

PVM-2130QM

RM-668

SERVICE MANUAL

AEP Model

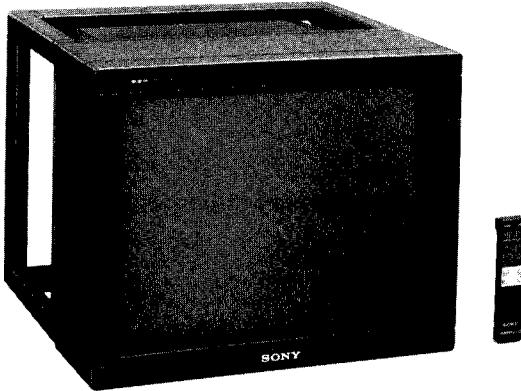
Chassis No. SCC-A99A-A

Australian Model

Chassis No. SCC-B22A-A

West Germany Model

Chassis No. SCC-B19A-A



SPECIFICATIONS

Note: The service manuals for RM-668 have been issued separately.

Color system	PAL, SECAM, NTSC and NTSC _{4.43} systems, switched automatically	
Picture tube	Trinitron tube	LINE A/B outputs (loop-through outputs)
	Approx. 54.5 cm (21 inches) (50.6 cm picture measured diagonally)	VIDEO: BNC connector
Resolution	100-degree deflection, AG pitch 0.55 mm Video input: 420 TV lines RGB inputs: 640 × 200 dots (2000 characters)	AUDIO: Phono jack
Color temperature	9300°K	Monitor outputs
Frequency response	10 MHz (-3 dB, RGB) 5 MHz (-3 dB, composite video)	VIDEO: BNC connector
Horizontal linearity	Less than ±7%	Composite video, 1 Vp-p
Vertical linearity	Less than ±8%	AUDIO: Phono jack
Line pull range	Horizontal: +500 Hz Vertical: -8 Hz	Less than 1 kilohm
Overscan of the picture	Less than +7%	Digital RGB inputs
Convergence	Central area: within 1.0 mm Periphery: within 1.8 mm	RGB: D-sub 9-pin connector (See "Signal assignment")
LINE A/B, VTR inputs		AUDIO: Phono jack
VIDEO IN:	LINE A/B: BNC connector Composite video, 1 Vp-p ±6 dB, sync negative, 75-ohm termination switchable	-5 dBs, more than 47 kilohms
	VTR: 8-pin connector Composite video, 1 Vp-p ±6 dB, sync negative, 75-ohm terminated	AV connector
AUDIO IN:	LINE A/B: Phono jack -5 dBs, more than 47 kilohms	21-pin connector (See "Signal assignment")
	VTR: 8-pin connector, -5 dBs, more than 47 kilohms	Speaker terminals 8 ohms
		Control S input/output
		Minijack, 5 Vp-p
		Power output 7 W + 7 W at 8 ohms
		Power requirements 220 – 240 V AC, 50/60 Hz
		Power consumption 140 W
		Dimensions Approx. 516 × 409 × 482 mm (w/h/d)
		Weight incl. projecting parts and controls
		Approx. 30.6 kg
		Supplied accessory Remote commander RM-668, with 2 R6 batteries..... 1
		Optional accessories TV stand SU-538, SU540 Speaker system SS-X6A, APM-X5A

— Continued on page 2 —

TRINITRON COLOR VIDEO MONITOR
SONY®

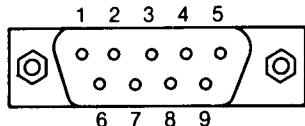


MICROFILM

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SIGNAL ASSIGNMENT

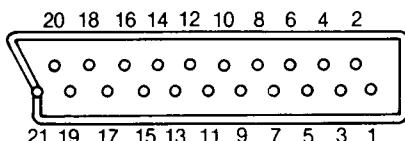
DIGITAL RGB connector (D-sub 9-pin)



Digital signal (TTL level)

Pin No.	Signal assignment
1	Ground
2	Ground
3	Red input
4	Green input
5	Blue input
6	Intensity input
7	No connection
8	H. sync input (positive/negative)
9	V. sync input (positive/negative)

AV connector (21-pin)



Pin No.	Signal	Signal level
1	Audio output B (right)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*
2	Audio input B (right)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*
3	Audio output A (left)	Standard level: 0.5 Vrms Output impedance: Less than 1 k ohm*
4	Ground (audio)	
5	Ground (blue)	
6	Audio input A (left)	Standard level: 0.5 Vrms Input impedance: More than 10 k ohms*
7	Blue input	0.7 V ±3 dB, 75 ohms, positive
8	Function select (AV control)	High state (9.5 - 12 V): Peri mode Low state (0 - 2 V): TV mode Input impedance: More than 10 k ohms Input capacitance: Less than 2 nF

Pin No.	Signal	Signal level
9	Ground (green)	
10	Open	
11	Green input	(Same as Pin 7)
12	Open	
13	Ground (red)	
14	Ground (blanking)	
15	Red input	(Same as Pin 7)
16	Blanking input	High state (1 - 3 V) Low state (0 - 0.4 V) Input impedance: 75 ohms
17	Ground (video output)	
18	Ground (video input)	
19	Video output	1 V ±3 dB, 75 ohms, positive Sync: 0.3 V (±3 dB)
20	Video input	1 V ±3 dB, 75 ohms, positive Sync: 0.3 V (±3 dB)
21	Common ground (plug, shield)	

* at 20 Hz - 20 kHz

Design and specifications subject to change without notice.

TROUBLESHOOTING

If these symptoms occur when you begin operation, follow the suggestions below.

SYMPTOMS	CORRECTIONS
No controllable keys although the POWER switch is turned on.	• Press the CONTROL key.
No indication appears although the CONTROL key is pressed.	• Set the MANUAL CONTROL switch on the rear panel to ON.
Remote control is not possible.	• Set the REMOTE CONTROL switch on the rear panel to ON.

If the problem still cannot be solved, contact your authorized Sony dealer.

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SAFETY-RELATED COMPONENT WARNING !!

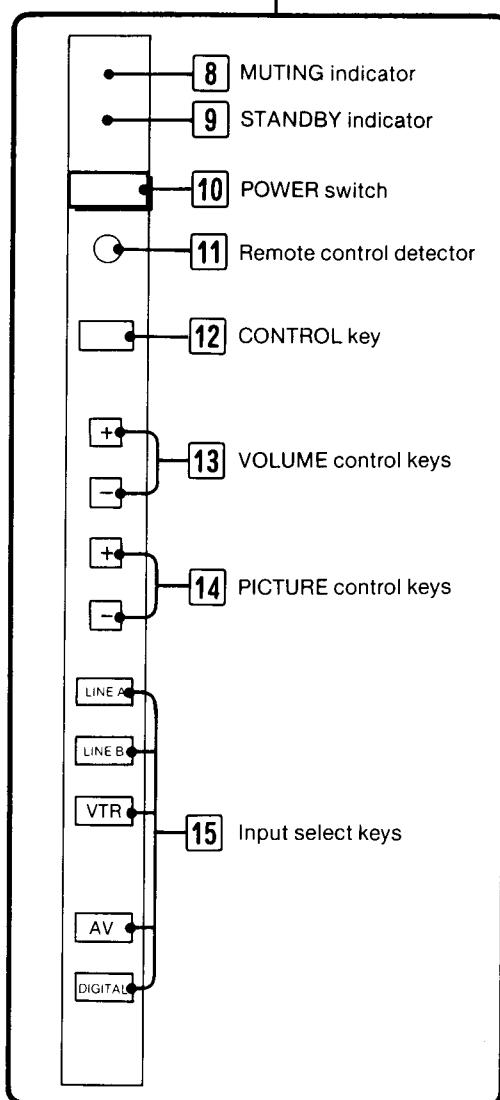
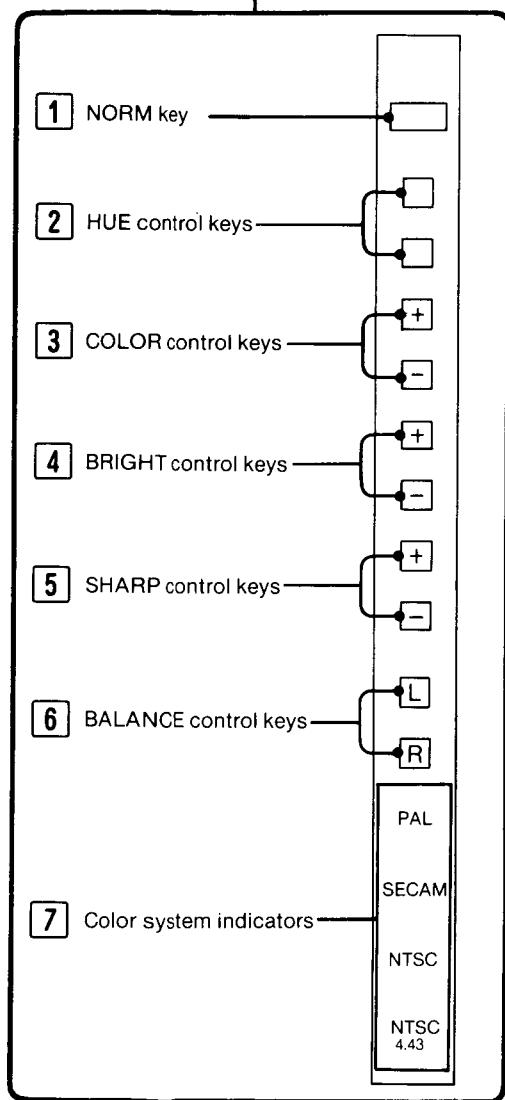
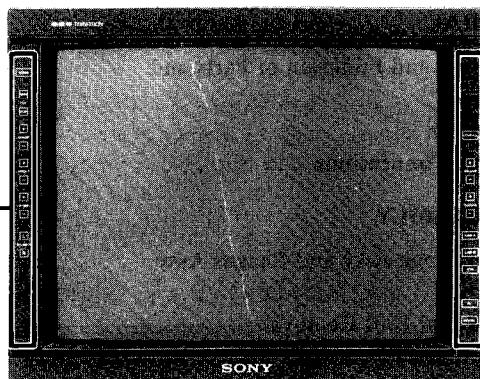
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

SECTION 1

GENERAL

1-1. LOCATION AND FUNCTION OF PARTS AND CONTROL

FRONT PANEL



• Press CONTROL key after power is turned on to illuminate the control keys or indicators.

The following control keys are effective only when MANUAL CONTROL switch on the rear panel is set to ON.

[1] NORM (normal) key

Press this key to return to the standard setting.
• This key is effective only for the control keys on the left.

[2] HUE control keys

Press the GRN (green) key to make the skin tones greenish or the PUR (purple) key to make it purplish.
• These control keys are effective for the NTSC and NTSC_{4,43} color systems only.

[3] COLOR control keys

Press the + key to make the color intensity vivid or the – key to make it pale.

[4] BRIGHT (brightness) control keys

Press the + key to make the picture brighter or the – key to make it darker.

[5] SHARP (sharpness) control keys

Press the + key to obtain a sharp picture or the – key to obtain a soft picture.

[6] BALANCE control keys

Press the L key to increase the sound volume of the left speaker or the R key to increase the sound volume of the right speaker.

[7] Color system indicators

PAL, SECAM, NTSC, NTSC_{4,43}

The color system of the input signal is automatically selected and the corresponding indicator illuminates. When the input signal is monochrome, no color system indicator illuminates.

[8] MUTING indicator

Illuminates while the sound is muted.
• Muting is controlled only by the Remote Commander.

[9] STANDBY indicator

Illuminates when the power is turned off by the Remote Commander.

[10] POWER switch

Press this switch to turn the monitor on.
Press this switch again to turn it off.
• When the monitor is turned on, the settings of the monitor are the same as when it was last turned off.
• For a few seconds after turning on the monitor the color of picture may vary because the white balance is adjusted at this time. This is not a problem.

[11] Remote control detector

The beam from the Remote Commander is received here.

[12] CONTROL key

Press this key to illuminate the keys and indicators on the front panel.
Press this key again to extinguish them.

[13] VOLUME control keys

Press the + key to raise the volume or the – key to lower it.

[14] PICTURE control keys

Press the + key to make the contrast, color intensity and brightness stronger or the – key to make them weaker.

[15] Input select keys

LINE A, LINE B, VTR, AV, DIGITAL

Select the input source connected to the LINE A, LINE B, VTR, AV or DIGITAL RGB connector.

When a key is pressed:

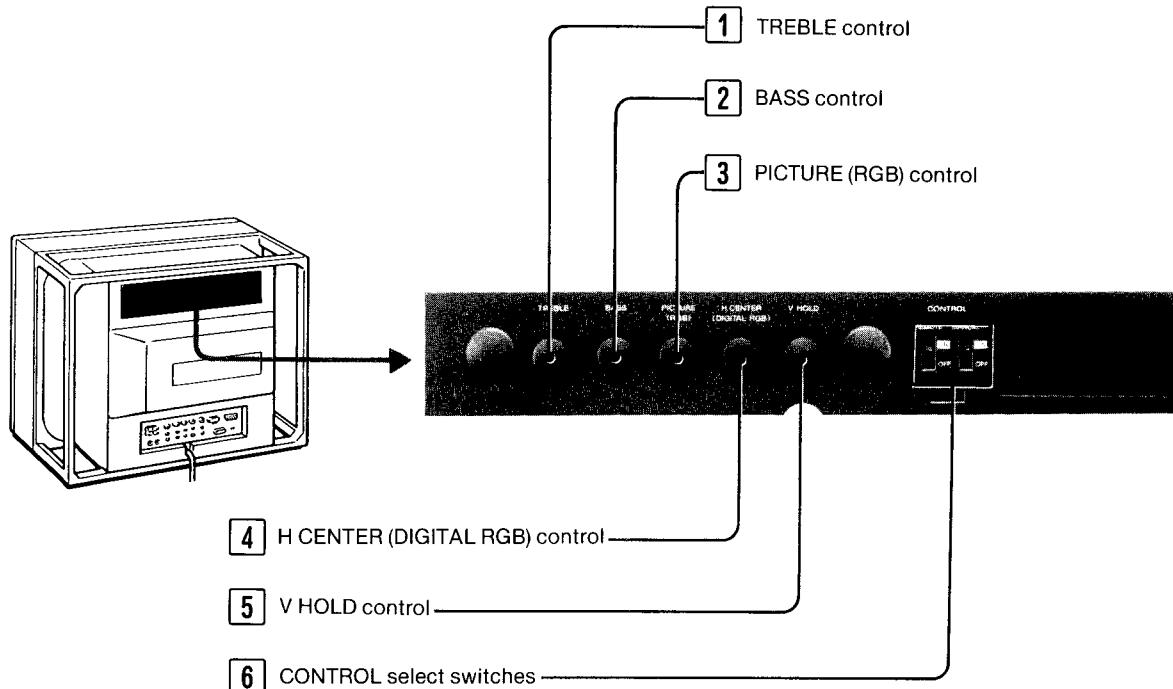
- it blinks if the other indicators and keys on the front panel illuminate.
- it illuminates if they are extinguished.

Key illumination

For the keys [1] through [7], [13] and [14]:

- While each key is pressed, it blinks, indicating that adjustment is going on.
- During adjustment, if the adjustment value reaches the limit, the blinking speed becomes slower.

REAR PANEL



1 TREBLE control

Turn clockwise for more treble (high tone), or counterclockwise for less.

2 BASS control

Turn clockwise for more bass (low tone), or counterclockwise for less.

3 PICTURE (RGB) control

Adjust the contrast of the RGB signals connected to the AV connector or the DIGITAL RGB connector.

4 H CENTER (DIGITAL RGB) (horizontal centering) control

When the picture of DIGITAL RGB input is decentered horizontally, correct it with this control.

5 V HOLD (vertical hold) control

When the picture rolls vertically, correct it with this control.

6 CONTROL select switches

Normally set to ON.

REMOTE CONTROL switch

Set this switch to ON to control the monitor with a Remote Commander.

If this switch is set to OFF, the remote control is not possible.

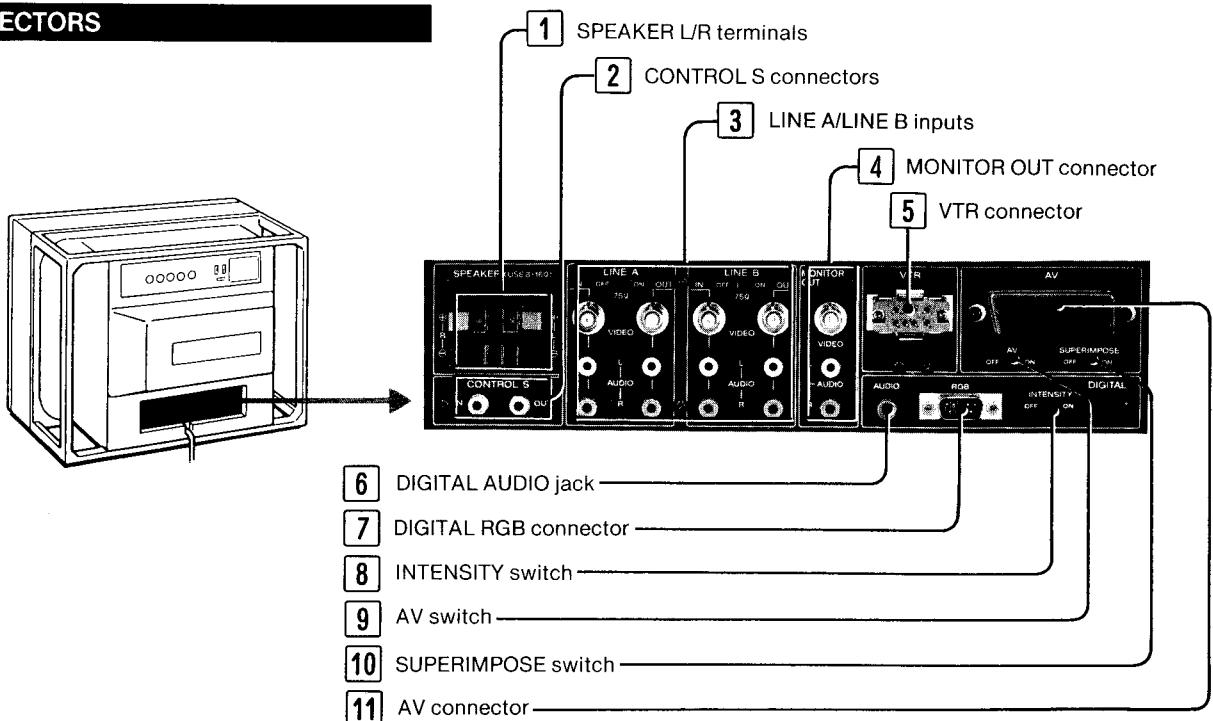
MANUAL CONTROL switch

Set this switch to ON to control the monitor manually.

To make the manual control of the control keys or switches on the front panel impossible, extinguish the indicators by pressing the CONTROL key on the front panel and set this switch to OFF.

(However remote control is possible if the REMOTE CONTROL switch is set to ON.)

CONNECTORS



1 SPEAKER L/R terminals

Connect to speakers with 8 to 16 ohm impedance.

2 CONTROL S IN/OUT connectors

Connect to the CONTROL S connectors of a VTR or another monitor.

It is then possible to control the whole system with a single Remote Commander.

3 LINE A/LINE B inputs

VIDEO IN connector (BNC type)

AUDIO L/R IN jacks (phono jack)

Connect to the video and audio outputs of a VTR or a camera.

VIDEO OUT connector (BNC type)

AUDIO L/R OUT jacks (phono jack)

Loop-through outputs of the IN connector and jacks.

Connect to the video and audio inputs of another monitor.

75-ohm termination switch

When only the VIDEO IN connector is used (nothing is connected to the VIDEO OUT connector), set this switch to ON.

When both connectors are used together for a loop-through connection, set this switch to OFF.

4 MONITOR OUT connectors

VIDEO connector (BNC type)

AUDIO L/R jacks (phono jacks)

The video and audio signals supplied from the LINE A, LINE B, VTR or AV input selected by the front panel input select keys are output from these connectors.

Connect to the video and audio inputs of another monitor, VTR, etc.

5 VTR connector (8-pin)

Connect to a VTR with an 8-pin TV connector.

6 DIGITAL AUDIO jack (phono jack)

Connect to the audio output of an audio source to listen to the sound from the connected audio source while viewing the picture from the DIGITAL RGB connector.

7 DIGITAL RGB connector (9-pin, D-sub)

Connect to the digital RGB output of a microcomputer.

8 INTENSITY switch

Normally set to OFF. When a microcomputer provided with intensity output is connected, set to ON for 16-color display.

9 AV switch

Set to ON so that the monitor is automatically switched to the AV input when a signal is input from the AV connector, taking priority over the LINE A, LINE B or VTR input previously selected by the input select keys on the front panel. Set to OFF to select the AV input manually by pressing the AV input select key.

10 SUPERIMPOSE switch

Normally set to ON.

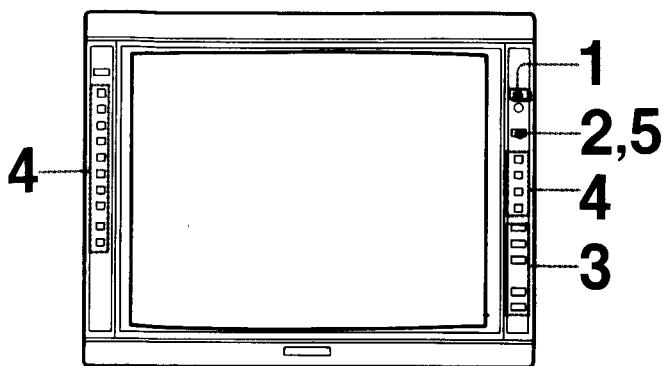
Set to OFF to display the analog RGB signal from the microcomputer connected to the AV connector.

11 AV connector (21-pin)

Connect to the 21-pin multiconnector of an 8 mm video cassette recorder or the analog RGB multioutput connector of a microcomputer.

1-2. OPERATION

DISPLAYING THE PICTURE



- 1 Depress the POWER switch.
One of the input select keys illuminates.
- 2 Press the CONTROL key.
The selected input select key blinks and all control keys on the front illuminate.
(If the control keys do not appear, set the MANUAL CONTROL switch on the rear to ON.)
- 3 Press the desired input select key.
The pressed key blinks and the picture from the selected input is displayed on the screen and the sound is heard through the speakers.
(For selecting the AV or DIGITAL input, see "Notes on input selection".)
- 4 Adjust the picture and sound.
- 5 Press the CONTROL key to extinguish the controls keys so that only the selected input select key illuminates.

SUPERIMPOSING

To superimpose the data from the microcomputer connected to the AV connector over the picture, proceed as follows.
(The data should be processed for superimposition on the microcomputer.)

- 1 Set the SUPERIMPOSE switch to ON.
- 2 Press the LINE A, LINE B or VTR input select key to display the picture on which the data is to be superimposed on the monitor screen.
- 3 Press the AV input select key.
The data is superimposed over the picture.
- 4 Adjust the contrast of the superimposed data with the PICTURE (RGB) control.

NOTES ON INPUT SELECTION

AV input and SUPERIMPOSE switch

Set the SUPERIMPOSE switch on the rear as follows, according to the signal supplied to the AV connector.

SUPERIMPOSE switch	Signal to be displayed
ON	<ul style="list-style-type: none"> • To display the composite video signal from an 8 mm video cassette recorder, etc. • To perform superimposition. (See "SUPERIMPOSING".)
OFF	<ul style="list-style-type: none"> • To display the analog RGB signal from a microcomputer, etc. In this case, the sync signal should be supplied to pin 20 of the AV connector.

- When the AV input select key is pressed with the SUPERIMPOSE switch ON, the previously selected LINE A, LINE B or VTR input select key blinks together with the AV key.
- When it is pressed with the SUPERIMPOSE switch OFF, only the AV key blinks.

AV input and AV switch

When the AV switch on the rear is set to ON, the monitor is automatically switched from the LINE A, LINE B or VTR input to the AV input if a signal is input to the AV connector.
Set the AV switch to OFF to select the AV input manually by pressing the AV input select key.

DIGITAL input

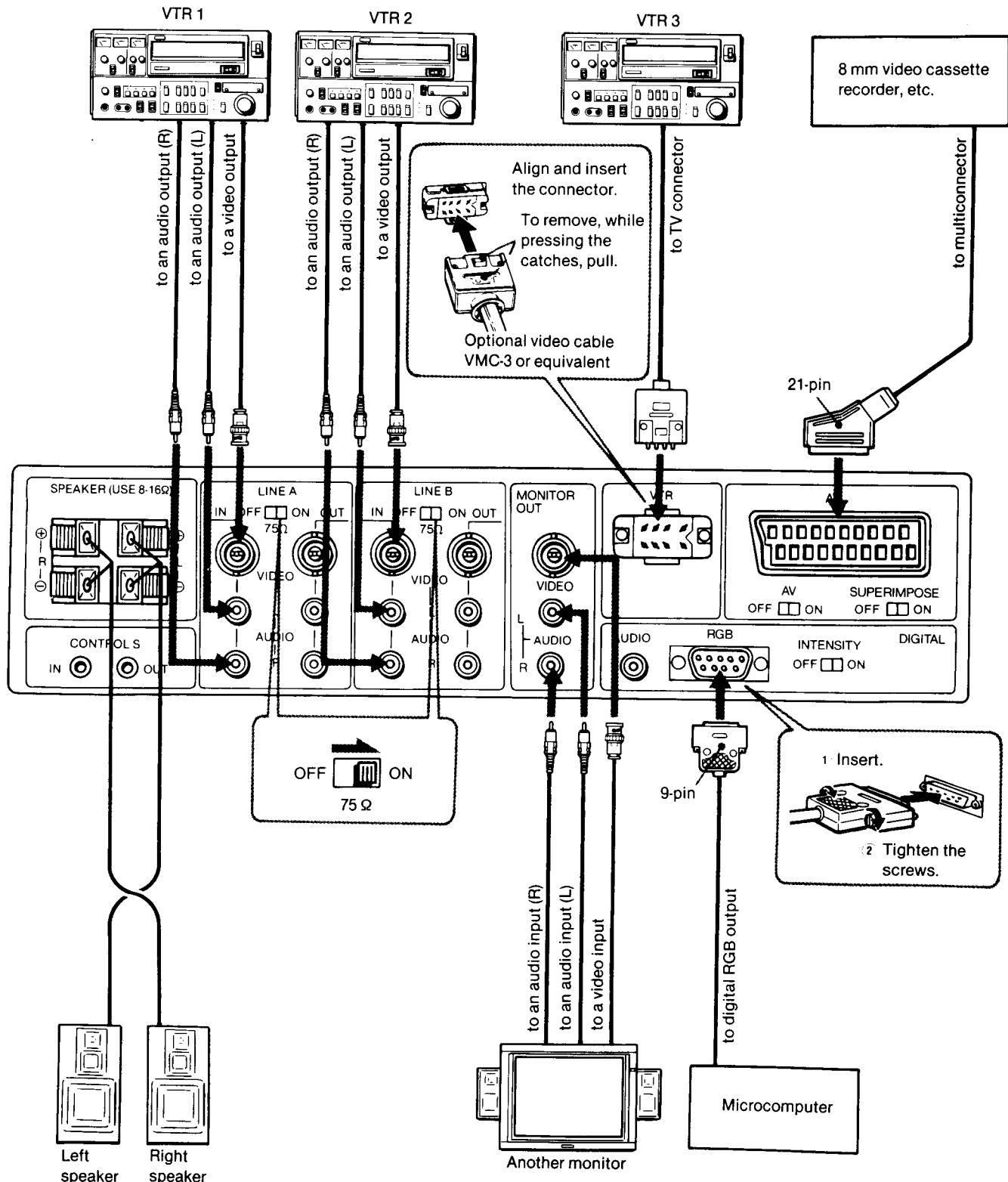
- To display the digital RGB signal from a microcomputer provided with intensity output in 16 colors, set the INTENSITY switch on the rear to ON.
- If necessary, center the picture from the DIGITAL RGB connector with the H CENTER control on the rear panel.

Note

The COLOR, HUE and SHARP control keys do not function when the DIGITAL input is selected or the AV input is selected with the SUPERIMPOSE switch OFF.

1-3. SYSTEM CONNECTIONS

CONNECTION DIAGRAM



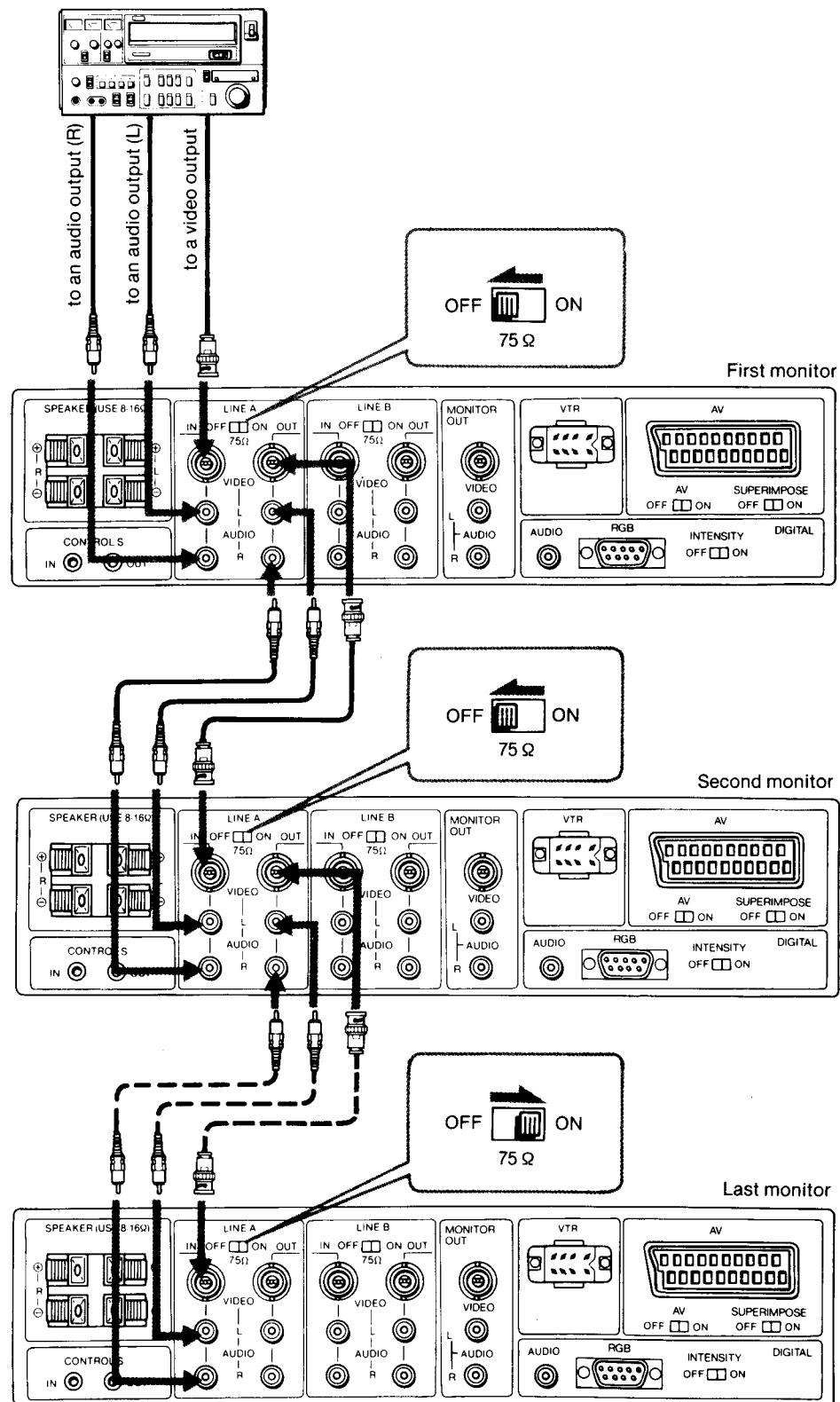
Note

- When a microcomputer has an analog RGB output connector, connect it to the AV connector.

- When a microcomputer has only a composite video output connector, connect it to the LINE A or LINE B VIDEO IN connector.

CONNECTING SEVERAL MONITORS

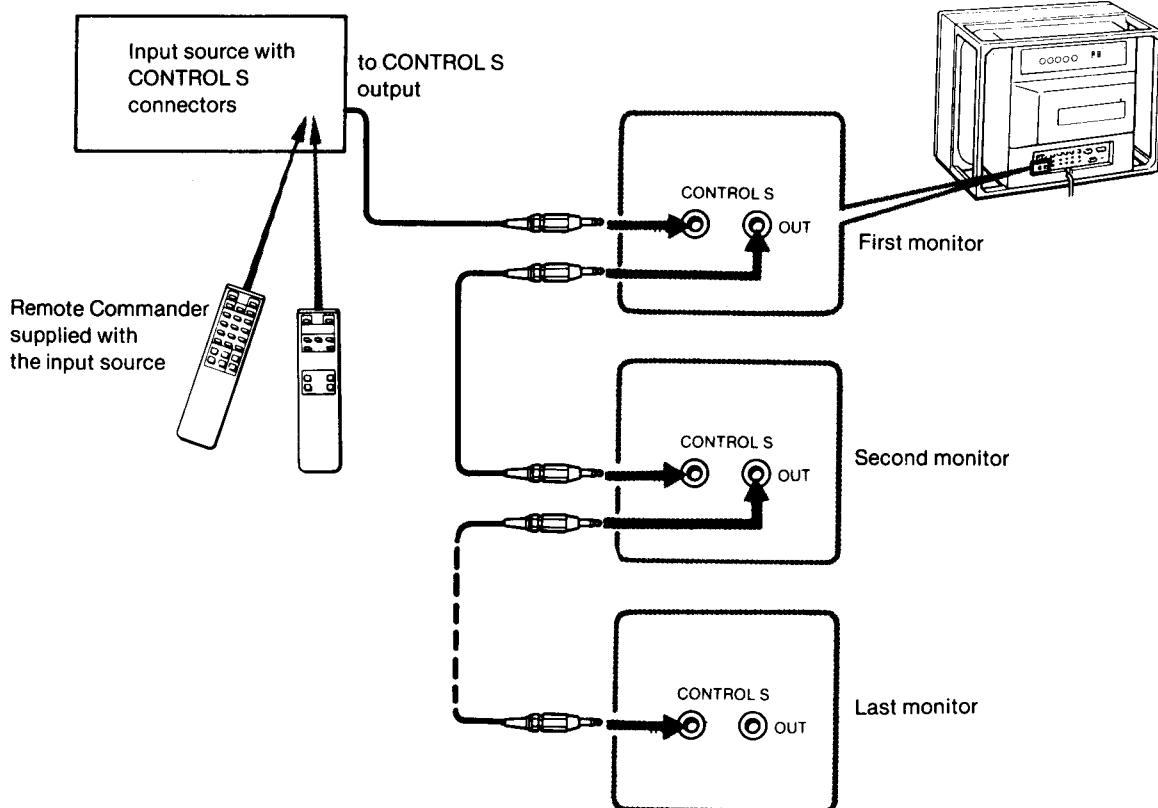
A loop-through connection is convenient for monitoring the same signal on three monitors. Up to 10 monitors can be connected. It is recommended to use a signal distributor when several monitors are connected.



