-CHIP	100	5%	1/10W	R129	1-216-073-91	RES-CHIP	10K	5%	1/10W
R079	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R130	1-216-049-11	RES-CHIP	1K	5%	1/10W
R084	1-216-025-11	RES-CHIP	100	5%	1/10W	R132	1-216-295-91	SHORT			
R085	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R135	1-216-295-91	SHORT			
R086	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R151	1-216-025-11	RES-CHIP	100	5%	1/10W
R087	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R152	1-216-083-00	RES-CHIP	27K	5%	1/10W
R088	1-216-025-11	RES-CHIP	100	5%	1/10W	R153	1-216-689-11	RES-CHIP	39K	5%	1/10W
R089	1-216-055-00	RES-CHIP	1.8K	5%	1/10W	R154	1-216-043-91	RES-CHIP	560	5%	1/10W
R090	1-216-113-00	RES-CHIP	470K	5%	1/10W	R155	1-216-025-11	RES-CHIP	100	5%	1/10W
R091	1-216-017-91	RES-CHIP	47	5%	1/10W	R156	1-216-045-00	RES-CHIP	680	5%	1/10W
R092	1-216-113-00	RES-CHIP	470K	5%	1/10W	R157	1-216-049-11	RES-CHIP	1K	5%	1/10W
R093	1-216-017-91	RES-CHIP	47	5%	1/10W						





REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R158	1-216-464-11	METAL OXIDE	18K	5%	2W	R300	1-216-033-00	RES-CHIP	220	5%	1/10W
R159	1-216-041-00	RES-CHIP	470	5%	1/10W	R301	1-216-033-00	RES-CHIP	220	5%	1/10W
R160	1-216-025-11	RES-CHIP	100	5%	1/10W	R302	1-216-049-11	RES-CHIP	1K	5%	1/10W
R161	1-216-083-00	RES-CHIP	27K	5%	1/10W	R303	1-216-133-91	RES-CHIP	3.3M	5%	1/10W
R162	1-216-041-00	RES-CHIP	470	5%	1/10W	R304	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R163	1-216-689-11	RES-CHIP	39K	5%	1/10W	R305	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R164	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R306	1-208-774-11	METAL CHIP	470	0.50%	1/10W
R166	1-216-025-11	RES-CHIP	100	5%	1/10W	R307	1-208-810-11	METAL CHIP	15K	0.50%	1/10W
R167	1-216-025-11	RES-CHIP	100	5%	1/10W	R308	1-216-109-00	RES-CHIP	330K	5%	1/10W
R168	1-216-025-11	RES-CHIP	100	5%	1/10W	R309	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R169	1-208-789-11	METAL CHIP	2K	0.50%	1/10W	R310	1-216-033-00	RES-CHIP	220	5%	1/10W
R170	1-216-025-11	RES-CHIP	100	5%	1/10W	R311	1-216-025-11	RES-CHIP	100	5%	1/10W
R171	1-216-295-91	SHORT				R312	1-216-025-11	RES-CHIP	100	5%	1/10W
R203	1-216-051-00	RES-CHIP	1.2K	5%	1/10W	R313	1-216-113-00	RES-CHIP	470K	5%	1/10W
R204	1-216-041-00	RES-CHIP	470	5%	1/10W	R314	1-216-025-11	RES-CHIP	100	5%	1/10W
R207	1-216-041-00	RES-CHIP	470	5%	1/10W	R315	1-216-043-91	RES-CHIP	560	5%	1/10W
R208	1-216-295-91	SHORT				R316	1-216-049-11	RES-CHIP	1K	5%	1/10W
R274	1-216-073-91	RES-CHIP	10K	5%	1/10W	R317	1-216-059-00	RES-CHIP	2.7K	5%	1/10W
R275	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R318	1-216-077-91	RES-CHIP	15K	5%	1/10W
R276	1-216-097-11	RES-CHIP	100K	5%	1/10W	R319	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R277	1-216-089-91	RES-CHIP	47K	5%	1/10W	R321	1-216-033-00	RES-CHIP	220	5%	1/10W
R278	1-216-073-91	RES-CHIP	10K	5%	1/10W	R322	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R279	1-216-129-00	RES-CHIP	2.2M	5%	1/10W	R323	1-216-017-91	RES-CHIP	47	5%	1/10W
R280	1-216-073-91	RES-CHIP	10K	5%	1/10W	R324	1-216-049-11	RES-CHIP	1K	5%	1/10W
R281	1-216-025-11	RES-CHIP	100	5%	1/10W	R325	1-216-073-91	RES-CHIP	10K	5%	1/10W
R282	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R326	1-216-073-91	RES-CHIP	10K	5%	1/10W
R283	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R327	1-216-073-91	RES-CHIP	10K	5%	1/10W
R284	1-216-025-11	RES-CHIP	100	5%	1/10W	R328	1-216-049-11	RES-CHIP	1K	5%	1/10W
R285	1-216-049-11	RES-CHIP	1K	5%	1/10W	R329	1-216-073-91	RES-CHIP	10K	5%	1/10W
R286	1-216-025-11	RES-CHIP	100	5%	1/10W	R330	1-216-073-91	RES-CHIP	10K	5%	1/10W
R287	1-216-025-11	RES-CHIP	100	5%	1/10W	R331	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R288	1-216-295-91	SHORT				R332	1-216-073-91	RES-CHIP	10K	5%	1/10W
R289	1-216-049-11	RES-CHIP	1K	5%	1/10W	R333	1-216-049-11	RES-CHIP	1K	5%	1/10W
R290	1-216-049-11	RES-CHIP	1K	5%	1/10W	R334	1-216-113-00	RES-CHIP	470K	5%	1/10W
R291	1-216-049-11	RES-CHIP	1K	5%	1/10W	R335	1-216-041-00	RES-CHIP	470	5%	1/10W
R292	1-216-049-11	RES-CHIP	1K	5%	1/10W	R336	1-216-048-00	RES-CHIP	910	5%	1/10W
R293	1-216-049-11	RES-CHIP	1K	5%	1/10W	R337	1-216-049-11	RES-CHIP	1K	5%	1/10W
R294	1-216-049-11	RES-CHIP	1K	5%	1/10W	R338	1-216-077-91	RES-CHIP	15K	5%	1/10W
R295	1-216-295-91	SHORT				R339	1-216-049-11	RES-CHIP	1K	5%	1/10W
R296	1-216-033-00	RES-CHIP	220	5%	1/10W	R340	1-216-037-00	RES-CHIP	330	5%	1/10W
R297	1-216-033-00	RES-CHIP	220	5%	1/10W	R341	1-216-041-00	RES-CHIP	470	5%	1/10W
R298	1-216-033-00	RES-CHIP	220	5%	1/10W	R342	1-216-049-11	RES-CHIP	1K	5%	1/10W
R299	1-216-033-00	RES-CHIP	220	5%	1/10W	R343	1-216-081-00	RES-CHIP	22K	5%	1/10W
						R344	1-216-025-11	RES-CHIP	100	5%	1/10W



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R345	1-216-049-11	RES-CHIP	1K	5%	1/10W	R444	1-216-077-91	RES-CHIP	15K	5%	1/10W
R346	1-216-089-91	RES-CHIP	47K	5%	1/10W	R445	1-216-079-00	RES-CHIP	18K	5%	1/10W
R347	1-216-073-91	RES-CHIP	10K	5%	1/10W	R446	1-216-085-91	RES-CHIP	33K	5%	1/10W
R348	1-216-079-00	RES-CHIP	18K	5%	1/10W	R447	1-216-079-00	RES-CHIP	18K	5%	1/10W
R349	1-216-077-91	RES-CHIP	15K	5%	1/10W	R448	1-216-079-00	RES-CHIP	18K	5%	1/10W
R350	1-216-073-91	RES-CHIP	10K	5%	1/10W	R449	1-216-049-11	RES-CHIP	1K	5%	1/10W
R351	1-216-041-00	RES-CHIP	470	5%	1/10W	R451	1-216-073-91	RES-CHIP	10K	5%	1/10W
R352	1-216-081-00	RES-CHIP	22K	5%	1/10W	R452	1-216-083-00	RES-CHIP	27K	5%	1/10W
R353	1-216-113-00	RES-CHIP	470K	5%	1/10W	R455	1-216-083-00	RES-CHIP	27K	5%	1/10W
R354	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R458	1-249-389-11	CARBON	4.7	5%	1/4W
R360	1-216-051-00	RES-CHIP	1.2K	5%	1/10W	R459	1-249-389-11	CARBON	4.7	5%	1/4W
R361	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R460	1-216-089-91	RES-CHIP	47K	5%	1/10W
R362	1-208-774-11	METAL CHIP	470	0.50%	1/10W	R461	1-216-025-11	RES-CHIP	100	5%	1/10W
R363	1-208-798-11	METAL CHIP	4.7K	0.50%	1/10W	R462	1-216-075-00	RES-CHIP	12K	5%	1/10W
R411	1-216-025-11	RES-CHIP	100	5%	1/10W	R463	1-216-089-91	RES-CHIP	47K	5%	1/10W
R412	1-216-025-11	RES-CHIP	100	5%	1/10W	R464	1-216-089-91	RES-CHIP	47K	5%	1/10W
R413	1-216-025-11	RES-CHIP	100	5%	1/10W	R465	1-216-121-11	RES-CHIP	1M	5%	1/10W
R414	1-216-081-00	RES-CHIP	22K	5%	1/10W	R466	1-216-079-00	RES-CHIP	18K	5%	1/10W
R415	1-216-073-91	RES-CHIP	10K	5%	1/10W	R467	1-216-077-91	RES-CHIP	15K	5%	1/10W
R416	1-216-025-11	RES-CHIP	100	5%	1/10W	R468	1-216-295-91	SHORT			
R418	1-216-025-11	RES-CHIP	100	5%	1/10W	R474	1-216-049-11	RES-CHIP	1K	5%	1/10W
R419	1-216-025-11	RES-CHIP	100	5%	1/10W	R805	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R420	1-216-025-11	RES-CHIP	100	5%	1/10W	R806	1-216-113-00	RES-CHIP	470K	5%	1/10W
R421	1-216-025-11	RES-CHIP	100	5%	1/10W	R808	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R422	1-216-025-11	RES-CHIP	100	5%	1/10W	R810	1-216-295-91	SHORT			
R423	1-216-089-91	RES-CHIP	47K	5%	1/10W	R811	1-216-109-00	RES-CHIP	330K	5%	1/10W
R425	1-216-025-11	RES-CHIP	100	5%	1/10W	R813	1-216-117-00	RES-CHIP	680K	5%	1/10W
R426	1-216-073-91	RES-CHIP	10K	5%	1/10W	R814	1-216-117-00	RES-CHIP	680K	5%	1/10W
R428	1-216-073-91	RES-CHIP	10K	5%	1/10W	R815	1-216-025-11	RES-CHIP	100	5%	1/10W
R429	1-216-073-91	RES-CHIP	10K	5%	1/10W	R816	1-216-049-11	RES-CHIP	1K	5%	1/10W
R430	1-216-041-00	RES-CHIP	470	5%	1/10W	R817	1-216-025-11	RES-CHIP	100	5%	1/10W
R431	1-216-073-91	RES-CHIP	10K	5%	1/10W	R818	1-216-025-11	RES-CHIP	100	5%	1/10W
R432	1-216-041-00	RES-CHIP	470	5%	1/10W	R819	1-216-025-11	RES-CHIP	100	5%	1/10W
R433	1-216-041-00	RES-CHIP	470	5%	1/10W	R824	1-216-025-11	RES-CHIP	100	5%	1/10W
R434	1-216-097-11	RES-CHIP	100K	5%	1/10W	R825	1-216-025-11	RES-CHIP	100	5%	1/10W
R435	1-216-073-91	RES-CHIP	10K	5%	1/10W	R828	1-216-049-11	RES-CHIP	1K	5%	1/10W
R436	1-216-079-00	RES-CHIP	18K	5%	1/10W	R829	1-216-073-91	RES-CHIP	10K	5%	1/10W
R437	1-216-046-00	RES-CHIP	750	5%	1/10W	R831	1-216-049-11	RES-CHIP	1K	5%	1/10W
R438	1-216-073-91	RES-CHIP	10K	5%	1/10W	R832	1-216-073-91	RES-CHIP	10K	5%	1/10W
R440	1-216-046-00	RES-CHIP	750	5%	1/10W	R833	1-216-049-11	RES-CHIP	1K	5%	1/10W
R441	1-216-049-11	RES-CHIP	1K	5%	1/10W	R834	1-216-049-11	RES-CHIP	1K	5%	1/10W
R442	1-216-041-00	RES-CHIP	470	5%	1/10W	R836	1-216-049-11	RES-CHIP	1K	5%	1/10W
R443	1-216-073-91	RES-CHIP	10K	5%	1/10W	R838	1-216-025-11	RES-CHIP	100	5%	1/10W



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R839	1-216-025-11	RES-CHIP	100	5%	1/10W	R894	1-216-033-00	RES-CHIP	220	5%	1/10W
R840	1-216-025-11	RES-CHIP	100	5%	1/10W	R895	1-216-025-11	RES-CHIP	100	5%	1/10W
R843	1-216-025-11	RES-CHIP	100	5%	1/10W	R896	1-216-121-11	RES-CHIP	1M	5%	1/10W
R844	1-216-025-11	RES-CHIP	100	5%	1/10W	R897	1-216-049-11	RES-CHIP	1K	5%	1/10W
R846	1-216-025-11	RES-CHIP	100	5%	1/10W	R898	1-216-049-11	RES-CHIP	1K	5%	1/10W
R847	1-216-033-00	RES-CHIP	220	5%	1/10W	R899	1-216-033-00	RES-CHIP	220	5%	1/10W
R848	1-216-025-11	RES-CHIP	100	5%	1/10W	R900	1-216-025-11	RES-CHIP	100	5%	1/10W
R852	1-216-081-00	RES-CHIP	22K	5%	1/10W	R901	1-216-033-00	RES-CHIP	220	5%	1/10W
R853	1-216-025-11	RES-CHIP	100	5%	1/10W	R902	1-216-033-00	RES-CHIP	220	5%	1/10W
R854	1-216-025-11	RES-CHIP	100	5%	1/10W	R903	1-216-025-11	RES-CHIP	100	5%	1/10W
R855	1-216-025-11	RES-CHIP	100	5%	1/10W	R904	1-216-033-00	RES-CHIP	220	5%	1/10W
R856	1-216-033-00	RES-CHIP	220	5%	1/10W	R905	1-216-049-11	RES-CHIP	1K	5%	1/10W
R858	1-216-073-91	RES-CHIP	10K	5%	1/10W	R906	1-216-049-11	RES-CHIP	1K	5%	1/10W
R859	1-216-081-00	RES-CHIP	22K	5%	1/10W	R907	1-216-049-11	RES-CHIP	1K	5%	1/10W
R860	1-216-025-11	RES-CHIP	100	5%	1/10W	R908	1-216-049-11	RES-CHIP	1K	5%	1/10W
R861	1-216-073-91	RES-CHIP	10K	5%	1/10W	R910	1-216-025-11	RES-CHIP	100	5%	1/10W
R863	1-216-025-11	RES-CHIP	100	5%	1/10W	R911	1-216-025-11	RES-CHIP	100	5%	1/10W
R864	1-208-801-11	METAL CHIP	6.2K	0.50%	1/10W	R912	1-216-049-11	RES-CHIP	1K	5%	1/10W
R865	1-216-025-11	RES-CHIP	100	5%	1/10W	R913	1-216-025-11	RES-CHIP	100	5%	1/10W
R866	1-216-025-11	RES-CHIP	100	5%	1/10W	R914	1-216-049-11	RES-CHIP	1K	5%	1/10W
R867	1-216-025-11	RES-CHIP	100	5%	1/10W	R915	1-216-049-11	RES-CHIP	1K	5%	1/10W
R868	1-216-025-11	RES-CHIP	100	5%	1/10W	R916	1-216-049-11	RES-CHIP	1K	5%	1/10W
R869	1-216-025-11	RES-CHIP	100	5%	1/10W	R917	1-216-025-11	RES-CHIP	100	5%	1/10W
R870	1-216-073-91	RES-CHIP	10K	5%	1/10W	R918	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R871	1-216-025-11	RES-CHIP	100	5%	1/10W	R919	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R872	1-216-025-11	RES-CHIP	100	5%	1/10W	R920	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R873	1-216-025-11	RES-CHIP	100	5%	1/10W	R922	1-216-049-11	RES-CHIP	1K	5%	1/10W
R874	1-216-025-11	RES-CHIP	100	5%	1/10W	R923	1-216-043-91	RES-CHIP	560	5%	1/10W
R875	1-216-295-91	SHORT				R924	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R876	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R925	1-216-043-91	RES-CHIP	560	5%	1/10W
R877	1-208-816-11	METAL CHIP	27K	0.50%	1/10W	R926	1-216-053-00	RES-CHIP	1.5K	5%	1/10W
R878	1-216-049-11	RES-CHIP	1K	5%	1/10W	R928	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R879	1-216-295-91	SHORT				R929	1-216-049-11	RES-CHIP	1K	5%	1/10W
R880	1-216-049-11	RES-CHIP	1K	5%	1/10W	R932	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W
R881	1-216-025-11	RES-CHIP	100	5%	1/10W	R935	1-216-025-11	RES-CHIP	100	5%	1/10W
R882	1-216-033-00	RES-CHIP	220	5%	1/10W	R936	1-216-025-11	RES-CHIP	100	5%	1/10W
R883	1-216-033-00	RES-CHIP	220	5%	1/10W	R937	1-216-025-11	RES-CHIP	100	5%	1/10W
R884	1-216-049-11	RES-CHIP	1K	5%	1/10W	R938	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R885	1-216-025-11	RES-CHIP	100	5%	1/10W	R939	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R887	1-414-551-11	FERRITE	0μH			R941	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R888	1-216-025-11	RES-CHIP	100	5%	1/10W	R942	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R891	1-216-073-91	RES-CHIP	10K	5%	1/10W	R943	1-216-041-00	RES-CHIP	470	5%	1/10W
R892	1-208-802-11	METAL CHIP	6.8K	0.50%	1/10W	R945	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R893	1-216-073-91	RES-CHIP	10K	5%	1/10W	R950	1-216-043-91	RES-CHIP	560	5%	1/10W