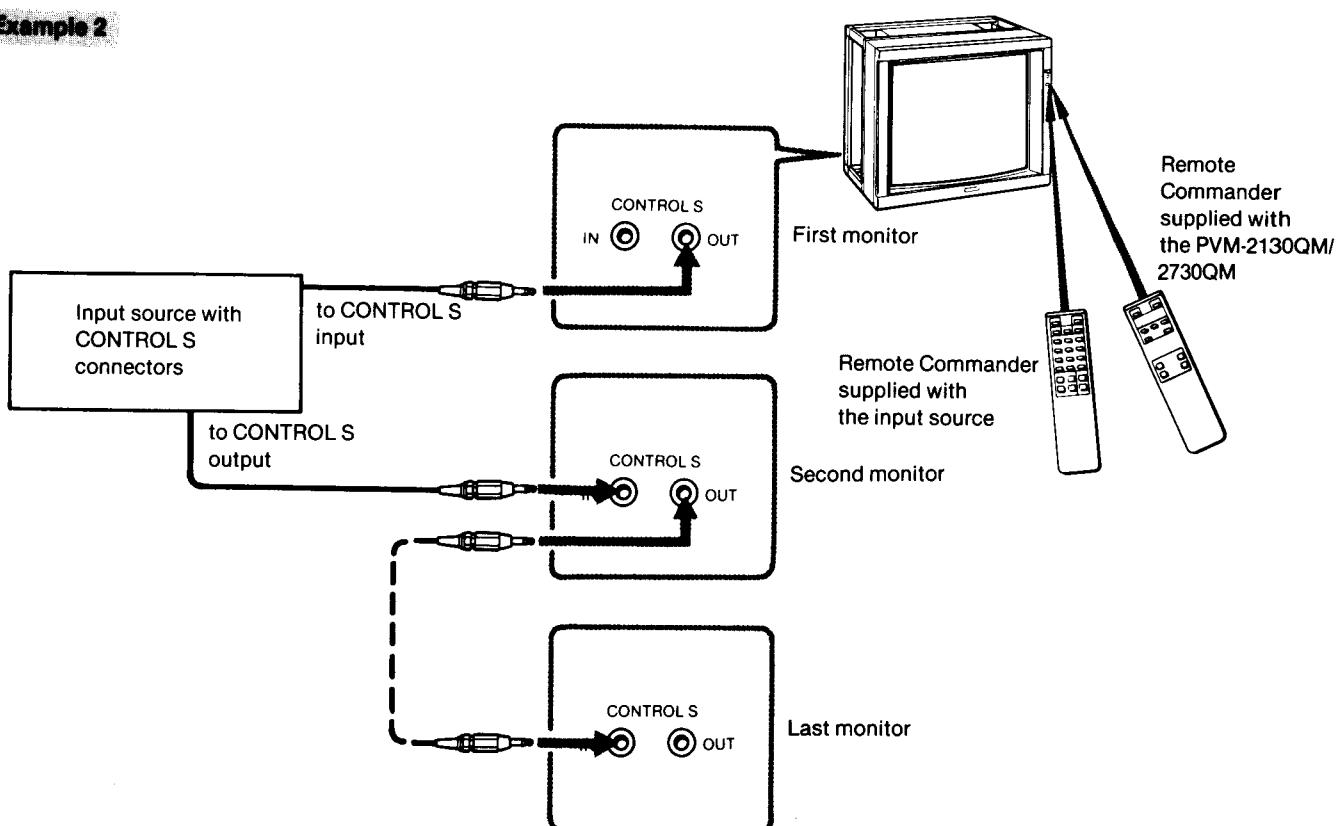
CONTROL S CONNECTION

The following connections allow remote control of several monitors and a VTR through a single monitor.

Example 1



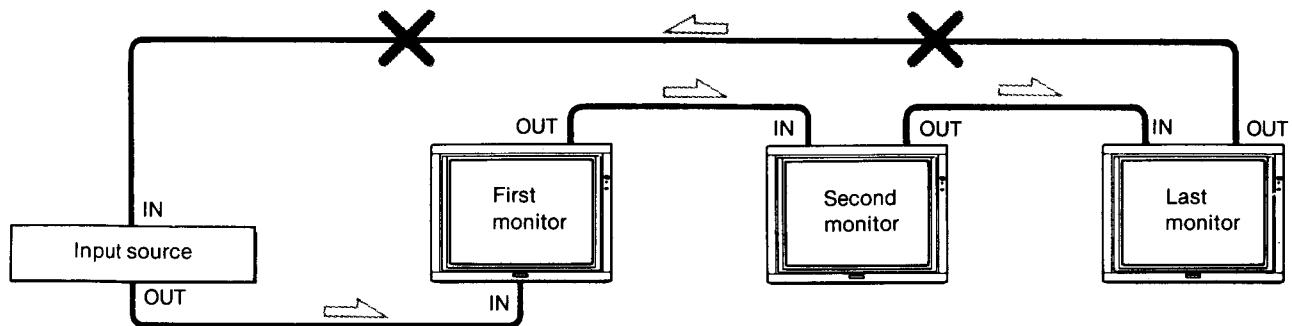
Example 2



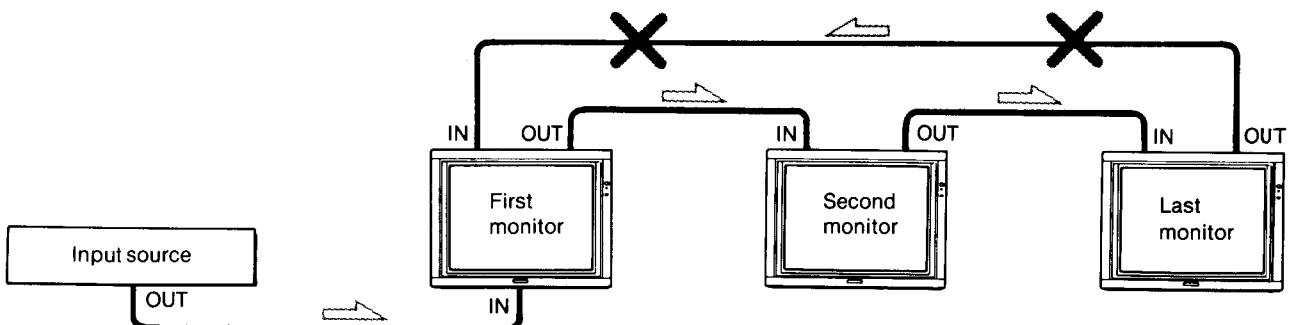
Note

Do not use the following loop connections.

Example 1



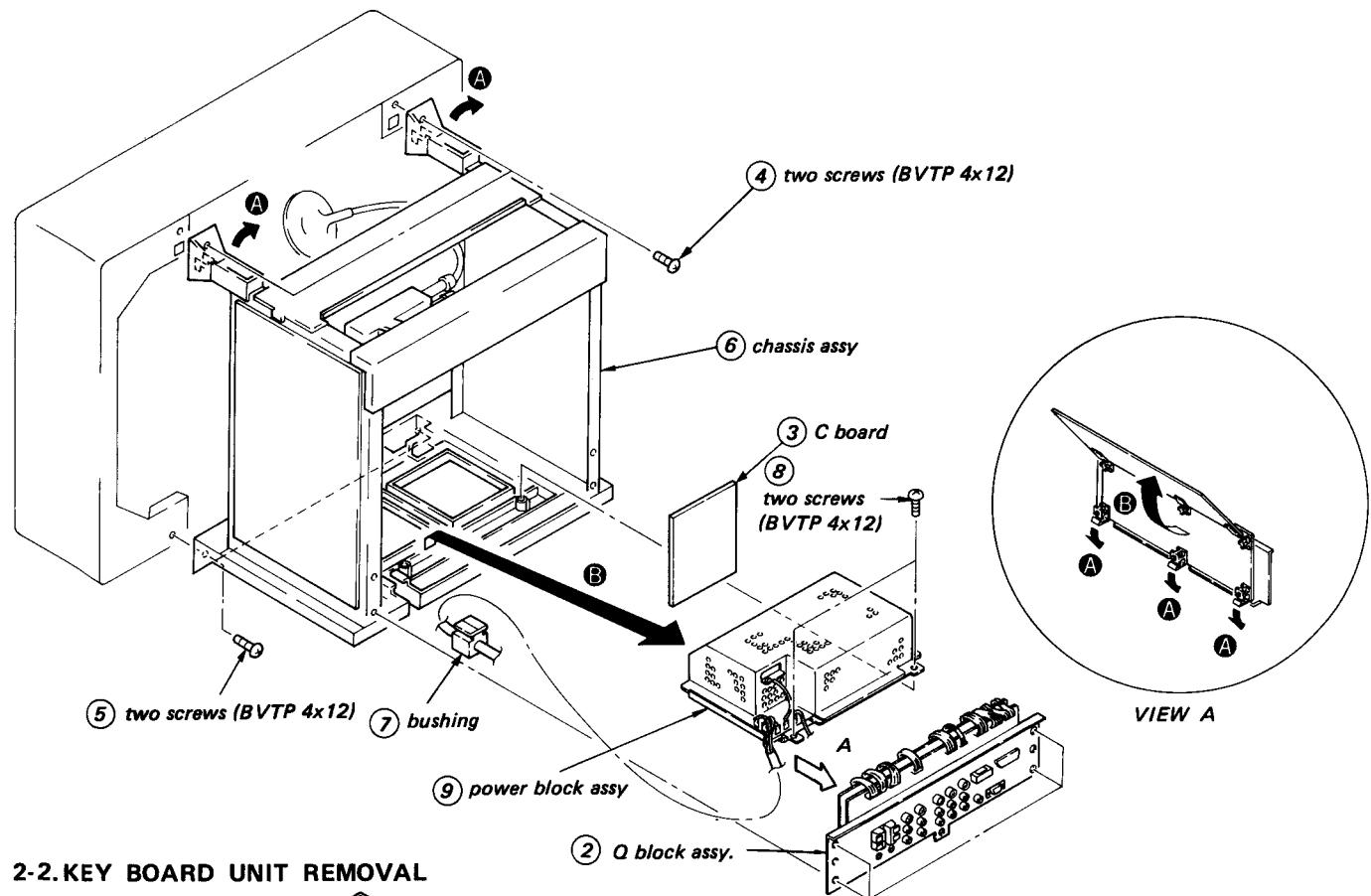
Example 2



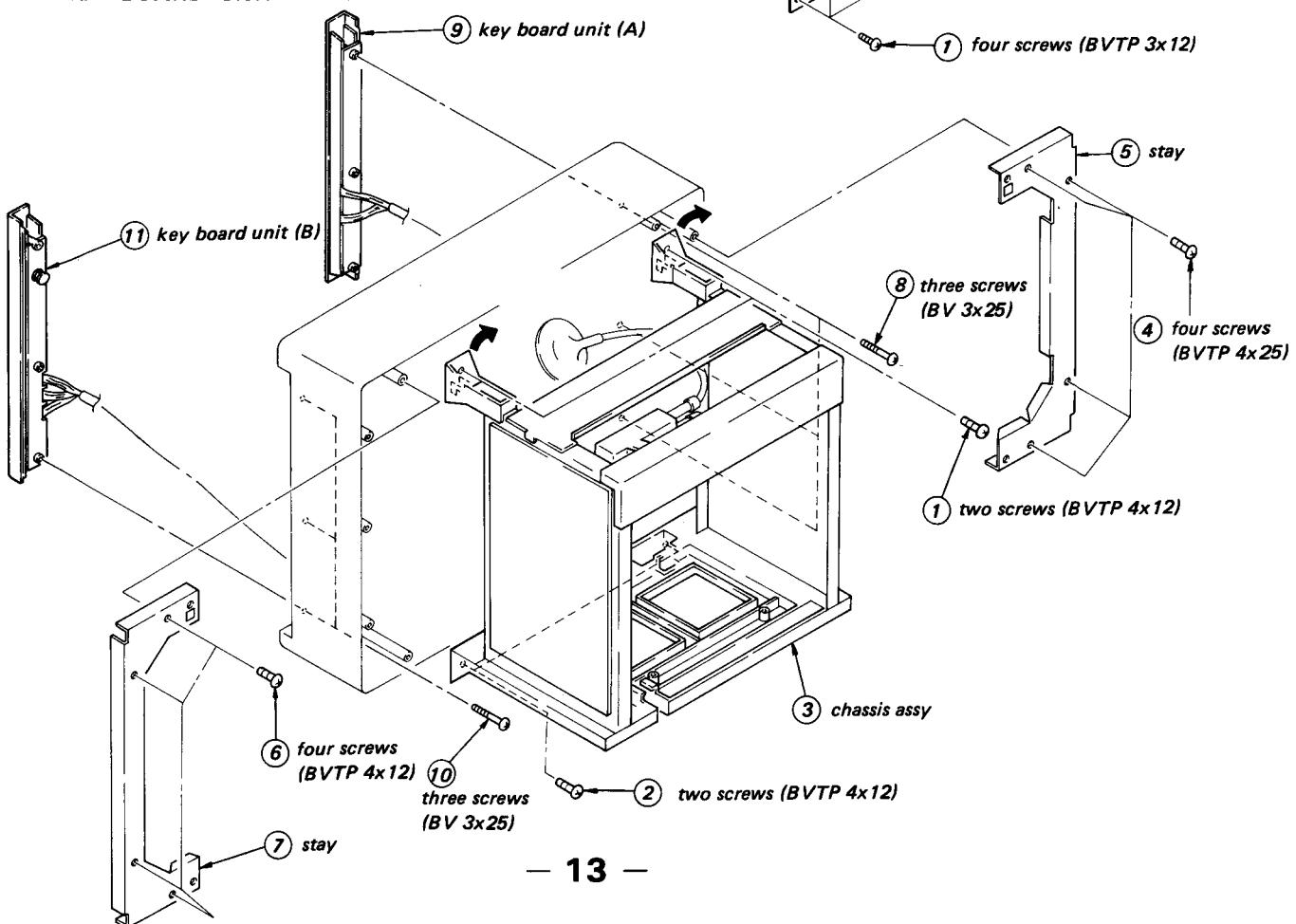
◀ CONTROL S signal flow

SECTION 2 DISASSEMBLY

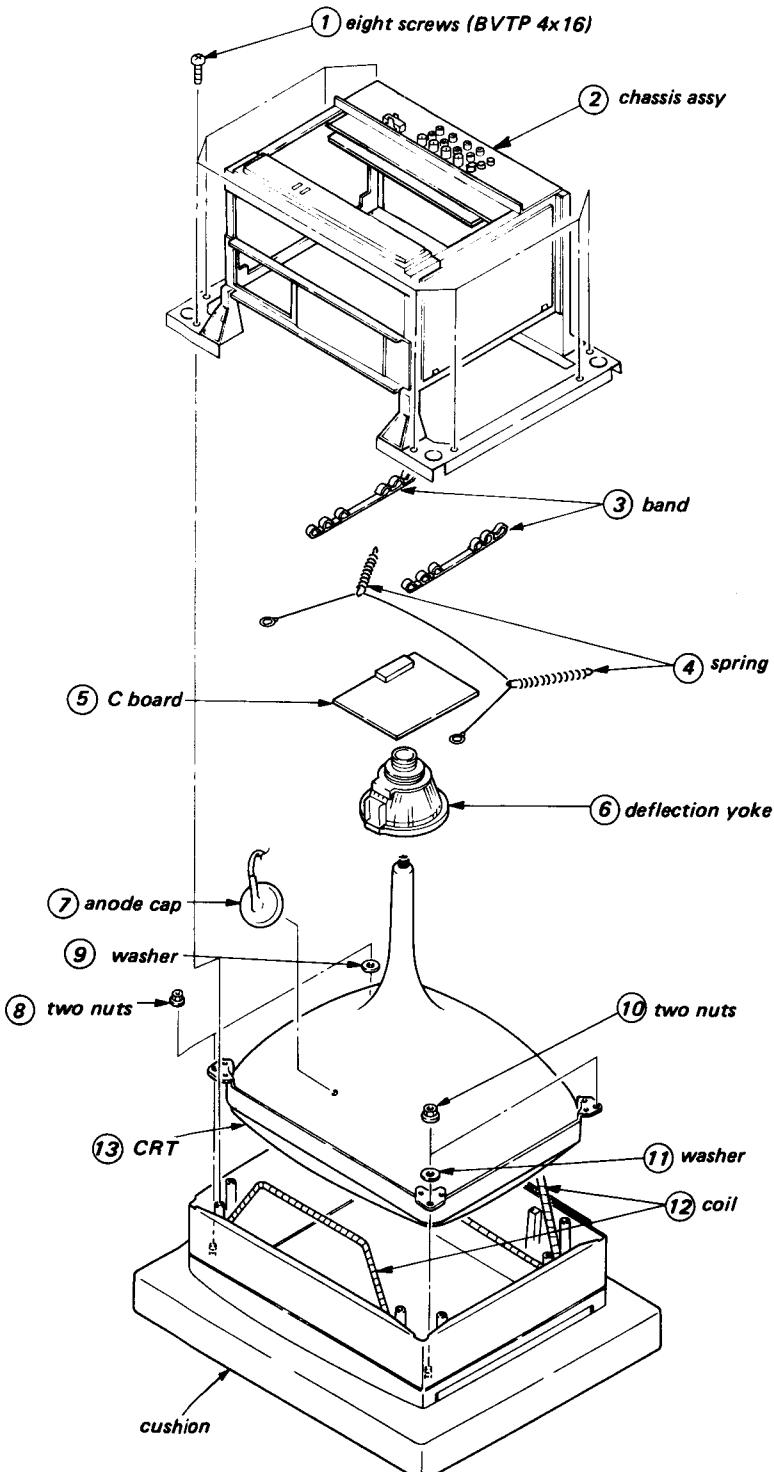
2-1. POWER BLOCK ASSY AND CHASSIS ASSY REMOVAL



2-2. KEY BOARD UNIT REMOVAL



2-3. PICTURE TUBE REMOVAL



• Removing Procedures

- ① Turn up one side of the rubber cap in the direction indicated by the arrow (a)
- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow (b)
- ③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow (c)

SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Perform the adjustments in order as follows:

- Beam Landing
- Convergence
- White Balance

Note: Test Equipment Required

- Color-bar/Pattern Generator
- Degausser

3-1. BEAM LANDING

Preparation:

- Input the RASTER pattern.
 - Before starting, degauss the entire screen.
- Turn on set power supply and input a RASTER signal.
 - Evenly degauss the entire screen.
 - Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 3-1.
 - Input a red signal.
 - Move the deflection yoke back, and adjust the purity control so that RED is in the center and GREEN and BLUE are at the sides, evenly. (Figure 3-2.)
 - Move the deflection yoke forward so that the entire screen is red.
 - If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
 - Substitute GREEN, then BLUE for RED in step 4 and check landing.
 - Rotate RED, GREEN and BLUE once each and check landing.
 - When landing is not right, adjust the purity control and use magnets as shown in Figure 3-3, then repeat steps 7 and 8.
 - When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.

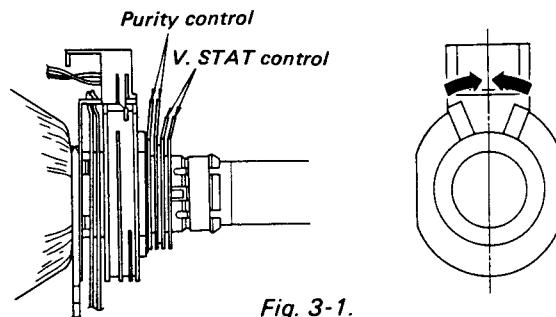


Fig. 3-1.

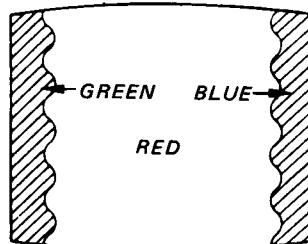


Fig. 3-2.

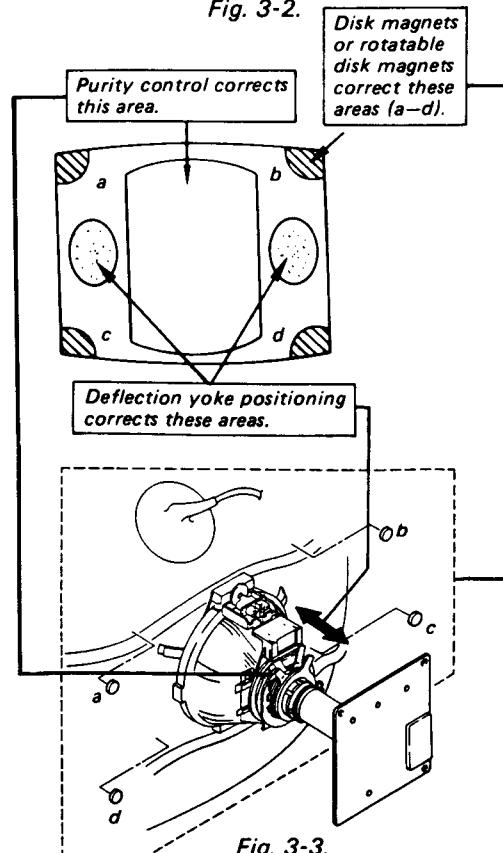


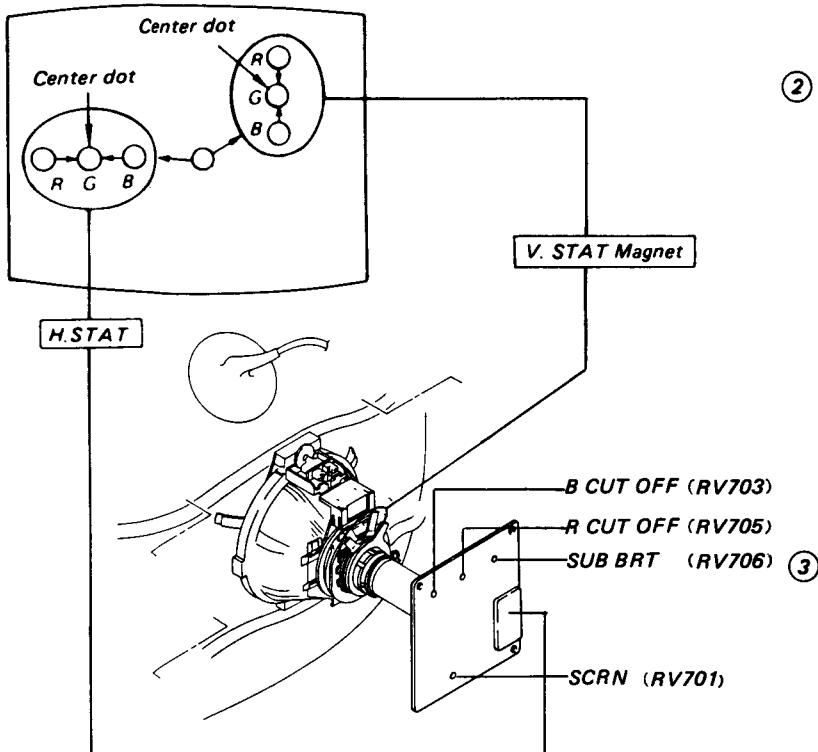
Fig. 3-3.

3-2. CONVERGENCE

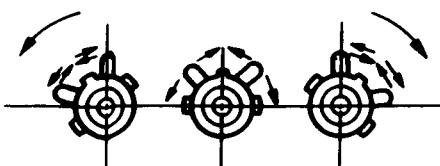
Preparation:

- Before starting, perform FOCUS, H. SIZE, V. SIZE and V. LIN adjustments.
- Set BRIGHTNESS control to fully counterclockwise.
- Feed in the dot pattern.

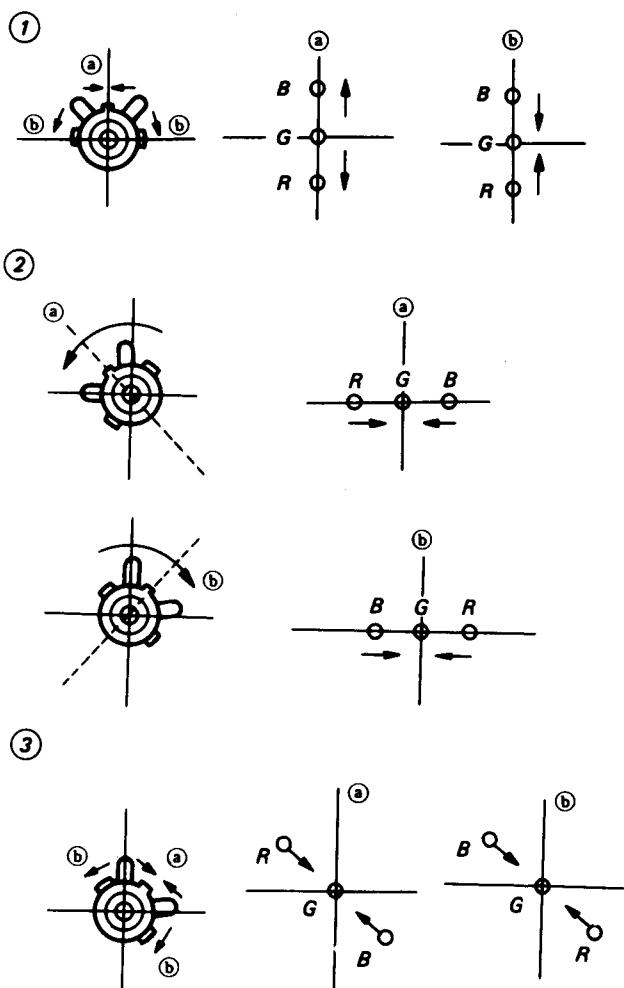
(1) Horizontal and Vertical Static Convergence



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



4. When the V. STAT magnet is moved in the direction of arrow (a) and (b), Red, Green and Blue dots move as shown below.

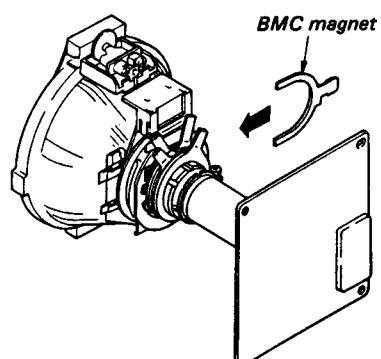


If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



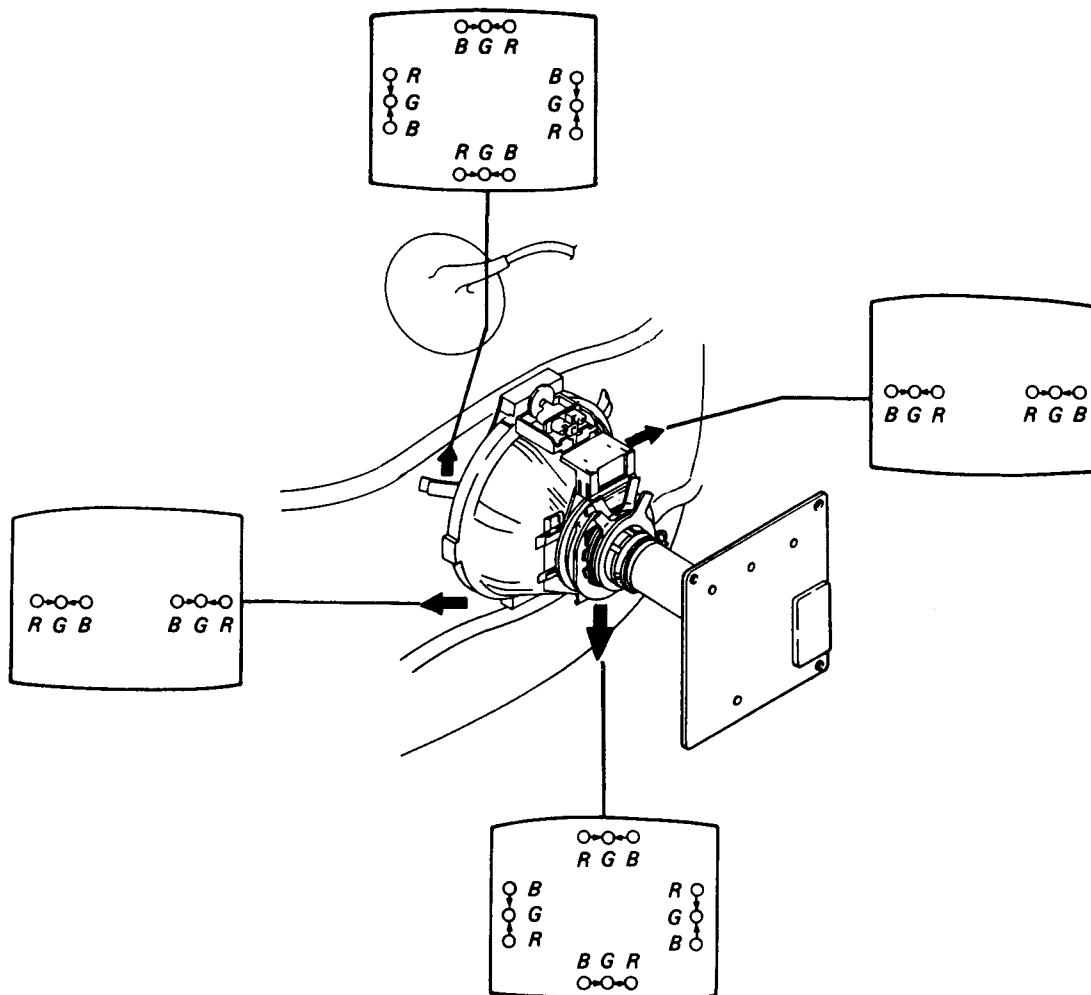
(2) Dynamic Convergence Adjustment

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- 1. Loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

3. Move the deflection yoke for best convergence as shown below.

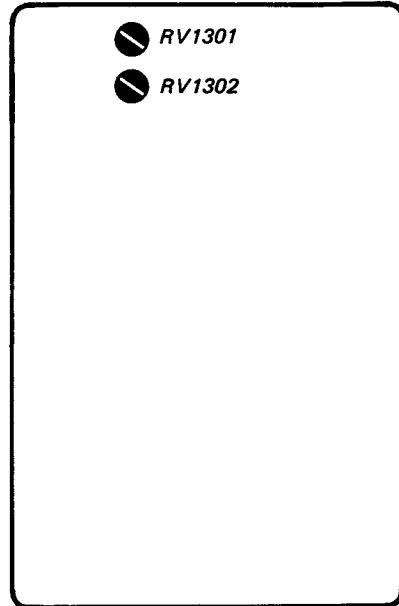
4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.



3-3. WHITE BALANCE ADJUSTMENT

- 1) SCREEN (G₂) adjustment
 1. Confirm that G₁ line voltage is 30±5 Vdc.
 2. Adjust CUT OFF(R,B) so that R,B cathode voltage becomes 180 V DC.
Adjust with G₂ VT immediately prior to the disappearing of the luminescent line.
- 2) W/B adjustment
 1. Input a all white signal.
 2. Set the PICTURE control to minimum and turn the BRIGHT control mechanical center.
 3. Set R CUT OFF(R,B) and RV703 (B CUT OFF) to minimum.
 4. Turn RV701 (SUB BRT) slowly to obtain a faintly visible cross-hatch.
Note the color tnat first becomes visible by turning RV701.
 5. Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hatch.
 6. Set the PICTURE control fully clockwise.
Observe the screen and adjust the RV1301 (G,H/L), RV1302 (B,H/L) controls for best white balance. (B Board)
 7. Repeat steps 1, through 7.

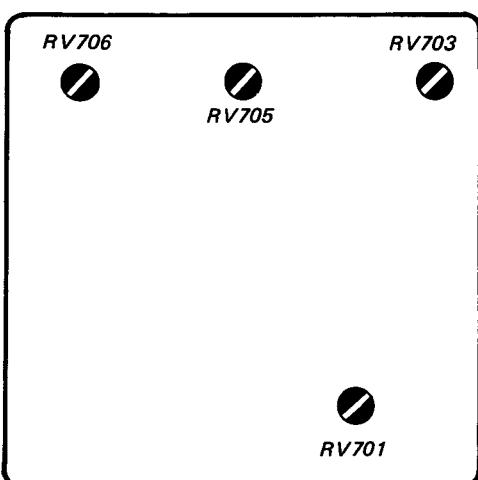
B Board



RV1301 (G.H/L)
RV1302 (B.H/L)

(Component side)

C Board



RV703 (B CUT OFF)
RV705 (R CUT OFF)
RV706 (SUB. BRT)
RV701 (SCRN)

(Component side)

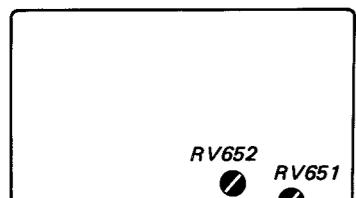
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. FA BOARDS ADJUSTMENT

+B Line Adjustment

- Supply 220V ac to with variable auto-transformer.
- Adjust RV651 so that the +B line is $140V \pm 0.5V$.
- Adjust RV652 so that the pin ① or IC651 is $32 \pm 0.1V$.

FA Board



(Component side)

4-2. D BOARD ADJUSTMENTS

Horizontal Position Adjustment

- Check that H center moves to the right and left with horizontal position VR (RV555), then adjust horizontal position to center.

Picture Distortion Adjustment

- Picture distortion adjustment
Input a signal equivalent to a crosshatch signal.

- PIN PHASE (RV553)

- PIN AMP (RV552)

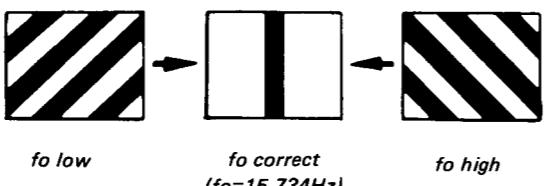
- Adjust RV554 (H.SIZE) so that H.SIZE is best.
- Adjust RV555 (H.CENT) so that horizontal position is center.

V.SIZE V.CENT

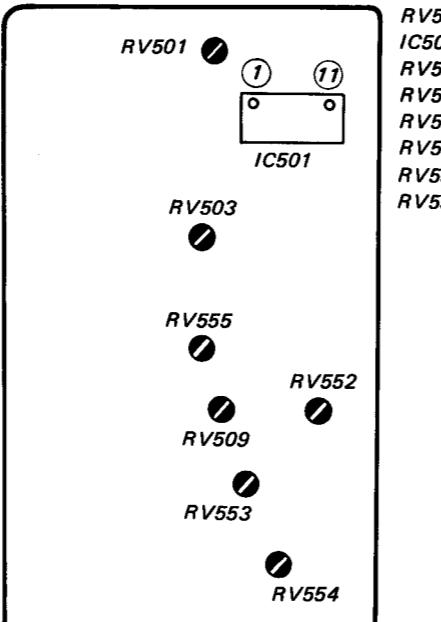
Adjust RV503 and RV509 for a best vertical SIZE Picture.

H.FREQ Adjustment

- Input a color bar signal and short between IC501 pins ① and ⑪.
Also short board IC401 pins ③⑤ and ⑥.
- Adjust H.FREQ VR (RV501) so that picture flow is as shown in Figure.
- After adjustment, remove the connections in step ①.



D Board

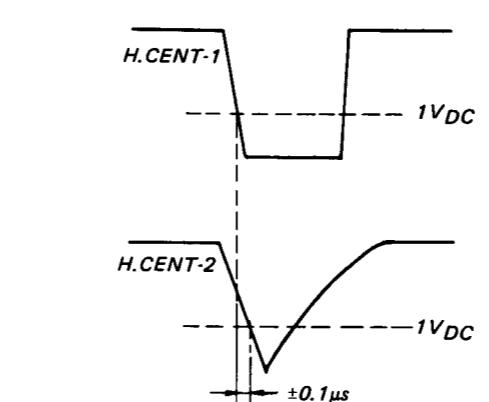
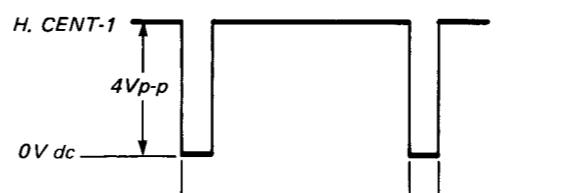


(Component side)

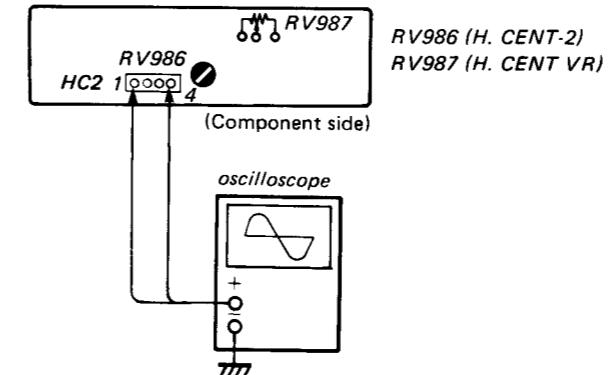
4-3. HC BOARD ADJUSTMENT

H. CENTER Adjustment (DIGITAL RGB)

- Connect to the digital RGB output connector of a microcomputer.
- Press to select the RGB mode.
- Turn the H. CENT VR (RV987--- Rear control panel) to center position.
- Connect the oscilloscope to pin ④ of HC-2 connector and pin ⑦ of HC-2 connector.
- Adjust RV986 (H. CENT-2) so that the phase difference level is $\pm 0.1\mu s$.



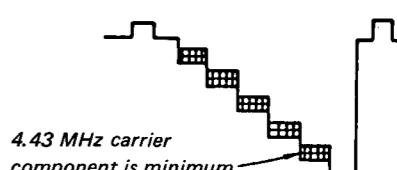
HC Board



4-4. B BOARD ADJUSTMENTS

Y Chroma Adjustment

- Input a PAL color bar signal.
- Connect an oscilloscope to pin ③ of IC301, and adjust so that chroma component is minimum on pin ③ of IC301 waveform while tracking with L451 (4.43 MHz).

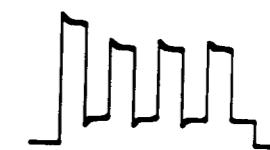


- Input a NTSC (3.58) color bar signal.

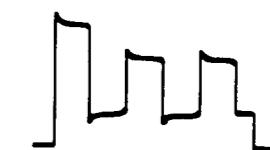
- Connect an oscilloscope to pin ③ of IC301 and adjust so that croma component is minimum on pin ③ of IC301 waveform while tracking with L452.

COLOR BALANCE Adjustment

- Input a SECAM color bar signal and set PICTURE to maximum.
Press "RESET" to set color to standard state.
- Observe blue output (TP33) waveform on the oscilloscope and adjust L421 (B-Y) so that the black portion of the color bar is the same level as the pedestal.

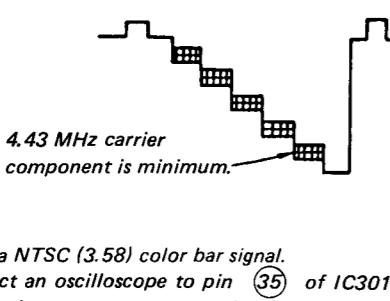


- Observe blue output (TP31) waveform on the oscilloscope and adjust L405 (R-Y) so that the black portion of the color bar is the same level as the pedestal.



4-4. B BOARD ADJUSTMENTS**Y Chroma Adjustment**

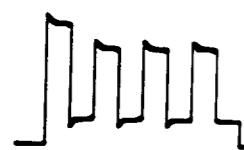
1. Input a PAL color bar signal.
2. Connect an oscilloscope to pin (35) of IC301, and adjust so that chroma component is minimum on pin (35) of IC301 waveform while tracking with L451 (4.43 MHz).



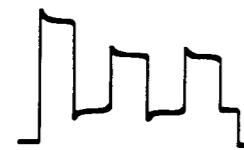
3. Input a NTSC (3.58) color bar signal.
4. Connect an oscilloscope to pin (35) of IC301 and adjust so that chroma component is minimum on pin (35) of IC301 waveform while tracking with L452.

COLOR BALANCE Adjustment

1. Input a SECAM color bar signal and set PICTURE to maximum.
Press "RESET" to set color to standard state.
2. Observe blue output (TP33) waveform on the oscilloscope and adjust L421 (B-Y) so that the black portion of the color bar is the same level as the pedestal.



3. Observe blue output (TP31) waveform on the oscilloscope and adjust L405 (R-Y) so that the black portion of the color bar is the same level as the pedestal.

**ANTI-PAL, LINE CRAWLING Adjustment**

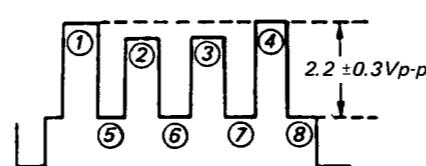
1. Input a PAL color bar signal and set PICTURE to maximum.
Press "RESET" to set COLOR, HUE and BRT to standard state.
2. Confirm that there is no color on the first anti-PAL signal frames at the right and left of the picture. If sides while tracking with RV303.
3. Adjust T301 (DAT) for minimum line crawling.
4. Confirm the anti-PAL adjustment in 2, and repeat 3, and 1 if necessary.

APC Adjustment

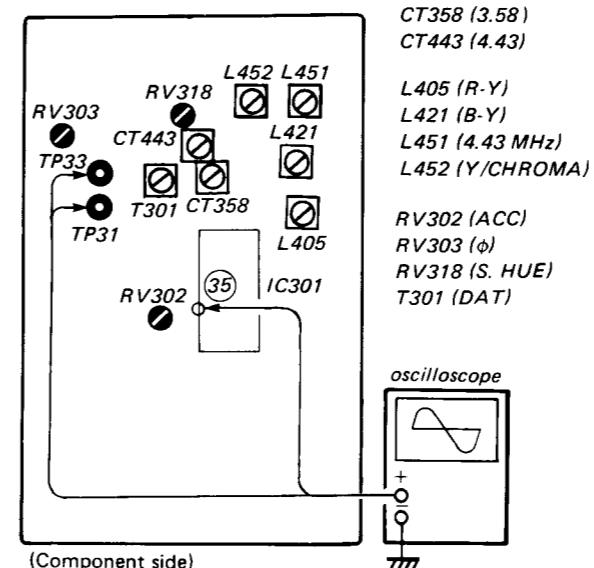
- 4.43 adjustment**
1. Input a PAL color bar signal.
 2. Short pin (11) and pin (12) on IC301.
 3. Adjust CT443 to get color sync.
- 3.58 adjustment**
4. Input a NTSC (3.58 MHz) color bar signal.
 5. Adjust CT358 to get color sync.

ACC, HUE CENT Adjustment

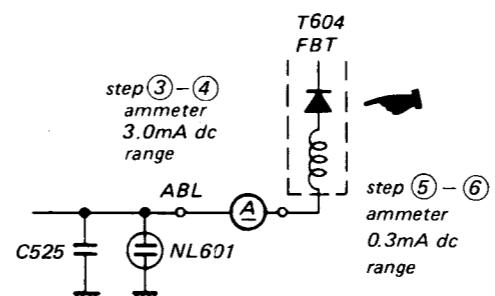
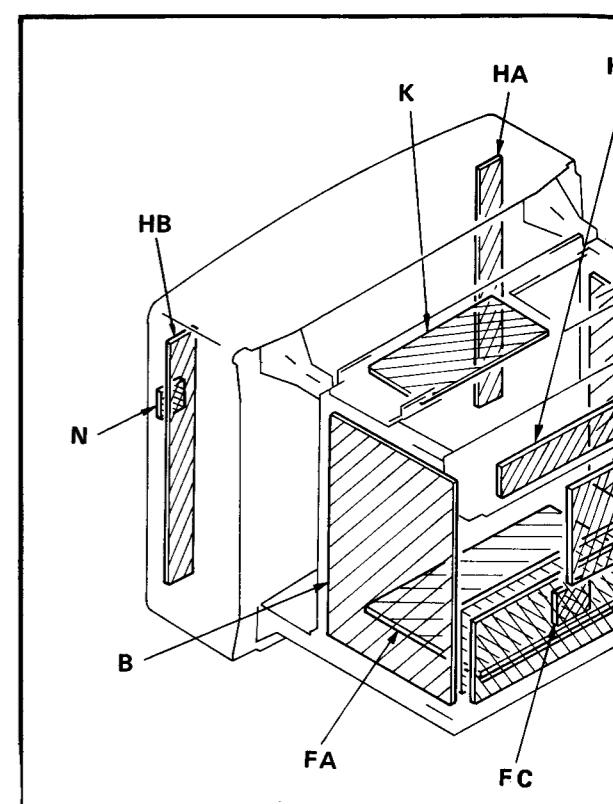
1. Input a PAL color bar signal and set PICTURE maximum.
2. Adjust RV302 (ACC ADJ) so that blue output (TP33) waveform is as shown in figure.



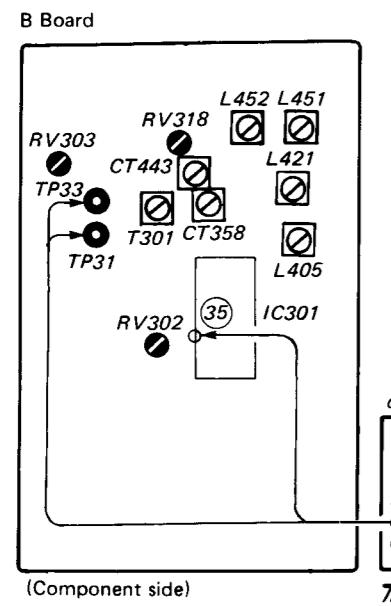
3. Input a NTSC (3.58 or 4.43) color bar signal and set PICTURE to maximum.
Press "RESET" to set COLOR, HUE and BRIGHTNESS to standard state.
4. Adjust RV318 (S. HUE) so that blue output (TP33) waveform is as shown in figure.

B Board**4-5. SAFETY CHECK ADJUSTMENT****HOLD DOWN ADJUSTMENT (*R531)**

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS control to maximum.
 2. Confirm that the voltage of the IC1510 (1) pin is more than 15.78V DC when the set is operating normally with 120V AC supply.
 3. Adjust ABL current to $1400 \pm 30 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 3.0mA dc range)
 4. Confirm that there is less than 18.35V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
 5. Adjust ABL current to $210 \pm 3 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 0.3mA dc range)
 6. Confirm that there is less than 19.25V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
- Note: If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
7. If above steps is not satisfied, select resistance value of R597 and repeat above steps 1 through 6.

**5-1. CIRCUIT BOARDS LOCATION**

SECTION 5 DIAGRAMS

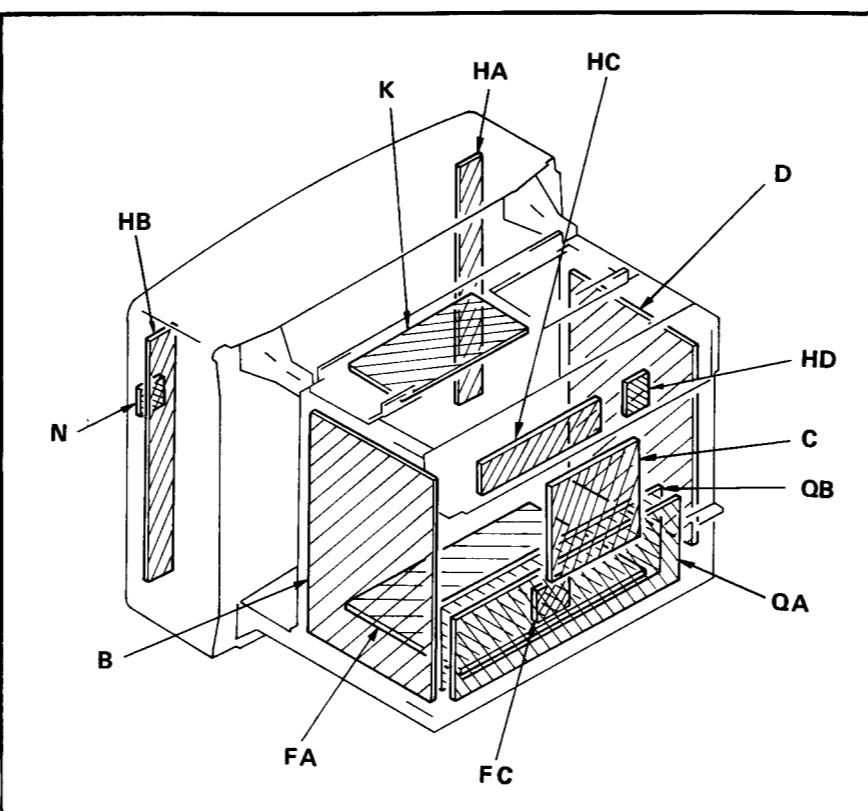


CT358 (3.58)
CT443 (4.43)
L405 (R-Y)
L421 (B-Y)
L451 (4.43 MHz)
L452 (Y/CHROMA)

RV302 (ACC)
RV303 (o)
RV318 (S. HUE)
T301 (DAT)

oscilloscope

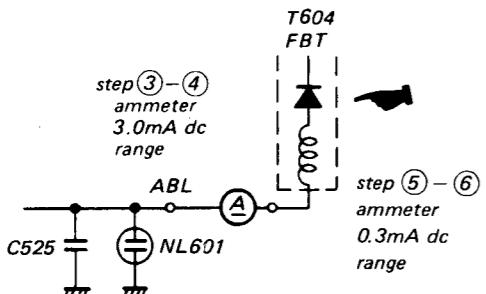
5-1. CIRCUIT BOARDS LOCATION



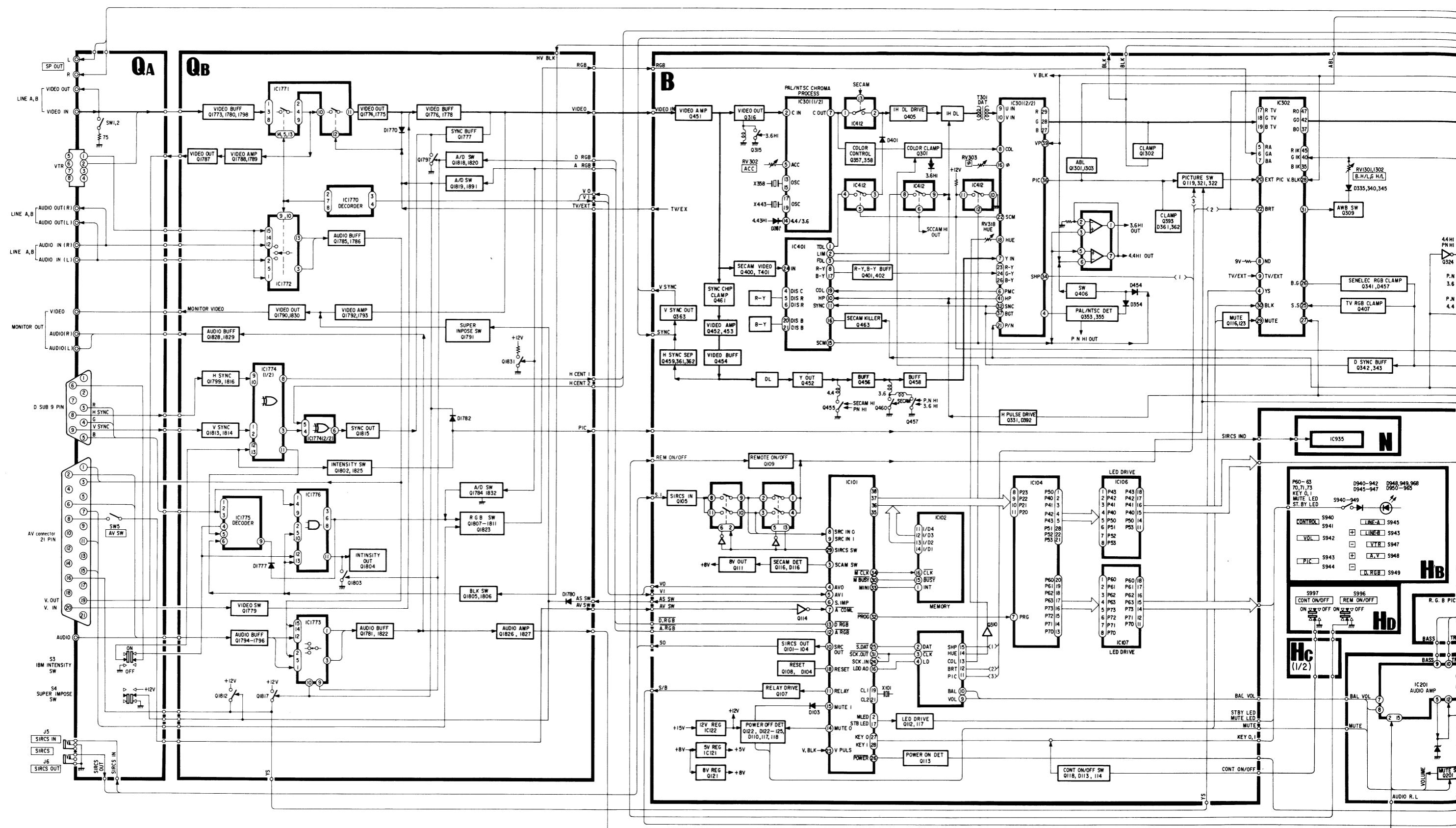
4-5. SAFETY CHECK ADJUSTMENT

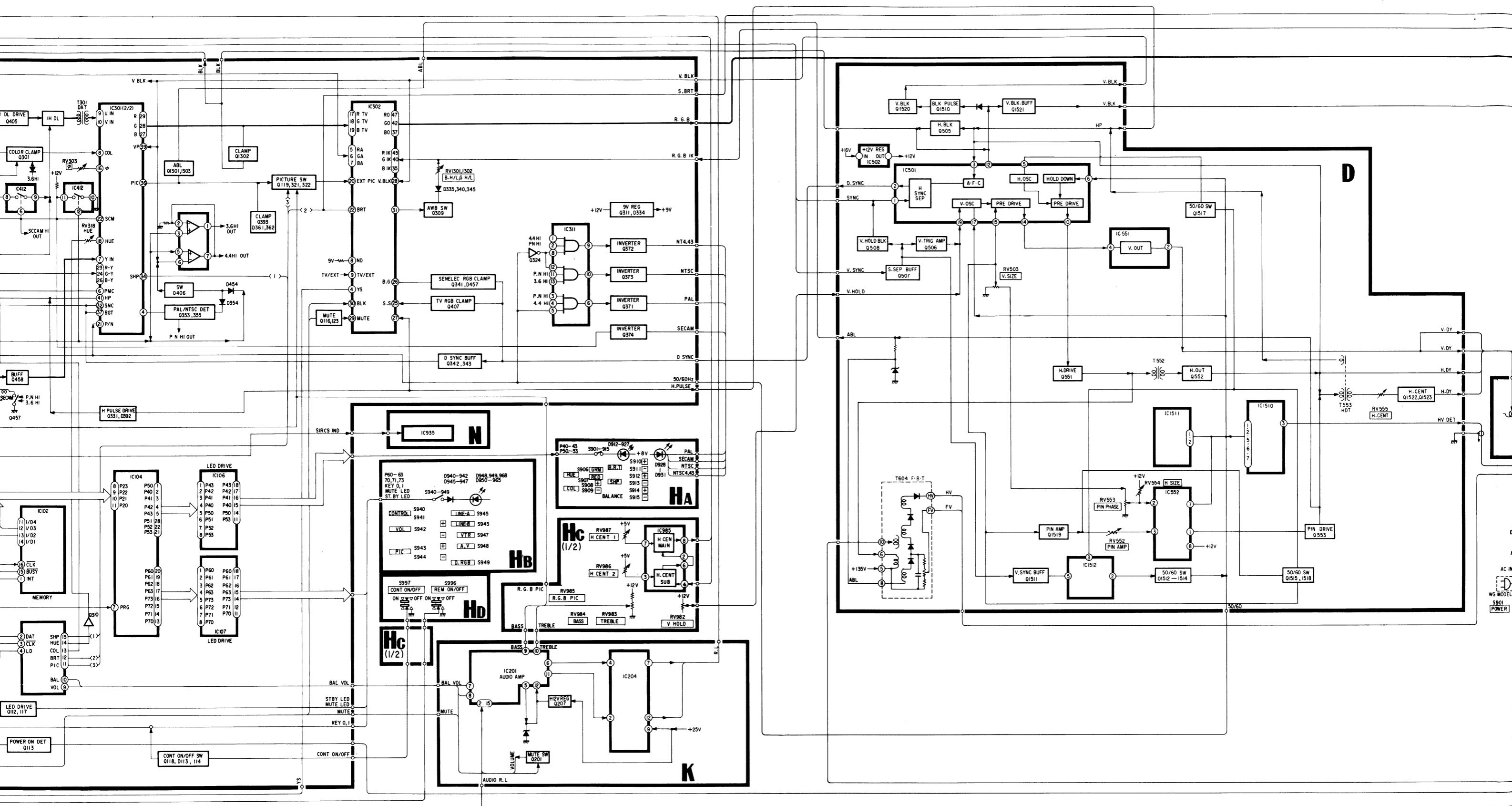
HOLD DOWN ADJUSTMENT (*R531)

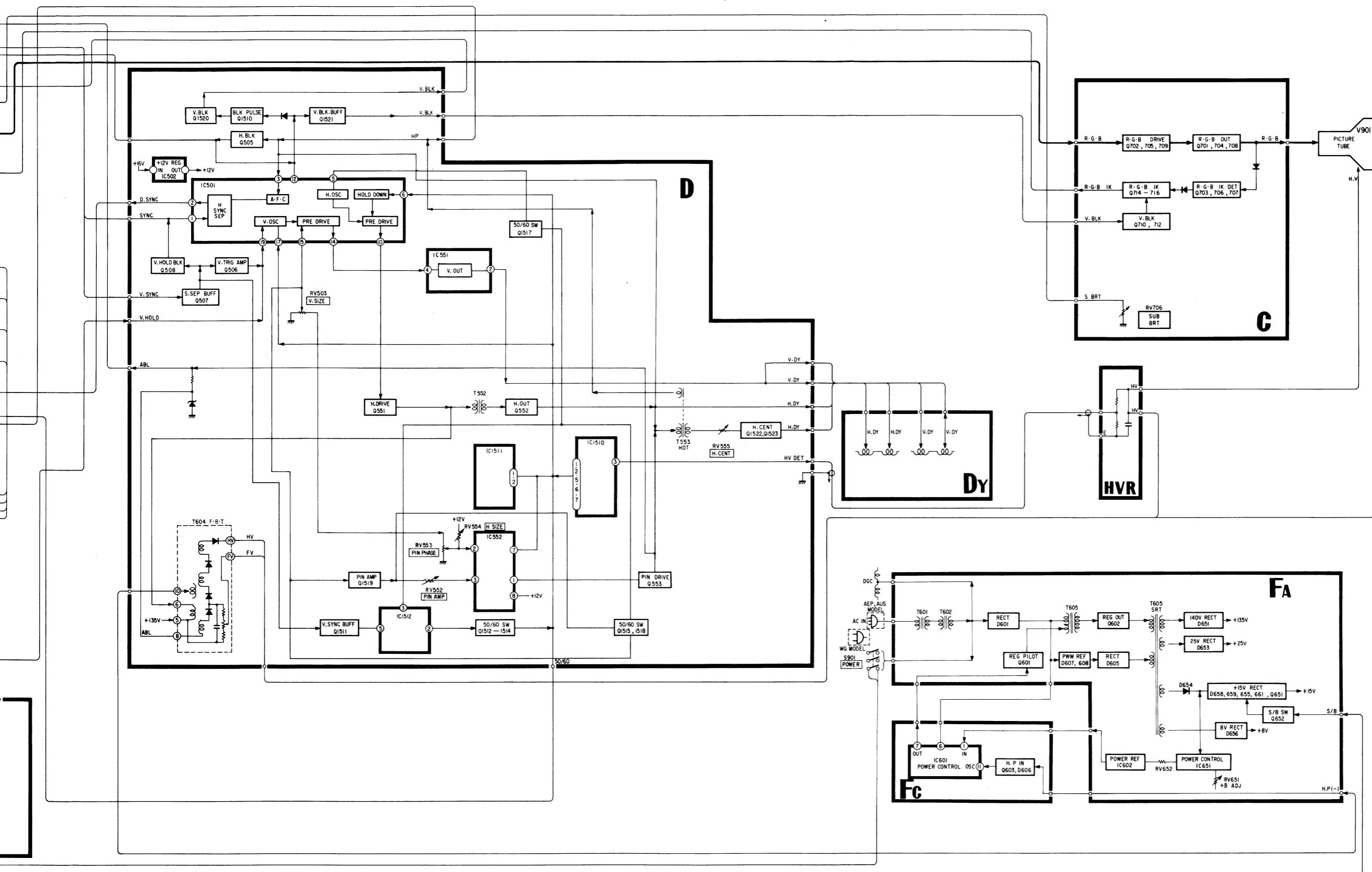
- Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS control to maximum.
- Confirm that the voltage of the IC1510 (1) pin is more than 15.78V DC when the set is operating normally with 120V AC supply.
- Adjust ABL current to $1400 \pm 30 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 3.0mA dc range)
- Confirm that there is less than 18.35V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
- Adjust ABL current to $210 \pm 3 \mu\text{A}$ with PICTURE and BRIGHTNESS. (ammeter 0.3mA dc range)
- Confirm that there is less than 19.25V DC where by the raster disappears during operation of hold-down circuit. (HOLD DOWN check point of IC1510 (1) pin)
- If the hold-down circuit starts operating in the above case, switch OFF the POWER of the set immediately.
- If above steps is not satisfied, select resistance value of R597 and repeat above steps 1 through 6.