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R951	1-216-053-00	RES-CHIP	1.5K	5%	1/10W	R1012	1-216-295-91	SHORT			
R952	1-216-049-11	RES-CHIP	1K	5%	1/10W	R1013	1-216-295-91	SHORT			
R953	1-216-025-11	RES-CHIP	100	5%	1/10W	R1014	1-216-295-91	SHORT			
R954	1-216-025-11	RES-CHIP	100	5%	1/10W	R1015	1-216-295-91	SHORT			
R955	1-216-025-11	RES-CHIP	100	5%	1/10W	R1106	1-216-041-00	RES-CHIP	470	5%	1/10W
R956	1-216-025-11	RES-CHIP	100	5%	1/10W	R1107	1-216-041-00	RES-CHIP	470	5%	1/10W
R957	1-216-025-11	RES-CHIP	100	5%	1/10W	R1111	1-216-025-11	RES-CHIP	100	5%	1/10W
R958	1-216-025-11	RES-CHIP	100	5%	1/10W	R1112	1-216-022-00	RES-CHIP	75	5%	1/10W
R959	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1113	1-216-022-00	RES-CHIP	75	5%	1/10W
R960	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1114	1-216-022-00	RES-CHIP	75	5%	1/10W
R961	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1115	1-216-113-00	RES-CHIP	470K	5%	1/10W
R962	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1116	1-216-113-00	RES-CHIP	470K	5%	1/10W
R963	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1117	1-216-022-00	RES-CHIP	75	5%	1/10W
R964	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1118	1-216-022-00	RES-CHIP	75	5%	1/10W
R965	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1119	1-216-022-00	RES-CHIP	75	5%	1/10W
R966	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1120	1-216-113-00	RES-CHIP	470K	5%	1/10W
R968	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1121	1-216-113-00	RES-CHIP	470K	5%	1/10W
R970	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1122	1-216-022-00	RES-CHIP	75	5%	1/10W
R972	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1123	1-216-022-00	RES-CHIP	75	5%	1/10W
R974	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1124	1-216-022-00	RES-CHIP	75	5%	1/10W
R976	1-208-806-11	METAL CHIP	10K	0.50%	1/10W	R1126	1-216-113-00	RES-CHIP	470K	5%	1/10W
R978	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R1127	1-216-113-00	RES-CHIP	470K	5%	1/10W
R979	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1128	1-216-073-91	RES-CHIP	10K	5%	1/10W
R980	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1129	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R981	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1130	1-216-025-11	RES-CHIP	100	5%	1/10W
R982	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1131	1-216-091-00	RES-CHIP	56K	5%	1/10W
R983	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1132	1-216-121-11	RES-CHIP	1M	5%	1/10W
R985	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R1133	1-216-113-00	RES-CHIP	470K	5%	1/10W
R987	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1134	1-216-113-00	RES-CHIP	470K	5%	1/10W
R989	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1135	1-216-041-00	RES-CHIP	470	5%	1/10W
R991	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1136	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R993	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1137	1-216-073-91	RES-CHIP	10K	5%	1/10W
R994	1-208-817-11	METAL CHIP	30K	0.50%	1/10W	R1138	1-216-089-91	RES-CHIP	47K	5%	1/10W
R996	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1139	1-216-073-91	RES-CHIP	10K	5%	1/10W
R997	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1140	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R998	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1141	1-216-073-91	RES-CHIP	10K	5%	1/10W
R999	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1142	1-216-089-91	RES-CHIP	47K	5%	1/10W
R1000	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1143	1-216-085-91	RES-CHIP	33K	5%	1/10W
R1001	1-208-776-11	METAL CHIP	560	0.50%	1/10W	R1144	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1002	1-208-810-11	METAL CHIP	15K	0.50%	1/10W	R1145	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1003	1-208-818-11	METAL CHIP	33K	0.50%	1/10W	R1146	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1010	1-216-295-91	SHORT				R1147	1-216-041-00	RES-CHIP	470	5%	1/10W
R1011	1-216-295-91	SHORT				R1148	1-216-041-00	RES-CHIP	470	5%	1/10W
						R1149	1-216-073-91	RES-CHIP	10K	5%	1/10W




REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R1151	1-216-105-91	RES-CHIP	220K	5%	1/10W	R1219	1-216-025-11	RES-CHIP	100	5%	1/10W
R1156	1-216-025-11	RES-CHIP	100	5%	1/10W	R1221	1-216-025-11	RES-CHIP	100	5%	1/10W
R1157	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1222	1-216-295-91	SHORT			
R1158	1-216-025-11	RES-CHIP	100	5%	1/10W	R1223	1-216-025-11	RES-CHIP	100	5%	1/10W
R1159	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1601	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1160	1-216-025-11	RES-CHIP	100	5%	1/10W	R1605	1-208-802-11	METAL CHIP	6.8K	0.50%	1/10W
R1162	1-216-689-11	RES-CHIP	39K	5%	1/10W	R1607	1-208-806-11	METAL CHIP	10K	0.50%	1/10W
R1163	1-216-089-91	RES-CHIP	47K	5%	1/10W	R1609	1-216-025-11	RES-CHIP	100	5%	1/10W
R1164	1-216-093-91	RES-CHIP	68K	5%	1/10W	R1610	1-216-025-11	RES-CHIP	100	5%	1/10W
R1165	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1614	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1166	1-216-097-11	RES-CHIP	100K	5%	1/10W	R1616	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1167	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1617	1-216-081-00	RES-CHIP	22K	5%	1/10W
R1168	1-216-689-11	RES-CHIP	39K	5%	1/10W	R1619	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1169	1-216-089-91	RES-CHIP	47K	5%	1/10W	R1622	1-216-033-00	RES-CHIP	220	5%	1/10W
R1170	1-216-089-91	RES-CHIP	47K	5%	1/10W	R1627	1-216-061-91	RES-CHIP	3.3K	5%	1/10W
R1171	1-216-049-11	RES-CHIP	1K	5%	1/10W	R1700	1-249-377-11	CARBON	0.47	5%	1/4W
R1173	1-216-049-11	RES-CHIP	1K	5%	1/10W	R1701	1-216-295-91	SHORT			
R1174	1-208-782-11	METAL CHIP	1K	0.50%	1/10W	R1702	1-216-295-91	SHORT			
R1175	1-208-782-11	METAL CHIP	1K	0.50%	1/10W	R1703	1-216-295-91	SHORT			
R1182	1-216-295-91	SHORT				R1704	1-216-021-00	RES-CHIP	68	5%	1/10W
R1183	1-216-048-00	RES-CHIP	910	5%	1/10W	R1705	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1184	1-208-774-11	METAL CHIP	470	0.50%	1/10W	R1706	1-216-071-00	RES-CHIP	8.2K	5%	1/10W
R1187	1-216-025-11	RES-CHIP	100	5%	1/10W	R1707	1-208-782-11	METAL CHIP	1K	0.50%	1/10W
R1188	1-216-025-11	RES-CHIP	100	5%	1/10W	R1708	1-216-047-91	RES-CHIP	820	5%	1/10W
R1191	1-216-025-11	RES-CHIP	100	5%	1/10W	R1709	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1193	1-216-041-00	RES-CHIP	470	5%	1/10W	R1710	1-216-295-91	SHORT			
R1197	1-216-041-00	RES-CHIP	470	5%	1/10W	R1711	1-216-033-00	RES-CHIP	220	5%	1/10W
R1202	1-216-025-11	RES-CHIP	100	5%	1/10W	R1712	1-216-295-91	SHORT			
R1203	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1713	1-216-025-11	RES-CHIP	100	5%	1/10W
R1204	1-216-025-11	RES-CHIP	100	5%	1/10W	R1714	1-216-025-11	RES-CHIP	100	5%	1/10W
R1205	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1715	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1206	1-216-025-11	RES-CHIP	100	5%	1/10W	R1716	1-216-105-91	RES-CHIP	220K	5%	1/10W
R1207	1-216-049-11	RES-CHIP	1K	5%	1/10W	R1717	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R1208	1-216-025-11	RES-CHIP	100	5%	1/10W	R1718	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R1209	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1719	1-208-776-11	METAL CHIP	560	0.50%	1/10W
R1210	1-216-025-11	RES-CHIP	100	5%	1/10W	R1720	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1211	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R1721	1-216-041-00	RES-CHIP	470	5%	1/10W
R1212	1-216-025-11	RES-CHIP	100	5%	1/10W	R1722	1-216-025-11	RES-CHIP	100	5%	1/10W
R1213	1-216-025-11	RES-CHIP	100	5%	1/10W	R1724	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R1214	1-216-025-11	RES-CHIP	100	5%	1/10W	R1731	1-216-049-11	RES-CHIP	1K	5%	1/10W
R1215	1-216-025-11	RES-CHIP	100	5%	1/10W	R1732	1-208-800-11	METAL CHIP	5.6K	0.50%	1/10W
R1216	1-216-025-11	RES-CHIP	100	5%	1/10W	R1733	1-208-790-11	METAL CHIP	2.2K	0.50%	1/10W
R1217	1-216-025-11	RES-CHIP	100	5%	1/10W	R1734	1-216-085-91	RES-CHIP	33K	5%	1/10W
R1218	1-216-025-11	RES-CHIP	100	5%	1/10W	R1735	1-208-776-11	METAL CHIP	560	0.50%	1/10W











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REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES			
					<b>DIODE</b>							
					D731	8-719-991-33	DIODE 1SS133T-77					
					D732	8-719-991-33	DIODE 1SS133T-77					
					D733	8-719-991-33	DIODE 1SS133T-77					
					D734	8-719-991-33	DIODE 1SS133T-77					
					D735	8-719-991-33	DIODE 1SS133T-77					
					D736	8-719-109-85	DIODE MTZJ-T-77-5.1B					
					D1304	8-719-991-33	DIODE 1SS133T-77					
					<b>COIL</b>							
					L731	1-414-188-41	INDUCTOR	68	μH			
					L732	1-412-911-11	FERRITE	0	μH			
					L1301	1-412-911-11	FERRITE	0	μH			
					L1302	1-412-911-11	FERRITE	0	μH			
					<b>NEON LAMP</b>							
					NL731	1-517-778-21	LAMP, NEON					
					<b>TRANSISTOR</b>							
					Q731	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA					
					Q732	8-729-326-11	TRANSISTOR 2SC3271F-N					
					Q733	8-729-200-17	TRANSISTOR 2SA10910-TPE2					
					Q734	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA					
					Q1301	8-729-017-06	TRANSISTOR 2SC4793					
					Q1302	8-729-017-05	TRANSISTOR 2SA1837					
					Q1303	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA					
					Q1304	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA					
					Q1305	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA					
					Q1306	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA					
					<b>RESISTOR</b>							
					R731	1-219-743-11	CARBON	100	5%	1/2W		
					R732	1-260-132-11	CARBON	560K	5%	1/2W		
					R733	1-247-807-31	CARBON	100	5%	1/4W		
					R734	1-260-087-11	CARBON	100	5%	1/2W		
					R735	1-249-403-11	CARBON	68	5%	1/4W		
					R736	1-216-486-00	METAL OXIDE	8.2K	5%	3W		
					R737	1-249-393-11	CARBON	10	5%	1/4W		
					R738	1-249-414-11	CARBON	560	5%	1/4W		
					R739	1-216-486-00	METAL OXIDE	8.2K	5%	3W		
					R741	1-249-425-11	CARBON	4.7K	5%	1/4W		
					R742	1-260-328-11	CARBON	1K	5%	1/2W		
					R743	1-247-881-00	CARBON	120K	5%	1/4W		
					<b>CAPACITOR</b>							
					C731	1-104-664-11	ELECT	47	μF	20%	25V	
					C732	1-104-570-11	CERAMIC	0.001	μF	10%	2KV	
					C733	1-102-114-00	CERAMIC	470	pF	10%	50V	
					C734	1-102-114-00	CERAMIC	470	pF	10%	50V	
					C735	1-101-880-00	CERAMIC	47	pF	5%	50V	
					C736	1-161-830-00	CERAMIC	.0047	μF	500V		
					C737	1-162-115-00	CERAMIC	330	pF	10%	2KV	
					C738	1-107-662-11	ELECT	22	μF	20%	250V	
					C1301	1-104-987-11	MYLAR	0.001	μF	10%	200V	
					C1302	1-107-639-11	ELECT	47	μF	20%	160V	
					C1303	1-126-933-11	ELECT	100	μF	20%	16V	
					C1305	1-126-933-11	ELECT	100	μF	20%	16V	
					C1308	1-106-383-00	MYLAR	0.047	μF	10%	200V	
					C1309	1-106-383-00	MYLAR	0.047	μF	10%	200V	
					C1310	1-126-960-11	ELECT	1	μF	20%	50V	
					C1312	1-161-830-00	CERAMIC	.0047	μF	500V		
					C1313	1-102-129-00	CERAMIC	0.01	μF	10%	50V	
					C1314	1-102-129-00	CERAMIC	0.01	μF	10%	50V	
					C1315	1-126-933-11	ELECT	100	μF	20%	16V	
					<b>CONNECTOR</b>							
					* CN731	1-564-512-11	PLUG,CONNECTOR	9P				
					* CN732	1-564-507-11	PLUG,CONNECTOR	4P				
					* CN733	1-564-508-11	PLUG,CONNECTOR	5P				
					* CN734	1-764-333-11	PLUG,CONNECTOR	10P				
					* CN735	1-564-512-11	PLUG,CONNECTOR	9P				
					* CN736	1-564-512-11	PLUG,CONNECTOR	9P				
					CN737	1-785-879-11	CONNECTOR, ONE	TOUCH				
					CN738	1-695-915-11	TAB (CONTACT)					
					CN739	1-695-915-11	TAB (CONTACT)					
					 CN740	1-251-182-11	SOCKET, CRT					
					* CN1301	1-564-506-11	PLUG,CONNECTOR	3P				
					* CN1302	1-564-506-11	PLUG,CONNECTOR	3P				
					* CN1303	1-564-506-11	PLUG,CONNECTOR	3P				
					* CN1304	1-564-509-11	PLUG,CONNECTOR	6P				









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REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
C548	1-104-665-11	ELECT	100 $\mu$ F	20%	25V	C657	1-126-768-11	ELECT	2200 $\mu$ F	20%	16V
C549	1-130-489-00	MYLAR	0.033 $\mu$ F	5%	50V	C658	1-126-943-11	ELECT	2200 $\mu$ F	20%	25V
C550	1-104-665-11	ELECT	100 $\mu$ F	20%	25V	C659	1-126-943-11	ELECT	2200 $\mu$ F	20%	25V
C551	1-126-971-11	ELECT	470 $\mu$ F	20%	50V	C662	1-123-024-21	ELECT	33 $\mu$ F		160V
C552	1-130-489-00	MYLAR	0.033 $\mu$ F	5%	50V	C663	1-104-665-11	ELECT	100 $\mu$ F	20%	25V
C553	1-126-935-11	ELECT	470 $\mu$ F	20%	16V	C664	1-107-910-11	ELECT	100 $\mu$ F	20%	35V
C554	1-126-935-11	ELECT	470 $\mu$ F	20%	16V	C665	1-126-934-11	ELECT	220 $\mu$ F	20%	10V
C555	1-104-665-11	ELECT	100 $\mu$ F	20%	25V	C666	1-126-927-11	ELECT	2200 $\mu$ F	20%	10V
C556	1-104-665-11	ELECT	100 $\mu$ F	20%	25V	C667	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
C557	1-128-562-11	ELECT	47 $\mu$ F	20%	100V	C668	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
C563	1-104-664-11	ELECT	47 $\mu$ F	20%	25V	C669	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
C564	1-102-129-00	CERAMIC	0.01 $\mu$ F	10%	50V	C670	1-106-359-00	MYLAR	.0047 $\mu$ F	5%	100V
C565	1-102-129-00	CERAMIC	0.01 $\mu$ F	10%	50V	C672	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
C566	1-104-666-11	ELECT	220 $\mu$ F	20%	25V	C673	1-126-960-11	ELECT	1 $\mu$ F	20%	50V
C567	1-106-387-00	MYLAR	0.068 $\mu$ F	5%	200V	C674	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
$\triangle$ C601	1-136-311-11	MYLAR	0.47 $\mu$ F	20%	125V	C676	1-126-940-11	ELECT	330 $\mu$ F	20%	25V
C602	1-129-722-00	FILM	0.047 $\mu$ F	5%	630V	C678	1-104-665-11	ELECT	100 $\mu$ F	20%	25V
C603	1-113-920-11	CERAMIC	0.0022 $\mu$ F	20%	250V	C679	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
$\triangle$ C604	1-113-920-11	CERAMIC	0.0022 $\mu$ F	20%	250V	C680	1-128-551-11	ELECT	22 $\mu$ F	20%	25V
$\triangle$ C606	1-113-920-11	CERAMIC	0.0022 $\mu$ F	20%	250V	C1501	1-130-495-00	MYLAR	0.1 $\mu$ F	5%	50V
$\triangle$ C607	1-136-311-11	MYLAR	0.47 $\mu$ F	20%	125V	C1502	1-126-941-11	ELECT	470 $\mu$ F	20%	25V
C608	1-107-670-11	ELECT	10 $\mu$ F	20%	400V	C1504	1-102-106-00	CERAMIC	100pF	10%	50V
C609	1-130-467-00	MYLAR	470pF	5%	50V	C1505	1-104-664-11	ELECT	47 $\mu$ F	20%	25V
C610	1-130-471-00	MYLAR	0.001 $\mu$ F	5%	50V	C1506	1-102-106-00	CERAMIC	100pF	10%	50V
C611	1-104-350-11	ELECT(BLOCK)	1000 $\mu$ F	20%	250V	C1507	1-126-942-61	ELECT	1000 $\mu$ F	20%	25V
C612	1-104-350-11	ELECT(BLOCK)	1000 $\mu$ F	20%	250V	C1508	1-102-121-00	CERAMIC	0.0022 $\mu$ F	10%	50V
C613	1-136-165-00	FILM	0.1 $\mu$ F	5%	50V	C1510	1-126-941-11	ELECT	470 $\mu$ F	20%	25V
C614	1-130-467-00	MYLAR	470pF	5%	50V	C1511	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C615	1-104-331-11	CERAMIC	0.0022 $\mu$ F	10%	1KV	C1512	1-126-933-11	ELECT	100 $\mu$ F	20%	16V
C616	1-130-471-00	MYLAR	0.001 $\mu$ F	5%	50V	C1513	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C617	1-137-605-11	MYLAR	0.01 $\mu$ F	10%	250V	C1516	1-104-665-11	ELECT	100 $\mu$ F	20%	25V
C618	1-126-965-91	ELECT	22 $\mu$ F	20%	50V	C1517	1-130-471-00	MYLAR	0.001 $\mu$ F	5%	50V
C619	1-104-660-91	ELECT	47 $\mu$ F	20%	16V	C1518	1-102-125-00	CERAMIC	.0047 $\mu$ F	10%	50V
C620	1-136-175-00	FILM	0.68 $\mu$ F	5%	50V	C1519	1-102-106-00	CERAMIC	100pF	10%	50V
C621	1-136-175-00	FILM	0.68 $\mu$ F	5%	50V	C1520	1-126-933-11	ELECT	100 $\mu$ F	20%	16V
C622	1-136-171-00	FILM	0.33 $\mu$ F	5%	50V	C1521	1-126-941-11	ELECT	470 $\mu$ F	20%	25V
C623	1-136-171-00	FILM	0.33 $\mu$ F	5%	50V	C1522	1-126-941-11	ELECT	470 $\mu$ F	20%	25V
C624	1-104-330-91	CERAMIC	470pF	10%	1KV	C1523	1-126-964-11	ELECT	10 $\mu$ F	20%	50V
C625	1-104-660-91	ELECT	47 $\mu$ F	20%	16V	C1524	1-102-106-00	CERAMIC	100pF	10%	50V
C626	1-104-660-91	ELECT	47 $\mu$ F	20%	16V	C1525	1-102-852-91	CERAMIC	47pF	5%	50V
C651	1-164-644-11	CERAMIC	330pF	10%	500V	C1526	1-136-177-00	FILM	1 $\mu$ F	5%	50V
C654	1-126-953-11	ELECT	2200 $\mu$ F	20%	35V	C1527	1-102-125-00	CERAMIC	.0047 $\mu$ F	10%	50V
C655	1-126-953-11	ELECT	2200 $\mu$ F	20%	35V	C1528	1-126-941-11	ELECT	470 $\mu$ F	20%	25V
C656	1-102-121-00	CERAMIC	0.0022 $\mu$ F	10%	50V	C1530	1-102-106-00	CERAMIC	100pF	10%	50V





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REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
C1531	1-102-106-00	CERAMIC	100pF 10% 50V	*	CN605	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
C1533	1-126-941-11	ELECT	470μF 20% 25V	*	CN651	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
C1534	1-102-125-00	CERAMIC	.0047μF 10% 50V	*	CN652	1-573-963-11	PIN,CONNECTOR (PC BOARD) 3P
C1536	1-102-106-00	CERAMIC	100pF 10% 50V		CN653	1-695-915-11	TAB (CONTACT)
C1537	1-102-125-00	CERAMIC	.0047μF 10% 50V	*	CN1501	1-564-507-11	PLUG,CONNECTOR 4P
C1538	1-126-941-11	ELECT	470μF 20% 25V	*	CN1502	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P
C1539	1-104-665-11	ELECT	100μF 20% 25V	*	CN1503	1-564-507-11	PLUG,CONNECTOR 4P
C1540	1-126-941-11	ELECT	470μF 20% 25V	*	CN1504	1-564-507-11	PLUG,CONNECTOR 4P
C1541	1-102-125-00	CERAMIC	.0047μF 10% 50V	*	CN1505	1-564-507-11	PLUG,CONNECTOR 4P
C1542	1-102-125-00	CERAMIC	.0047μF 10% 50V	*	CN1506	1-564-506-11	PLUG,CONNECTOR 3P
C1543	1-102-129-00	CERAMIC	0.01μF 10% 50V	*	CN1507	1-564-506-11	PLUG,CONNECTOR 3P
C1544	1-102-129-00	CERAMIC	0.01μF 10% 50V	*	CN1508	1-564-506-11	PLUG,CONNECTOR 3P
C1545	1-126-933-11	ELECT	100μF 20% 16V				<b>DIODE</b>
C1546	1-102-125-00	CERAMIC	.0047μF 10% 50V		D501	8-719-109-85	DIODE MTZJ-T-77-5.1B
C1547	1-130-487-00	MYLAR	0.022μF 5% 50V		D505	8-719-110-41	DIODE MTZJ-T-77-15B
C1548	1-136-177-00	FILM	1μF 5% 50V		D506	8-719-921-63	DIODE MTZJ-T-77-7.5B
C1549	1-130-471-00	MYLAR	0.001μF 5% 50V		D507	8-719-991-33	DIODE 1SS133T-77
C1550	1-104-665-11	ELECT	100μF 20% 25V		D513	8-719-991-33	DIODE 1SS133T-77
C1551	1-102-121-00	CERAMIC	0.0022μF 10% 50V		D517	8-719-979-85	DIODE RGP15J-6040G23
C1552	1-106-220-00	MYLAR	0.1μF 5% 100V		D518	8-719-945-80	DIODE ERC06-15S
C1555	1-104-665-11	ELECT	100μF 20% 25V		D520	8-719-302-43	DIODE RGP10GPKG23
C1556	1-104-665-11	ELECT	100μF 20% 25V	$\triangle$	D522	8-719-302-43	DIODE EL1Z-V1
C1557	1-126-969-11	ELECT	220μF 20% 50V		D525	8-719-031-34	DIODE RGP02-20EG23
C1559	1-137-401-11	MYLAR	0.22μF 5% 100V		D526	8-719-031-34	DIODE RGP02-20EG23
C1560	1-126-942-61	ELECT	1000μF 20% 25V		D528	8-719-908-03	DIODE GP08DPKG23
C1561	1-102-121-00	CERAMIC	0.0022μF 10% 50V		D529	8-719-302-43	DIODE RGP10GPKG23
C1562	1-102-125-00	CERAMIC	.0047μF 10% 50V		D530	8-719-991-33	DIODE 1SS133T-77
C1563	1-137-150-11	MYLAR	0.01μF 5% 50V		D531	8-719-991-33	DIODE 1SS133T-77
C1566	1-137-150-11	MYLAR	0.01μF 5% 50V		D532	8-719-908-03	DIODE GP08DPKG23
C1570	1-130-471-00	MYLAR	0.001μF 5% 50V		D533	8-719-302-43	DIODE RGP10GPKG23
C1571	1-102-074-00	CERAMIC	0.001μF 10% 50V		D534	8-719-302-43	DIODE RGP10GPKG23
C1572	1-102-074-00	CERAMIC	0.001μF 10% 50V		D601	8-719-068-00	DIODE ERC04-06SE
					D602	8-719-068-00	DIODE ERC04-06SE
		<b>CONNECTOR</b>		$\triangle$	D603	8-719-510-53	DIODE D4SB60L-F
*	CN501	1-779-890-11	CONNECTOR, BOARD TO BOARD 10P		D604	8-719-110-41	DIODE MTZJ-T-77-15B
*	CN502	1-506-371-00	PIN,CONNECTOR 2P		D605	8-719-110-49	DIODE MTZJ-T-77-18B
*	CN503	1-764-333-11	PLUG,CONNECTOR 10P		D607	8-719-991-33	DIODE 1SS133T-77
*	CN504	1-580-689-11	PIN,CONNECTOR (PC BOARD) 4P		D609	8-719-948-45	DIODE ERA22-08TP3
*	CN505	1-580-689-11	PIN,CONNECTOR (PC BOARD) 4P		D610	8-719-510-48	DIODE D1N20R-TA
*	CN506	1-580-689-11	PIN,CONNECTOR (PC BOARD) 4P		D650	8-719-028-45	DIODE D2L20U-F
*	CN507	1-691-134-11	PIN,CONNECTOR (PC BOARD) 2P		D651	8-719-063-70	DIODE D1NL20U-TA
	CN508	1-695-915-11	TAB (CONTACT)		D652	8-719-028-45	DIODE D2L20U-TA
	CN601	1-580-843-11	PIN,CONNECTOR (POWER)		D653	8-719-028-45	DIODE D2L20U-TA





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REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
D654	8-719-057-96	DIODE D10SC6M-4012		<b>FUSE</b>			
D655	8-719-052-91	DIODE D4SBS4-F			F601	1-576-193-11	FUSE 6.3A/125V
D656	8-719-028-45	DIODE D2L20U-TA			F651	1-576-360-21	FUSE, MULTIPLE
D657	8-719-028-45	DIODE D2L20U-TA			F652	1-576-360-21	FUSE, MULTIPLE
D658	8-719-063-70	DIODE D1NL20U-TA		<b>FERRITE BEAD</b>			
D659	8-719-063-70	DIODE D1NL20U-TA		FB651	1-410-396-41	FERRITE	0.45µH
D660	8-719-028-45	DIODE D2L20U-F		FB654	1-410-396-41	FERRITE	0.45µH
D661	8-719-991-33	DIODE 1SS133T-77		FB655	1-410-396-41	FERRITE	0.45µH
D662	8-719-991-33	DIODE 1SS133T-77		FB656	1-410-396-41	FERRITE	0.45µH
D663	8-719-991-33	DIODE 1SS133T-77		FB657	1-410-396-41	INDUCTOR	0.45µH
D664	8-719-981-94	DIODE MTZJ-T-77-2.7A		<b>FUSE CLIP</b>			
D665	8-719-991-33	DIODE 1SS133T-77		FH601	1-533-223-11	CLIP, FUSE	
D666	8-719-991-33	DIODE 1SS133T-77		FH602	1-533-223-11	CLIP, FUSE	
D667	8-719-032-12	DIODE D1NS6-TR		<b>IC</b>			
D668	8-719-110-61	DIODE MTZJ-T-77-24A		IC502	8-759-133-90	IC UPC339C	
D669	8-719-921-86	DIODE MTZJ-T-77-13			IC601	8-729-045-39	TRANSISTOR MX0842AB-F
D670	8-719-027-22	DIODE D3S6M-F		IC651	8-759-103-93	IC UPC393C	
D671	8-719-027-22	DIODE D3S6M-F		IC652	8-759-701-84	IC NJM7905FA	
D672	8-719-200-82	DIODE 11ES2-TA2B		IC653	8-759-701-75	IC NJM7805FA	
D673	8-719-991-33	DIODE 1SS133T-77			IC654	8-749-012-13	IC DM-58
D674	8-719-991-33	DIODE 1SS133T-77		IC655	8-759-450-47	IC BA05T	
D675	8-719-110-17	DIODE MTZJ-T-77-10B		IC1501	8-752-068-36	IC CXA1726AS	
D676	8-719-109-72	DIODE MTZJ-T-77-3.9B		IC1502	8-749-014-37	IC STK392-150	
D677	8-719-991-33	DIODE 1SS133T-77		IC1504	8-759-634-51	IC NJM4558D	
D680	8-719-991-33	DIODE 1SS133T-77		IC1505	8-759-634-51	IC NJM4558D	
D1501	8-719-109-89	DIODE MTZJ-T-77-5.6B		IC1506	8-749-014-37	IC STK392-150	
D1503	8-719-921-40	DIODE MTZJ-T-77-4.7B		IC1507	8-759-634-51	IC NJM4558D	
D1504	8-719-110-08	DIODE MTZJ-T-77-8.2B		IC1509	8-759-593-33	IC LA78045	
D1505	8-719-110-41	DIODE MTZJ-T-77-15B		<b>COIL</b>			
D1506	8-719-110-41	DIODE MTZJ-T-77-15B		L501	1-412-533-21	INDUCTOR	47µH
D1507	8-719-110-41	DIODE MTZJ-T-77-15B		L502	1-414-187-11	INDUCTOR	47µH
D1509	8-719-110-41	DIODE MTZJ-T-77-15B		L503	1-459-104-00	COIL, DUST CORE	
D1510	8-719-110-41	DIODE MTZJ-T-77-15B			L504	1-419-082-11	COIL, HORIZONTAL LINEARITY
D1513	8-719-110-41	DIODE MTZJ-T-77-15B		L505	1-412-552-11	INDUCTOR	2.2MH
D1515	8-719-110-41	DIODE MTZJ-T-77-15B			L601	1-433-900-11	TRANSFORMER, LINE FILTER
D1520	8-719-109-93	DIODE MTZJ-T-77-6.2B		L651	1-419-589-21	INDUCTOR	10µH
D1521	8-719-109-93	DIODE MTZJ-T-77-6.2B		L652	1-419-589-21	INDUCTOR	10µH
D1522	8-719-924-16	DIODE MTZJ-T-77-24		L653	1-406-975-21	INDUCTOR	47µH
D1523	8-719-924-16	DIODE MTZJ-T-77-24					
D1525	8-719-908-03	DIODE GP08DPKG23					
D1526	8-719-110-41	DIODE MTZJ-T-77-15B					
D1527	8-719-110-41	DIODE MTZJ-T-77-15B					
D1528	8-719-110-41	DIODE MTZJ-T-77-15B					
D1529	8-719-110-41	DIODE MTZJ-T-77-15B					




**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.


**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.










REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
L654	1-410-396-41	FERRITE	0.45µH	Q652	8-729-922-39	TRANSISTOR 2SD2144S-TP-V	
L655	1-410-396-41	FERRITE	0.45µH	Q653	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
L656	1-412-525-31	INDUCTOR	10µH	Q654	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
L657	1-412-525-31	INDUCTOR	10µH	Q655	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L658	1-412-525-31	INDUCTOR	10µH	Q656	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L659	1-412-521-31	INDUCTOR	4.7µH	Q657	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
L660	1-412-521-31	INDUCTOR	4.7µH	Q658	8-729-119-76	TRANSISTOR 2SA1309A-RTA	
L1501	1-412-533-21	INDUCTOR	47µH	Q1501	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1502	1-412-533-21	INDUCTOR	47µH	Q1502	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
L1509	1-412-533-21	INDUCTOR	47µH	Q1503	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1510	1-412-533-21	INDUCTOR	47µH	Q1505	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1511	1-412-533-21	INDUCTOR	47µH	Q1506	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1512	1-412-533-21	INDUCTOR	47µH	Q1508	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1513	1-412-525-31	INDUCTOR	10µH	Q1509	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA	
L1514	1-412-911-11	FERRITE	0µH	Q1511	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA	
L1515	1-412-911-11	FERRITE	0µH				
<b>NEON LAMP</b>				<b>RESISTOR</b>			
NL501	1-517-778-21	LAMP, NEON		R501	1-247-843-11	CARBON	3.3K 5% 1/4W
NL502	1-517-778-21	LAMP, NEON		R502	1-249-419-11	CARBON	1.5K 5% 1/4W
NL503	1-517-778-21	LAMP, NEON		R503	1-260-336-11	CARBON	4.7K 5% 1/2W
NL504	1-517-778-21	LAMP, NEON		R504	1-260-087-11	CARBON	100 5% 1/2W
NL505	1-517-778-21	LAMP, NEON		R505	1-260-087-11	CARBON	100 5% 1/2W
				R506	1-216-482-11	METAL OXIDE	1.8K 5% 3W
				R507	1-216-482-11	METAL OXIDE	1.8K 5% 3W
<b>IC LINK</b>				R508	1-216-482-11	METAL OXIDE	1.8K 5% 3W
 PS501	1-533-593-31	LINK, IC		R509	1-260-337-11	CARBON	5.6K 5% 1/2W
 PS1501	1-533-593-31	LINK, IC		R510	1-249-421-11	CARBON	2.2K 5% 1/4W
 PS1502	1-533-593-31	LINK, IC		R511	1-215-879-11	METAL OXIDE	47K 5% 1W
 PS1503	1-533-593-31	LINK, IC		R512	1-249-422-11	CARBON	2.7K 5% 1/4W
 PS1504	1-533-593-31	LINK, IC		R513	1-249-422-11	CARBON	2.7K 5% 1/4W
 PS1505	1-533-593-31	LINK, IC		R514	1-249-422-11	CARBON	2.7K 5% 1/4W
 PS1506	1-533-593-31	LINK, IC		R515	1-260-131-11	CARBON	470K 5% 1/2W
				R517	1-247-891-00	CARBON	330K 5% 1/4W
				R519	1-215-445-00	METAL	10K 1% 1/4W
				R520	1-260-304-51	CARBON	10 5% 1/2W
				R522	1-215-399-00	METAL	120 1% 1/4W
				R523	1-247-895-91	CARBON	470K 5% 1/4W
				R524	1-249-433-11	CARBON	22K 5% 1/4W
				R525	1-249-428-11	CARBON	8.2K 5% 1/4W
				R526	1-249-437-11	CARBON	47K 5% 1/4W
				R527	1-249-428-11	CARBON	8.2K 5% 1/4W
				R528	1-249-437-11	CARBON	47K 5% 1/4W
				R529	1-249-439-11	CARBON	68K 5% 1/4W
				R530	1-249-428-11	CARBON	8.2K 5% 1/4W
Q501	8-729-048-47	TRANSISTOR 2SC2688(5)-LK					
Q502	8-729-048-46	TRANSISTOR 2SD2578-RF					
Q503	8-729-931-45	TRANSISTOR IRF614					
Q505	8-729-046-80	TRANSISTOR 2SC4634LS-CB11					
Q506	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA					
Q507	8-729-046-80	TRANSISTOR 2SC4634LS-CB11					
Q601	8-729-046-40	TRANSISTOR 2SK2663					
Q602	8-729-922-39	TRANSISTOR 2SD2144S-TP-V					
Q651	8-729-119-76	TRANSISTOR 2SA1309A-QRSTA					