5-2. BLOCK DIAGRAM

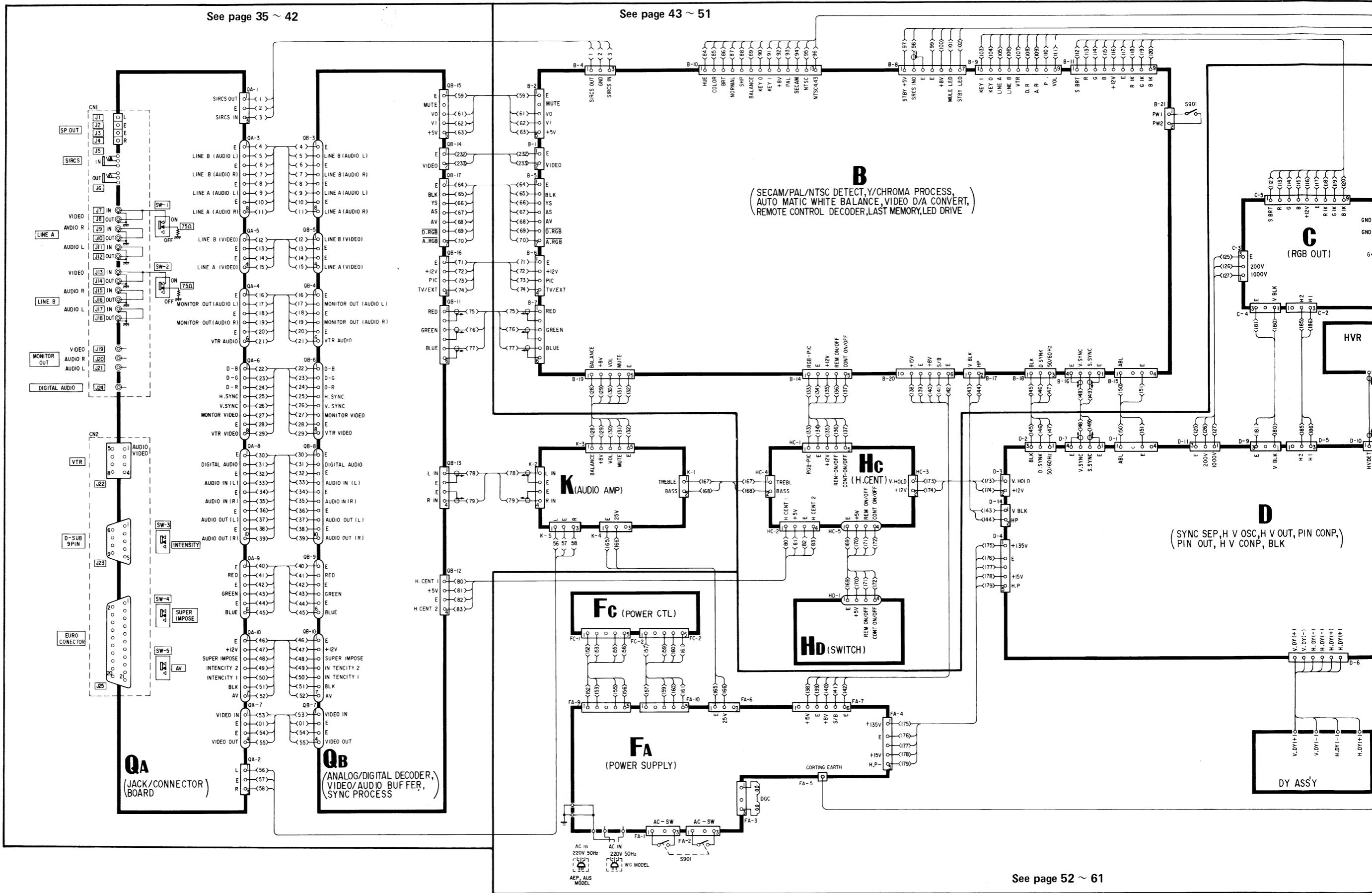






5-3. FRAME SCHEMATIC DIAGRAM

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



See page 52 ~ 61

9

10

11

12

1

1

1

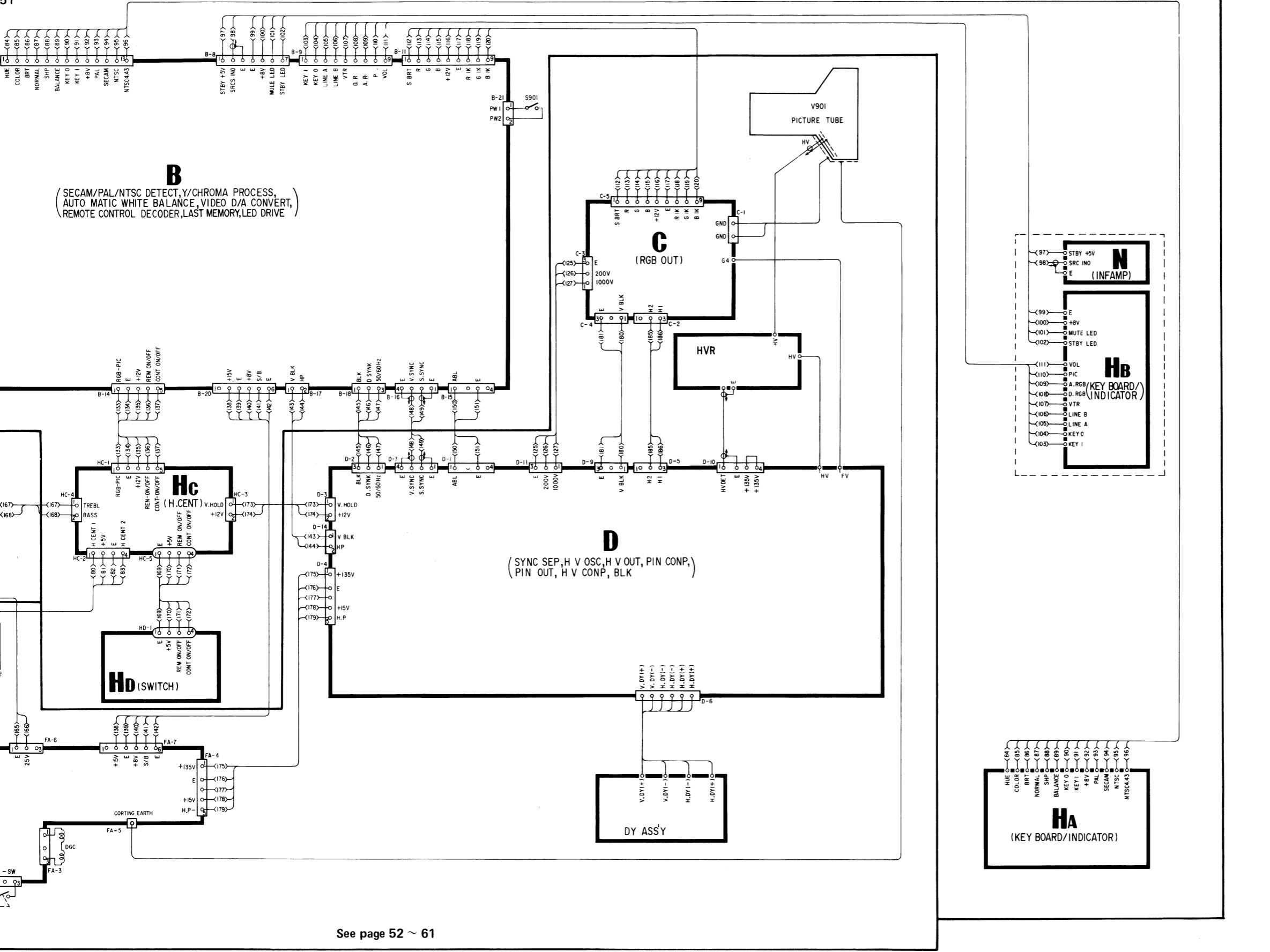
1

1

1

1

See page 43 ~ 51



19

20

21

22

A

B

C

D

E

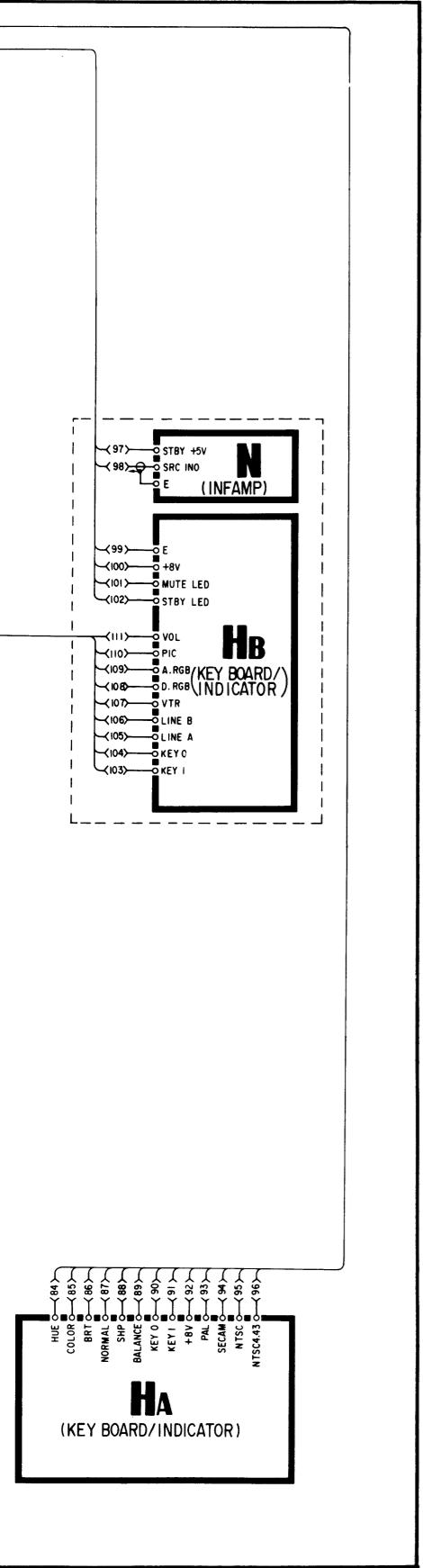
F

G

H

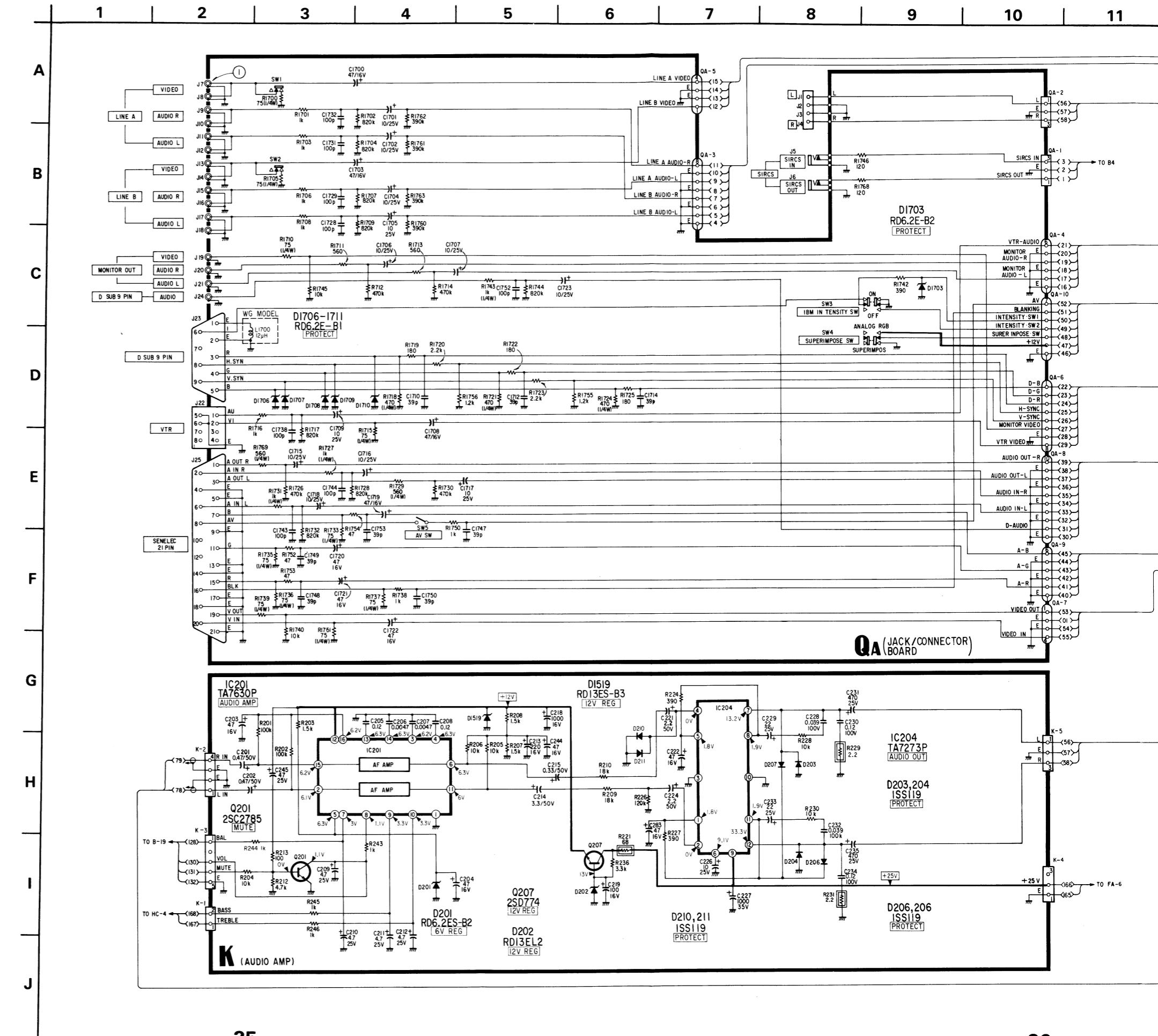
I

J

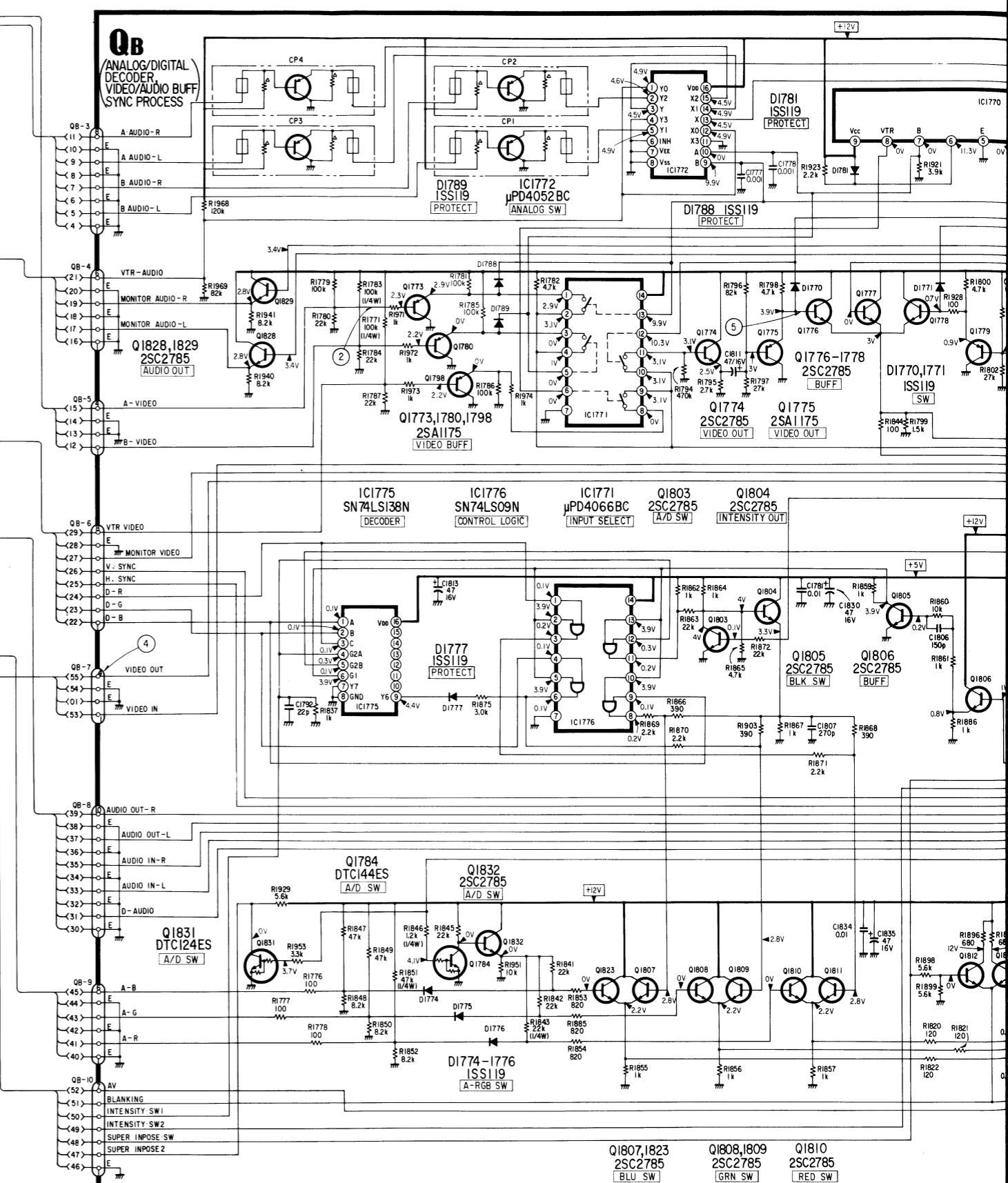
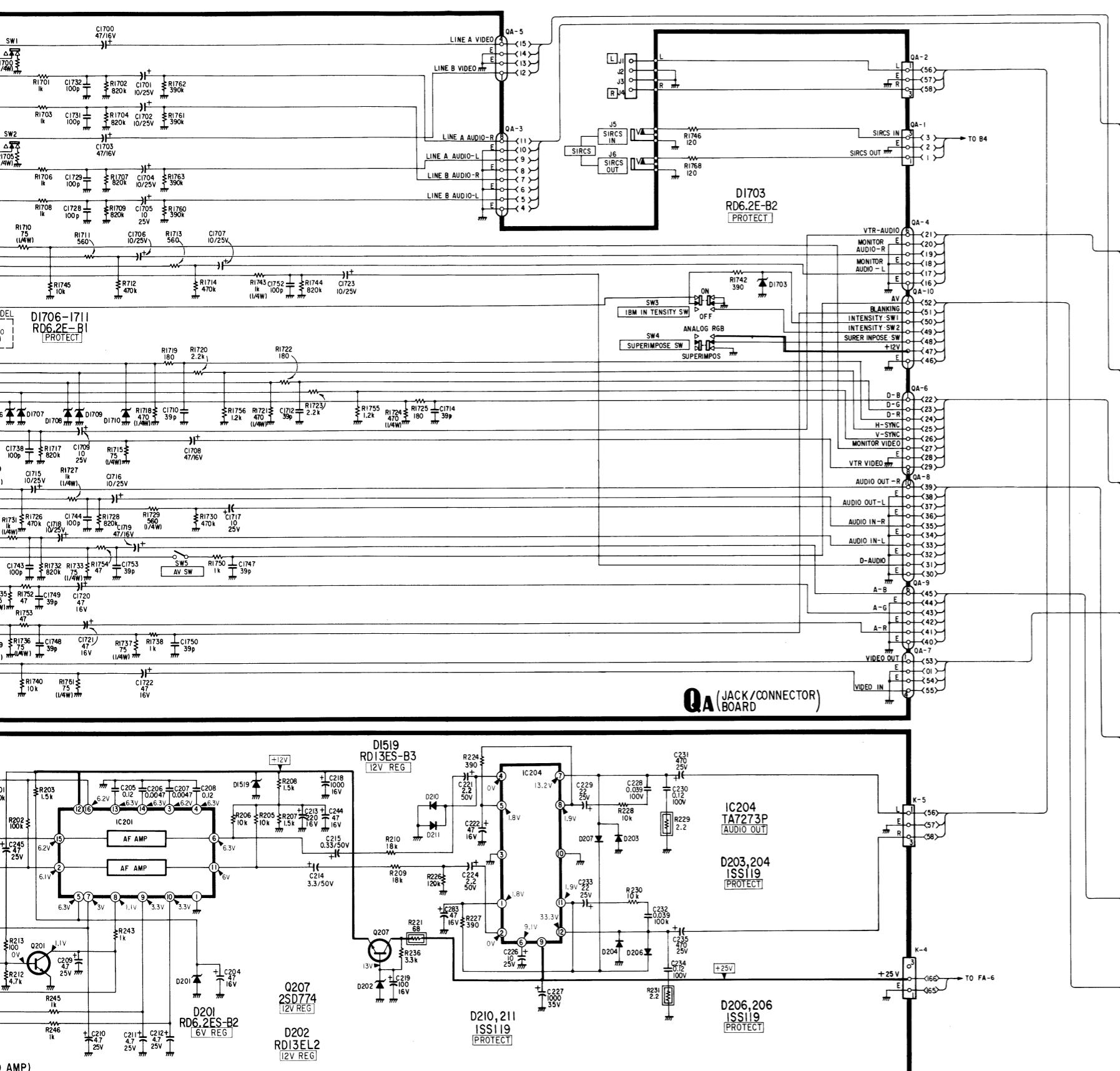


5-4. SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

- Note:**
- All capacitors are in μF unless otherwise noted.
 - 50WV or less are not indicated except for electrolytics.
 - p : μF
 - All resistors are in ohms: $\frac{1}{2}\text{W}$ unless otherwise noted.
 - $\text{k}\Omega$: 1000Ω , $\text{M}\Omega$: $1000 \text{ k}\Omega$
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - : nonflammable resistor.
 - : internal component.
 - : panel designation.
 - : adjustment for repair.
 - : $\text{B}+$ bus.
 - : $\text{B}-$ bus.
 - Voltages are dc with respect to ground unless otherwise noted.
 - Readings are taken with a $10 \text{ M}\Omega$ digital multimeter.
 - Voltage variations may be noted due to normal production tolerances.
 - Readings are taken with a color-bar-signal input.
 - no mark: with PAL color-bar signal received.
() : with SECAM color-bar signal received.
< > : with NTSC (3.58) color-bar signal received.
[] : with NTSC (4.43) color-bar signal received.
 - * : Selected to yield optimum performance.



3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19



14

15

16

1

1

1

1

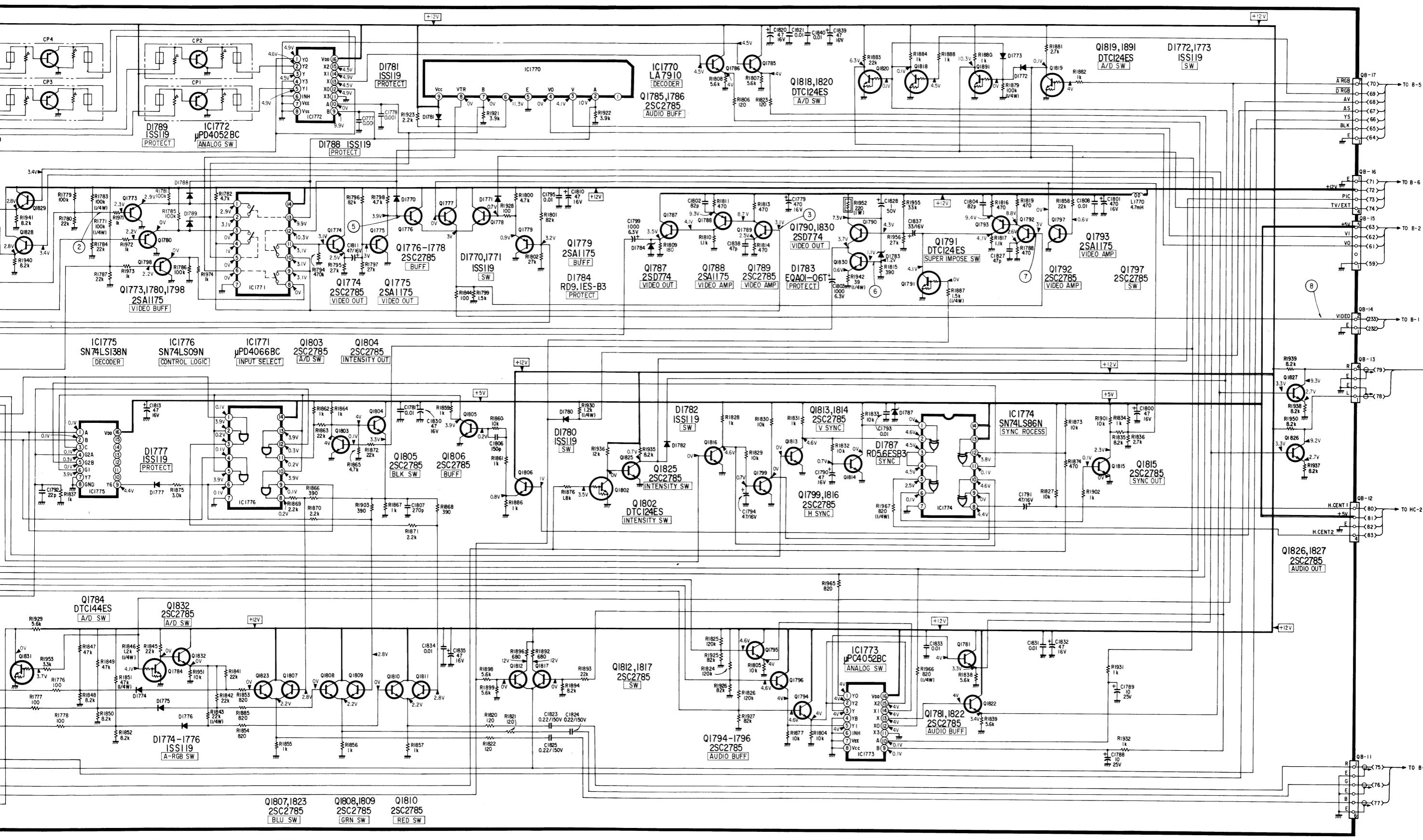
5

96

27

28

29



[JACK/CONNECTOR]

QAANALOG/DIGITAL DECODER,
VIDEO/AUDIO BUFFUER,
SYNC PROCESS.**QB****QB** **QA**

【QB BOARD】

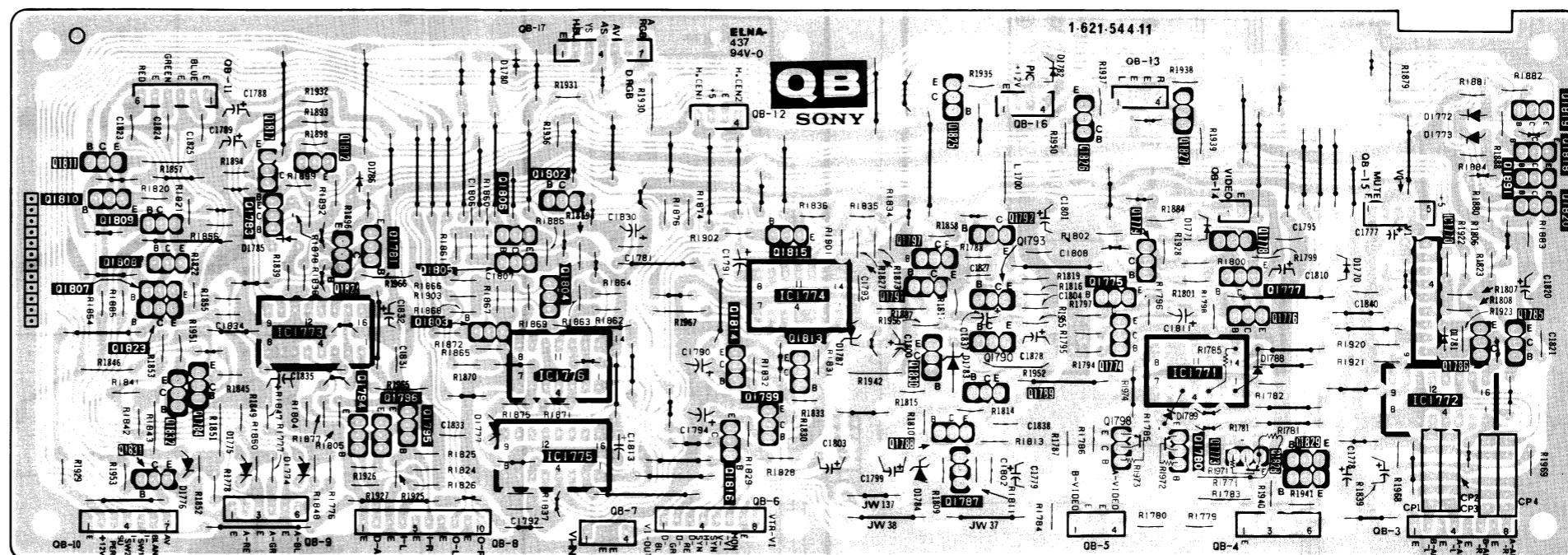
A	PAL	SECAM	NTSC 3.58 4.43
B	② Q1773 B IVp-p(H)	IVp-p(H)	IVp-p(H)
C	③ Q1789 B IVp-p(H)	IVp-p(H)	IVp-p(H)
D	④ QB-7 ④ 2Vp-p(H)	2Vp-p(H)	2Vp-p(H)
E	⑤ Q1776 B 0.9Vp-p(H)	0.9Vp-p(H)	0.9Vp-p(H)
F	⑥ Q1830 C 2Vp-p(H)	2Vp-p(H)	2Vp-p(H)
G	⑦ Q1792 B 0.9Vp-p(H)	0.9Vp-p(H)	0.9Vp-p(H)
H	⑧ QB-14 ② 0.9Vp-p(H)	0.9Vp-p(H)	0.9Vp-p(H)

【QA BOARD】

① LINEA J7 IVp-p(H)	IVp-p(H)	IVp-p(H)
------------------------	----------	----------

QA Board

IC Q	I811 I810 I809 I808 I823 I831 I832 I784	I817 I812 I822 I781 I796 I795	I806 I805 I804 I803 I776 I775	I802 I815 I814 I816 I799 I813	I825 I792 I793 I791 I788 I790	I826 I775 I774 I798 I789	I827 I779 I778 I780 I773	I777 I776 I775 I774 I771	I819 I818 I817 I785 I786 I820	IC Q
D	I703 I776 I775 I774 I711 I709 I707 I777, I708, I710	I780 I706	I787 I784, I783	I782 I789 I788	I770 I781	I771 I770	I780 I781	I782 I783	I772 I773	D

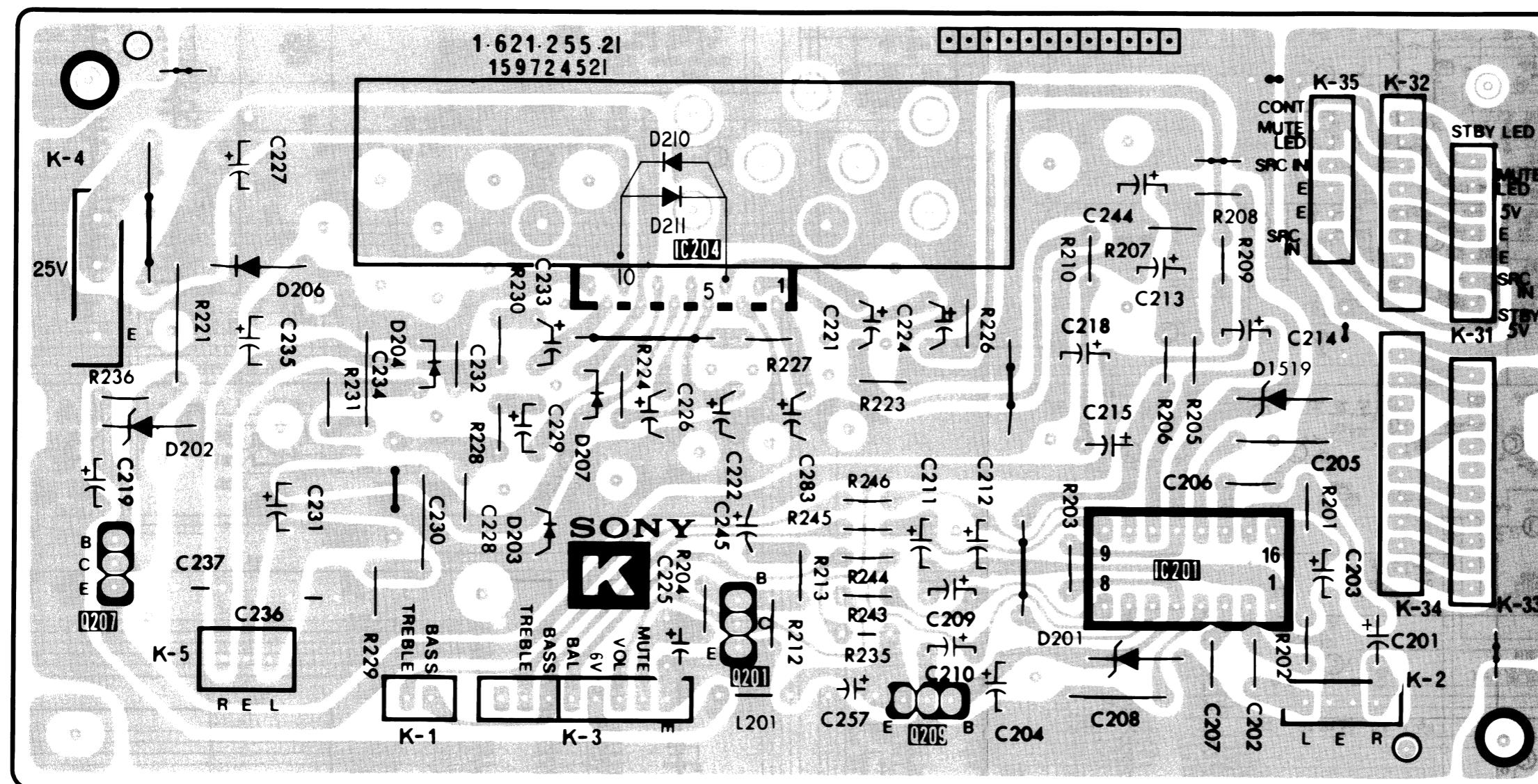


[AUDIO AMP CONTROL.]

K

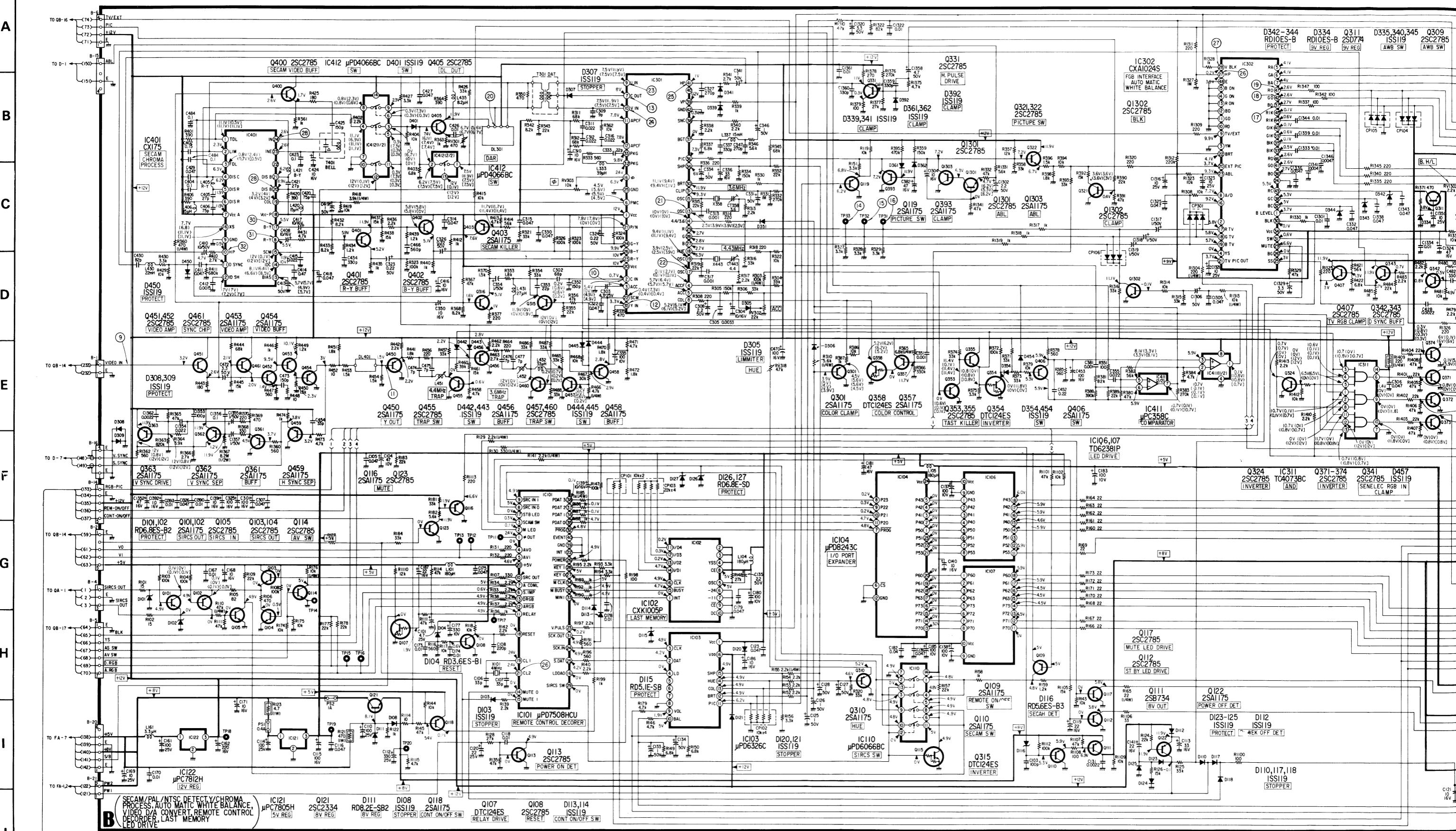
15

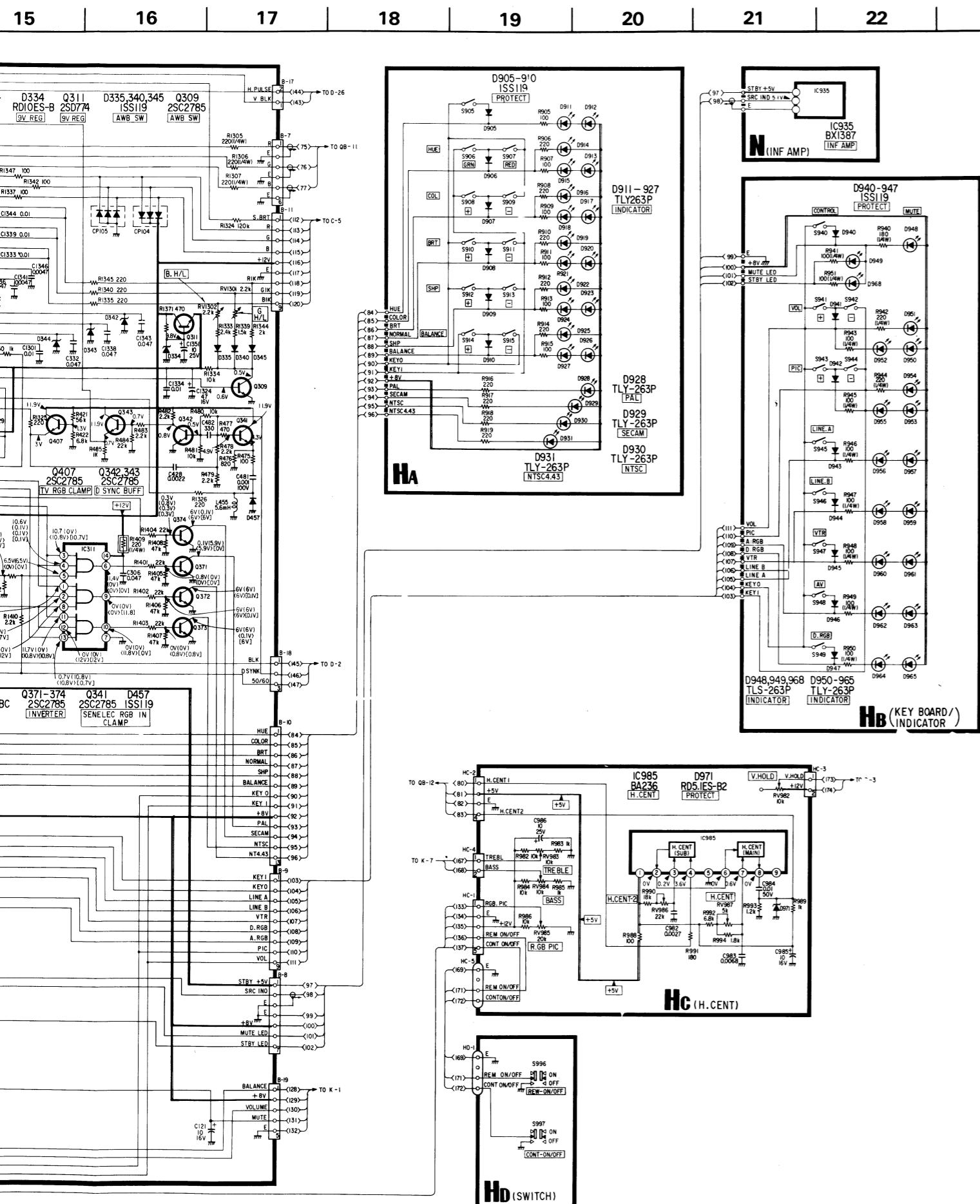
K Board



A
B
C
D
E
F
G
H

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





[B BOARD]

A	PAL	SECAM	NTSC 3.58 4.43	PAL	SECAM	NTSC 3.58 4.43
⑨ Q451B				⑯ IC302 ④		
B	0.9Vp-p (H)	0.9Vp-p (H)	0.9Vp-p (H)	3.6Vp-p (H)	3.8Vp-p (H)	3.6Vp-p (H)
⑩ IC301 ②				⑯ IC302 ④		
C	0.8Vp-p (H)	0.5Vp-p (H)	3.58, 0.9Vp-p (H) 4.43, 0.8Vp-p (H)	3.2Vp-p (H)	3.2Vp-p (H)	3.2Vp-p (H)
⑪ Q450B				⑯ IC302 ④		
D	1.1Vp-p (H)	1.1Vp-p (H)	1.1Vp-p (H)	3.5Vp-p (H)	3.2Vp-p (H)	3.5Vp-p (H)
⑫ IC301 ⑤				⑯ DL301 ②		
E	0.9Vp-p (H)	0.9Vp-p (H)	0.9Vp-p (H)	0.15Vp-p (H)	0.2Vp-p (H)	3.58 - 0.28Vp-p (H) 4.43 - 0.23Vp-p (H)
⑬ IC301 ⑦				⑯ IC301 ⑬		
F	0.2Vp-p (H)		0.34Vp-p (H)	1.4Vp-p (3.58MHz)	2.2Vp-p (H)	SECAM 0.18Vp-p (H)
⑭ TP33				⑯ IC301 ⑯		
G	3.9Vp-p (H)	2.8Vp-p (H)	3.9Vp-p (H)	1.9Vp-p (4.43MHz)	6.2Vp-p (H)	SECAM 2Vp-p (H)
⑮ TP32				⑯ IC301 ⑨		
H	2.6Vp-p (H)	2.2Vp-p (H)	2.6Vp-p (H)	PAL 0.23Vp-p (H)	3.6Vp-p (H)	SECAM 2Vp-p (H)
⑯ TP31				⑯ IC301 ⑩		
I	2.8Vp-p (H)	3.1Vp-p (H)	2.8Vp-p (H)	PAL 0.27Vp-p (H)	SECAM 0.36Vp-p (H)	1.5Vp-p (H)
J				⑯ IC401 ⑩		

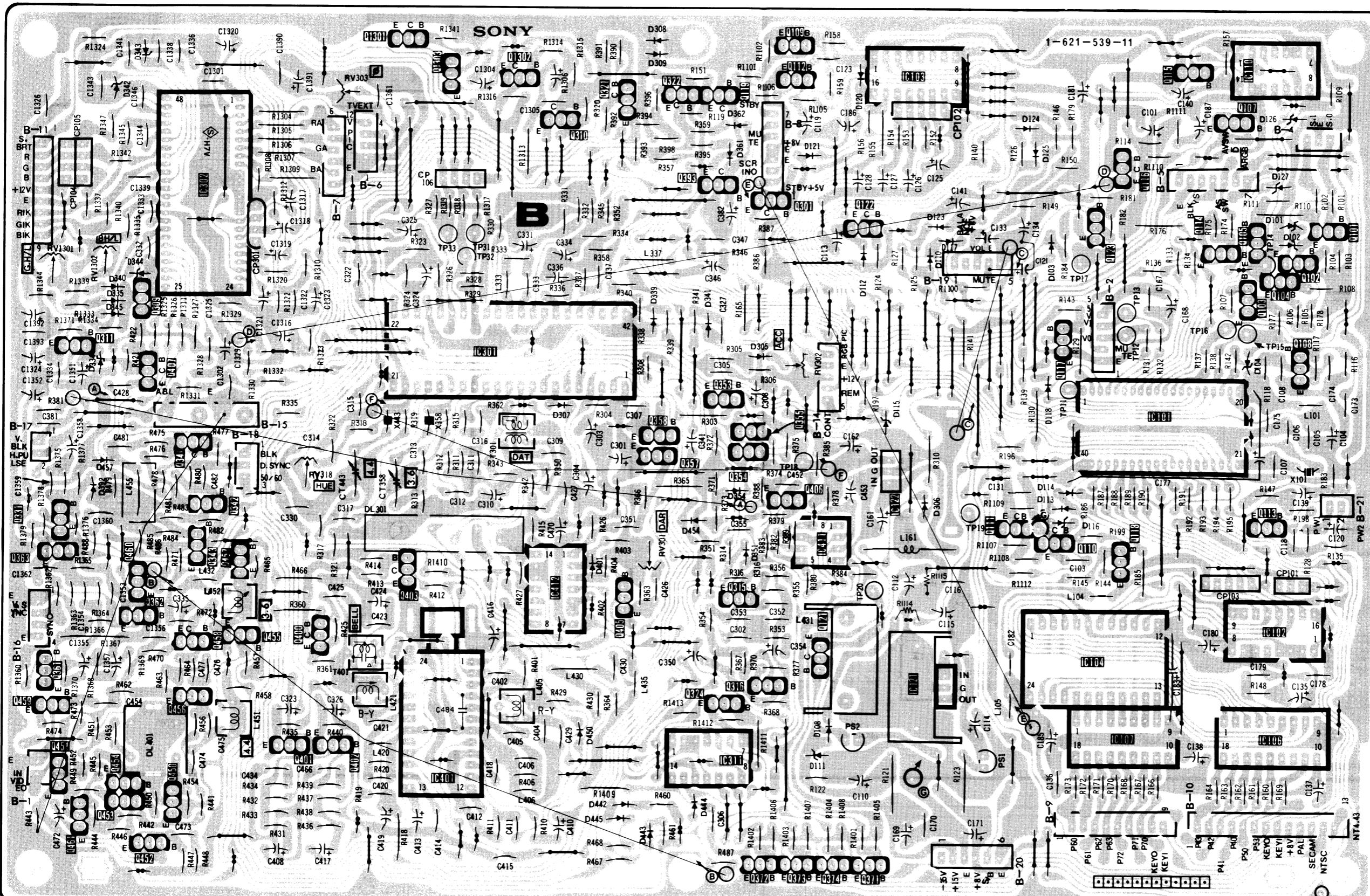
[SECAM/PAL/NTSC DFTFCT, Y/CHROMA PROCESS
AUTOMATIC WHITE BALANCE, VIDEO D/A CONVERT
REMOTO CONTROL DECODER, LAST MEMORY,
LED DRIVE.