**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

A component identified by this  symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R531	1-249-429-11	CARBON	10K	5%	1/4W	R588	1-215-863-11	METAL OXIDE	100	5%	1W
R532	1-249-430-11	CARBON	12K	5%	1/4W						(KP- 43T90 only)
R535	1-247-887-00	CARBON	220K	5%	1/4W	R588	1-215-864-00	METAL OXIDE	150	5%	1W
  R536	1-215-467-00	METAL	82K	1%	1/4W						(KP- 53T90 only)
R537	1-249-433-11	CARBON	22K	5%	1/4W	R589	1-247-807-31	CARBON	100	5%	1/4W
R538	1-215-443-00	METAL	8.2K	1%	1/4W	R590	1-260-127-11	CARBON	220K	5%	1/2W
R542	1-249-424-11	CARBON	3.9K	5%	1/4W	R591	1-216-391-11	METAL OXIDE	1.5	5%	3W
R543	1-260-135-11	CARBON	1M	5%	1/2W	R592	1-249-433-11	CARBON	22K	5%	1/4W
R544	1-249-405-11	CARBON	100	5%	1/4W	R593	1-249-429-11	CARBON	10K	5%	1/4W
  R545		METAL			1/4W	R594	1-249-377-11	CARBON	0.47	5%	1/4W
R546	1-215-456-00	METAL	30K	1%	1/4W	R595	1-249-377-11	CARBON	0.47	5%	1/4W
R548	1-215-449-00	METAL	15K	1%	1/4W	R596	1-249-377-11	CARBON	0.47	5%	1/4W
R550	1-215-910-00	METAL OXIDE	68	5%	3W	R597	1-260-288-11	CARBON	0.47	5%	1/2W
R551	1-215-910-00	METAL OXIDE	68	5%	3W	R598	1-249-377-11	CARBON	0.47	5%	1/4W
R556	1-249-437-11	CARBON	47K	5%	1/4W	R599	1-249-429-11	CARBON	10K	5%	1/4W
R563	1-247-887-00	CARBON	220K	5%	1/4W	R600	1-249-433-11	CARBON	22K	5%	1/4W
R566	1-215-868-00	METAL OXIDE	680	5%	1W	 R601	1-219-776-11	CARBON	2.2M	10%	1/2W
R567	1-249-437-11	CARBON	47K	5%	1/4W	 R602	1-219-759-11	CARBON	1M	5%	1/2W
R568	1-249-405-11	CARBON	100	5%	1/4W	 R603	1-240-881-11	CMT-RES	0.82	5%	20W
R569	1-260-314-11	CARBON	68	5%	1/2W	R604	1-260-298-51	CARBON	3.3	5%	1/2W
R570	1-247-807-31	CARBON	100	5%	1/4W	R605	1-249-415-11	CARBON	680	5%	1/4W
R571	1-215-917-11	METAL OXIDE	1K	5%	3W	 R606	1-240-881-11	CMT-RES	0.82	5%	20W
R572	1-216-490-11	METAL OXIDE	39K	5%	3W	R607	1-249-389-11	CARBON	4.7	5%	1/4W
R573	1-214-912-00	METAL	91K	1%	1/2W	R608	1-247-791-91	CARBON	22	5%	1/4W
R574	1-216-490-11	METAL OXIDE	39K	5%	3W	R609	1-240-205-91	CARBON	22M	5%	1/2W
R575	1-249-433-11	CARBON	22K	5%	1/4W	R610	1-260-127-11	CARBON	220K	5%	1/2W
R576	1-247-881-00	CARBON	120K	5%	1/4W	R611	1-260-127-11	CARBON	220K	5%	1/2W
R577	1-214-923-00	METAL	270K	1%	1/2W	 R612	1-202-933-61	FUSIBLE	0.1	10%	1/2W
R578	1-216-490-11	METAL OXIDE	39K	5%	3W	R613	1-249-413-11	CARBON	470	5%	1/4W
R579	1-216-490-11	METAL OXIDE	39K	5%	3W	R615	1-249-437-11	CARBON	47K	5%	1/4W
R580	1-249-413-11	CARBON	470	5%	1/4W	R616	1-249-421-11	CARBON	2.2K	5%	1/4W
R581	1-247-807-31	CARBON	100	5%	1/4W	R617	1-216-349-00	METAL OXIDE	1	5%	1W
R582	1-260-292-11	CARBON	1	5%	1/2W	R618	1-260-127-11	CARBON	220K	5%	1/2W
R583	1-260-117-11	CARBON	33K	5%	1/2W	R619	1-216-349-00	METAL OXIDE	1	5%	1W
R584	1-249-377-11	CARBON	0.47	5%	1/4W	R620	1-215-493-00	METAL	1M	1%	1/4W
R586	1-215-862-11	METAL OXIDE	68	5%	1W	R621	1-260-127-11	CARBON	220K	5%	1/2W
						R622	1-249-441-11	CARBON	100K	5%	1/4W
R586	1-215-863-11	METAL OXIDE	100	5%	1W	R623	1-260-127-11	CARBON	220K	5%	1/2W
						R624	1-260-127-11	CARBON	220K	5%	1/2W
R586	1-215-864-00	METAL OXIDE	150	5%	1W	R652	1-249-377-11	CARBON	0.47	5%	1/4W
						R654	1-216-365-00	METAL OXIDE	0.47	5%	2W
						R655	1-260-288-11	CARBON	0.47	5%	1/2W
R587	1-216-349-00	METAL OXIDE	1	5%	1W	R656	1-249-377-11	CARBON	0.47	5%	1/4W
R588	1-215-862-11	METAL OXIDE	68	5%	1W	R657	1-215-421-00	METAL	1K	1%	1/4W
											(KP-48V90/ 61V90 only)



REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R658	1-249-429-11	CARBON	10K	5%	1/4W	R1512	1-214-800-11	METAL	2.2	1%	1/2W
R659	1-215-446-00	METAL	11K	1%	1/4W	R1513	1-215-421-00	METAL	1K	1%	1/4W
R660	1-215-439-00	METAL	5.6K	1%	1/4W	R1514	1-215-433-00	METAL	3.3K	1%	1/4W
R661	1-215-481-00	METAL	330K	1%	1/4W	R1515	1-249-409-11	CARBON	220	5%	1/4W
R662	1-215-445-00	METAL	10K	1%	1/4W	R1516	1-249-429-11	CARBON	10K	5%	1/4W
R663	1-215-445-00	METAL	10K	1%	1/4W	R1517	1-247-887-00	CARBON	220K	5%	1/4W
R664	1-249-425-11	CARBON	4.7K	5%	1/4W	R1518	1-249-429-11	CARBON	10K	5%	1/4W
R665	1-249-425-11	CARBON	4.7K	5%	1/4W	R1519	1-249-437-11	CARBON	47K	5%	1/4W
R666	1-247-887-00	CARBON	220K	5%	1/4W	R1520	1-247-881-00	CARBON	120K	5%	1/4W
R667	1-249-425-11	CARBON	4.7K	5%	1/4W	R1521	1-215-474-00	METAL	160K	1%	1/4W
R668	1-249-429-11	CARBON	10K	5%	1/4W	R1522	1-214-800-11	METAL	2.2	1%	1/2W
R669	1-247-807-31	CARBON	100	5%	1/4W	R1523	1-214-800-11	METAL	2.2	1%	1/2W
R671	1-249-429-11	CARBON	10K	5%	1/4W	R1524	1-215-421-00	METAL	1K	1%	1/4W
R672	1-249-417-11	CARBON	1K	5%	1/4W	R1525	1-215-433-00	METAL	3.3K	1%	1/4W
R673	1-249-425-11	CARBON	4.7K	5%	1/4W	R1526	1-249-409-11	CARBON	220	5%	1/4W
R675	1-249-429-11	CARBON	10K	5%	1/4W	R1527	1-249-409-11	CARBON	220	5%	1/4W
R676	1-249-417-11	CARBON	1K	5%	1/4W	R1528	1-215-433-00	METAL	3.3K	1%	1/4W
R677	1-249-417-11	CARBON	1K	5%	1/4W	R1529	1-215-421-00	METAL	1K	1%	1/4W
R678	1-249-425-11	CARBON	4.7K	5%	1/4W	R1530	1-214-800-11	METAL	2.2	1%	1/2W
R679	1-247-807-31	CARBON	100	5%	1/4W	R1531	1-214-800-11	METAL	2.2	1%	1/2W
R680	1-249-429-11	CARBON	10K	5%	1/4W	R1532	1-214-800-11	METAL	2.2	1%	1/2W
R681	1-249-429-11	CARBON	10K	5%	1/4W	R1533	1-249-441-11	CARBON	100K	5%	1/4W
R682	1-249-417-11	CARBON	1K	5%	1/4W	R1534	1-214-800-11	METAL	2.2	1%	1/2W
R683	1-249-417-11	CARBON	1K	5%	1/4W	R1535	1-215-421-00	METAL	1K	1%	1/4W
R684	1-249-425-11	CARBON	4.7K	5%	1/4W	R1536	1-215-433-00	METAL	3.3K	1%	1/4W
R685	1-249-417-11	CARBON	1K	5%	1/4W	R1537	1-249-409-11	CARBON	220	5%	1/4W
R686	1-215-445-00	METAL	10K	1%	1/4W	R1538	1-249-429-11	CARBON	10K	5%	1/4W
R687	1-215-429-00	METAL	2.2K	1%	1/4W	R1539	1-249-428-11	CARBON	8.2K	5%	1/4W
R688	1-215-429-00	METAL	2.2K	1%	1/4W	R1540	1-249-417-11	CARBON	1K	5%	1/4W
R689	1-249-417-11	CARBON	1K	5%	1/4W	R1541	1-247-843-11	CARBON	3.3K	5%	1/4W
R690	1-215-437-00	METAL	4.7K	1%	1/4W	R1542	1-249-429-11	CARBON	10K	5%	1/4W
R691	1-249-417-11	CARBON	1K	5%	1/4W	R1543	1-249-429-11	CARBON	10K	5%	1/4W
R1501	1-214-800-11	METAL	2.2	1%	1/2W	R1544	1-249-419-11	CARBON	1.5K	5%	1/4W
R1502	1-214-800-11	METAL	2.2	1%	1/2W	R1548	1-249-438-11	CARBON	56K	5%	1/4W
R1503	1-215-421-00	METAL	1K	1%	1/4W	R1549	1-214-800-11	METAL	2.2	1%	1/2W
R1504	1-215-433-00	METAL	3.3K	1%	1/4W	R1550	1-215-447-00	METAL	12K	1%	1/4W
R1505	1-249-409-11	CARBON	220	5%	1/4W	R1551	1-249-428-11	CARBON	8.2K	5%	1/4W
R1506	1-249-409-11	CARBON	220	5%	1/4W	R1552	1-214-800-11	METAL	2.2	1%	1/2W
R1507	1-215-433-00	METAL	3.3K	1%	1/4W	R1554	1-215-449-00	METAL	15K	1%	1/4W
R1508	1-215-421-00	METAL	1K	1%	1/4W	R1555	1-247-807-31	CARBON	100	5%	1/4W
R1509	1-214-800-11	METAL	2.2	1%	1/2W	R1556	1-249-433-11	CARBON	22K	5%	1/4W
R1510	1-214-800-11	METAL	2.2	1%	1/2W	R1557	1-249-429-11	CARBON	10K	5%	1/4W
R1511	1-214-800-11	METAL	2.2	1%	1/2W	R1558	1-249-429-11	CARBON	10K	5%	1/4W
						R1559	1-215-857-71	METAL OXIDE	10	5%	1W





**NOTE: The components identified by shading and  $\triangle$  mark are critical for safety. Replace only with part number specified.**

**NOTE: Les composants identifiés par un trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifique.**

REF.NO.	PART NO.	DESCRIPTION	VALUES			REF.NO.	PART NO.	DESCRIPTION	VALUES		
R1560	1-216-452-11	METAL OXIDE	180	5%	2W	R1615	1-215-445-00	METAL	10K	1%	1/4W
R1561	1-249-429-11	CARBON	10K	5%	1/4W			<b>RELAY</b>			
R1562	1-249-429-11	CARBON	10K	5%	1/4W						
R1563	1-249-429-11	CARBON	10K	5%	1/4W						
R1564	1-215-445-00	METAL	10K	1%	1/4W	$\triangle$ RY601	1-755-266-11	RELAY, AC POWER			
R1565	1-249-429-11	CARBON	10K	5%	1/4W			<b>SPARK GAP</b>			
R1566	1-249-427-11	CARBON	6.8K	5%	1/4W	SG501	1-519-466-11	GAP, SPARK			
R1567	1-249-433-11	CARBON	22K	5%	1/4W	SG502	1-519-466-11	GAP, SPARK			
R1568	1-249-429-11	CARBON	10K	5%	1/4W			<b>TRANSFORMER</b>			
R1570	1-249-383-11	CARBON	1.5	5%	1/4W	$\triangle$ T501	1-433-836-11	TRANSFORMER, HORIZONTAL	DRIVE		
R1576	1-249-429-11	CARBON	10K	5%	1/4W	$\triangle$ T502	1-433-876-11	TRANSFORMER, FERRITE	(PMT)		
R1577	1-215-447-00	METAL	12K	1%	1/4W	$\triangle$ T504	1-453-238-31	FBT ASSY, NX-4007//X4P4			
R1578	1-249-429-11	CARBON	10K	5%	1/4W	$\triangle$ T601	1-433-871-11	TRANSFORMER, CONVERTER	(PIT)		
R1579	1-215-421-00	METAL	1K	1%	1/4W	$\triangle$ T602	1-433-844-11	TRANSFORMER, CONVERTER			
R1580	1-215-421-00	METAL	1K	1%	1/4W	$\triangle$ T603	1-429-992-21	TRANSFORMER, CONVERTER	(PRT)		
R1581	1-215-474-00	METAL	160K	1%	1/4W			<b>THERMISTOR</b>			
R1582	1-249-421-11	CARBON	2.2K	5%	1/4W	TH1501	1-807-925-11	THERMISTOR			
R1583	1-247-807-31	CARBON	100	5%	1/4W			<b>VARISTOR</b>			
R1584	1-249-433-11	CARBON	22K	5%	1/4W	$\triangle$ VDR601	1-801-073-31	VARISTOR TNR14V471K660			
R1585	1-215-449-00	METAL	15K	1%	1/4W						
R1586	1-249-441-11	CARBON	100K	5%	1/4W						
R1587	1-249-414-11	CARBON	560	5%	1/4W						
R1588	1-249-414-11	CARBON	560	5%	1/4W						
R1589	1-249-414-11	CARBON	560	5%	1/4W						
R1590	1-249-414-11	CARBON	560	5%	1/4W						
R1591	1-249-414-11	CARBON	560	5%	1/4W						
R1592	1-249-414-11	CARBON	560	5%	1/4W						
R1593	1-216-475-11	METAL OXIDE	120	5%	3W						
R1594	1-216-475-11	METAL OXIDE	120	5%	3W						
R1595	1-216-475-11	METAL OXIDE	120	5%	3W						
R1596	1-216-475-11	METAL OXIDE	120	5%	3W						
R1597	1-216-475-11	METAL OXIDE	120	5%	3W						
R1598	1-216-475-11	METAL OXIDE	120	5%	3W						
R1599	1-249-429-11	CARBON	10K	5%	1/4W						
R1600	1-247-807-31	CARBON	100	5%	1/4W						
R1601	1-249-437-11	CARBON	47K	5%	1/4W						
R1602	1-247-807-31	CARBON	100	5%	1/4W						
R1603	1-249-418-11	CARBON	1.2K	5%	1/4W						
R1604	1-249-429-11	CARBON	10K	5%	1/4W						
R1609	1-215-445-00	METAL	10K	1%	1/4W						
R1610	1-247-807-31	CARBON	100	5%	1/4W						
R1611	1-247-807-31	CARBON	100	5%	1/4W						
R1612	1-249-429-11	CARBON	10K	5%	1/4W						
R1613	1-249-429-11	CARBON	10K	5%	1/4W						



REF.NO.	PART NO.	DESCRIPTION	VALUES	REF.NO.	PART NO.	DESCRIPTION	VALUES
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**\* A-1372-618-A HC BOARD, MOUNTED**

**CAPACITOR**

C1291	1-126-791-11	ELECT	10µF	20%	16V
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**CONNECTOR**

* CN1291	1-564-518-11	PLUG,CONNECTOR	3P
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**DIODE**

D1291	8-719-066-43	DIODE GP1U28Y
D1292	8-719-109-89	DIODE MTZJ-T-77-5.6
D1293	8-719-109-89	DIODE MTZJ-T-77-5.6

**RESISTOR**

R1291	1-247-807-31	CARBON	100	5%	1/4W
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**\* A-1390-933-A S BOARD, MOUNTED**

**CONNECTOR**

* CN3001	1-564-506-11	PLUG,CONNECTOR	3P
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**DIODE**

D3001	8-719-109-89	DIODE MTZJ-T-77-5.6
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**SWITCH**