B

B

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

B Board



IC	Q	D	ADJ	TP
I301	I09	308 343 309		
I303	I10	I20		
I302	I03	342		
	I12			
	321, 322	362 I26	RV303	
	I19	I24		
	I07	361 I25		
	310	I21		
	I16			
	393	I27		
IC302	301	I01		
I22, I23	I01	I23		
	I05	I17, I02	RVI301	31
	I14	I03	RVI302	17
	I02	I12		14
	I04	I10		33
	I03	344 340 335 345		32
309		339 341		I3 I6 I5 I2
IC301	I08	305 I04	RV302	
311		334 I18		I1
407	353	307 I15		
	IC101			
	358, 355			
	357, 354			
IC122		457 354	CT443	I8
341	406	392 I14	CT358 RV318	
	I13	306 454 I13 I16		I9
342	I11			
331	IC411	I10		
	343	I18	351	
363, 457		401	RV301	20
460	403			
	IC412			
	405, 315			
362	IC102			
	400			
455	IC104			
458	I21			
361	IC121			
	316			
	324			
459, 456				
IC401				
	IC106	450 I08		
401	IC107	III		
402				
	IC311			
451				
454				
453				
450		442 444		
461		445, 443		
	452			
	372, 373			
	374, 371			
IC	Q	D	ADJ	TP

[H.CENT.]

HC

KEY BOARD

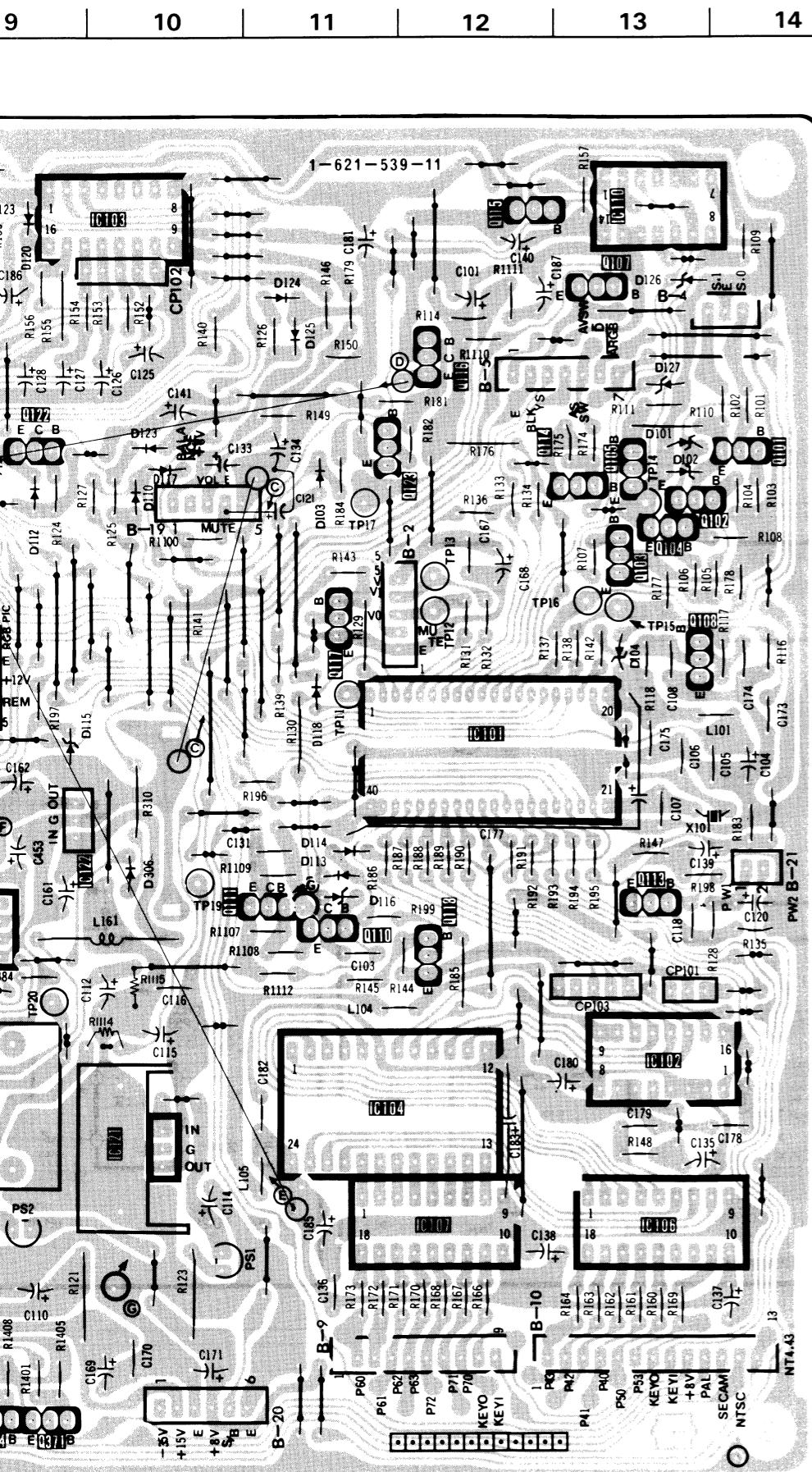
HB

[KEY BOARD INDICATOR.]

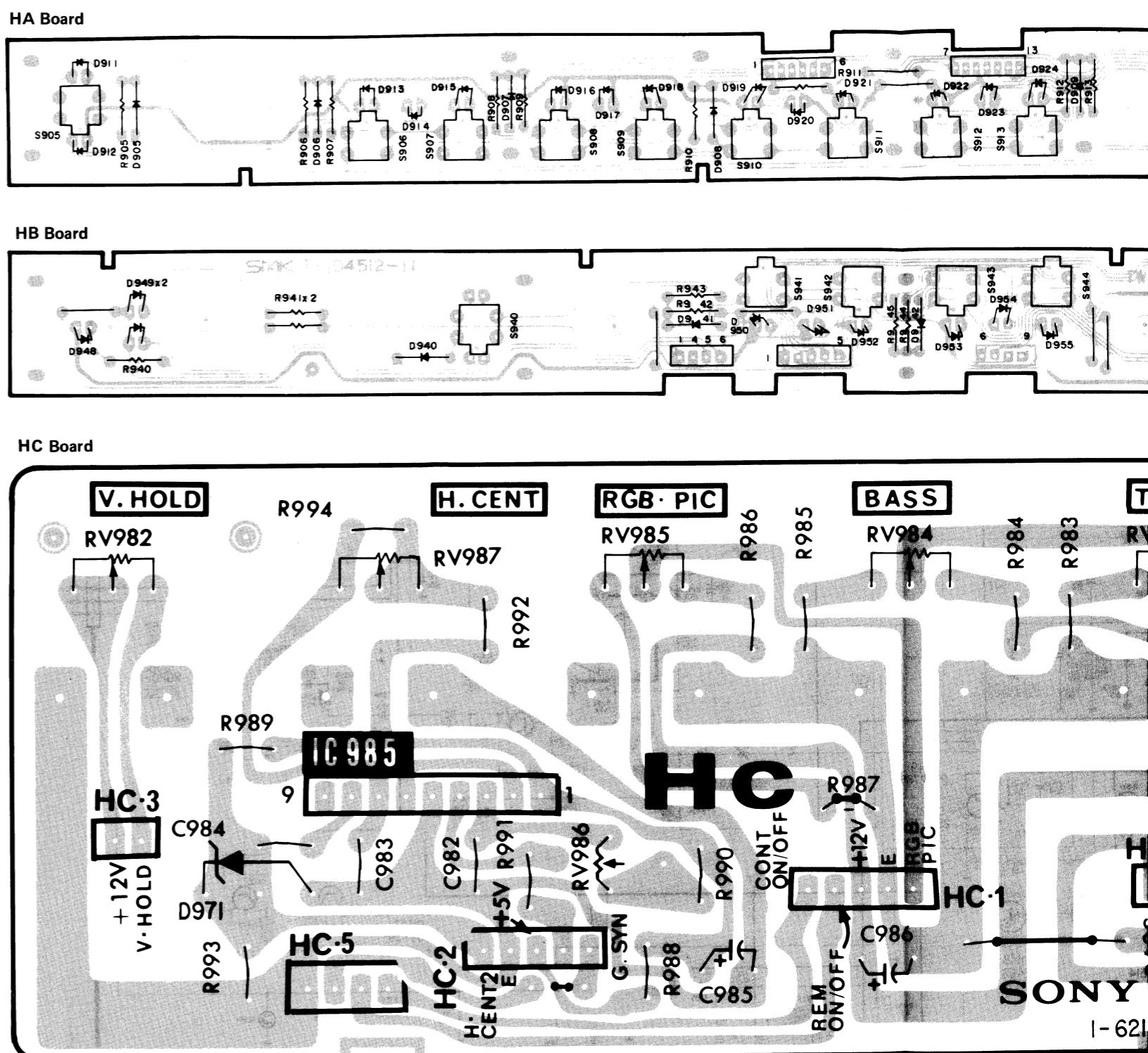
H

A H

BH



IC	Q	D	ADJ	TP
1301	109	308		
	IC110	343		
1303	115	309		
1302	IC103	120		
	112	342		
321, 322				
119	107	362	RV303	
310		126		
		124		
	116	361		
		125		
		121		
393		127		
301				
IC302		101		
122, 123	101	123		
	105	117, 102	RVI301	31
	114	103	RVI302	17
	102	112		14
	104	110		33
	103	344		32
		340		
		335		
309		345		
		339		13
	117	341		16
				15
IC301	108	305	RV302	12
311		104		
		334		
		118		
407	353	307		
	IC101	115		
358, 355				
357, 354				
IC122		457	CT443	
		354	CT358	18
341	406	392	RV318	
		114		
		306		
	113	454		
		113		
		116		
342	111			
331	IC411	110		
343				
363, 457	118	351		
460	403	401	RV301	
IC412				
405, 315				
362	IC102			
400				
455	IC104			
458	121			
361	IC121			
316				
324				
459, 456				
IC401				
401	IC106	450		
402	IC107	108		
IC311				
451				
454				
453				
450		442		
461		444		
		445		
		443		
452				
372, 373				
374, 371				
IC	Q	D	ADJ	TP



[KEY BOARD INDICATOR.] **HB** [KEY BOARD INDICATOR.]

HA

HA

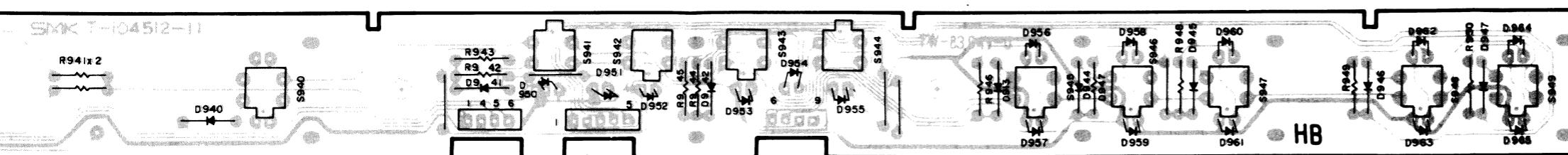
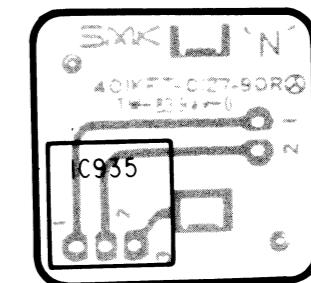
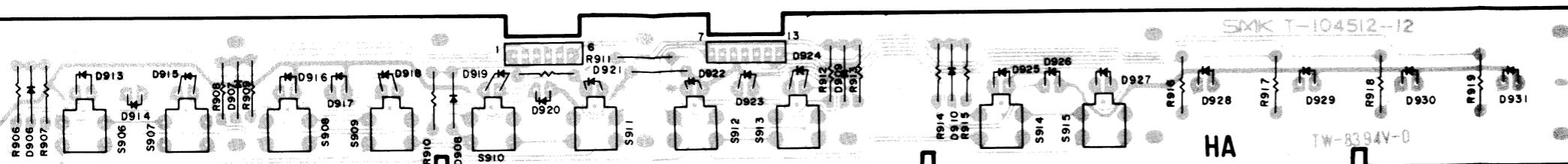
HB | H

HD

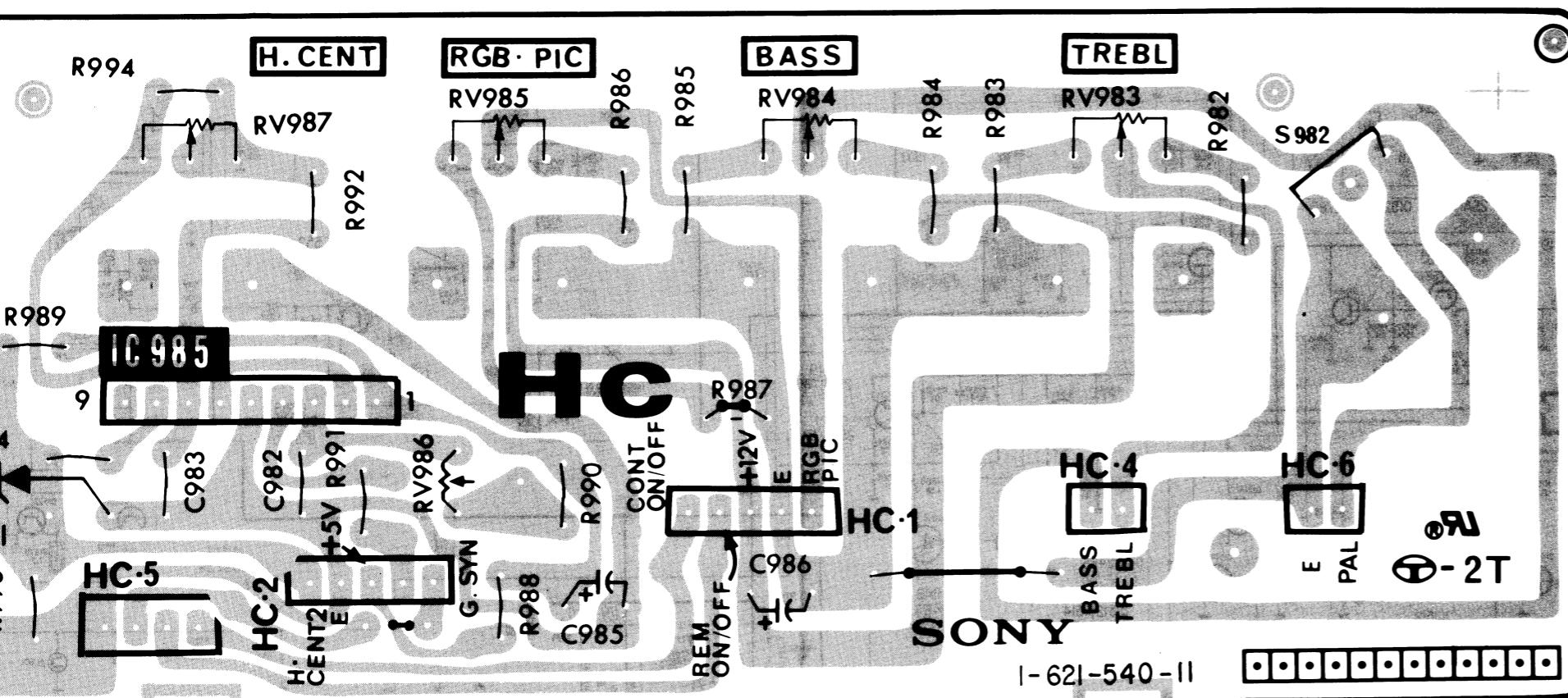
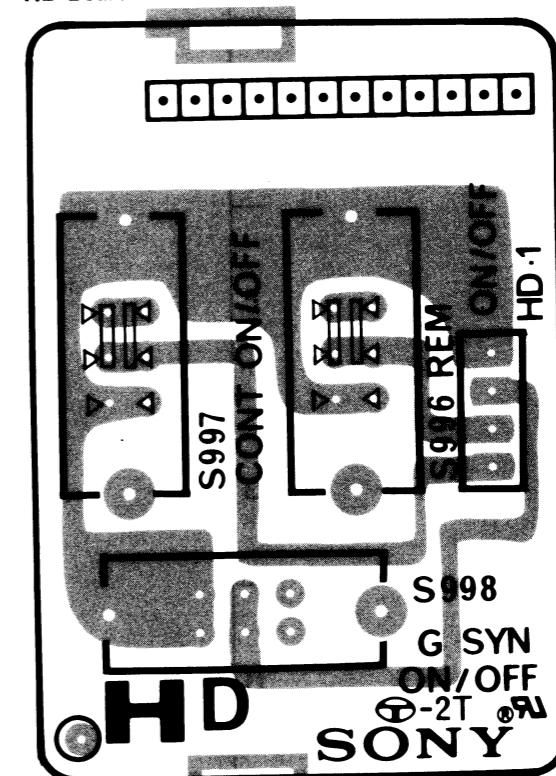
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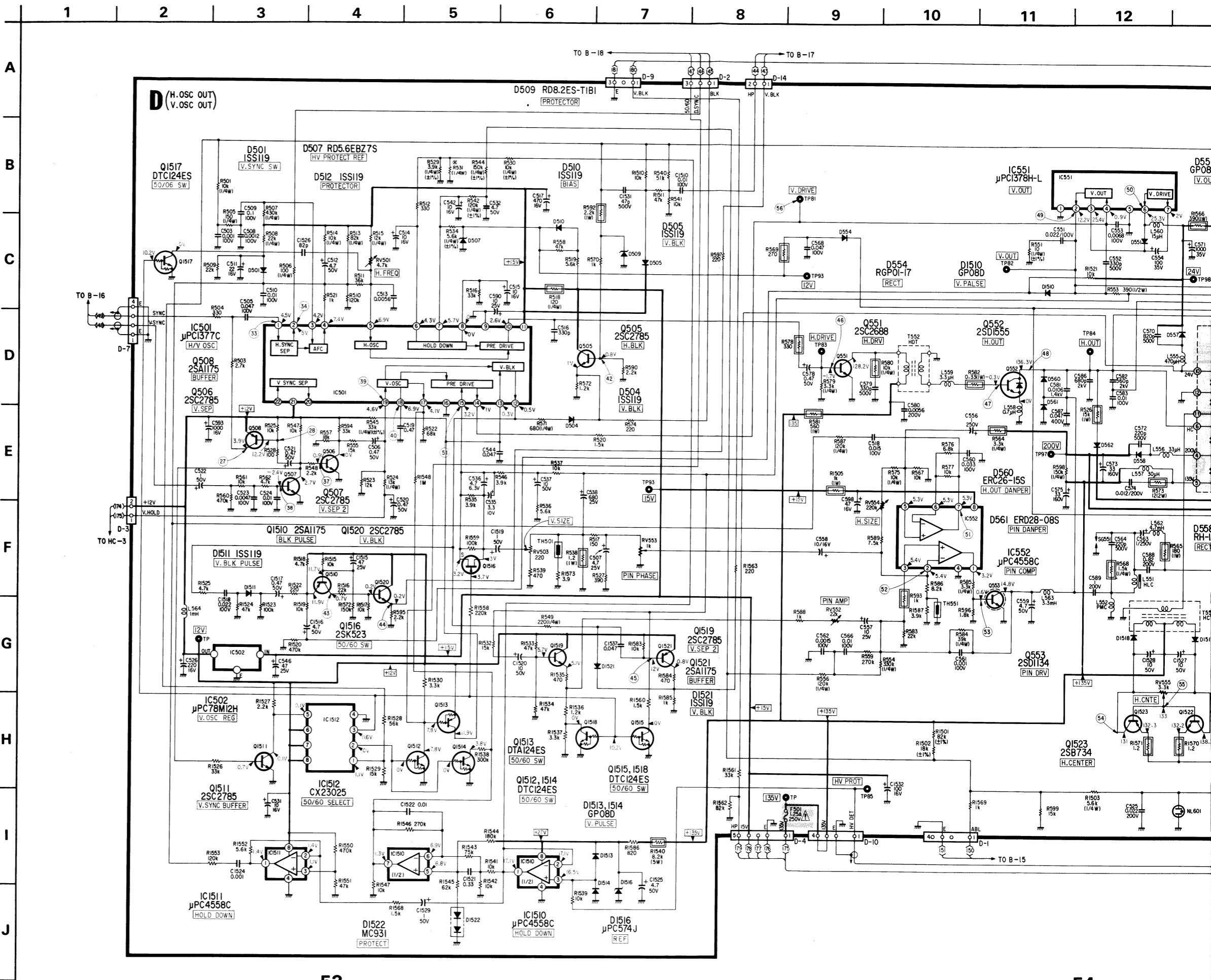
INF AMP.]

19 | **20** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34**

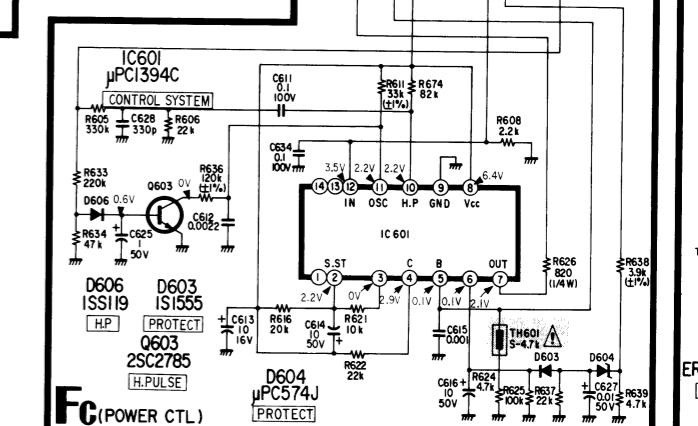
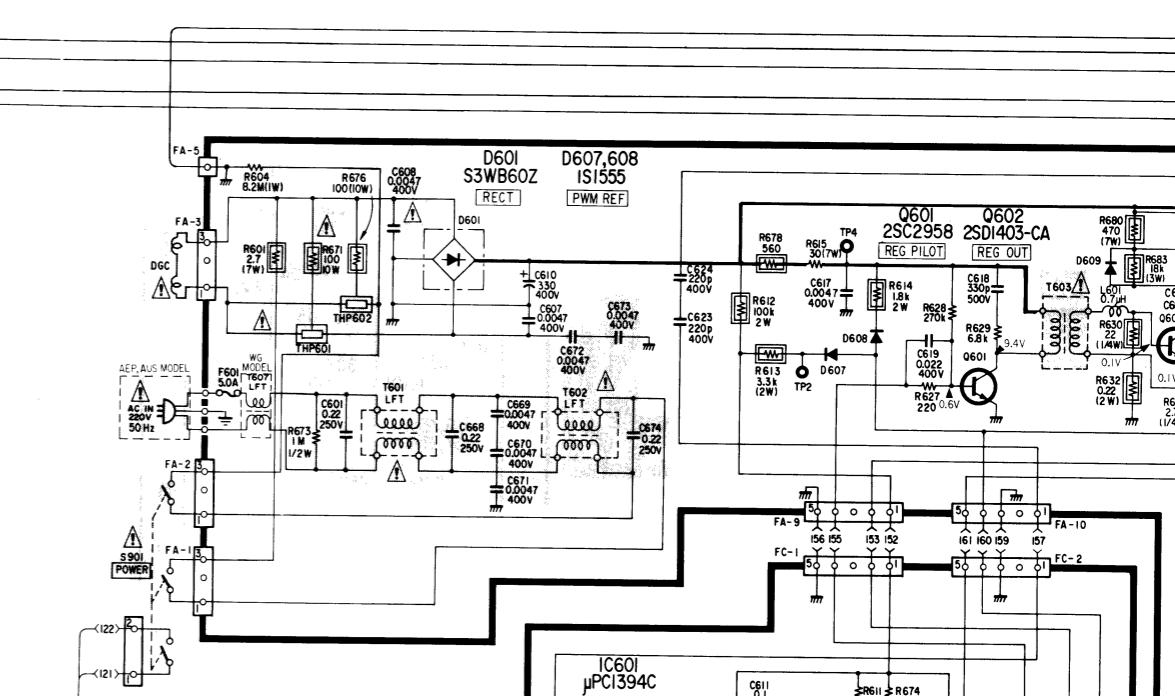
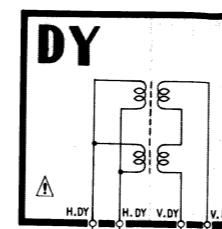
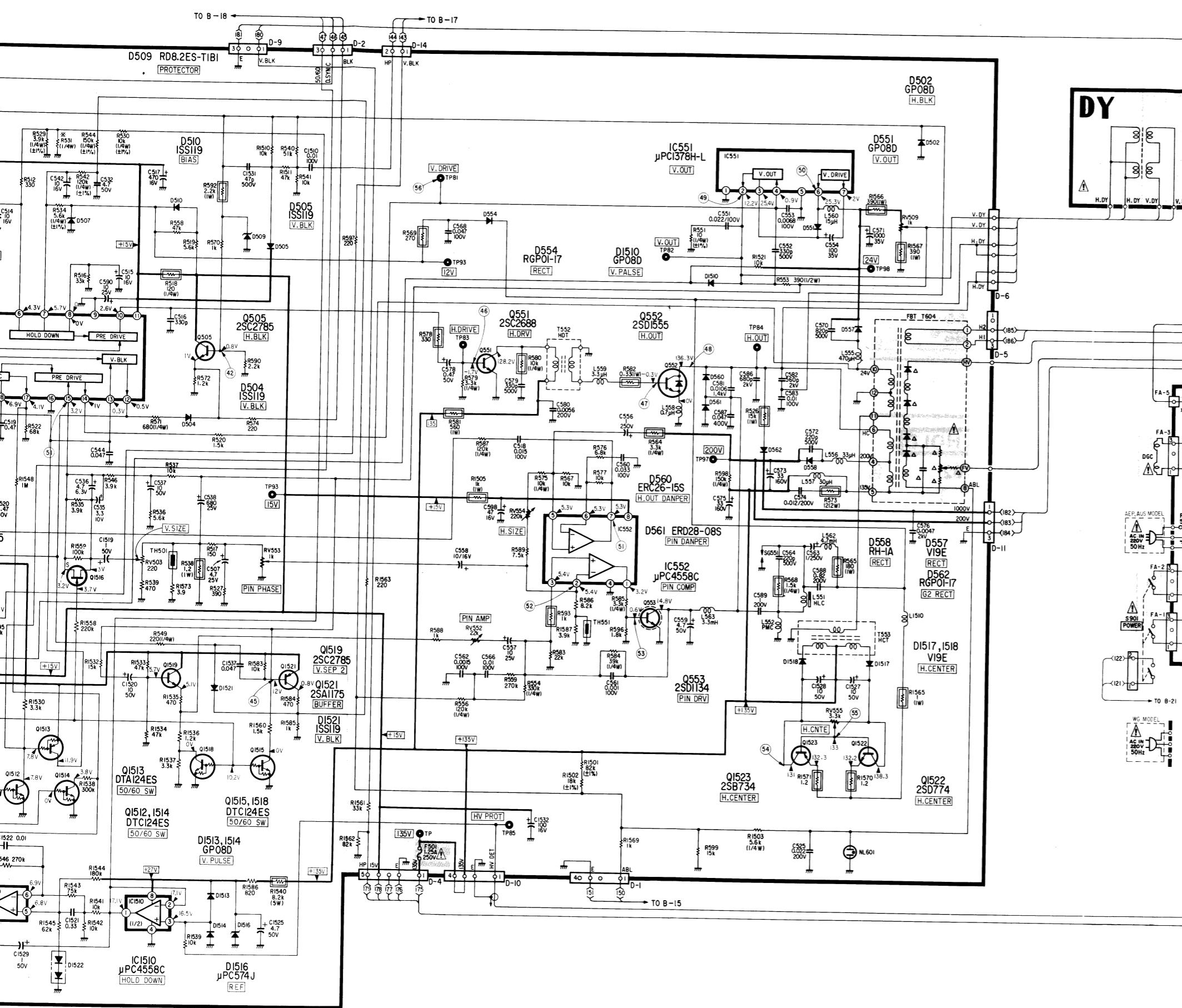


HD Board

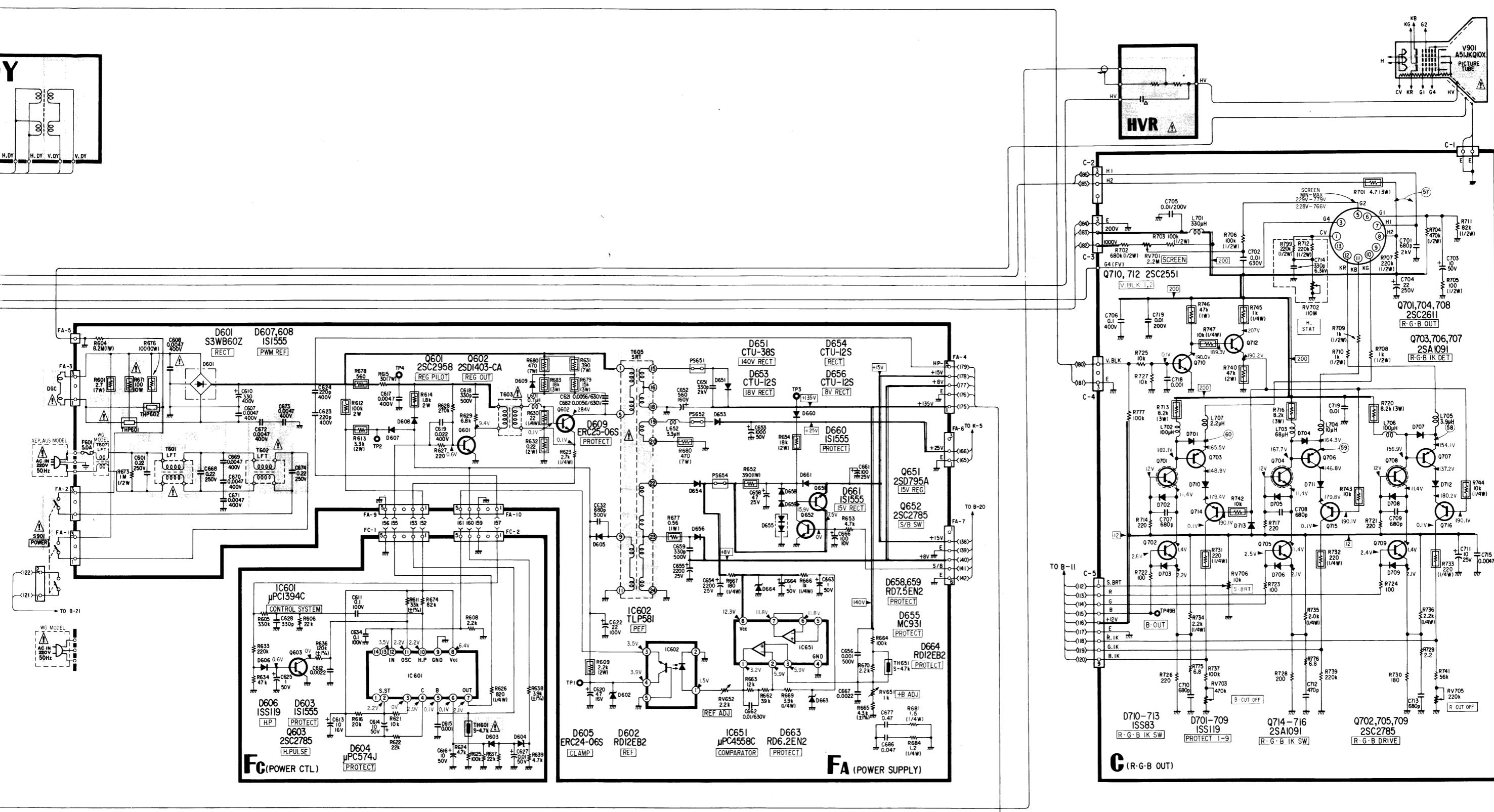




5 **6** **7** **8** **9** **10** **11** **12** **13** **14** **15** **16** **17** **18**



15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31



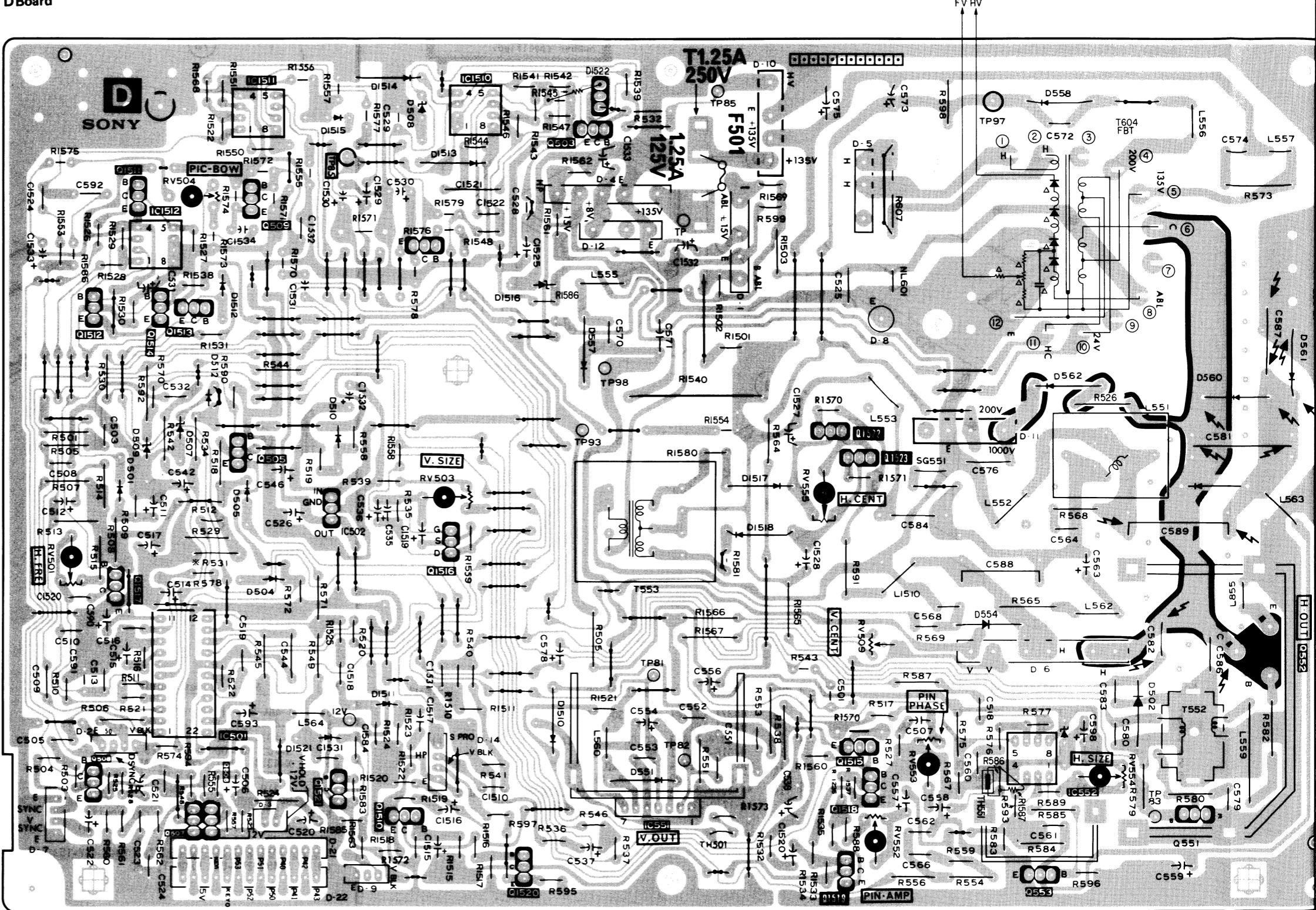
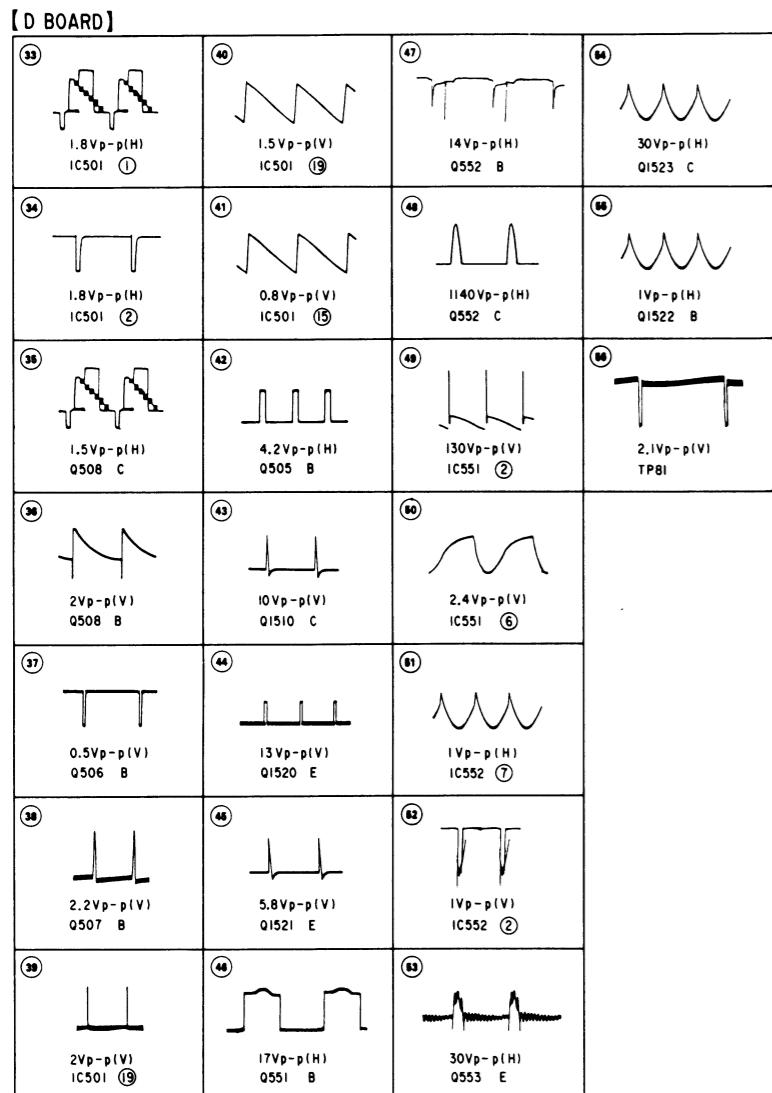
[SYNC SEP, H/V OSC, H/S OUT
PIN CONP, PIN OUT, H/V CONP, BLK.]

D

D

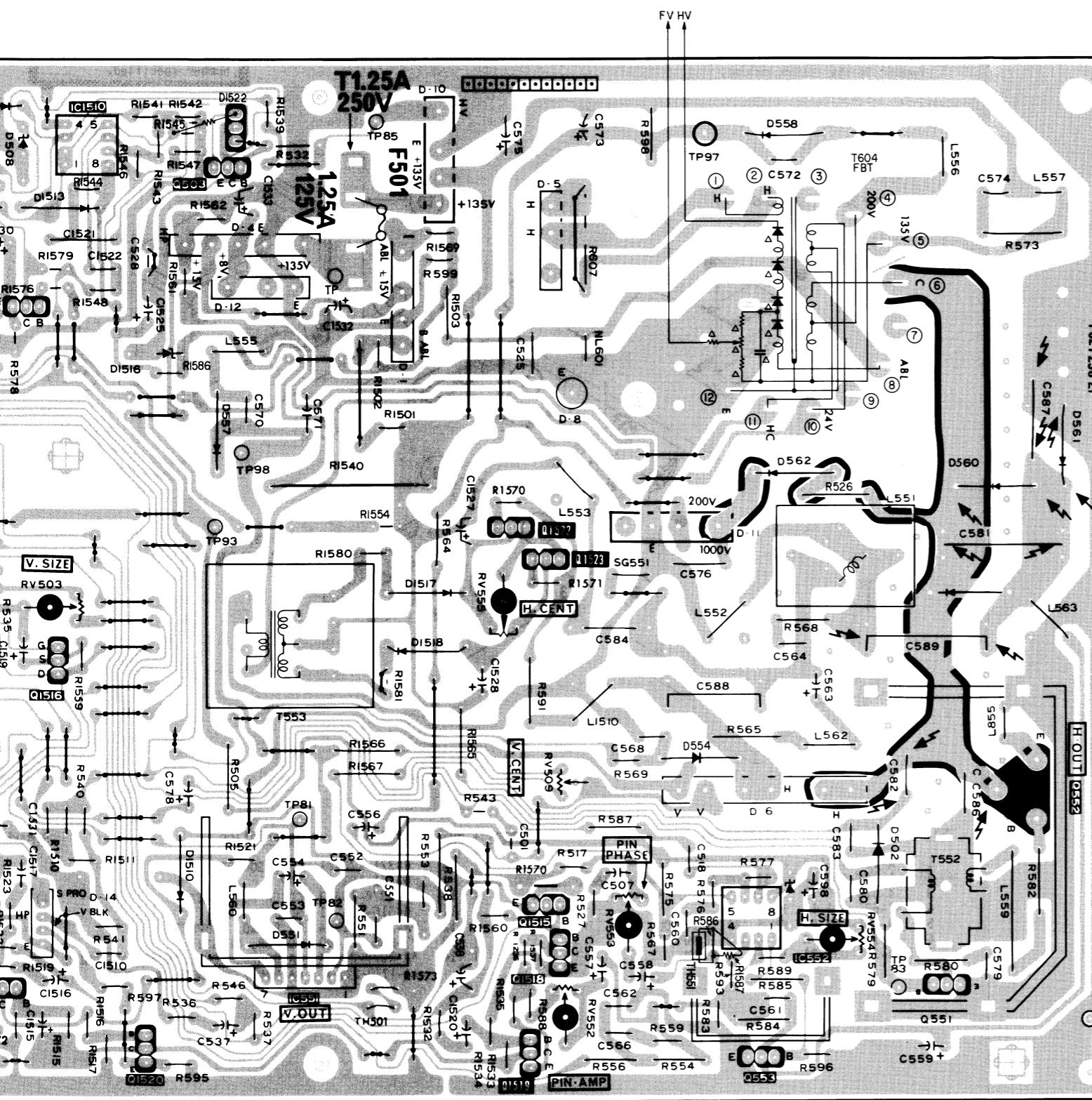
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

D Board

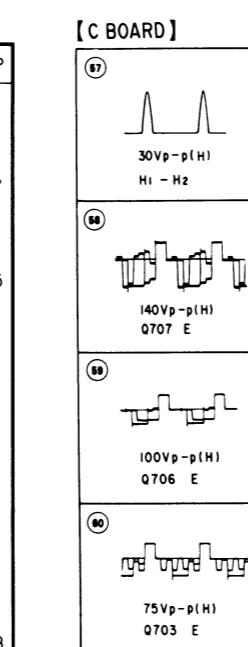


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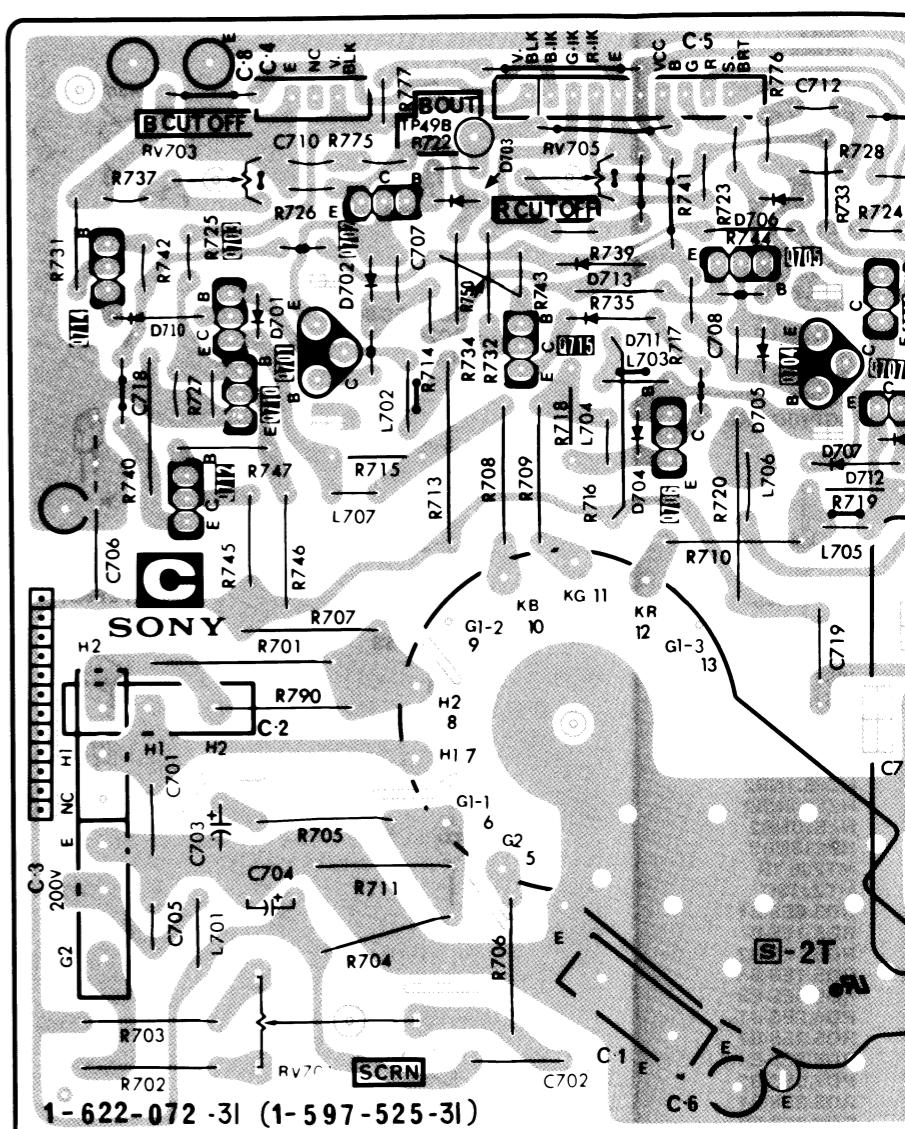
9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25



IC , Q	D	ADJ	TP
IC1510 IC1511	I522 I514	558	97
I511 IC1512	I513		85
I514 I512 I513	I516		98
505 IC502	I522 I523	507 510 509	93
I516	I517	RV555 RV503	
I517	I518	501 505	
I517	I516	504	RV501
I517	I517	554	RV509
IC501	I502	502	
I511 I510 I521	I510 I518 IC552	551	RV553 RV554
I510 I506 I507	I510 I518 IC551	551	RV552
I519 I520	I519 I520	553	
			IC , Q D ADJ TP



CBoard

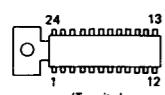


5-5. SEMICONDUCTORS

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LA7910



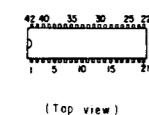
CX-175



CX23025
HA17558
NJM4558D
μPC358C
μPC4558C



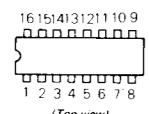
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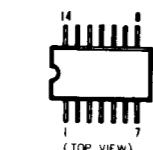
CXA1024S



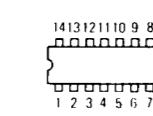
CXK1005P
SN74LS138N
TA7630P
μPD4052BC
μPD6326C



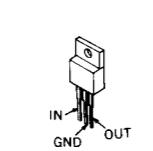
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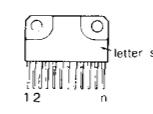
SN74LS09N
SN74LS86N
TC4073BP
μPD1394C
μPD4066BC
μPD4073BC



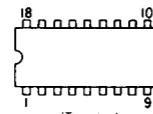
NJM7805H
NJM7812A
NJM78M12H
μPC7805H
μPC7812H
μPC78M121-1



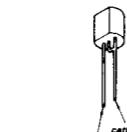
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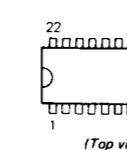
TD62381



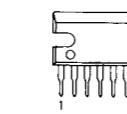
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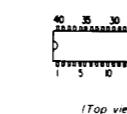
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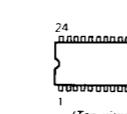
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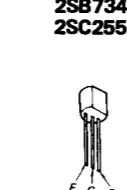
μPD750HCU-244



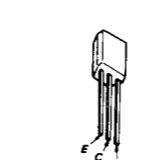
μPD8243C



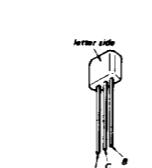
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2SA1091
2SB734
2SC2551



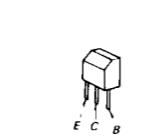
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DTC124ES
DTC144ES



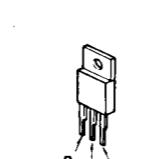
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2SB734
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2SC2959
2SD773
2SD774



2SC2334
2SD1134



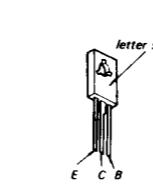
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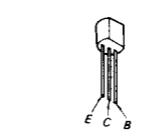
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2SC2688



IN4148
ISS83
IS1555
10E2
EQ01-06
ERC24-06S
ERD28-08
ES1F
GP-08D
RD5,6E-B2
RD5,6EBZ7S



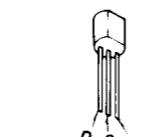
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2SD1555



2SK13



2SD12S

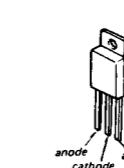


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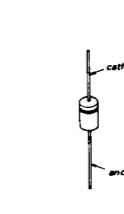


Marking

CTU-12S



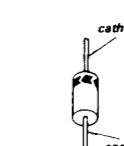
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ERC25-06
RH-1A



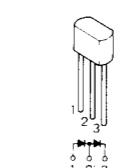
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GH3F
UO5G
V30N



ERD29-08

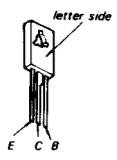


MC931



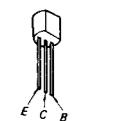
SECTION 6
EXPLODED VIEWS

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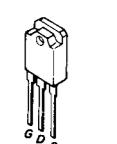


IN4148
ISS83
IS1555
10E2
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ERC24-06S
ERD28-08
ES1F
GP-08D
RD5,6E-B2
RD5,6EBZS
RD6,2E-B1
RD6,2E-B2
RD6,2E-L2
RD12E-B2
RD13E-L2
RD27E-B2
RGP01-17
RGP01-17PKG23
RGP10G-PKG23

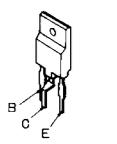
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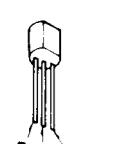
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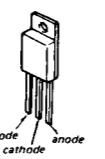
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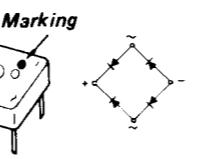
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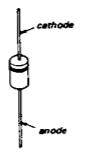
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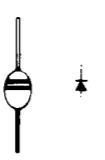
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ERC25-06
RH-1A



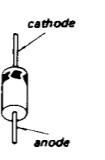
V19E
V19G



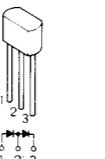
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GH3F
U05G
V30N



ERD29-08



MC931



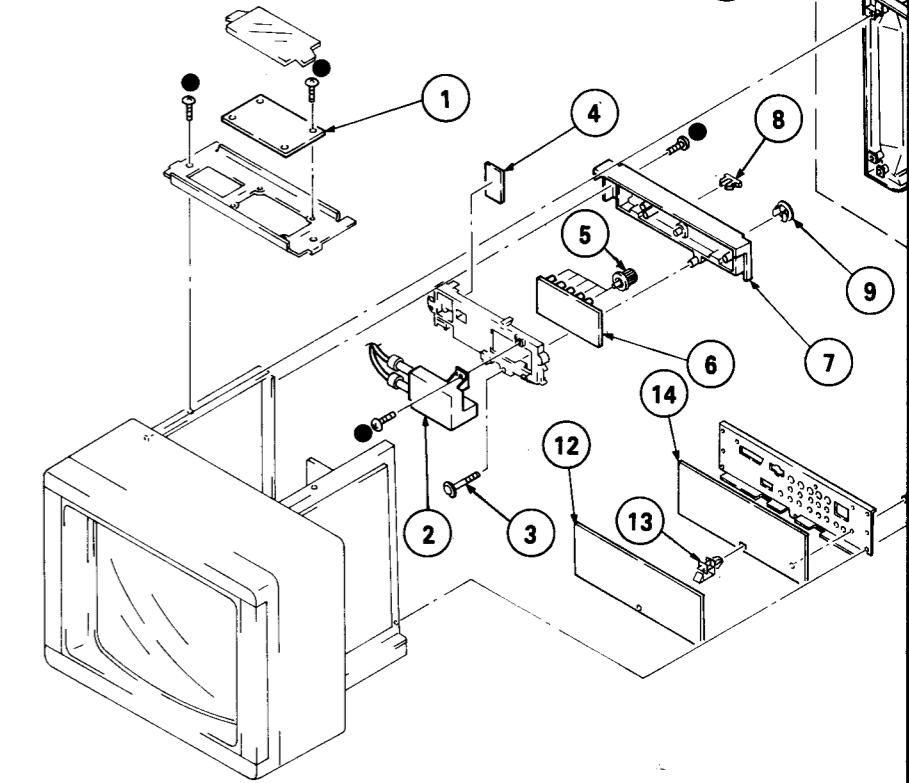
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. PICTURE TUBE

• BVTP 3x12 7-685-648-79



No.	Part No.	Description	Remark	No.	Part No.
1	*A-1389-865-A	K BOARD, COMPLETE		8	4-371-176-01
2	A-1-237-614-11	RESISTOR ASSY, HIGH-VOLTAGE		9	4-371-181-01
3	4-319-520-11	SCREW, SPECIAL (+PW4X30)		10	X-4374-166-3
4	*1-621-541-11	HD BOARD		11	4-316-003-21
5	4-381-166-01	KNOB (A), CONTROL		12	*A-1270-213-A
6	*A-1375-066-A	HC BOARD, COMPLETE		13	*3-680-721-00
7	4-382-035-21	PANEL, CONTROL		14	*A-1270-212-A
					*A-1270-223-A

SECTION 6

EXPLODED VIEWS

NOTE:

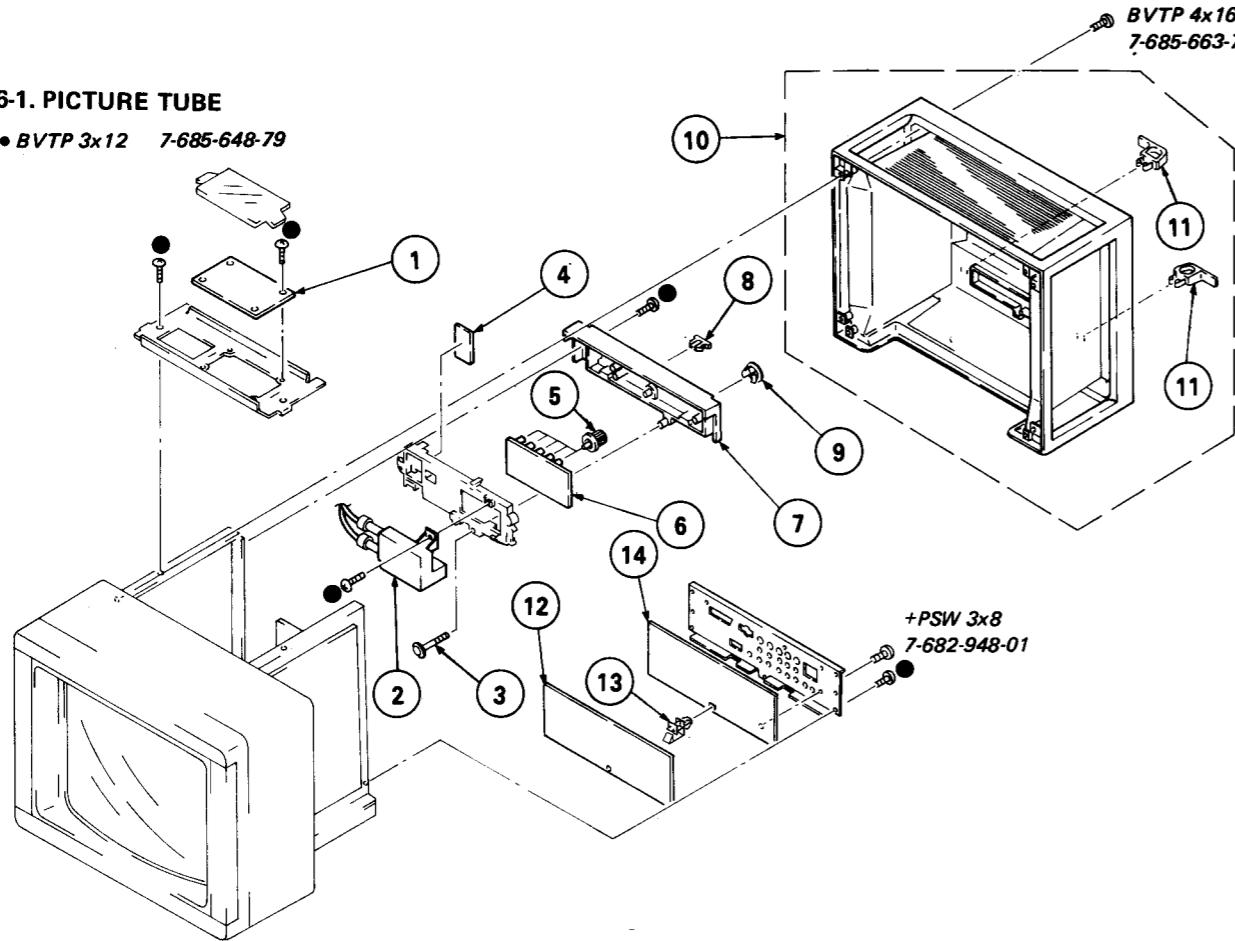
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a callout number in the remark column.

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

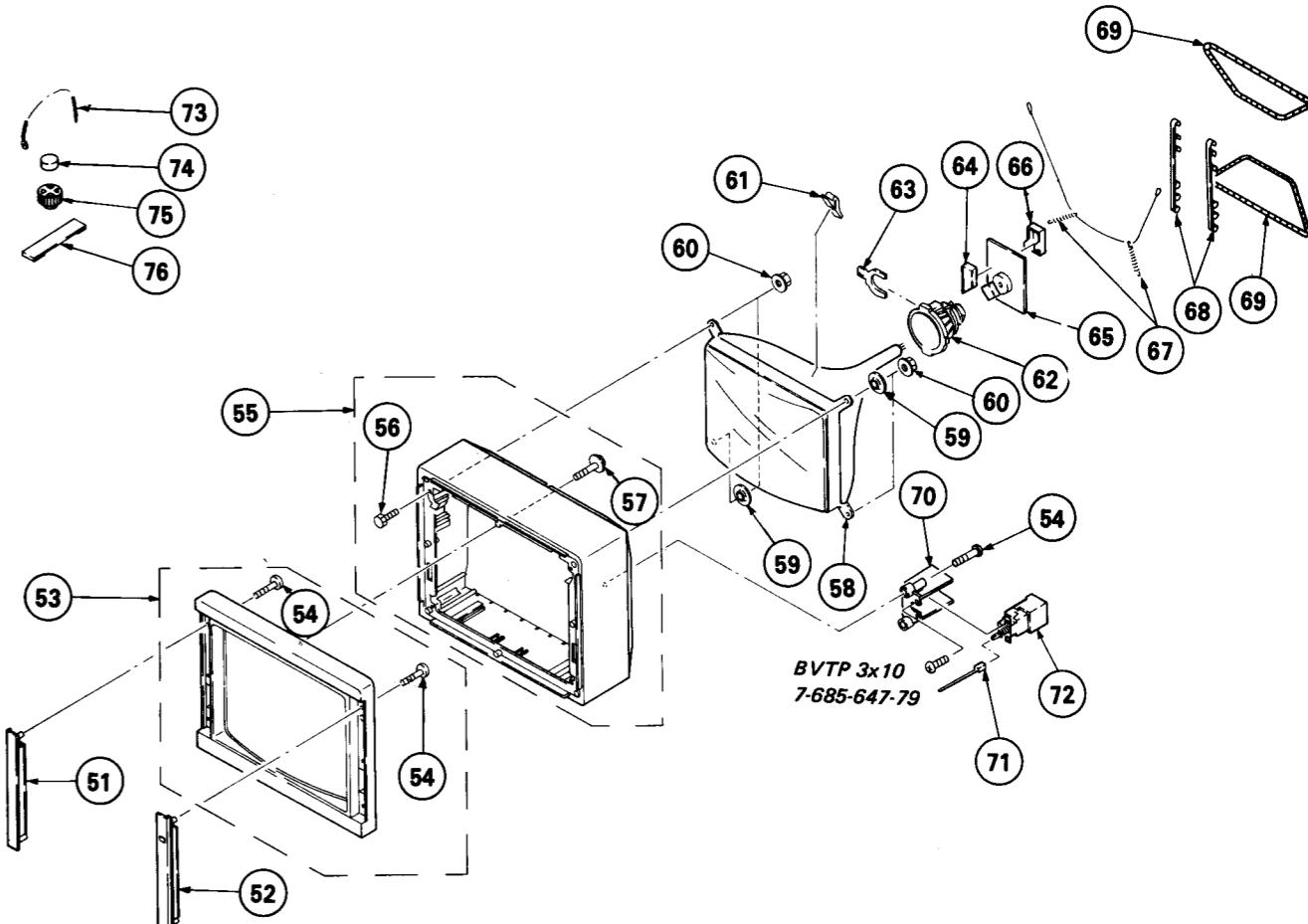
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

6-1. PICTURE TUBE

• BVTP 3x12 7-685-648-79



6-2. CHASSIS



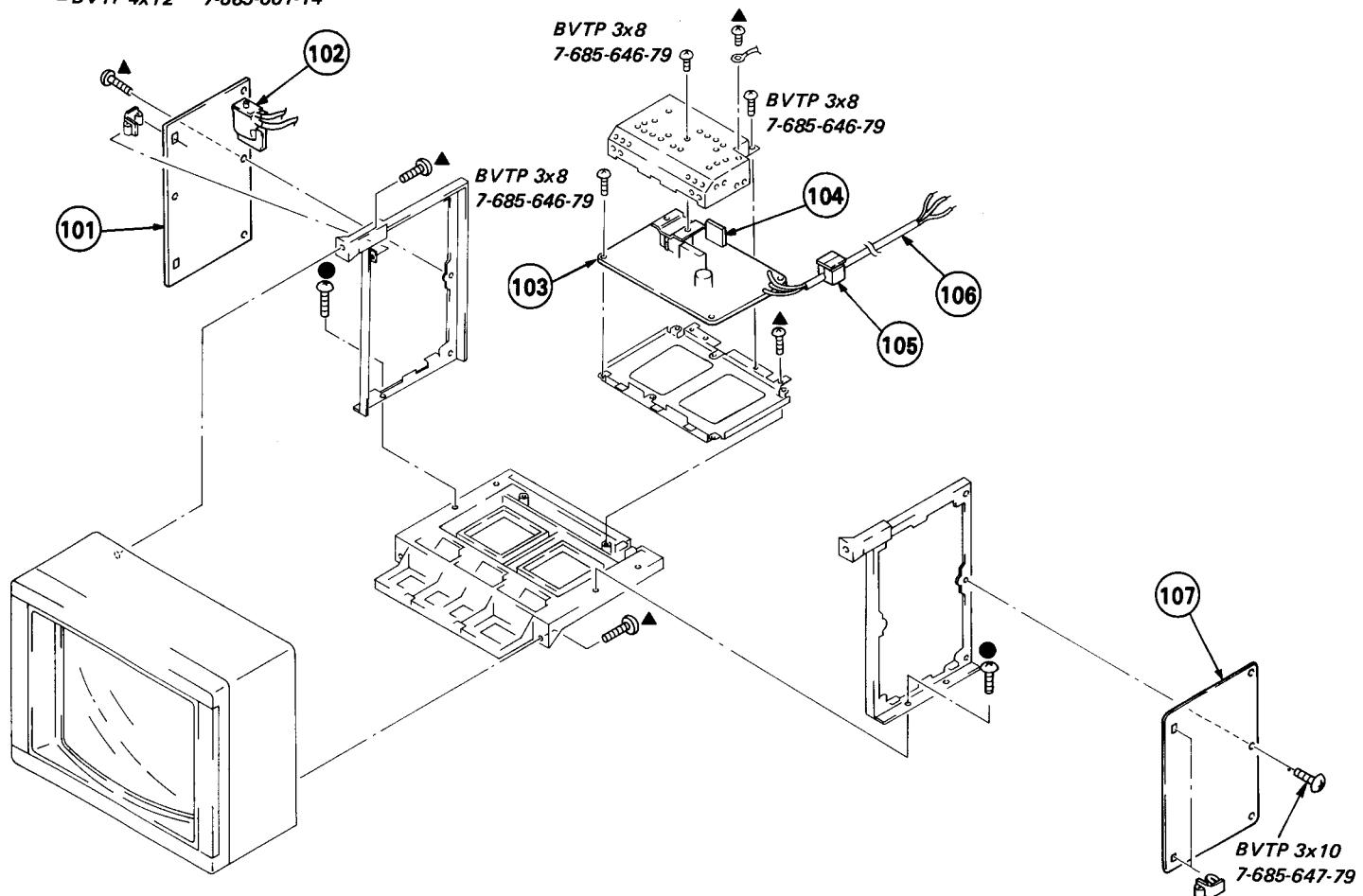
The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	*A-1389-865-A	K BOARD, COMPLETE		8	4-371-176-01	CAP, SQUARE	
2	▲1-237-614-11	RESISTOR ASSY, HIGH-VOLTAGE		9	4-371-181-01	CAP	
3	4-319-520-11	SCREW, SPECIAL (+PW4X30)		10	X-4374-166-3	COVER ASSY, REAR	11
4	*1-621-541-11	HD BOARD		11	4-316-003-21	HOLDER, CORD	
5	4-381-166-01	KNOB (A), CONTROL		12	*A-1270-213-A	QB BOARD, COMPLETE	
6	*A-1375-066-A	HC BOARD, COMPLETE		13	*3-680-721-00	HOLDER, CHASSIS	
7	4-382-035-21	PANEL, CONTROL		14	*A-1270-212-A	QA BOARD, COMPLETE (AEP,AUS ONLY)	
		*A-1270-223-A				QA BOARD, COMPLETE (WG ONLY)	

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	1-464-803-11	KEY BOARD UNIT (A)		64	*4-379-167-01	COVER (MAIN), CV	
52	1-464-804-11	KEY BOARD UNIT (B)		65	*A-1330-801-A	C BOARD, COMPLETE	
53	X-4374-194-1	BEZEL ASSY		66	*4-379-160-01	COVER (REAR LID), CV	
54	3-703-083-00	+ BV 3X25		67	4-369-318-00	SPRING, TENSION	
55	X-4374-195-1	CABINET ASSY		68	*4-369-319-00	BAND, COIL	
56	3-703-025-12	BOLT M5, HEXAGON-HEAD	56,57	69	▲1-426-315-11	COIL, DEMAGNETIZATION	
57	4-319-520-11	SCREW, SPECIAL (+PW4X30)		70	*4-383-128-01	COVER, MAIN SWITCH	
58	▲8-736-955-05	PICTURE TUBE (A51JKQ10X)		71	*4-371-182-01	SHAFT	
59	4-373-615-02	WASHER, CRT POSITIONING		72	▲1-554-965-12	SWITCH, PUSH (AC POWER)(1 KEY)	
60	4-306-034-00	FLANGE NUT, (B) 5MM		73	4-308-870-00	CLIP, LEAD WIRE	
61	3-703-003-00	SPACER, DY		74	1-452-032-00	MAGNET, DISK; 10MM Ø	
62	▲1-451-295-11	DEFLECTION YOKE (SY-153E)		75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
63	1-452-277-00	MAGNET, BMC		76	X-4308-815-0	PERMALLOY ASSY, CONVERGENCE	