S3001	1-528-911-21	BATTERY, SOLAR
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**\*A-1372-619-A HA BOARD, MOUNTED**

**CONNECTOR**

* CN1202	1-564-517-11	PLUG,CONNECTOR	2P
* CN1203	1-564-522-11	PLUG,CONNECTOR	7P

**DIODE**

D1201	8-719-053-43	DIODE SLR-325VCT31
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**RESISTOR**

R1201	1-249-431-11	CARBON	15K	5%	1/4W
R1202	1-249-425-11	CARBON	4.7K	5%	1/4W
R1203	1-249-417-11	CARBON	1K	5%	1/4W
R1204	1-249-419-11	CARBON	1.5K	5%	1/4W
R1205	1-249-421-11	CARBON	2.2K	5%	1/4W
R1206	1-249-409-11	CARBON	220	5%	1/4W

**SWITCH**

S1201	1-572-198-11	SWITCH KEYBOARD
S1202	1-572-198-11	SWITCH KEYBOARD
S1203	1-572-198-11	SWITCH KEYBOARD
S1204	1-572-198-11	SWITCH KEYBOARD
S1205	1-572-198-11	SWITCH KEYBOARD
S1206	1-572-198-11	SWITCH KEYBOARD
S1207	1-572-198-11	SWITCH KEYBOARD



REF.NO. PART NO. DESCRIPTION VALUES

**\*A-1372-620-A HB BOARD, MOUNTED**

**CAPACITOR**

C1251	1-128-551-11	ELECT	22μF	20%	25V
C1252	1-128-551-11	ELECT	22μF	20%	25V
C1253	1-128-551-11	ELECT	22μF	20%	25V
C1254	1-128-551-11	ELECT	22μF	20%	25V
C1255	1-128-551-11	ELECT	22μF	20%	25V

**CONNECTOR**

*	CN1252	1-564-517-11	PLUG,CONNECTOR	2P	
*	CN1253	1-564-526-11	PLUG,CONNECTOR	11P	

**DIODE**

D1251	8-719-110-17	DIODE MTZJ-T-77-10			
D1252	8-719-110-17	DIODE MTZJ-T-77-10			
D1253	8-719-110-17	DIODE MTZJ-T-77-10			
D1254	8-719-110-17	DIODE MTZJ-T-77-10			
D1255	8-719-110-17	DIODE MTZJ-T-77-10			
D1256	8-719-110-17	DIODE MTZJ-T-77-10			

**JACK**

J1251	1-770-361-11	TERMINAL BLOCK, S			
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**RESISTOR**

R1251	1-249-429-11	CARBON	10K	5%	1/4W
R1252	1-249-424-11	CARBON	3.9K	5%	1/4W
R1253	1-249-421-11	CARBON	2.2K	5%	1/4W
R1254	1-249-418-11	CARBON	1.2K	5%	1/4W
R1255	1-249-425-11	CARBON	4.7K	5%	1/4W
R1256	1-247-804-11	CARBON	75	5%	1/4W
R1257	1-247-895-91	CARBON	470K	5%	1/4W
R1258	1-247-895-91	CARBON	470K	5%	1/4W
R1259	1-247-804-11	CARBON	75	5%	1/4W
R1260	1-247-804-11	CARBON	75	5%	1/4W

REF.NO. PART NO. DESCRIPTION VALUES

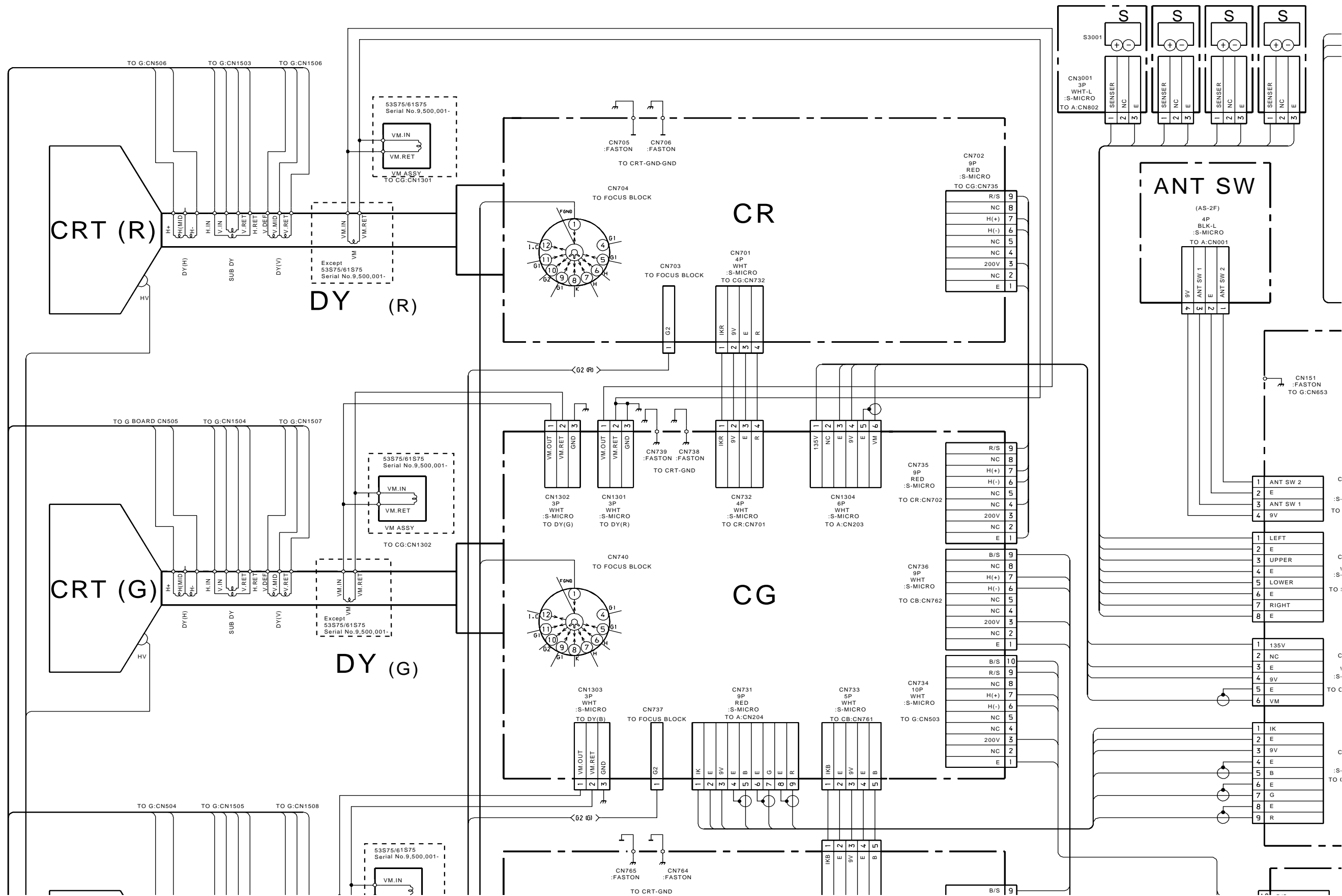
**SWITCH**

S1251	1-572-198-11	SWITCH KEYBOARD			
S1252	1-572-198-11	SWITCH KEYBOARD			
S1253	1-572-198-11	SWITCH KEYBOARD			
S1254	1-572-198-11	SWITCH KEYBOARD			
S1255	1-572-198-11	SWITCH KEYBOARD			

**ACCESSORIES AND PACKING MATERIALS**

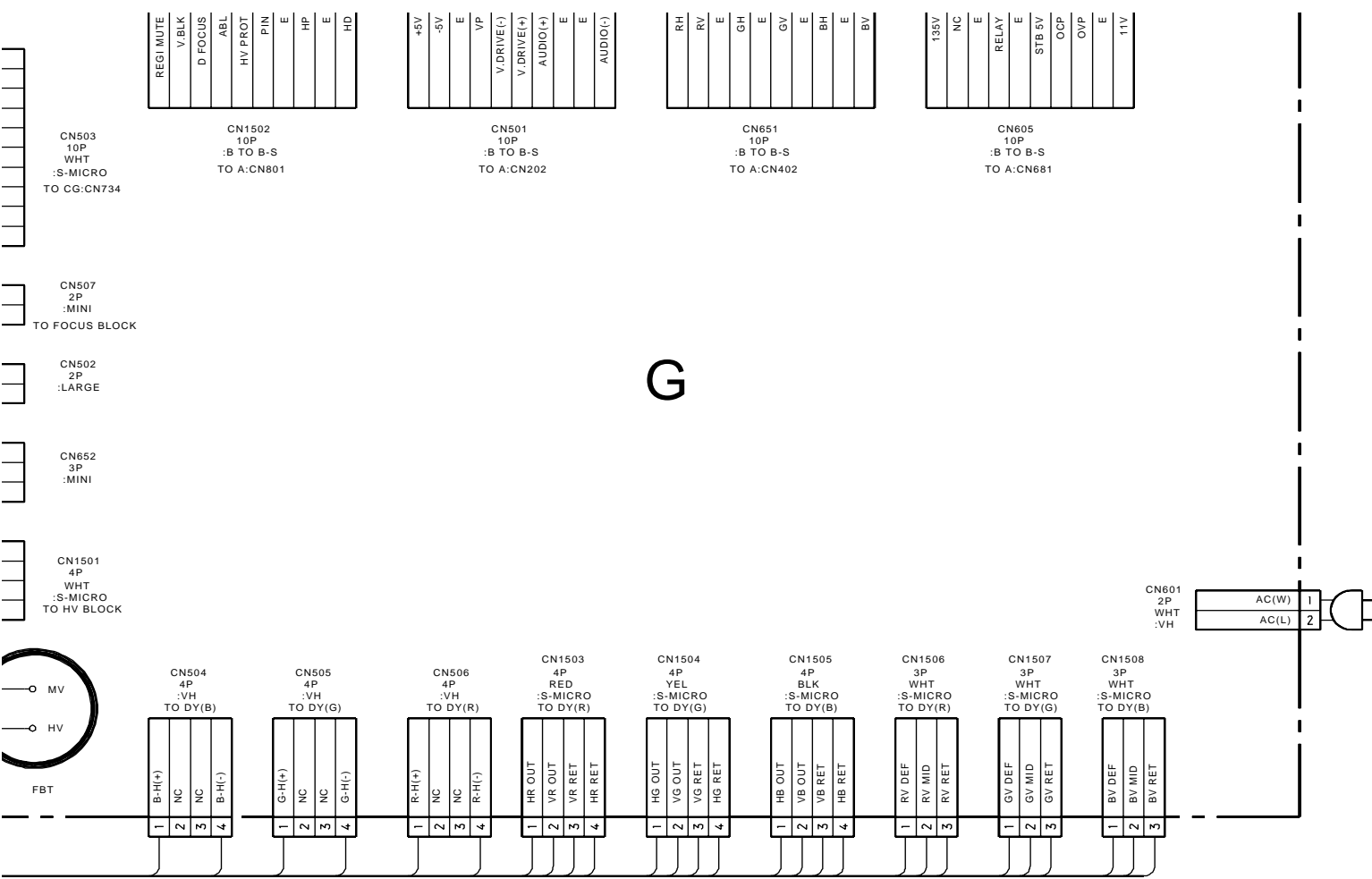
*	4-041-425-01	BAG, PROTECTION	(KP-48V90)		
*	4-041-426-01	BAG,PROTECTION	(KP-53V9)		
*	4-049-155-01	BAG, PROTECTION	(KP-43T90)		
*	4-076-420-01	BAG, PROTECTION	(KP-61V90)		
*	4-069-526-03	CUSHION, LOWER ASSY	(KP-48V90)		
*	4-069-586-03	CUSHION, LOWER ASSY	(KP-61V90)		
*	4-080-861-01	CUSHION, LOWER ASSY	(KP-53V90)		
*	4-080-867-01	CUSHION, LOWER ASSY	(KP-43T90)		
*	4-069-525-02	CUSHION, UPPER ASSY	(KP-48V90)		
*	4-069-585-02	CUSHION, UPPER ASSY	(KP-61V90)		
*	4-080-860-01	CUSHION, UPPER ASSY	(KP-53V90)		
*	4-080-866-01	CUSHION, UPPER ASSY	(KP-43T90)		
*	4-069-531-02	INDIVIDUALCARTON	(KP-48V90)		
*	4-069-573-02	INDIVIDUAL CARTON	(KP-53V90)		
*	4-069-582-03	INDIVIDUAL CARTON	(KP-61V90)		
*	4-081-590-01	INDIVIDUAL CARTON	(KP-43T90)		
*	4-041-423-01	SHEET,PROTECTION	(KP-43T90, KP-48V90)		
*	4-042-463-01	SHEET, PROTECTION	(KP-53V90, KP-61V90)		
*	4-069-532-01	PLATE, BOTTOM 4X20	(KP-48V90)		
*	4-069-533-02	TRAY	(KP-48V90)		
*	4-069-575-02	TRAY	(KP-53V90)		
*	4-069-584-01	TRAY	(KP-61V90)		
*	4-081-591-01	TRAY	(KP-43T90)		
	4-082-881-11	MANUAL, INSTRUCTION	(FOR US)		
	4-082-881-21	MANUAL, INSTRUCTION	(FOR CANADA)		
	4-082-881-31	MANUAL, INSTRUCTION	(FOR MEXICO)		
	1-418-469-11	REMOTE COMMANDER	(RM-Y906)		
	4-978-977-01	REMOTE BATTERY COVER	FOR RM-Y906		

# 5-4. FRAME SCHEMATIC DIAGRAM





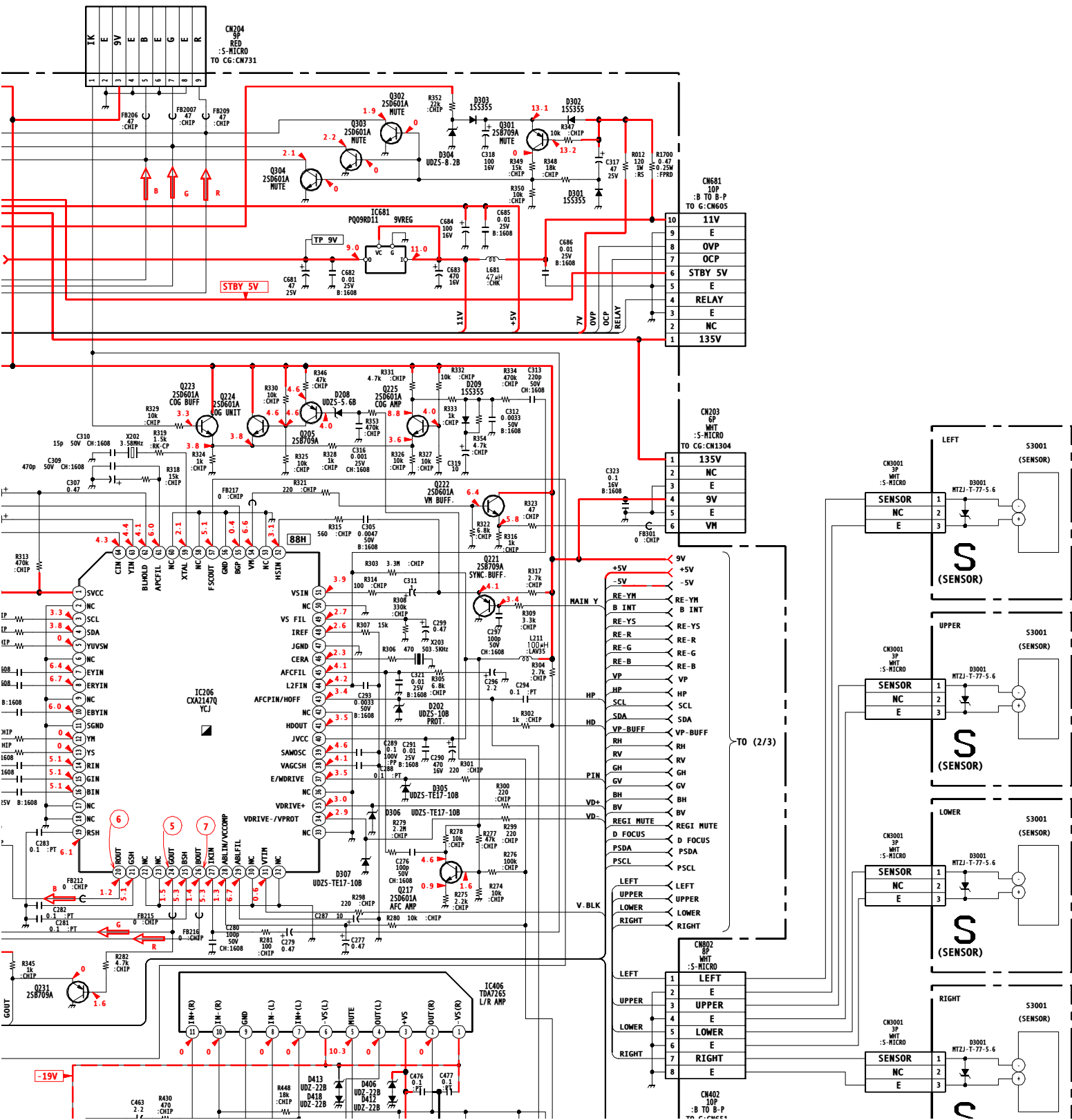




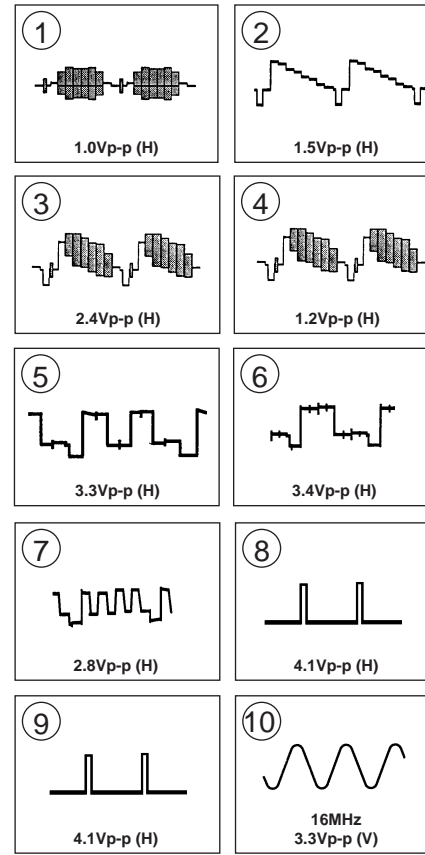




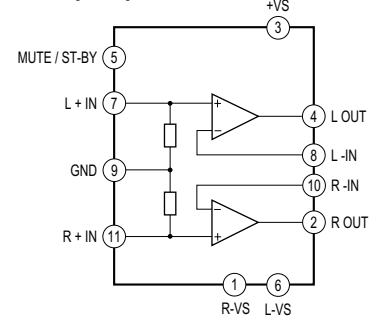
16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24