6-3. BACK COVER

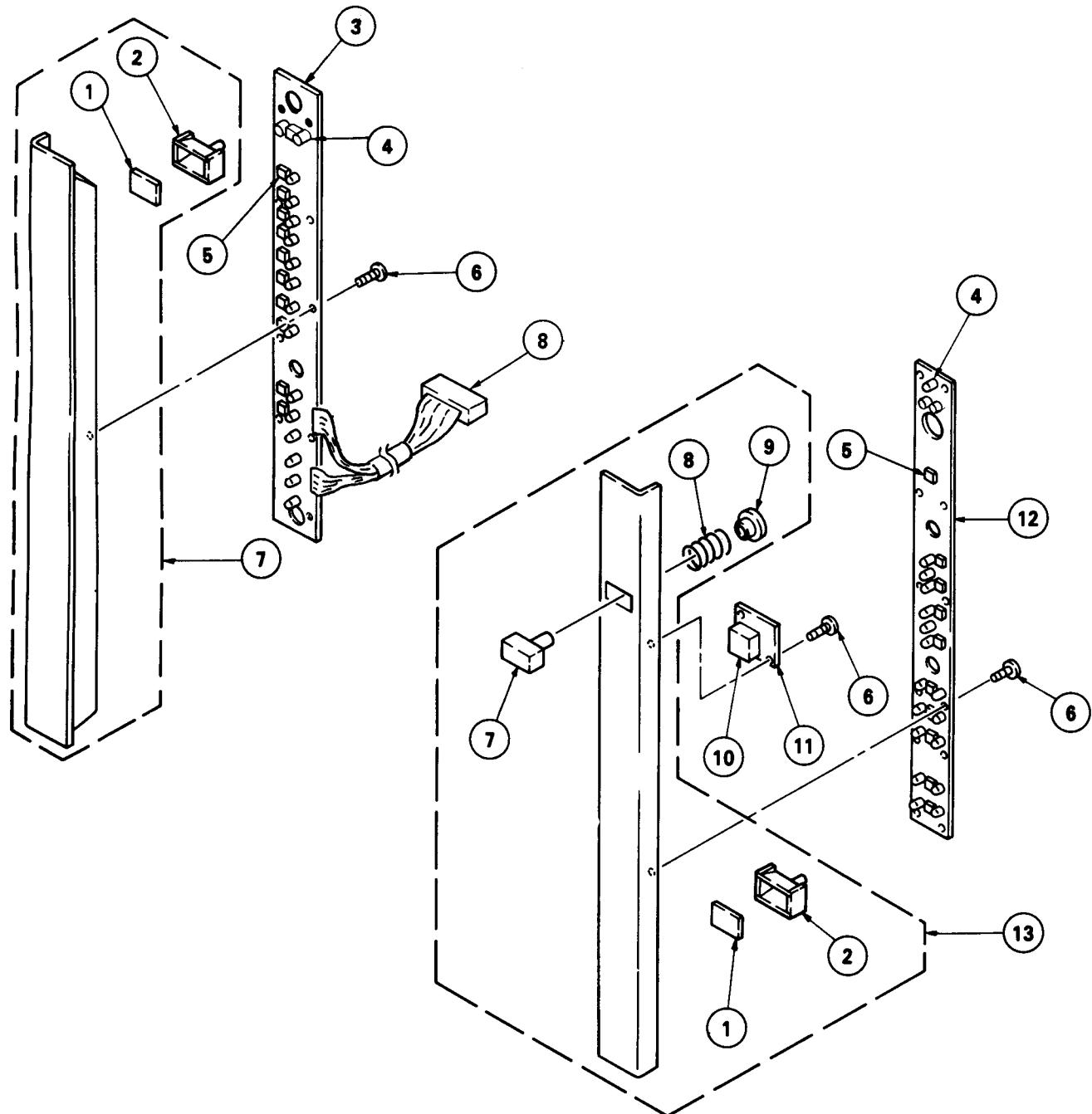
- BVTP 3x12 7-685-648-79
- ▲ BVTP 4x12 7-685-661-14



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

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
101	*A-1345-708-A	D BOARD, COMPLETE		105	▲ *4-364-726-01	BUSHING, AC CORD	
102	▲ A-1-439-372-32	TRANSFORMER ASSY, FLYBACK		106	▲ A-1-534-820-13	POWER CORD (AEP, AUS ONLY)	
103	*A-1245-395-A	FA BOARD, COMPLETE (AEP, AUS ONLY)	104	104	▲ A-1-559-409-11	POWER CORD (WG ONLY)	
104	*A-1245-414-A	FA BOARD, COMPLETE (WG ONLY)		107	*A-1135-448-A	B BOARD, COMPLETE	
	*1-621-548-11	FC BOARD					

6-4. KEY BOARD UNIT



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	9-990-892-01	ILLUMINATOR A		1	9-990-892-01	ILLUMINATOR A	
2	9-990-891-01	REFLECTOR A		2	9-990-891-01	REFLECTOR A	
3	*9-992-308-01	HA BOARD		4	9-990-895-01	SPACER	
4	9-990-895-01	SPACER		5	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)	
5	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		6	9-990-894-01	TAPPING SCREW	
6	9-990-894-01	TAPPING SCREW		7	9-990-899-01	KEY TOP	
7	9-992-310-01	FRAME ASSY	1,2	8	9-990-902-01	COIL SPRING	
8	9-992-309-01	HARNESS		9	9-990-900-01	STOPPER	
				10	8-741-138-70	DETECTOR (BX1387)	
				11	*9-990-898-01	N BOARD	
				12	*9-992-401-01	HB BOARD	
				13	9-992-402-01	FRAME ASSY	1,2,7,8,9

B

SECTION 7 ELECTRICAL PARTS LIST

NOTE:

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

- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

- CAPACITORS
• MF : μF , PF : $\mu\mu\text{F}$

- RESISTORS
• All resistors are in ohms
• F : nonflammable

- COILS
• MMH : mH, UH : μH

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

Ref.No.	Part No.	Description	Remark		Ref.No.	Part No.	Description	Remark		
	*A-1135-448-A	B BOARD, COMPLETE			C138	1-123-307-00	ELECT	100MF	20% 10V	
		*****			C139	1-123-356-00	ELECT	10MF	20% 16V	
					C140	1-123-356-00	ELECT	10MF	20% 16V	
					C141	1-123-330-00	ELECT	22MF	20% 16V	
					C161	1-123-333-00	ELECT	100MF	20% 25V	
					C162	1-123-321-00	ELECT	220MF	20% 16V	
					C167	1-101-004-00	CERAMIC	0.01MF	50V	
					C168	1-123-356-00	ELECT	10MF	20% 16V	
					C169	1-123-356-00	ELECT	10MF	20% 25V	
					C170	1-101-004-00	CERAMIC	0.01MF	50V	
B1	*1-566-054-11	PIN, CONNECTOR 2P			C171	1-123-356-00	ELECT	10MF	20% 16V	
B2	*1-566-057-11	PIN, CONNECTOR 5P			C173	1-101-004-00	CERAMIC	0.01MF	50V	
B4	*1-566-055-11	PIN, CONNECTOR 3P			C174	1-101-004-00	CERAMIC	0.01MF	50V	
B5	*1-566-059-11	PIN, CONNECTOR 7P			C175	1-101-006-00	CERAMIC	0.047MF	50V	
B6	*1-566-056-11	PIN, CONNECTOR 4P			C177	1-119-354-00	ELECT	330MF	10V	
B7	*1-566-058-11	PIN, CONNECTOR 6P			C178	1-101-004-00	CERAMIC	0.01MF	50V	
B8	*1-566-059-11	PIN, CONNECTOR 7P			C179	1-101-006-00	CERAMIC	0.047MF	50V	
B9	*1-566-061-11	PIN, CONNECTOR 9P			C180	1-123-307-00	ELECT	100MF	20% 10V	
B10	*1-566-065-11	PIN, CONNECTOR 13P			C181	1-123-332-00	ELECT	47MF	20% 16V	
B11	*1-566-061-11	PIN, CONNECTOR 9P			C182	1-101-006-00	CERAMIC	0.047MF	50V	
B13	*1-566-054-11	PIN, CONNECTOR 2P			C183	1-119-352-00	ELECT	100MF	20% 10V	
B14	*1-566-057-11	PIN, CONNECTOR 5P			C185	1-123-307-00	ELECT	100MF	20% 10V	
B15	*1-508-766-00	4P PLUG (M)			C186	1-123-356-00	ELECT	10MF	20% 16V	
B16	*1-566-056-11	PIN, CONNECTOR 4P			C187	1-123-330-00	ELECT	22MF	20% 16V	
B17	*1-566-054-11	PIN, CONNECTOR 2P			C301	1-123-333-00	ELECT	100MF	20% 16V	
C101	1-123-356-00	ELECT	10MF	20%	16V	C302	1-101-888-00	CERAMIC	68PF	5% 50V
C103	1-102-973-00	CERAMIC	100PF	5%	50V	C303	1-123-369-00	ELECT	4.7MF	20% 25V
C104	1-123-306-00	ELECT	47MF	20%	10V	C304	1-123-356-00	ELECT	10MF	20% 16V
C105	1-136-161-00	FILM	0.047MF	5%	50V	C305	1-110-201-00	MYLAR	0.0033MF	5% 50V
C106	1-102-963-00	CERAMIC	33PF	5%	50V	C306	1-101-006-00	CERAMIC	0.047MF	50V
C107	1-102-963-00	CERAMIC	33PF	5%	50V	C307	1-101-006-00	CERAMIC	0.047MF	50V
C108	1-102-978-00	CERAMIC	220PF	5%	50V	C308	1-123-381-00	ELECT	2.2MF	20% 50V
C110	1-123-333-00	ELECT	100MF	20%	25V	C309	1-102-946-00	CERAMIC	9PF	0.5PF 50V
C112	1-123-335-00	ELECT	330MF	20%	25V	C310	1-123-356-00	ELECT	10MF	20% 16V
C113	1-123-318-00	ELECT	33MF	20%	16V	C311	1-136-157-00	FILM	0.022MF	5% 50V
C114	1-123-333-00	ELECT	100MF	20%	25V	C312	1-136-157-00	FILM	0.022MF	5% 50V
C115	1-123-333-00	ELECT	100MF	20%	16V	C313	1-102-074-00	CERAMIC	0.001MF	10% 50V
C116	1-101-006-00	CERAMIC	0.047MF	50V	C314	1-101-006-00	CERAMIC	0.047MF	50V	
C118	1-101-004-00	CERAMIC	0.01MF	50V	C315	1-101-006-00	CERAMIC	0.047MF	50V	
C119	1-123-330-00	ELECT	22MF	20%	16V	C316	1-136-169-00	FILM	0.22MF	5% 50V
C120	1-123-330-00	ELECT	22MF	20%	25V	C317	1-102-074-00	CERAMIC	0.001MF	10% 50V
C121	1-123-356-00	ELECT	10MF	20%	16V	C322	1-101-006-00	CERAMIC	0.047MF	50V
C123	1-101-006-00	CERAMIC	0.047MF	50V	C323	1-124-464-11	ELECT	0.22MF	20% 50V	
C125	1-123-380-00	ELECT	1MF	20%	50V	C324	1-124-464-11	ELECT	0.22MF	20% 50V
C126	1-123-380-00	ELECT	1MF	20%	50V	C325	1-123-333-00	ELECT	100MF	20% 16V
C127	1-123-380-00	ELECT	1MF	20%	50V	C326	1-124-464-11	ELECT	0.22MF	20% 50V
C128	1-123-380-00	ELECT	1MF	20%	50V	C327	1-102-111-00	CERAMIC	270PF	10% 50V
C131	1-130-475-00	MYLAR	0.0022MF	5%	50V	C330	1-101-006-00	CERAMIC	0.047MF	50V
C133	1-123-380-00	ELECT	1MF	20%	50V	C331	1-123-380-00	ELECT	1MF	20% 50V
C134	1-123-380-00	ELECT	1MF	20%	50V	C332	1-136-161-00	FILM	0.047MF	5% 50V
C135	1-123-381-00	ELECT	2.2MF	20%	50V	C333	1-102-959-00	CERAMIC	22PF	5% 50V
C136	1-101-006-00	CERAMIC	0.047MF	50V	C334	1-123-380-00	ELECT	1MF	20% 50V	
C137	1-123-307-00	ELECT	100MF	20%	10V	C335	1-123-307-00	ELECT	100MF	20% 10V

B

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark				
C336	1-123-318-00	ELECT	33MF	20%	16V	C1302	1-124-656-00	ELECT	2.2MF	20%	50V
C337	1-102-112-00	CERAMIC	330PF	10%	50V	C1304	1-123-356-00	ELECT	10MF	20%	16V
C341	1-123-380-00	ELECT	1MF	20%	50V	C1305	1-136-161-00	FILM	0.047MF	5%	50V
C346	1-123-380-00	ELECT	1MF	20%	50V	C1306	1-123-380-00	ELECT	1MF	20%	50V
C347	1-102-111-00	CERAMIC	270PF	10%	50V	C1316	1-123-356-00	ELECT	10MF	20%	25V
C350	1-123-356-00	ELECT	10MF	20%	16V	C1317	1-123-380-00	ELECT	1MF	20%	50V
C351	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1318	1-123-380-00	ELECT	1MF	20%	50V
C352	1-101-361-00	CERAMIC	150PF	5%	50V	C1319	1-123-380-00	ELECT	1MF	20%	50V
C353	1-102-959-00	CERAMIC	22PF	5%	50V	C1320	1-123-382-00	ELECT	3.3MF	20%	50V
C354	1-123-380-00	ELECT	1MF	20%	50V	C1321	1-123-356-00	ELECT	10MF	20%	25V
C355	1-101-005-00	CERAMIC	0.022MF		50V	C1322	1-101-004-00	CERAMIC	0.01MF		50V
C381	1-102-074-00	CERAMIC	0.001MF	10%	50V	C1323	1-123-356-00	ELECT	10MF	20%	25V
C382	1-123-332-00	ELECT	47MF	20%	16V	C1324	1-123-332-00	ELECT	47MF	20%	16V
C402	1-136-167-00	FILM	0.15MF	5%	50V	C1325	1-101-006-00	CERAMIC	0.047MF		50V
C404	1-136-165-00	FILM	0.1MF	5%	50V	C1326	1-101-006-00	CERAMIC	0.047MF		50V
C405	1-102-806-00	CERAMIC	27PF	5%	50V	C1329	1-123-318-00	ELECT	33MF	20%	16V
C406	1-101-890-00	CERAMIC	75PF	5%	50V	C1333	1-136-153-00	FILM	0.01MF	5%	50V
C408	1-123-356-00	ELECT	10MF	20%	16V	C1334	1-101-004-00	CERAMIC	0.01MF		50V
C410	1-123-356-00	ELECT	10MF	20%	50V	C1336	1-110-203-00	MYLAR	0.0047MF	5%	50V
C411	1-136-161-00	FILM	0.047MF	5%	50V	C1338	1-136-161-00	FILM	0.047MF	5%	50V
C412	1-102-119-00	CERAMIC	0.0015MF	10%	50V	C1339	1-136-153-00	FILM	0.01MF	5%	50V
C413	1-123-380-00	ELECT	1MF	20%	50V	C1341	1-110-203-00	MYLAR	0.0047MF	5%	50V
C414	1-136-173-00	FILM	0.47MF	5%	50V	C1343	1-136-161-00	FILM	0.047MF	5%	50V
C415	1-101-005-00	CERAMIC	0.022MF		50V	C1344	1-136-153-00	FILM	0.01MF	5%	50V
C416	1-123-356-00	ELECT	10MF	20%	16V	C1346	1-110-203-00	MYLAR	0.0047MF	5%	50V
C417	1-123-356-00	ELECT	10MF	20%	16V	C1351	1-123-356-00	ELECT	10MF	20%	25V
C418	1-136-161-00	FILM	0.047MF	5%	50V	C1352	1-123-332-00	ELECT	47MF	20%	16V
C419	1-123-380-00	ELECT	1MF	20%	50V	C1353	1-102-973-00	CERAMIC	100PF	5%	50V
C420	1-101-890-00	CERAMIC	75PF	5%	50V	C1354	1-136-157-00	FILM	0.022MF	5%	50V
C421	1-102-806-00	CERAMIC	27PF	5%	50V	C1355	1-123-380-00	ELECT	1MF	20%	50V
C423	1-136-165-00	FILM	0.1MF	5%	50V	C1356	1-136-165-00	FILM	0.1MF	5%	50V
C424	1-123-356-00	ELECT	10MF	20%	16V	C1357	1-123-380-00	ELECT	1MF	20%	50V
C425	1-102-888-00	CERAMIC	150PF	5%	50V	C1358	1-123-369-00	ELECT	4.7MF	20%	50V
C426	1-101-004-00	CERAMIC	0.01MF		50V	C1359	1-102-820-00	CERAMIC	330PF	5%	50V
C427	1-101-006-00	CERAMIC	0.047MF		50V	C1360	1-102-820-00	CERAMIC	330PF	5%	50V
C428	1-102-121-00	CERAMIC	0.0022MF	10%	50V	C1361	1-102-129-00	CERAMIC	0.01MF	10%	50V
C429	1-136-161-00	FILM	0.047MF	5%	50V	C1362	1-130-475-00	MYLAR	0.0022MF	5%	50V
C430	1-102-971-00	CERAMIC	82PF	5%	50V	C1390	1-101-004-00	CERAMIC	0.01MF		50V
C434	1-102-112-00	CERAMIC	330PF	10%	50V	C1391	1-123-356-00	ELECT	10MF	20%	16V
C452	1-136-169-00	FILM	0.22MF	5%	50V	C1392	1-123-356-00	ELECT	10MF	20%	16V
C453	1-123-333-00	ELECT	100MF	20%	16V	C1393	1-101-004-00	CERAMIC	0.01MF		50V
C454	1-102-963-00	CERAMIC	33PF	5%	50V	<u>TRIMMER</u>					
C466	1-102-115-00	CERAMIC	560PF	10%	50V	CT358	1-141-181-11	CAP, TRIMMER			
C470	1-123-333-00	ELECT	100MF	20%	16V	CT443	1-141-181-11	CAP, TRIMMER			
C472	1-123-356-00	ELECT	10MF	20%	16V	<u>DIODE</u>					
C473	1-101-361-00	CERAMIC	150PF	5%	50V	D101	8-719-109-97	DIODE RD6.8ES-B2			
C474	1-102-662-00	CERAMIC	7PF	0.5PF	50V	D102	8-719-109-97	DIODE RD6.8ES-B2			
C475	1-102-662-00	CERAMIC	7PF	0.5PF	50V	D103	8-719-911-19	DIODE 1SS119			
C476	1-102-662-00	CERAMIC	7PF	0.5PF	50V	D104	8-719-109-68	DIODE RD3.6ES-B1			
C477	1-102-662-00	CERAMIC	7PF	0.5PF	50V	D108	8-719-911-19	DIODE 1SS119			
C481	1-108-614-91	MYLAR	0.001MF	10%	100V						
C482	1-102-820-00	CERAMIC	330PF	5%	50V						
C484	1-136-165-00	FILM	0.1MF		50V						
C1301	1-101-004-00	CERAMIC	0.01MF		50V						

B

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
D110	8-719-911-19	DIODE 1SS119		IC106	8-759-207-07	IC TD62381P	
D111	8-719-110-08	DIODE RD8.2ES-B2		IC107	8-759-207-07	IC TD62381P	
D112	8-719-911-19	DIODE 1SS119		IC110	8-759-140-66	IC UPD4066BC	
D113	8-719-911-19	DIODE 1SS119		IC121	8-759-171-05	IC UPC7805H	
D114	8-719-911-19	DIODE 1SS119			*4-363-146-00	HEAT SINK, V.OUT; IC121	
D115	8-719-109-83	DIODE RD5.1ES-B		IC122	8-759-700-06	IC NJM7812B	
D116	8-719-109-90	DIODE RD5.6ES-B3			*4-323-833-00	HEAT SINK, PIN OUT; IC122	
D117	8-719-911-19	DIODE 1SS119		IC301	8-752-030-86	IC CXA1001AP	
D118	8-719-911-19	DIODE 1SS119		IC302	8-752-030-31	IC CXA1024S	
D120	8-719-911-19	DIODE 1SS119		IC311	8-759-240-73	IC TC4073BP	
D121	8-719-911-19	DIODE 1SS119		IC401	8-751-750-00	IC CX175	
D123	8-719-911-19	DIODE 1SS119		IC411	8-759-135-80	IC UPC358C	
D124	8-719-911-19	DIODE 1SS119		IC412	8-759-140-66	IC UPD4066BC	
D125	8-719-911-19	DIODE 1SS119				<u>COIL</u>	
D126	8-719-109-95	DIODE RD6.8ES-B		L101	1-408-424-00	MICRO INDUCTOR 180UH	
D127	8-719-109-95	DIODE RD6.8ES-B		L104	1-408-424-00	MICRO INDUCTOR 180UH	
D305	8-719-911-19	DIODE 1SS119		L105	1-408-424-00	MICRO INDUCTOR 180UH	
D306	8-719-911-19	DIODE 1SS119		L161	1-407-364-00	COIL, SPOOK CHOKE 3.3UH	
D307	8-719-911-19	DIODE 1SS119		L333	1-408-416-00	MICRO INDUCTOR 39UH	
D308	8-719-911-19	DIODE 1SS119					
D309	8-719-911-19	DIODE 1SS119		L337	1-408-160-00	MICRO INDUCTOR 15MMH	
D334	8-719-110-15	DIODE RD10ES-B		L405	1-404-496-00	COIL	
D335	8-719-911-19	DIODE 1SS119		L406	1-408-411-00	MICRO INDUCTOR 15UH	
D339	8-719-911-19	DIODE 1SS119		L420	1-408-411-00	MICRO INDUCTOR 15UH	
D340	8-719-911-19	DIODE 1SS119		L421	1-404-496-00	COIL	
D341	8-719-911-19	DIODE 1SS119		L430	1-408-245-00	MICRO INDUCTOR 22MMH	
D342	8-719-110-15	DIODE RD10ES-B		L431	1-408-414-00	MICRO INDUCTOR 27UH	
D343	8-719-110-15	DIODE RD10ES-B		L432	1-408-415-00	MICRO INDUCTOR 33UH	
D344	8-719-110-15	DIODE RD10ES-B		L435	1-408-408-00	MICRO INDUCTOR 8.2UH	
D345	8-719-911-19	DIODE 1SS119		L451	1-404-495-00	COIL	
D351	8-719-911-19	DIODE 1SS119		L452	1-404-495-00	COIL	
D354	8-719-911-19	DIODE 1SS119		L455	1-408-163-00	MICRO INDUCTOR 5.6MMH	
D361	8-719-911-19	DIODE 1SS119				<u>IC LINK</u>	
D362	8-719-911-19	DIODE 1SS119		PS1	1-532-605-00	LINK, IC	
D392	8-719-911-19	DIODE 1SS119		PS2	1-532-637-00	LINK, IC	
						<u>TRANSISTOR</u>	
D401	8-719-911-19	DIODE 1SS119		Q101	8-729-117-54	TRANSISTOR 2SA1175	
D442	8-719-911-19	DIODE 1SS119		Q102	8-729-117-54	TRANSISTOR 2SA1175	
D443	8-719-911-19	DIODE 1SS119		Q103	8-729-178-54	TRANSISTOR 2SC2785	
D444	8-719-911-19	DIODE 1SS119		Q104	8-729-178-54	TRANSISTOR 2SC2785	
D445	8-719-911-19	DIODE 1SS119		Q105	8-729-178-54	TRANSISTOR 2SC2785	
D450	8-719-911-19	DIODE 1SS119					
D454	8-719-911-19	DIODE 1SS119		Q107	8-729-900-36	TRANSISTOR DTC124ES	
D457	8-719-911-19	DIODE 1SS119		Q108	8-729-178-54	TRANSISTOR 2SC2785	
				Q109	8-729-117-54	TRANSISTOR 2SA1175	
DL301	1-415-122-31	DELAY LINE, 1H (PAL)		Q110	8-729-117-54	TRANSISTOR 2SA1175	
DL401	1-415-380-11	DELAY LINE, Y		Q111	8-729-103-43	TRANSISTOR 2SB734	
				Q112	8-729-178-54	TRANSISTOR 2SC2785	
IC101	8-759-113-02	IC UPD7508HCU-244		Q113	8-729-178-54	TRANSISTOR 2SC2785	
IC102	8-752-321-18	IC CXK1005P		Q114	8-729-178-54	TRANSISTOR 2SC2785	
IC103	8-759-102-28	IC UPD6326C		Q115	8-729-900-36	TRANSISTOR DTC124ES	
IC104	8-759-182-43	IC UPD8243C		Q116	8-729-117-54	TRANSISTOR 2SA1175	

B

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
Q117	8-729-178-54	TRANSISTOR 2SC2785		Q1302	8-729-178-54	TRANSISTOR 2SC2785	
Q118	8-729-117-54	TRANSISTOR 2SA1175		Q1303	8-729-117-54	TRANSISTOR 2SA1175	
Q119	8-729-117-54	TRANSISTOR 2SA1175					
Q121	8-729-133-42	TRANSISTOR 2SC2334-L					
*4-363-146-00 HEAT SINK, V. OUT; Q121							
Q122	8-729-117-54	TRANSISTOR 2SA1175		R101	1-249-395-11	CARBON	15 5% 1/6W
Q123	8-729-178-54	TRANSISTOR 2SC2785		R102	1-249-395-11	CARBON	15 5% 1/6W
Q301	8-729-117-54	TRANSISTOR 2SA1175		R103	1-249-441-11	CARBON	100K 5% 1/6W
Q309	8-729-178-54	TRANSISTOR 2SC2785		R104	1-249-441-11	CARBON	100K 5% 1/6W
Q310	8-729-117-54	TRANSISTOR 2SA1175		R105	1-247-805-00	CARBON	82 5% 1/6W
Q311	8-729-177-43	TRANSISTOR 2SD774		R106	1-249-413-11	CARBON	470 5% 1/6W
Q315	8-729-178-54	TRANSISTOR 2SC2785		R107	1-249-411-11	CARBON	330 5% 1/6W
Q316	8-729-178-54	TRANSISTOR 2SC2785		R108	1-249-441-11	CARBON	100K 5% 1/6W
Q321	8-729-178-54	TRANSISTOR 2SC2785		R109	1-249-433-11	CARBON	22K 5% 1/6W
Q322	8-729-178-54	TRANSISTOR 2SC2785		R110	1-249-465-11	CARBON	47K 5% 1/4W
Q324	8-729-178-54	TRANSISTOR 2SC2785		R111	1-249-437-11	CARBON	47K 5% 1/6W
Q331	8-729-178-54	TRANSISTOR 2SC2785		R114	1-249-437-11	CARBON	47K 5% 1/6W
Q341	8-729-178-54	TRANSISTOR 2SC2785		R116	1-249-414-11	CARBON	560 5% 1/6W
Q342	8-729-178-54	TRANSISTOR 2SC2785		R117	1-249-429-11	CARBON	10K 5% 1/6W
Q343	8-729-178-54	TRANSISTOR 2SC2785		R118	1-249-429-11	CARBON	10K 5% 1/6W
Q353	8-729-178-54	TRANSISTOR 2SC2785		R119	1-249-429-11	CARBON	10K 5% 1/6W
Q354	8-729-900-36	TRANSISTOR DTC124ES		R121	1-215-867-00	METAL OXIDE	470 5% 1W F
Q355	8-729-178-54	TRANSISTOR 2SC2785		R122	1-249-417-11	CARBON	1K 5% 1/6W
Q357	8-729-117-54	TRANSISTOR 2SA1175		R123	1-216-357-00	METAL OXIDE	4.7 5% 1W F
Q358	8-729-900-36	TRANSISTOR DTC124ES		R124	1-249-433-11	CARBON	22K 5% 1/6W
Q361	8-729-117-54	TRANSISTOR 2SA1175		R125	1-249-435-11	CARBON	33K 5% 1/6W
Q362	8-729-117-54	TRANSISTOR 2SA1175		R126	1-249-431-11	CARBON	15K 5% 1/6W
Q363	8-729-117-54	TRANSISTOR 2SA1175		R127	1-249-417-11	CARBON	1K 5% 1/6W
Q371	8-729-178-54	TRANSISTOR 2SC2785		R128	1-249-434-11	CARBON	27K 5% 1/6W
Q372	8-729-178-54	TRANSISTOR 2SC2785		R129	1-247-717-11	CARBON	2.2K 5% 1/4W
Q373	8-729-178-54	TRANSISTOR 2SC2785		R130	1-247-706-11	CARBON	330 5% 1/4W
Q374	8-729-178-54	TRANSISTOR 2SC2785		R131	1-249-409-11	CARBON	220 5% 1/6W
Q393	8-729-117-54	TRANSISTOR 2SA1175		R132	1-249-409-11	CARBON	220 5% 1/6W
Q400	8-729-178-54	TRANSISTOR 2SC2785		R133	1-249-421-11	CARBON	2.2K 5% 1/6W
Q401	8-729-178-54	TRANSISTOR 2SC2785		R134	1-249-421-11	CARBON	2.2K 5% 1/6W
Q402	8-729-178-54	TRANSISTOR 2SC2785		R135	1-249-437-11	CARBON	47K 5% 1/6W
Q403	8-729-117-54	TRANSISTOR 2SA1175		R136	1-249-417-11	CARBON	1K 5% 1/6W
Q405	8-729-178-54	TRANSISTOR 2SC2785		R137	1-249-421-11	CARBON	2.2K 5% 1/6W
Q406	8-729-117-54	TRANSISTOR 2SA1175		R138	1-249-421-11	CARBON	2.2K 5% 1/6W
Q407	8-729-178-54	TRANSISTOR 2SC2785		R139	1-249-421-11	CARBON	2.2K 5% 1/6W
Q450	8-729-117-54	TRANSISTOR 2SA1175		R140	1-249-421-11	CARBON	2.2K 5% 1/6W
Q451	8-729-178-54	TRANSISTOR 2SC2785		R141	1-247-717-11	CARBON	2.2K 5% 1/4W
Q452	8-729-178-54	TRANSISTOR 2SC2785		R142	1-249-421-11	CARBON	2.2K 5% 1/6W
Q453	8-729-117-54	TRANSISTOR 2SA1175		R143	1-249-429-11	CARBON	10K 5% 1/6W
Q454	8-729-117-54	TRANSISTOR 2SA1175		R144	1-249-429-11	CARBON	10K 5% 1/6W
Q455	8-729-178-54	TRANSISTOR 2SC2785		R145	1-249-437-11	CARBON	47K 5% 1/6W
Q456	8-729-117-54	TRANSISTOR 2SA1175		R146	1-249-425-11	CARBON	4.7K 5% 1/6W
Q457	8-729-178-54	TRANSISTOR 2SC2785		R147	1-249-441-11	CARBON	100K 5% 1/6W
Q458	8-729-117-54	TRANSISTOR 2SA1175		R148	1-249-434-11	CARBON	27K 5% 1/6W
Q459	8-729-117-54	TRANSISTOR 2SA1175		R149	1-249-427-11	CARBON	6.8K 5% 1/6W
Q460	8-729-178-54	TRANSISTOR 2SC2785		R150	1-249-427-11	CARBON	6.8K 5% 1/6W
Q461	8-729-178-54	TRANSISTOR 2SC2785		R151	1-249-423-11	CARBON	3.3K 5% 1/6W
Q1301	8-729-178-54	TRANSISTOR 2SC2785		R152	1-249-421-11	CARBON	2.2K 5% 1/6W
				R153	1-249-421-11	CARBON	2.2K 5% 1/6W

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R154	1-249-421-11	CARBON	2.2K 5% 1/6W	R313	1-249-421-11	CARBON	2.2K 5% 1/6W
R155	1-247-717-11	CARBON	2.2K 5% 1/4W	R314	1-249-409-11	CARBON	220 5% 1/6W
R156	1-249-423-11	CARBON	3.3K 5% 1/6W	R315	1-249-433-11	CARBON	22K 5% 1/6W
R157	1-249-433-11	CARBON	22K 5% 1/6W	R316	1-249-435-11	CARBON	33K 5% 1/6W
R158	1-249-417-11	CARBON	1K 5% 1/6W	R317	1-249-421-11	CARBON	2.2K 5% 1/6W
R159	1-249-418-11	CARBON	1.2K 5% 1/6W	R318	1-249-409-11	CARBON	220 5% 1/6W
R160	1-249-397-11	CARBON	22 5% 1/6W	R319	1-249-433-11	CARBON	22K 5% 1/6W
R161	1-249-397-11	CARBON	22 5% 1/6W	R320	1-249-435-11	CARBON	33K 5% 1/6W
R162	1-249-397-11	CARBON	22 5% 1/6W	R321	1-249-435-11	CARBON	33K 5% 1/6W
R163	1-249-397-11	CARBON	22 5% 1/6W	R322	1-249-429-11	CARBON	10K 5% 1/6W
R164	1-249-397-11	CARBON	22 5% 1/6W	R323	1-249-441-11	CARBON	100K 5% 1/6W
R165	1-247-692-11	CARBON	22 5% 1/4W	R324	1-249-441-11	CARBON	100K 5% 1/6W
R166	1-249-397-11	CARBON	22 5% 1/6W	R326	1-249-441-11	CARBON	100K 5% 1/6W
R167	1-249-397-11	CARBON	22 5% 1/6W	R327	1-249-423-11	CARBON	3.3K 5% 1/6W
R168	1-249-397-11	CARBON	22 5% 1/6W	R328	1-249-423-11	CARBON	3.3K 5% 1/6W
R169	1-249-397-11	CARBON	22 5% 1/6W	R329	1-249-423-11	CARBON	3.3K 5% 1/6W
R170	1-249-397-11	CARBON	22 5% 1/6W	R330	1-249-417-11	CARBON	1K 5% 1/6W
R171	1-249-397-11	CARBON	22 5% 1/6W	R331	1-215-493-00	CARBON	1M 5% 1/6W
R172	1-249-397-11	CARBON	22 5% 1/6W	R332	1-215-479-00	CARBON	270K 5% 1/6W
R173	1-249-397-11	CARBON	22 5% 1/6W	R333	1-249-414-11	CARBON	560 5% 1/6W
R174	1-249-429-11	CARBON	10K 5% 1/6W	R334	1-247-883-00	CARBON	150K 5% 1/6W
R175	1-249-429-11	CARBON	10K 5% 1/6W	R335	1-249-413-11	CARBON	470 5% 1/6W
R176	1-247-725-11	CARBON	10K 5% 1/4W	R336	1-249-409-11	CARBON	220 5% 1/6W
R177	1-249-433-11	CARBON	22K 5% 1/6W	R337	1-249-427-11	CARBON	6.8K 5% 1/6W
R178	1-249-433-11	CARBON	22K 5% 1/6W	R338	1-249-421-11	CARBON	2.2K 5% 1/6W
R179	1-249-425-11	CARBON	4.7K 5% 1/6W	R339	1-249-417-11	CARBON	1K 5% 1/6W
R181	1-249-435-11	CARBON	33K 5% 1/6W	R340	1-249-421-11	CARBON	2.2K 5% 1/6W
R182	1-247-849-00	CARBON	5.6K 5% 1/6W	R341	1-249-422-11	CARBON	2.7K 5% 1/6W
R183	1-249-433-11	CARBON	22K 5% 1/6W	R342	1-249-428-11	CARBON	8.2K 5% 1/6W
R184	1-249-435-11	CARBON	33K 5% 1/6W	R343	1-249-433-11	CARBON	22K 5% 1/6W
R185	1-247-713-11	CARBON	1K 5% 1/4W	R345	1-249-439-11	CARBON	68K 5% 1/6W
R186	1-249-417-11	CARBON	1K 5% 1/6W	R346	1-247-849-00	CARBON	5.6K 5% 1/6W
R187	1-249-417-11	CARBON	1K 5% 1/6W	R350	1-249-413-11	CARBON	470 5% 1/6W
R188	1-249-417-11	CARBON	1K 5% 1/6W	R351	1-249-405-11	CARBON	100 5% 1/6W
R189	1-249-417-11	CARBON	1K 5% 1/6W	R352	1-249-433-11	CARBON	22K 5% 1/6W
R190	1-249-417-11	CARBON	1K 5% 1/6W	R353	1-249-420-11	CARBON	1.8K 5% 1/6W
R191	1-249-414-11	CARBON	560 5% 1/6W	R354	1-249-435-11	CARBON	33K 5% 1/6W
R192	1-249-417-11	CARBON	1K 5% 1/6W	R355	1-249-433-11	CARBON	22K 5% 1/6W
R193	1-249-423-11	CARBON	3.3K 5% 1/6W	R356	1-249-437-11	CARBON	47K 5% 1/6W
R194	1-249-423-11	CARBON	3.3K 5% 1/6W	R357	1-249-430-11	CARBON	12K 5% 1/6W
R195	1-249-421-11	CARBON	2.2K 5% 1/6W	R358	1-249-435-11	CARBON	33K 5% 1/6W
R196	1-249-414-11	CARBON	560 5% 1/6W	R359	1-247-883-00	CARBON	150K 5% 1/6W
R197	1-249-421-11	CARBON	2.2K 5% 1/6W	R360	1-247-708-11	CARBON	470 5% 1/4W
R198	1-249-405-11	CARBON	100 5% 1/6W	R361	1-249-417-11	CARBON	1K 5% 1/6W
R199	1-249-417-11	CARBON	1K 5% 1/6W	R362	1-249-429-11	CARBON	10K 5% 1/6W
R303	1-249-469-11	CARBON	100K 5% 1/4W	R363	1-249-417-11	CARBON	1K 5% 1/6W
R304	1-249-436-11	CARBON	39K 5% 1/6W	R364	1-249-412-11	CARBON	390 5% 1/6W
R305	1-247-883-00	CARBON	150K 5% 1/6W	R365	1-247-723-11	CARBON	6.8K 5% 1/4W
R306	1-249-435-11	CARBON	33K 5% 1/6W	R366	1-247-891-00	CARBON	330K 5% 1/6W
R308	1-249-409-11	CARBON	220 5% 1/6W	R367	1-249-437-11	CARBON	47K 5% 1/6W
R310	1-247-722-11	CARBON	5.6K 5% 1/4W	R368	1-249-428-11	CARBON	8.2K 5% 1/6W
R311	1-249-439-11	CARBON	68K 5% 1/6W	R370	1-249-419-11	CARBON	1.5K 5% 1/6W
R312	1-249-439-11	CARBON	68K 5% 1/6W	R371	1-249-435-11	CARBON	33K 5% 1/6W