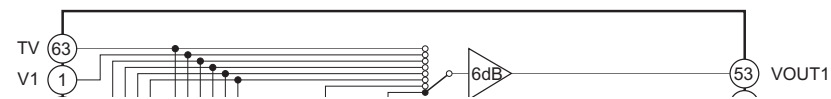
**A (1/3) BOARD WAVEFORMS**



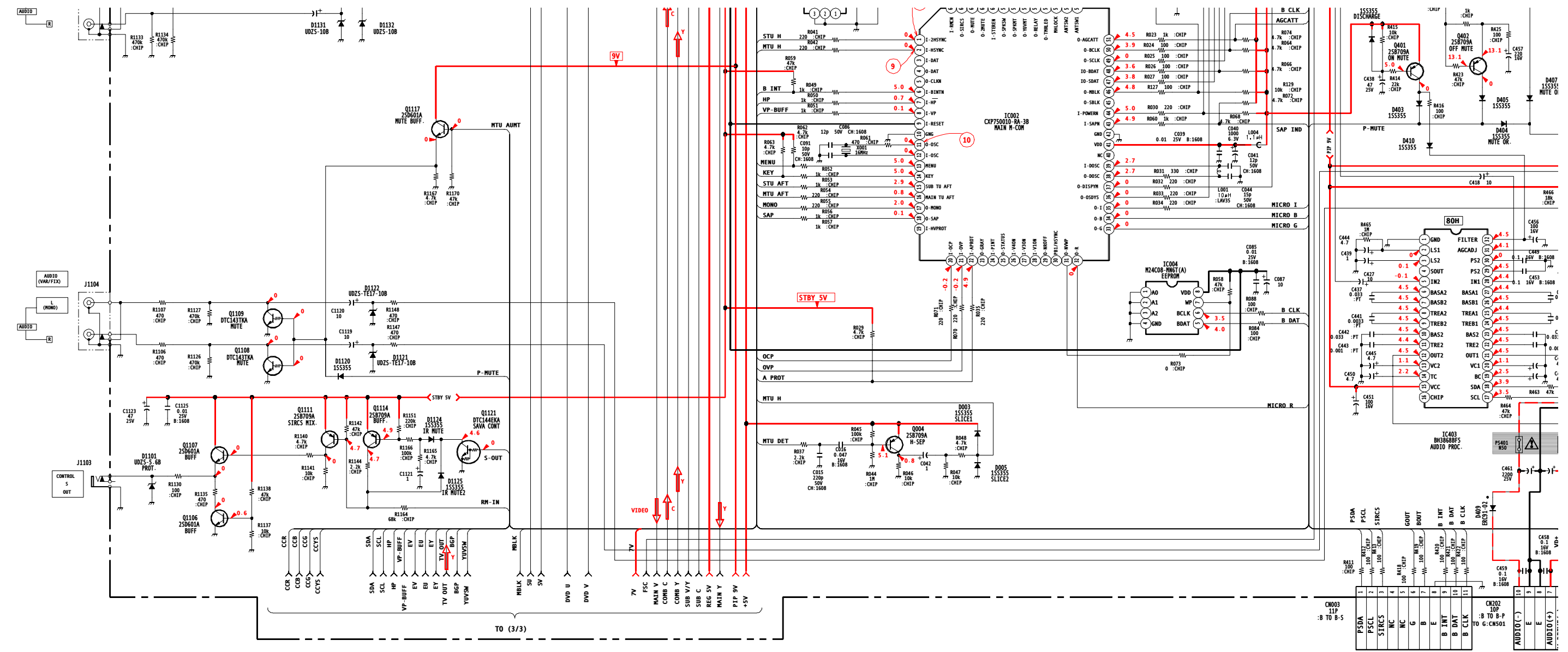
**A (1/3) BOARD : IC406 TDA7265**



**A (1/3) BOARD : IC1011 CXA2079Q**

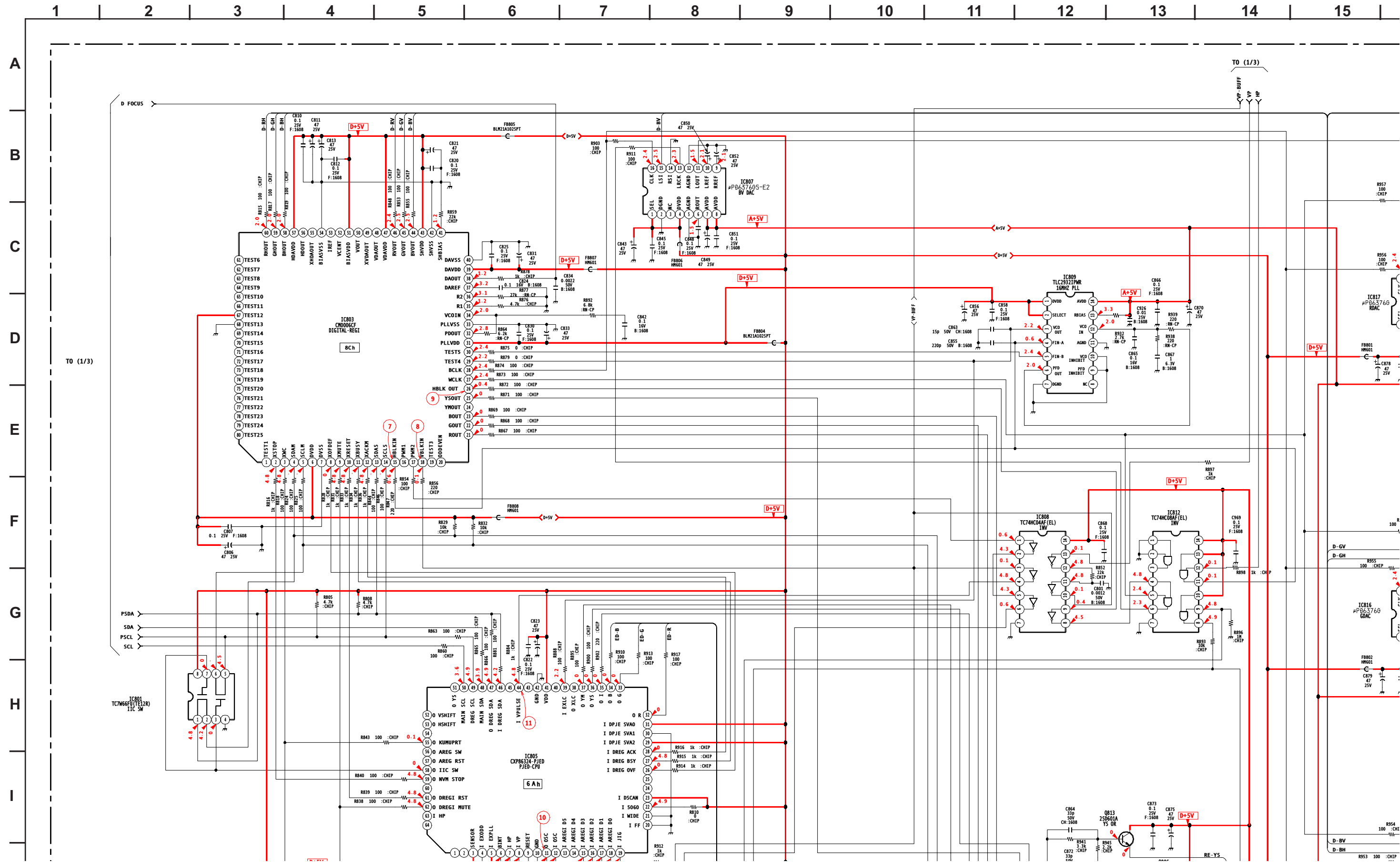


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A BOARD SCHEMATIC DIAGRAM (2 OF 3)

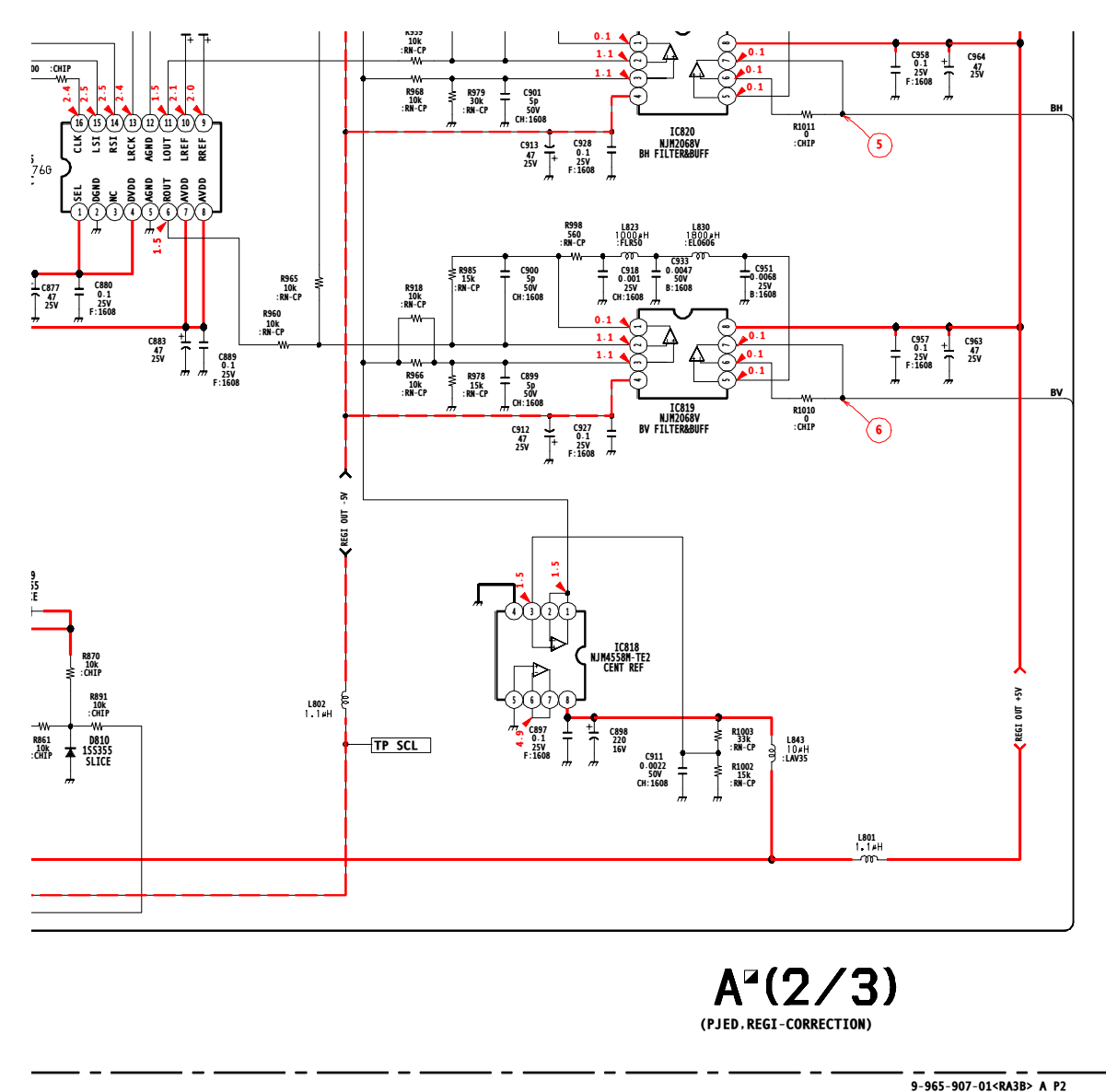






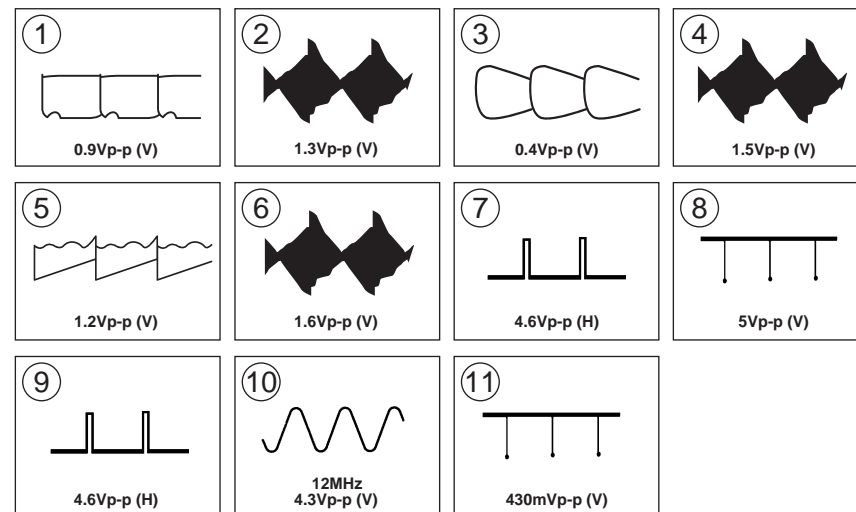






9-965-907-01<RA3B> A P2

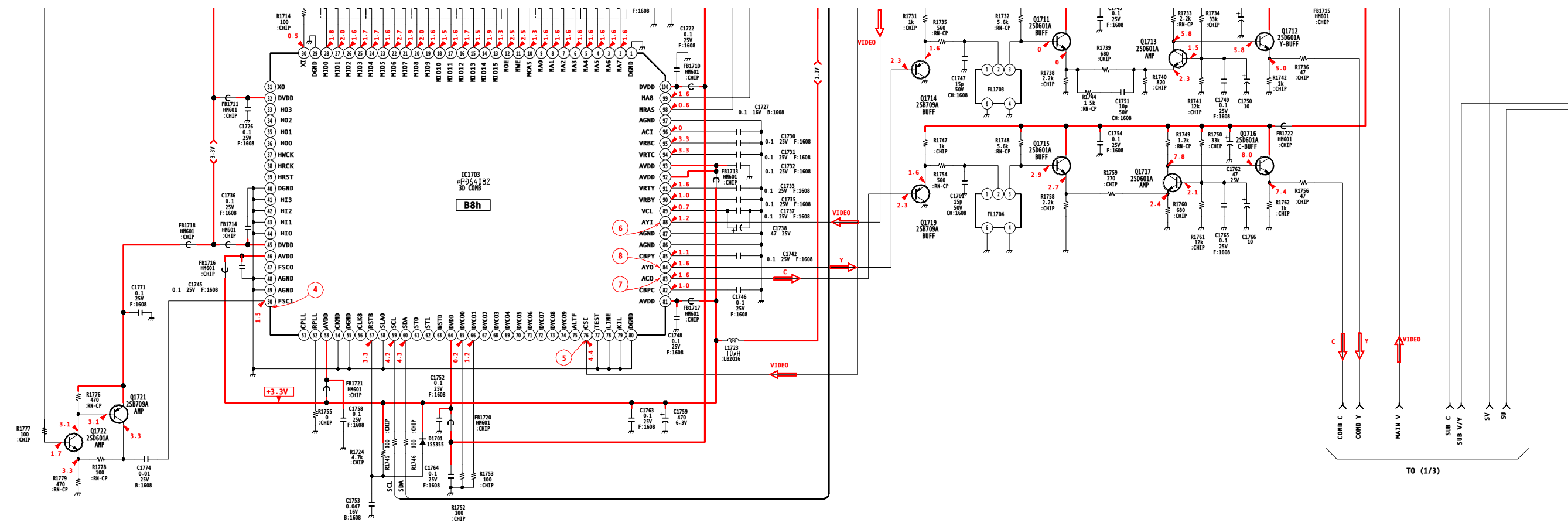
### A (2/3) BOARD WAVEFORMS



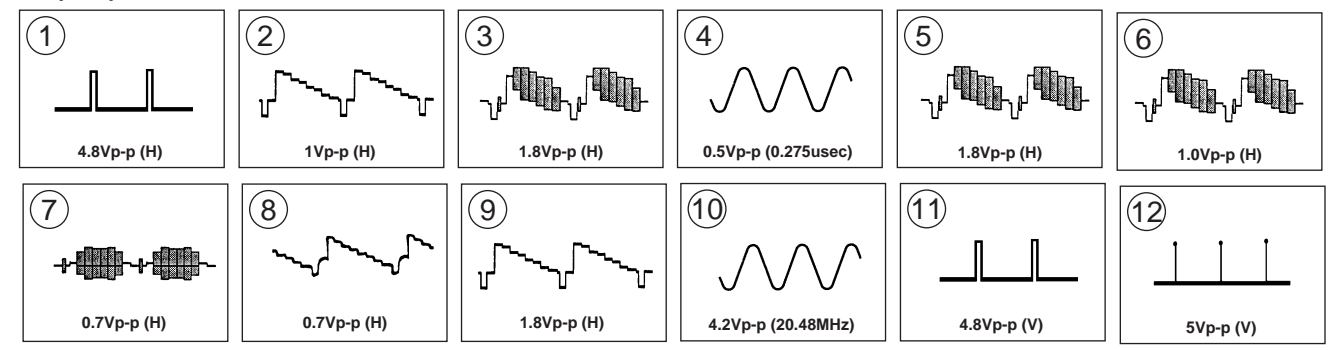


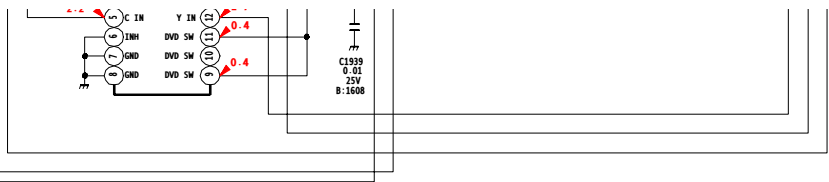


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A (3/3) BOARD WAVEFORMS

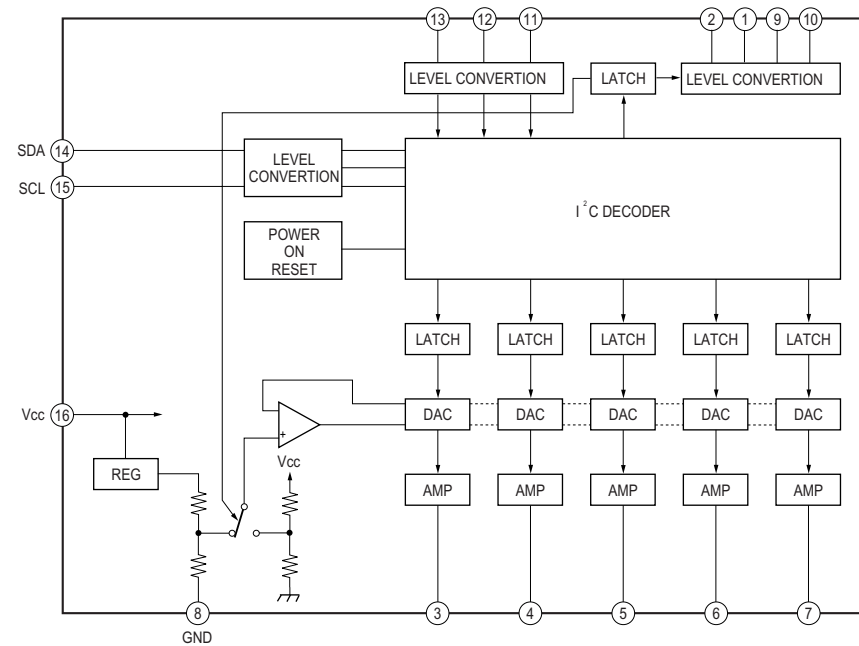




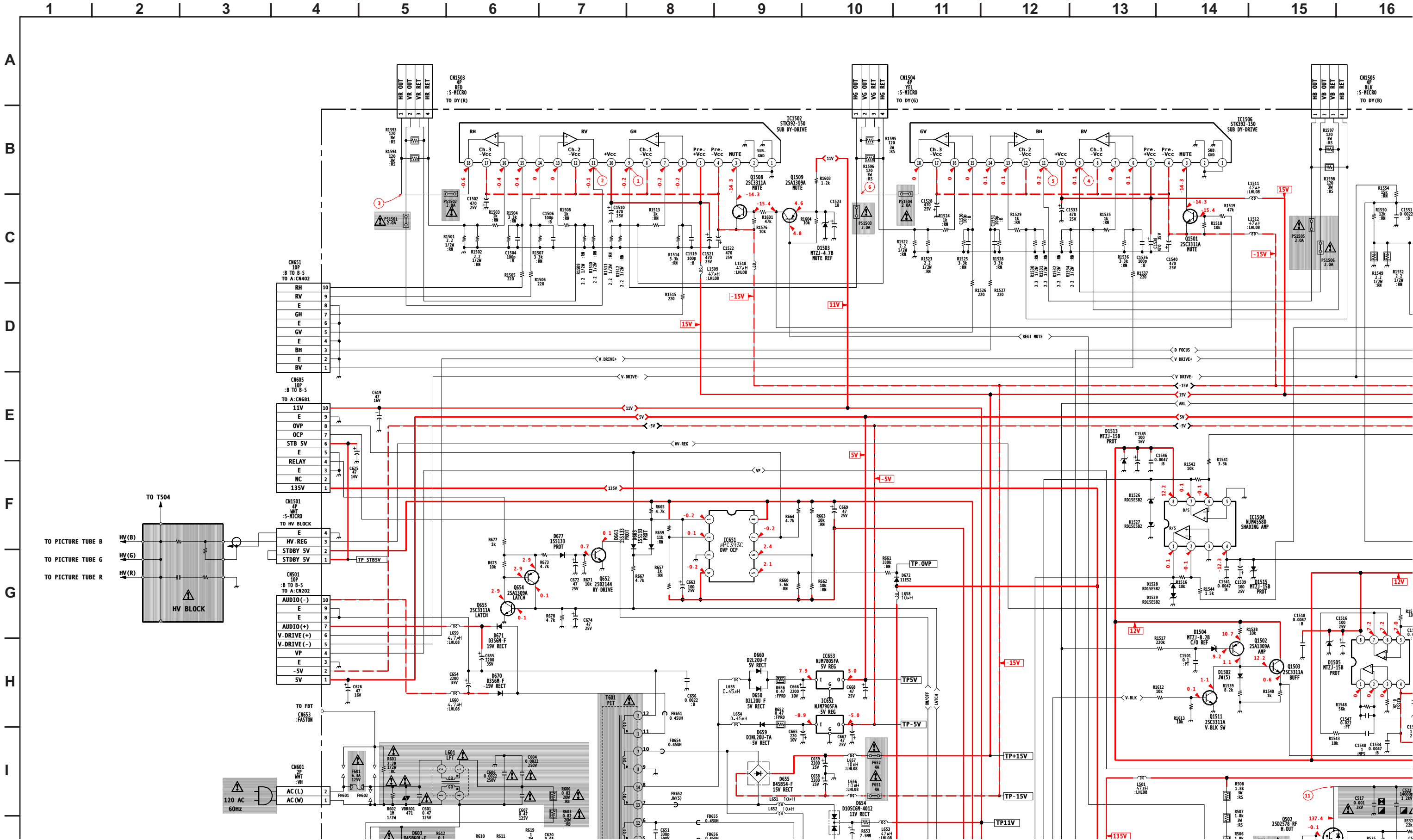
**A<sup>2</sup>(3/3)**  
 (P IN P.COMB FILTER)

9-965-907-01<RA3B> A P3

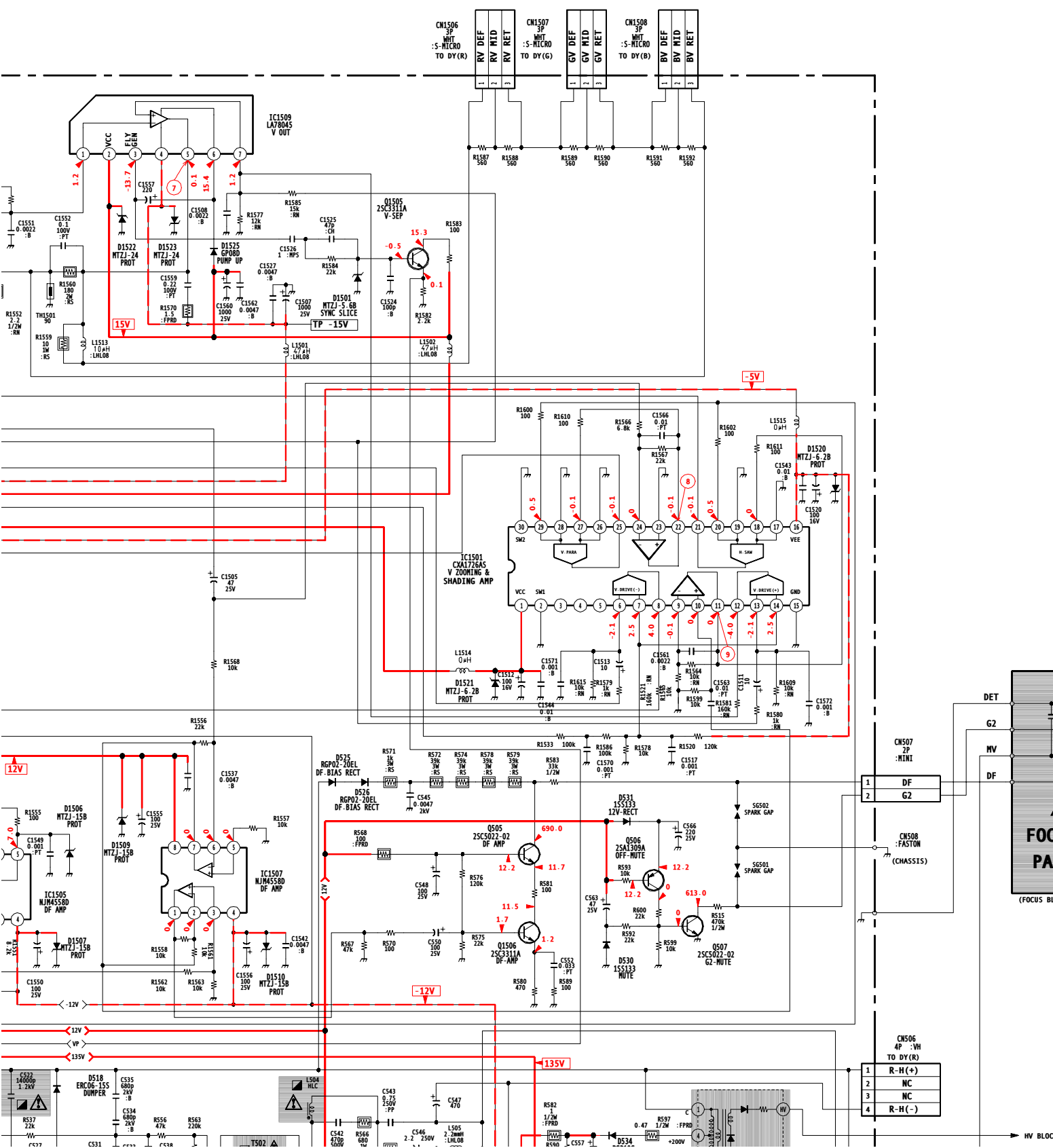
**A (3/3) BOARD : IC1904 CXA1315M-T4**



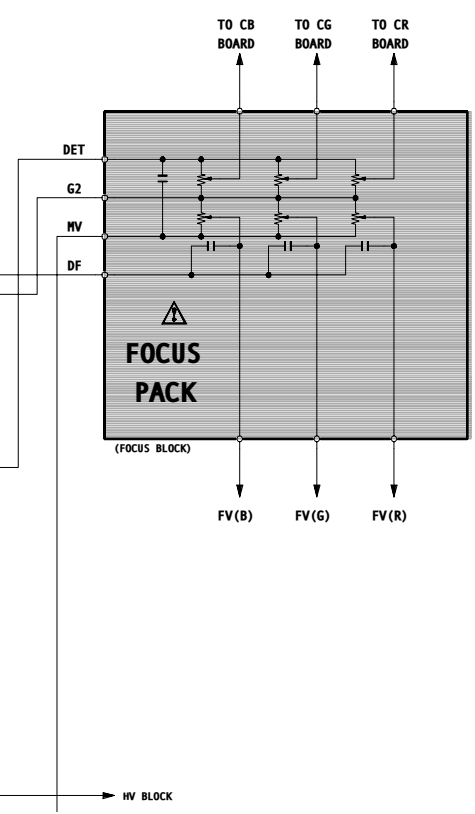
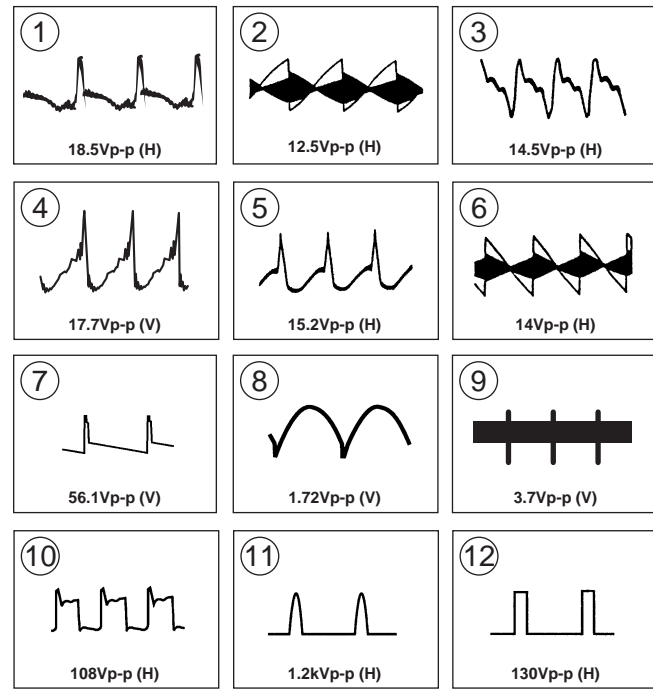
# G BOARD SCHEMATIC DIAGRAM



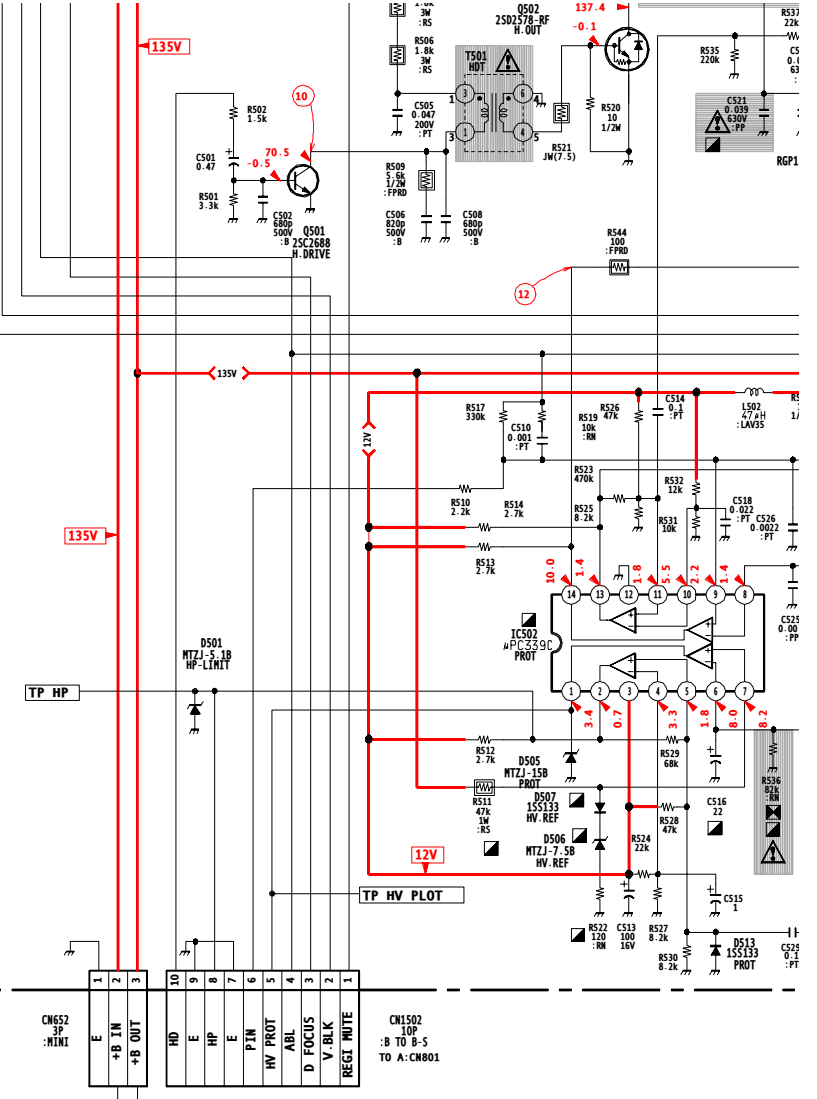
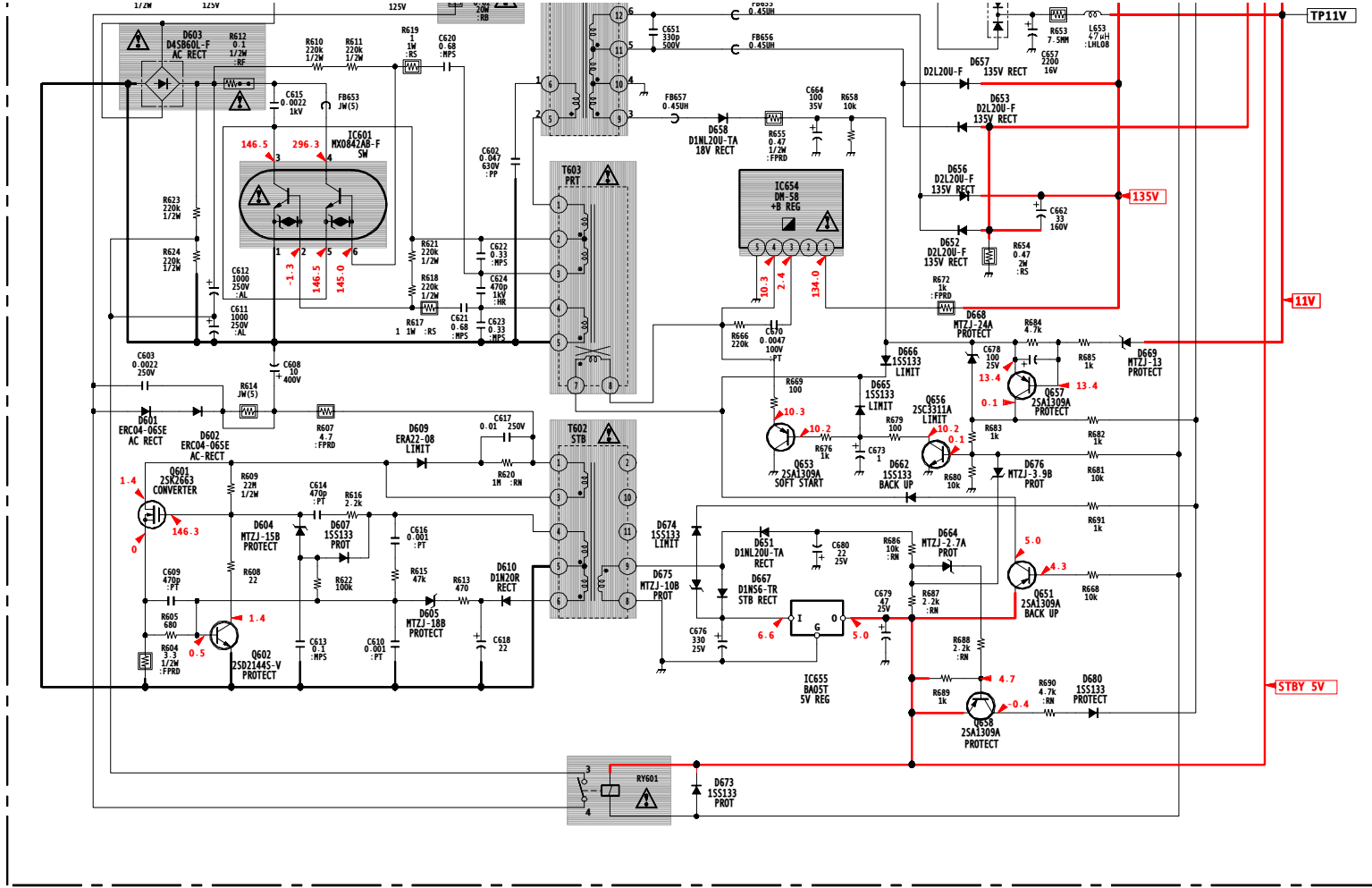


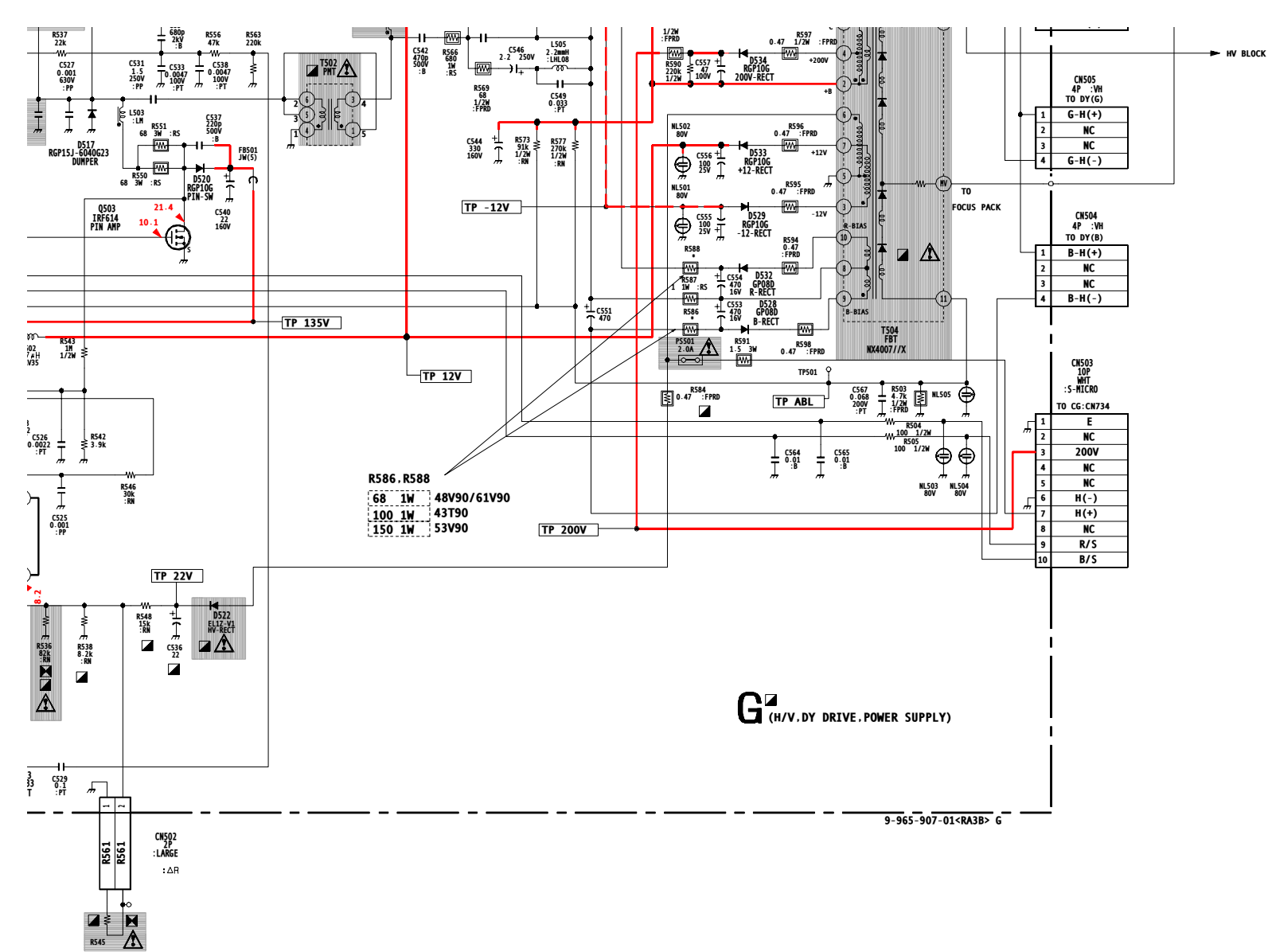


G BOARD WAVEFORMS

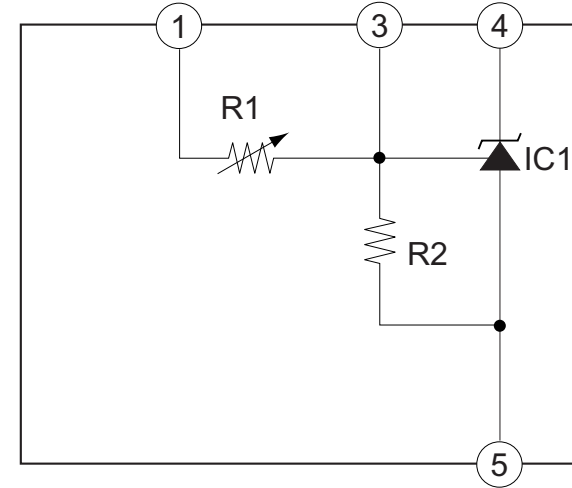


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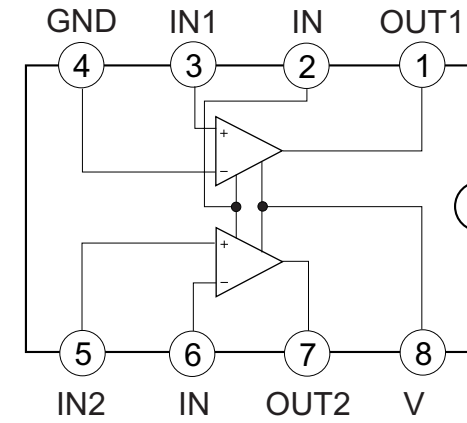




G BOARD : IC654 DM-58



G BOARD : IC651 μPC393C



**HISTORY INFORMATION FOR THE FOLLOWING MANUAL:**

**SERVICE MANUAL**

**RA-3B CHASSIS**

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KP-43T90</b>	RM-Y906	US/Canada/Mexico	SCC-P62A-A
<b>KP-48V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62D-A
<b>KP-53V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62C-A
<b>KP-61V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62B-A

**ORIGINAL MANUAL ISSUE DATE: 5/2001**

**ALL REVISIONS AND UPDATES TO THE ORIGINAL MANUAL ARE APPENDED TO THE END OF THE PDF FILE.**

<u>REVISION DATE</u>	<u>REVISION TYPE</u>	<u>SUBJECT</u>
5/2001	No revisions or updates are applicable at this time.	
7/2001	CORRECTION - 1	Addition of Page 63 (6-10. COVER)

**COLOR REAR VIDEO PROJECTOR**

**SONY®**

# PRINTING THE SERVICE MANUAL

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

## NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

## SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5" x 11" and 18" x 30" depending upon each individual diagram size. Those diagrams that are LARGER than 11" x 17" in full-size mode have been tiled for your convenience and can be printed on standard 11" x 17" (tabloid-size) paper, and reassembled.

### TO PRINT FULL SIZE SCHEMATIC DIAGRAMS

---

If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:


- 1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

### TO PRINT TILED VERSION OF SCHEMATICS

---

Schematic pages that are larger than 11" x 17" full-size are provided in a 11" x 17" printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.



If you have access to a printer capable of outputting the tabloid size (11" x 17") paper, then output the tiled version of the diagram as follows:


- 1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11" x 17", or tabloid size paper in landscape (  ) mode.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

### TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC

---

To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

- 1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like: . This tool will expand to reveal additional tools. Choose the Graphics Select tool by placing the cursor over the button on of the far right that looks like: 
- 2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.
- 3) With the marquee in place, go to the file menu and select the "Print..." option. When the print window appears, choose the option under the section called "Print Range" which says "Selected Graphic".

Select OK and the output will print only the area that you outlined with the marquee. 

(continued >)



## ON-SCREEN SEARCH OPTION

All of the text within the service manual PDF is content searchable. This means that you can enter any text, word, phrase or reference number that appears in the manual, and the PDF software will search, find and move the cursor to the location where you requested text first appears. This feature can be particularly useful in locating components on a specific schematic or printed wire circuit board (PWB) diagrams.

Follow these steps to effectively locate a component on a schematic diagram:

- 1) Locate the schematic you want to search by clicking on the corresponding bookmark on the left side of the screen. The view on the right of the screen will then jump to the desired schematic page.
- 2) Magnify the diagram to at least 400% before conducting a component search. This will enable you to easily view the reference number when it is highlighted on screen. To do this, click on the magnifying glass button on the tool bar at the top of the screen. Move the cursor over the diagram and RIGHT click you mouse. Select the 400% magnification option on the pop-up menu. Click on the button with the icon of the open hand to deactivate the magnification tool
- 3) Search the diagram (or the entire manual) by clicking on the binocular button tool at the top of the screen. The "Find" window will appear and allow you to type in your desired text. Type in a reference designator, such as R502, and click on the "Find" button. If the component is not on the diagram, but is listed anywhere else in the manual, the cursor will jump to the first location the text is found in the file. To find another instance of that same text, click on the binocular button again and select "Find Again."

# SERVICE MANUAL

# RA-3B CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KP-43T90</b>	RM-Y906	US/Canada/Mexico	SCC-P62A-A
<b>KP-48V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62D-A
<b>KP-53V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62C-A
<b>KP-61V90</b>	RM-Y906	US/Canada/Mexico	SCC-P62B-A

## CORRECTION - 1

**Subject: Addition/Deletion of Pages 63 & 64**

Correct the service manual as shown below.  
File this correction with the service manual.

### Section 6: Exploded Views (Page 63)

Add Page 63 [6-10. COVER (KP-61V90)] to manual.  
Delete duplicate Page 64 [6-11. CHASSIS (KP-61V90)].

**COLOR REAR VIDEO PROJECTOR**

**SONY®**

Sony Corporation  
Sony Technology Center  
Technical Services  
Service Promotion Department

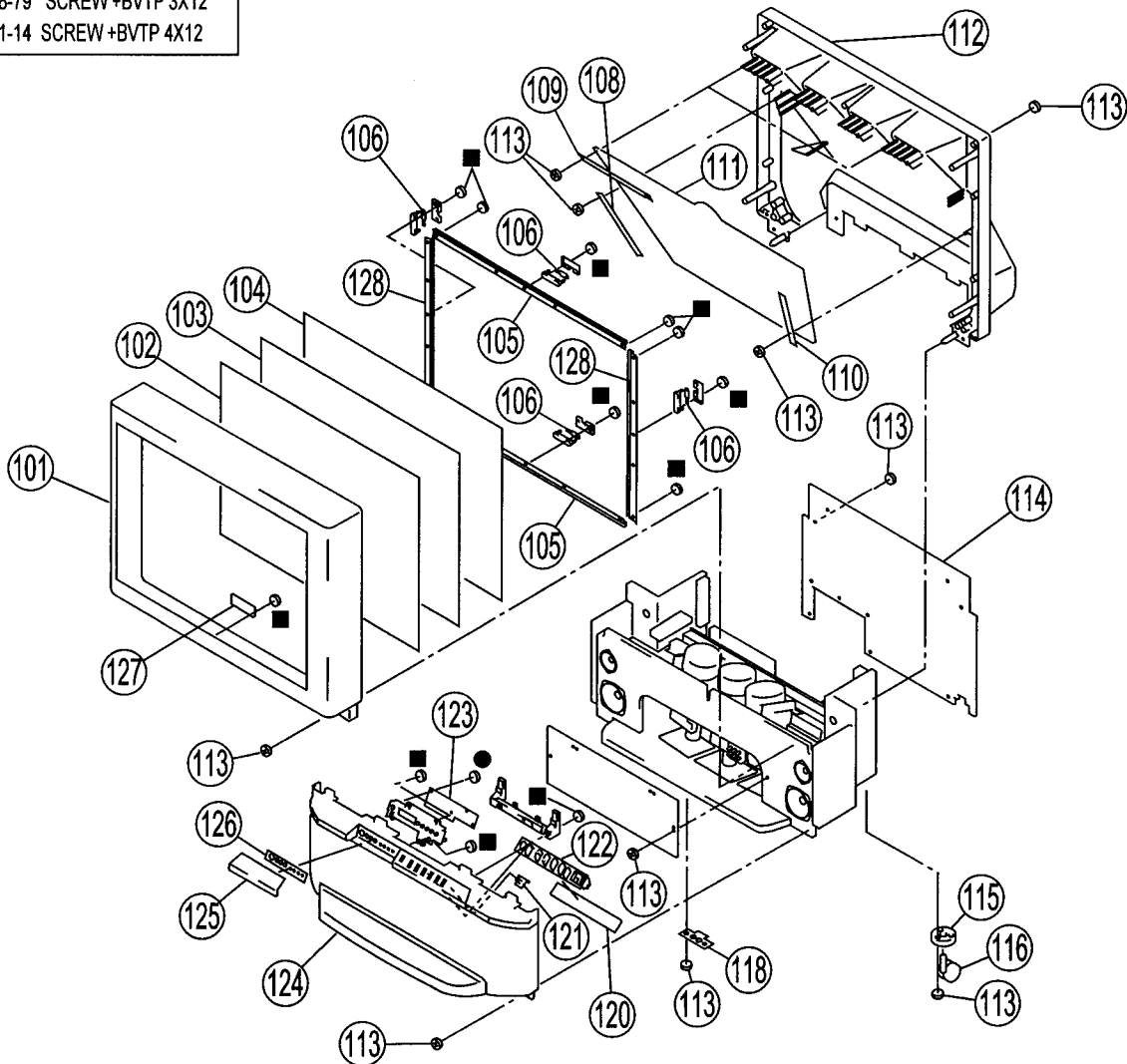
English  
2001GJ74108-1  
Printed in USA  
© 2001.7

NOTE: The components identified by shading and  $\triangle$  mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifiés par un trame et une marque  $\triangle$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### 6-10. COVER (KP-61V90)

- 7-685-648-79 SCREW +BVTP 3X12
- 7-685-661-14 SCREW +BVTP 4X12



REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	[ASS'Y INCLUDES]
101	X-4038-910-2	BEZNET ASSY	115	4-030-850-01	SOCKET, CASTER	
102	4-081-067-11	SCREEN (61), CONTRAST	116	4-039-546-01	CASTER	
103	4-070-283-11	PLATE (L), DIFFUSION	118	4-075-020-01	FOOT, PLASTIC	
104	4-079-449-11	PLATE (61FV), DIFFUSION	*	120	A-1372-619-A	HA BOARD, MOUNTED
* 105	4-070-329-02	HOLDER (L), SCREEN YC	121	4-069-682-01	GUIDE, LED	
* 106	A-1390-933-A	S BOARD, MOUNTED	122	4-069-681-21	BUTTON, MULTI	
* 108	4-069-689-01	HOLDER (L), MIRROR	* 123	A-1372-620-A	HB BOARD, MOUNTED	
* 109	4-070-345-01	HOLDER (TOP), MIRROR	* 124	X-4038-911-1	GRILLE ASSY, SPEAKER	[125]
* 110	4-069-690-01	HOLDER (R), MIRROR	125	4-069-671-41	DOOR (V), CONTROL	
111	4-070-922-01	MIRROR, REFLECTION	126	4-072-529-01	LABEL (2), SPEAKER GRILLE	
113	4-081-063-01	SCREW, DOME WASHER HEX TAP 4X20	* 127	A-1372-618-A	HC BOARD, MOUNTED	
* 112	4-069-695-01	COVER, MIRROR	* 128	4-070-334-02	HOLDER (S), SCREEN YC	
* 114	4-070-920-02	BOARD, REAR				