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R372	1-249-441-11	CARBON	100K 5% 1/6W	R438	1-249-431-11	CARBON	15K 5% 1/6W
R373	1-249-435-11	CARBON	33K 5% 1/6W	R439	1-249-418-11	CARBON	1.2K 5% 1/6W
R374	1-249-435-11	CARBON	33K 5% 1/6W	R440	1-249-417-11	CARBON	1K 5% 1/6W
R375	1-249-423-11	CARBON	3.3K 5% 1/6W	R441	1-249-420-11	CARBON	1.8K 5% 1/6W
R377	1-249-409-11	CARBON	220 5% 1/6W	R442	1-249-421-11	CARBON	2.2K 5% 1/6W
R378	1-249-414-11	CARBON	560 5% 1/6W	R443	1-249-408-11	CARBON	180 5% 1/6W
R379	1-249-429-11	CARBON	10K 5% 1/6W	R444	1-249-439-11	CARBON	68K 5% 1/6W
R380	1-249-437-11	CARBON	47K 5% 1/6W	R445	1-249-431-11	CARBON	15K 5% 1/6W
R381	1-249-440-11	CARBON	82K 5% 1/6W	R446	1-249-417-11	CARBON	1K 5% 1/6W
R382	1-249-438-11	CARBON	56K 5% 1/6W	R447	1-249-414-11	CARBON	560 5% 1/6W
R383	1-215-479-00	CARBON	270K 5% 1/6W	R448	1-249-393-11	CARBON	10 5% 1/6W
R384	1-249-425-11	CARBON	4.7K 5% 1/6W	R449	1-249-418-11	CARBON	1.2K 5% 1/6W
R385	1-249-414-11	CARBON	560 5% 1/6W	R450	1-249-419-11	CARBON	1.5K 5% 1/6W
R386	1-249-429-11	CARBON	10K 5% 1/6W	R451	1-249-420-11	CARBON	1.8K 5% 1/6W
R387	1-249-417-11	CARBON	1K 5% 1/6W	R452	1-249-393-11	CARBON	10 5% 1/6W
R388	1-215-483-00	CARBON	390K 5% 1/6W	R453	1-249-419-11	CARBON	1.5K 5% 1/6W
R389	1-249-433-11	CARBON	22K 5% 1/6W	R454	1-249-419-11	CARBON	1.5K 5% 1/6W
R390	1-249-433-11	CARBON	22K 5% 1/6W	R456	1-249-409-11	CARBON	220 5% 1/6W
R391	1-249-437-11	CARBON	47K 5% 1/6W	R457	1-249-435-11	CARBON	33K 5% 1/6W
R392	1-249-431-11	CARBON	15K 5% 1/6W	R458	1-249-425-11	CARBON	4.7K 5% 1/6W
R393	1-249-435-11	CARBON	33K 5% 1/6W	R460	1-249-436-11	CARBON	39K 5% 1/6W
R394	1-249-429-11	CARBON	10K 5% 1/6W	R461	1-249-431-11	CARBON	15K 5% 1/6W
R395	1-247-895-00	CARBON	470K 5% 1/6W	R462	1-249-421-11	CARBON	2.2K 5% 1/6W
R396	1-249-419-11	CARBON	1.5K 5% 1/6W	R463	1-249-422-11	CARBON	2.7K 5% 1/6W
R398	1-249-420-11	CARBON	1.8K 5% 1/6W	R464	1-249-409-11	CARBON	220 5% 1/6W
R401	1-249-412-11	CARBON	390 5% 1/6W	R465	1-249-435-11	CARBON	33K 5% 1/6W
R402	1-247-717-11	CARBON	2.2K 5% 1/4W	R466	1-247-721-11	CARBON	4.7K 5% 1/4W
R403	1-249-427-11	CARBON	6.8K 5% 1/6W	R467	1-215-456-00	CARBON	30K 5% 1/6W
R404	1-249-429-11	CARBON	10K 5% 1/6W	R468	1-249-429-11	CARBON	10K 5% 1/6W
R406	1-249-412-11	CARBON	390 5% 1/6W	R470	1-249-420-11	CARBON	1.8K 5% 1/6W
R410	1-249-422-11	CARBON	2.7K 5% 1/6W	R471	1-249-425-11	CARBON	4.7K 5% 1/6W
R411	1-215-489-00	CARBON	680K 5% 1/6W	R472	1-249-420-11	CARBON	1.8K 5% 1/6W
R412	1-249-417-11	CARBON	1K 5% 1/6W	R473	1-249-425-11	CARBON	4.7K 5% 1/6W
R413	1-249-425-11	CARBON	4.7K 5% 1/6W	R474	1-249-417-11	CARBON	1K 5% 1/6W
R414	1-249-438-11	CARBON	56K 5% 1/6W	R475	1-249-405-11	CARBON	100 5% 1/6W
R415	1-249-429-11	CARBON	10K 5% 1/6W	R476	1-249-416-11	CARBON	820 5% 1/6W
R418	1-247-720-11	CARBON	3.9K 5% 1/4W	R477	1-249-413-11	CARBON	470 5% 1/6W
R419	1-249-429-11	CARBON	10K 5% 1/6W	R478	1-249-421-11	CARBON	2.2K 5% 1/6W
R420	1-249-412-11	CARBON	390 5% 1/6W	R479	1-249-421-11	CARBON	2.2K 5% 1/6W
R421	1-249-438-11	CARBON	56K 5% 1/6W	R480	1-249-429-11	CARBON	10K 5% 1/6W
R422	1-249-427-11	CARBON	6.8K 5% 1/6W	R481	1-249-429-11	CARBON	10K 5% 1/6W
R425	1-249-408-11	CARBON	180 5% 1/6W	R482	1-249-421-11	CARBON	2.2K 5% 1/6W
R426	1-249-435-11	CARBON	33K 5% 1/6W	R483	1-249-421-11	CARBON	2.2K 5% 1/6W
R427	1-249-423-11	CARBON	3.3K 5% 1/6W	R484	1-249-433-11	CARBON	22K 5% 1/6W
R429	1-249-429-11	CARBON	10K 5% 1/6W	R485	1-249-417-11	CARBON	1K 5% 1/6W
R430	1-249-423-11	CARBON	3.3K 5% 1/6W	R486	1-249-435-11	CARBON	33K 5% 1/6W
R431	1-249-425-11	CARBON	4.7K 5% 1/6W	R487	1-249-435-11	CARBON	33K 5% 1/6W
R432	1-249-428-11	CARBON	8.2K 5% 1/6W	R488	1-249-435-11	CARBON	33K 5% 1/6W
R433	1-249-428-11	CARBON	8.2K 5% 1/6W	R1100	1-249-405-11	CARBON	100 5% 1/6W
R434	1-249-418-11	CARBON	1.2K 5% 1/6W	R1101	1-249-437-11	CARBON	47K 5% 1/6W
R435	1-249-417-11	CARBON	1K 5% 1/6W	R1102	1-249-429-11	CARBON	10K 5% 1/6W
R436	1-249-421-11	CARBON	2.2K 5% 1/6W	R1105	1-249-431-11	CARBON	15K 5% 1/6W
R437	1-249-431-11	CARBON	15K 5% 1/6W	R1106	1-249-399-11	CARBON	33 5% 1/6W

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>		
R1107	1-249-437-11	CARBON	47K 5% 1/6W	R1367	1-202-730-00	SOLID	8.2M 10% 1/2W		
R1108	1-249-405-11	CARBON	100 5% 1/6W	R1368	1-249-411-11	CARBON	330 5% 1/6W		
R1109	1-249-429-11	CARBON	10K 5% 1/6W	R1369	1-249-413-11	CARBON	470 5% 1/6W		
R1110	1-249-430-11	CARBON	12K 5% 1/6W	R1370	1-249-409-11	CARBON	220 5% 1/6W		
R1111	1-249-437-11	CARBON	47K 5% 1/6W	R1371	1-249-413-11	CARBON	470 5% 1/6W		
R1112	1-249-441-11	CARBON	100K 5% 1/6W	R1375	1-249-425-11	CARBON	4.7K 5% 1/6W		
R1114	1-249-393-11	CARBON	10 5% 1/6W	R1376	1-215-479-00	CARBON	270K 5% 1/6W		
R1115	1-249-425-11	CARBON	4.7K 5% 1/6W	R1377	1-249-434-11	CARBON	27K 5% 1/6W		
R1304	1-247-704-11	CARBON	220 5% 1/4W	R1378	1-249-410-11	CARBON	270 5% 1/6W		
R1305	1-247-704-11	CARBON	220 5% 1/4W	R1379	1-249-405-11	CARBON	100 5% 1/6W		
R1306	1-247-704-11	CARBON	220 5% 1/4W	R1401	1-249-433-11	CARBON	22K 5% 1/6W		
R1307	1-247-704-11	CARBON	220 5% 1/4W	R1402	1-249-433-11	CARBON	22K 5% 1/6W		
R1308	1-249-429-11	CARBON	10K 5% 1/6W	R1403	1-249-433-11	CARBON	22K 5% 1/6W		
R1309	1-247-704-11	CARBON	220 5% 1/4W	R1404	1-249-433-11	CARBON	22K 5% 1/6W		
R1310	1-249-437-11	CARBON	47K 5% 1/6W	R1405	1-249-437-11	CARBON	47K 5% 1/6W		
R1311	1-249-409-11	CARBON	220 5% 1/6W	R1406	1-249-437-11	CARBON	47K 5% 1/6W		
R1312	1-247-887-00	CARBON	220K 5% 1/6W	R1407	1-249-437-11	CARBON	47K 5% 1/6W		
R1313	1-247-725-11	CARBON	10K 5% 1/4W	R1408	1-249-437-11	CARBON	47K 5% 1/6W		
R1314	1-249-429-11	CARBON	10K 5% 1/6W	R1409	1-247-704-11	CARBON	220 5% 1/4W		
R1315	1-249-435-11	CARBON	33K 5% 1/6W	R1410	1-249-421-11	CARBON	2.2K 5% 1/6W		
R1316	1-249-435-11	CARBON	33K 5% 1/6W	R1411	1-247-725-11	CARBON	10K 5% 1/4W		
R1317	1-249-417-11	CARBON	1K 5% 1/6W	R1412	1-249-429-11	CARBON	10K 5% 1/6W		
R1318	1-249-417-11	CARBON	1K 5% 1/6W	R1413	1-249-421-11	CARBON	2.2K 5% 1/6W		
R1320	1-249-409-11	CARBON	220 5% 1/6W	<u>VARIABLE RESISTOR</u>					
R1322	1-249-440-11	CARBON	82K 5% 1/6W	RV301	1-230-626-41	RES, ADJ, CARBON	470		
R1323	1-249-429-11	CARBON	10K 5% 1/6W	RV302	1-230-631-11	RES, ADJ, CARBON	22K		
R1324	1-247-881-00	CARBON	120K 5% 1/6W	RV303	1-230-630-11	RES, ADJ, CARBON	10K		
R1325	1-249-409-11	CARBON	220 5% 1/6W	RV318	1-230-271-00	RES, ADJ, CARBON	4.7K		
R1326	1-249-409-11	CARBON	220 5% 1/6W	RV1301	1-230-628-11	RES, ADJ, CARBON	2.2K		
R1327	1-215-493-00	CARBON	1M 5% 1/6W	RV1302	1-230-628-11	RES, ADJ, CARBON	2.2K		
R1328	1-249-417-11	CARBON	1K 5% 1/6W	<u>TRANSFORMER</u>					
R1329	1-249-437-11	CARBON	47K 5% 1/6W	T301	1-404-524-11	DAT			
R1330	1-249-417-11	CARBON	1K 5% 1/6W	T401	1-404-584-11	COIL			
R1331	1-247-849-00	CARBON	5.6K 5% 1/6W	<u>CRYSTAL</u>					
R1332	1-249-437-11	CARBON	47K 5% 1/6W	X101	1-567-192-11	OSCILLATOR, CERAMIC			
R1333	1-215-430-00	CARBON	2.4K 5% 1/6W	X358	1-567-505-11	OSCILLATOR, CRYSTAL			
R1334	1-249-429-11	CARBON	10K 5% 1/6W	X443	1-567-504-11	OSCILLATOR, CRYSTAL			
R1335	1-249-409-11	CARBON	220 5% 1/6W	*****					
R1337	1-249-405-11	CARBON	100 5% 1/6W	*A-1245-395-A FA BOARD, COMPLETE (AEP, AUS ONLY)					
R1339	1-249-419-11	CARBON	1.5K 5% 1/6W	*****					
R1340	1-249-409-11	CARBON	220 5% 1/6W	*A-1245-414-A FA BOARD, COMPLETE (WG ONLY)					
R1341	1-249-437-11	CARBON	47K 5% 1/6W	*****					
R1342	1-249-405-11	CARBON	100 5% 1/6W	*****					
R1344	1-247-838-00	CARBON	2K 5% 1/6W	*****					
R1345	1-249-409-11	CARBON	220 5% 1/6W	<u>CAPACITOR</u>					
R1347	1-249-405-11	CARBON	100 5% 1/6W	C601	Δ.1-136-360-51	FILM	0.22MF 20% 250VAC		
R1360	1-249-414-11	CARBON	560 5% 1/6W	C607	1-161-738-00	CERAMIC	0.0047MF 20% 400V		
R1362	1-249-414-11	CARBON	560 5% 1/6W	C608	Δ.1-161-738-12	CERAMIC	0.0047MF 20% 400V		
R1363	1-215-491-00	CARBON	820K 5% 1/6W	C610	1-125-222-21	ELECT(BLOCK)	330MF 20% 400V		
R1364	1-249-424-11	CARBON	3.9K 5% 1/6W	C617	1-161-738-00	CERAMIC	0.0047MF 20% 400V		
R1365	1-249-437-11	CARBON	47K 5% 1/6W	C618	1-102-030-00	CERAMIC	330PF 10% 500V		

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F A

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>											
C619	1-129-743-00	FILM	0.022MF	10%	400V	<u>FUSE</u>			<u>FUSE</u>													
C620	1-124-126-00	ELECT	47MF	20%	16V	F601 Δ 1-532-299-11			FUSE, TIME-LAG 5A/250V													
C621	1-130-062-00	FILM	0.0056MF	5%	630V	*1-533-189-11			HOLDER, FUSE; F601													
C622	1-124-344-91	ELECT	22MF	20%	100V	<u>CONNECTOR</u>			<u>CONNECTOR</u>													
C623	1-161-973-00	CERAMIC	220PF	10%	400V	C624 1-161-973-00			FA1 *1-506-348-XX													
C624	1-161-973-00	CERAMIC	220PF	10%	400V	3P PLUG (L)			FA2 *1-506-348-XX													
C632	1-102-002-00	CERAMIC	680PF	10%	500V	3P PLUG (L)			FA3 *1-508-765-00													
C651	1-162-115-00	CERAMIC	330PF	10%	2KV	3P PLUG (M)			FA4 *1-508-767-00													
C652	1-125-294-00	ELECT(BLOCK)	560MF	20%	160V	5P PLUG			FA6 *1-508-765-00													
C653	1-123-364-00	ELECT	1000MF	20%	50V	3P PLUG (M)			<u>IC</u>													
C654	1-123-338-00	ELECT	2200MF	20%	25V	FA7 *1-566-058-11			FA9 *1-564-529-11													
C655	1-123-338-00	ELECT	2200MF	20%	25V	PIN, CONNECTOR 6P			FA10 *1-564-529-11													
C656	1-162-318-11	CERAMIC	0.001MF	10%	500V	CONNECTOR, BOARD TO BOARD 5P			CONNECTOR, BOARD TO BOARD 5P													
C658	1-124-126-00	ELECT	47MF	20%	25V	<u>COIL</u>			<u>COIL</u>													
C659	1-102-030-00	CERAMIC	330PF	10%	500V	IC602 8-719-800-82			IC651 8-759-145-58													
C661	1-123-333-00	ELECT	100MF	20%	25V	DIODE TLP581			IC UPC4558C													
C662	1-136-332-11	FILM	0.01MF	5%	630V	<u>IC LINK</u>			<u>IC LINK</u>													
C663	1-124-038-00	ELECT	1MF	20%	50V	L601 1-407-365-00			PS651 1-532-675-00													
C664	1-124-038-00	ELECT	1MF	20%	50V	COIL, CHOKE			PS652 1-532-686-00													
C666	1-124-123-00	ELECT	100MF	20%	10V	L652 1-407-780-00			PS654 1-532-637-00													
<u>DIODE</u>																						
D601	8-719-503-06	DIODE S3WB60Z	Q601 8-729-195-82			TRANSISTOR 2SC2958			R601 Δ 1-217-328-11													
D602	8-719-100-65	DIODE RD12E-B2	Q602 8-729-802-07			TRANSISTOR 2SD1403-CA			WIREWOUND													
D605	8-719-924-06	DIODE ERC24-06S	3-701-833-01			3-701-833-01			R604 Δ 1-247-289-11													
D607	8-719-815-55	DIODE 1S1555	HEAD, WASHER, TAPPING SCREW; Q602			SPACER, MICA; Q602			CARBON													
D608	8-719-815-55	DIODE 1S1555	*4-347-706-00			Q651 8-729-109-53			R609 1-215-894-11													
<u>RESISTOR</u>																						
D609	8-719-925-06	DIODE ERC25-06S	Q652 8-729-178-54			HEAT SINK (TR); Q651			R610 1-215-895-11													
D651	8-719-900-26	DIODE ERD29-08J	R611 1-215-904-11			TRANSISTOR 2SD795A			METAL OXIDE													
D653	8-719-300-59	DIODE CTU-12S	R612 1-215-904-11			R613 1-215-895-11			R614 1-216-458-11													
D654	8-719-300-59	DIODE CTU-12S	R615 1-205-737-00			METAL OXIDE			CARBON													
<u>TRANSISTOR</u>																						
*4-347-706-00	HEAT SINK (TR); D654			R616 1-247-718-11			R617 10%			10%												
D655	8-719-000-12	DIODE MC931	R618 1-249-409-11			R618 10%			R619 1-217-352-11													
D656	8-719-300-59	DIODE CTU-12S	R619 1-217-192-00			WIREWOUND			WIREWOUND													
<u>RESISTOR</u>																						
*4-347-706-00	HEAT SINK (TR); D656			R620 1-217-192-00			R621 1-217-192-00			10%												
D658	8-719-110-03	DIODE RD7.5ES-B2	R622 1-216-430-11			R622 10%			R623 1-249-427-11													
D659	8-719-110-03	DIODE RD7.5ES-B2	R624 1-216-430-11			R624 10%			CARBON													
D660	8-719-815-55	DIODE 1S1555	R625 1-247-692-11			R625 10%			R626 1-217-352-11													
D661	8-719-815-55	DIODE 1S1555	R627 1-249-409-11			R627 10%			WIREWOUND													
D663	8-719-109-93	DIODE RD6.2ES-B2	R628 1-215-479-00			R628 10%			R628 10%													
D664	8-719-100-65	DIODE RD12E-B2	R629 1-249-427-11			R629 10%			R629 10%													
<u>RESISTOR</u>																						
<u>WIREWOUND</u>																						
<u>CARBON</u>																						
<u>METAL OXIDE</u>																						

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

F A F C Q A

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

QA

Ref.No.	Part No.	Description		Remark	Ref.No.	Part No.	Description		Remark		
C1706	1-124-247-00	ELECT	10MF	20%	25V	R1705	1-247-104-00	CARBON	75	5%	1/4W
C1707	1-124-247-00	ELECT	10MF	20%	25V	R1706	1-249-417-11	CARBON	1K	5%	1/6W
C1708	1-124-236-00	ELECT	47MF	20%	16V	R1707	1-215-491-00	CARBON	820K	5%	1/6W
C1709	1-124-247-00	ELECT	10MF	20%	25V	R1708	1-249-417-11	CARBON	1K	5%	1/6W
C1710	1-102-965-00	CERAMIC	39PF	5%	50V	R1709	1-215-491-00	CARBON	820K	5%	1/6W
C1712	1-102-965-00	CERAMIC	39PF	5%	50V	R1710	1-247-104-00	CARBON	75	5%	1/4W
C1714	1-102-965-00	CERAMIC	39PF	5%	50V	R1711	1-249-414-11	CARBON	560	5%	1/6W
C1715	1-124-247-00	ELECT	10MF	20%	25V	R1712	1-247-895-00	CARBON	470K	5%	1/6W
C1716	1-124-247-00	ELECT	10MF	20%	25V	R1713	1-249-414-11	CARBON	560	5%	1/6W
C1717	1-124-247-00	ELECT	10MF	20%	25V	R1714	1-247-895-00	CARBON	470K	5%	1/6W
C1718	1-124-247-00	ELECT	10MF	20%	25V	R1715	1-247-104-00	CARBON	75	5%	1/4W
C1719	1-124-236-00	ELECT	47MF	20%	16V	R1716	1-249-417-11	CARBON	1K	5%	1/6W
C1720	1-124-236-00	ELECT	47MF	20%	16V	R1717	1-215-491-00	CARBON	820K	5%	1/6W
C1721	1-124-236-00	ELECT	47MF	20%	16V	R1718	1-247-708-11	CARBON	470	5%	1/4W
C1722	1-124-236-00	ELECT	47MF	20%	16V	R1719	1-249-408-11	CARBON	180	5%	1/6W
C1723	1-124-247-00	ELECT	10MF	20%	25V	R1720	1-249-421-11	CARBON	2.2K	5%	1/6W
C1728	1-102-973-00	CERAMIC	100PF	5%	50V	R1721	1-247-708-11	CARBON	470	5%	1/4W
C1729	1-102-973-00	CERAMIC	100PF	5%	50V	R1722	1-249-408-11	CARBON	180	5%	1/6W
C1731	1-102-973-00	CERAMIC	100PF	5%	50V	R1723	1-249-421-11	CARBON	2.2K	5%	1/6W
C1732	1-102-973-00	CERAMIC	100PF	5%	50V	R1724	1-247-708-11	CARBON	470	5%	1/4W
C1738	1-102-973-00	CERAMIC	100PF	5%	50V	R1725	1-249-408-11	CARBON	180	5%	1/6W
C1743	1-102-973-00	CERAMIC	100PF	5%	50V	R1726	1-247-895-00	CARBON	470K	5%	1/6W
C1744	1-102-973-00	CERAMIC	100PF	5%	50V	R1727	1-247-713-11	CARBON	1K	5%	1/4W
C1747	1-102-965-00	CERAMIC	39PF	5%	50V	R1728	1-215-491-00	CARBON	820K	5%	1/6W
C1748	1-102-965-00	CERAMIC	39PF	5%	50V	R1729	1-247-710-11	CARBON	560	5%	1/4W
C1749	1-102-965-00	CERAMIC	39PF	5%	50V	R1730	1-247-895-00	CARBON	470K	5%	1/6W
C1750	1-102-965-00	CERAMIC	39PF	5%	50V	R1731	1-247-713-11	CARBON	1K	5%	1/4W
C1752	1-102-973-00	CERAMIC	100PF	5%	50V	R1732	1-215-491-00	CARBON	820K	5%	1/6W
C1753	1-102-965-00	CERAMIC	39PF	5%	50V	R1733	1-247-104-00	CARBON	75	5%	1/4W
<u>DIODE</u>											
D1703	8-719-100-38	DIODE	RD6.2E-B2			R1736	1-247-104-00	CARBON	75	5%	1/4W
D1706	8-719-100-38	DIODE	RD6.2E-B2			R1737	1-247-104-00	CARBON	75	5%	1/4W
D1707	8-719-100-38	DIODE	RD6.2E-B2			R1738	1-249-417-11	CARBON	1K	5%	1/6W
D1708	8-719-100-38	DIODE	RD6.2E-B2			R1739	1-247-104-00	CARBON	75	5%	1/4W
D1709	8-719-100-38	DIODE	RD6.2E-B2			R1740	1-249-429-11	CARBON	10K	5%	1/6W
D1710	8-719-100-38	DIODE	RD6.2E-B2			R1742	1-249-412-11	CARBON	390	5%	1/6W
D1711	8-719-100-38	DIODE	RD6.2E-B2			R1743	1-247-713-11	CARBON	1K	5%	1/4W
<u>JACK</u>											
J25	1-561-534-41	SOCKET	21P			R1744	1-215-491-00	CARBON	820K	5%	1/6W
<u>COIL</u>											
L1770	1-408-604-00	MICRO INDUCTOR	12UH (WG ONLY)			R1745	1-249-429-11	CARBON	10K	5%	1/6W
<u>CONNECTOR</u>											
QA1	*1-566-055-11	PIN, CONNECTOR	3P			R1746	1-249-406-11	CARBON	120	5%	1/6W
QA2	*1-560-278-00	PLUG, CONNECTOR	3P			R1750	1-249-417-11	CARBON	1K	5%	1/6W
<u>RESISTOR</u>											
R1700	1-247-104-00	CARBON	75	5%	1/4W	R1751	1-247-104-00	CARBON	75	5%	1/4W
R1701	1-249-417-11	CARBON	1K	5%	1/6W	R1752	1-249-401-11	CARBON	47	5%	1/6W
R1702	1-215-491-00	CARBON	820K	5%	1/6W	R1753	1-249-401-11	CARBON	47	5%	1/6W
R1703	1-249-417-11	CARBON	1K	5%	1/6W	R1754	1-249-401-11	CARBON	47	5%	1/6W
R1704	1-215-491-00	CARBON	820K	5%	1/6W	R1755	1-249-418-11	CARBON	1.2K	5%	1/6W
<u> </u>											
R1756	1-249-418-11	CARBON	1.2K	5%	1/6W	R1760	1-215-483-00	CARBON	390K	5%	1/6W
R1761	1-215-483-00	CARBON	390K	5%	1/6W	R1762	1-215-483-00	CARBON	390K	5%	1/6W
R1763	1-215-483-00	CARBON	390K	5%	1/6W	R1764	1-249-406-11	CARBON	120	5%	1/6W
R1765	1-249-406-11	CARBON	560	5%	1/4W	R1766	1-247-710-11	CARBON	560	5%	1/4W

QA **QB**

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>				<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>				<u>Remark</u>							
<u>SWITCH</u>												<u>DIODE</u>								
SW1	1-570-145-11	SWITCH, SLIDE					D1770	8-719-911-19	DIODE	ISS119										
SW2	1-570-145-11	SWITCH, SLIDE					D1771	8-719-911-19	DIODE	ISS119										
SW3	1-570-145-11	SWITCH, SLIDE					D1772	8-719-911-19	DIODE	ISS119										
SW4	1-570-145-11	SWITCH, SLIDE					D1773	8-719-911-19	DIODE	ISS119										
SW5	1-570-145-11	SWITCH, SLIDE					D1774	8-719-911-19	DIODE	ISS119										

*A-1270-213-A QB BOARD, COMPLETE																				

<u>CAPACITOR</u>												<u>IC</u>								
C1777	1-102-074-00	CERAMIC	0.001MF	10%	50V		D1782	8-719-911-19	DIODE	ISS119										
C1778	1-102-074-00	CERAMIC	0.001MF	10%	50V		D1783	8-719-931-06	DIODE	EQ801-06										
C1779	1-124-475-11	ELECT	470MF	20%	16V		D1784	8-719-110-14	DIODE	RD9.1ES-B3										
C1781	1-101-004-00	CERAMIC	0.01MF		50V		D1787	8-719-109-90	DIODE	RD5.6ES-B3										
C1788	1-124-247-00	ELECT	10MF	20%	25V		D1788	8-719-911-19	DIODE	ISS119										
C1789	1-124-247-00	ELECT	10MF	20%	25V		D1789	8-719-911-19	DIODE	ISS119										
C1790	1-124-236-00	ELECT	47MF	20%	16V		<u>IC</u>													
C1791	1-124-236-00	ELECT	47MF	20%	16V		IC1770	8-759-800-65	IC	LA7910										
C1792	1-102-959-00	CERAMIC	22PF	5%	50V		IC1771	8-759-140-66	IC	UPD4066BC										
C1793	1-101-004-00	CERAMIC	0.01MF		50V		IC1772	8-759-102-37	IC	UPD4052BC										
C1794	1-124-236-00	ELECT	47MF	20%	16V		IC1773	8-759-102-37	IC	UPD4052BC										
C1795	1-101-004-00	CERAMIC	0.01MF		50V		IC1774	8-759-900-86	IC	SN74LS86N										
C1799	1-124-471-00	ELECT	1000MF	20%	6.3V		IC1775	8-759-901-38	IC	SN74LS138N										
C1800	1-124-236-00	ELECT	47MF	20%	16V		IC1776	8-759-900-09	IC	SN74LS09N										
C1801	1-124-475-11	ELECT	470MF	20%	16V		<u>COIL</u>													
C1802	1-102-971-00	CERAMIC	82PF	5%	50V		L1770	1-408-239-00	MICRO INDUCTOR	4.7MMH										
C1803	1-124-471-00	ELECT	1000MF	20%	6.3V		<u>TRANSISTOR</u>													
C1804	1-102-971-00	CERAMIC	82PF	5%	50V		Q1773	8-729-117-54	TRANSISTOR	2SA1175										
C1806	1-101-361-00	CERAMIC	150PF	5%	50V		Q1774	8-729-178-54	TRANSISTOR	2SC2785										
C1807	1-102-111-00	CERAMIC	270PF	10%	50V		Q1775	8-729-117-54	TRANSISTOR	2SA1175										
C1808	1-101-004-00	CERAMIC	0.01MF		50V		Q1776	8-729-178-54	TRANSISTOR	2SC2785										
C1810	1-124-236-00	ELECT	47MF	20%	16V		Q1777	8-729-178-54	TRANSISTOR	2SC2785										
C1811	1-124-236-00	ELECT	47MF	20%	16V		Q1778	8-729-178-54	TRANSISTOR	2SC2785										
C1813	1-124-236-00	ELECT	47MF	20%	16V		Q1779	8-729-117-54	TRANSISTOR	2SA1175										
C1820	1-124-236-00	ELECT	47MF	20%	16V		Q1780	8-729-117-54	TRANSISTOR	2SA1175										
C1821	1-101-004-00	CERAMIC	0.01MF		50V		Q1781	8-729-178-54	TRANSISTOR	2SC2785										
C1823	1-124-267-11	ELECT	0.1MF	20%	50V		Q1782	8-729-178-54	TRANSISTOR	2SC2785										
C1824	1-124-267-11	ELECT	0.1MF	20%	50V		Q1783	8-729-900-89	TRANSISTOR	DTC144ES										
C1825	1-124-267-11	ELECT	0.1MF	20%	50V		Q1785	8-729-178-54	TRANSISTOR	2SC2785										
C1827	1-101-880-00	CERAMIC	47PF	5%	50V		Q1786	8-729-178-54	TRANSISTOR	2SC2785										
C1828	1-123-611-00	ELECT	1MF	20%	50V		Q1787	8-729-177-43	TRANSISTOR	2SD774										
C1830	1-124-236-00	ELECT	47MF	20%	16V		Q1788	8-729-117-54	TRANSISTOR	2SA1175										
C1831	1-101-004-00	CERAMIC	0.01MF		50V		Q1789	8-729-178-54	TRANSISTOR	2SC2785										
C1832	1-124-236-00	ELECT	47MF	20%	16V		Q1790	8-729-177-43	TRANSISTOR	2SD774										
C1833	1-101-004-00	CERAMIC	0.01MF		50V		Q1791	8-729-900-36	TRANSISTOR	DTC124ES										
C1834	1-101-004-00	CERAMIC	0.01MF		50V		Q1792	8-729-178-54	TRANSISTOR	2SC2785										
C1835	1-124-236-00	ELECT	47MF	20%	16V		Q1793	8-729-117-54	TRANSISTOR	2SA1175										
C1837	1-124-963-11	ELECT	33MF	20%	16V		Q1794	8-729-178-54	TRANSISTOR	2SC2785										
C1838	1-101-880-00	CERAMIC	47PF	5%	50V		Q1795	8-729-178-54	TRANSISTOR	2SC2785										
C1839	1-124-236-00	ELECT	47MF	20%	16V		Q1796	8-729-178-54	TRANSISTOR	2SC2785										
C1840	1-101-004-00	CERAMIC	0.01MF		50V		Q1797	8-729-178-54	TRANSISTOR	2SC2785										

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
Q1798	8-729-117-54	TRANSISTOR 2SA1175		R1785	1-249-441-11	CARBON	100K 5% 1/6W
Q1799	8-729-178-54	TRANSISTOR 2SC2785		R1786	1-249-441-11	CARBON	100K 5% 1/6W
Q1802	8-729-900-36	TRANSISTOR DTC124ES		R1787	1-249-433-11	CARBON	22K 5% 1/6W
Q1803	8-729-178-54	TRANSISTOR 2SC2785		R1788	1-249-413-11	CARBON	470 5% 1/6W
Q1804	8-729-178-54	TRANSISTOR 2SC2785		R1794	1-247-895-00	CARBON	470K 5% 1/6W
Q1805	8-729-178-54	TRANSISTOR 2SC2785		R1795	1-249-422-11	CARBON	2.7K 5% 1/6W
Q1806	8-729-178-54	TRANSISTOR 2SC2785		R1796	1-249-440-11	CARBON	82K 5% 1/6W
Q1807	8-729-178-54	TRANSISTOR 2SC2785		R1797	1-249-434-11	CARBON	27K 5% 1/6W
Q1808	8-729-178-54	TRANSISTOR 2SC2785		R1798	1-249-425-11	CARBON	4.7K 5% 1/6W
Q1809	8-729-178-54	TRANSISTOR 2SC2785		R1799	1-249-419-11	CARBON	1.5K 5% 1/6W
Q1810	8-729-178-54	TRANSISTOR 2SC2785		R1800	1-249-425-11	CARBON	4.7K 5% 1/6W
Q1811	8-729-178-54	TRANSISTOR 2SC2785		R1801	1-249-440-11	CARBON	82K 5% 1/6W
Q1812	8-729-178-54	TRANSISTOR 2SC2785		R1802	1-249-434-11	CARBON	27K 5% 1/6W
Q1813	8-729-178-54	TRANSISTOR 2SC2785		R1804	1-249-429-11	CARBON	10K 5% 1/6W
Q1814	8-729-178-54	TRANSISTOR 2SC2785		R1805	1-249-429-11	CARBON	10K 5% 1/6W
Q1815	8-729-178-54	TRANSISTOR 2SC2785		R1806	1-249-406-11	CARBON	120 5% 1/6W
Q1816	8-729-178-54	TRANSISTOR 2SC2785		R1807	1-247-849-00	CARBON	5.6K 5% 1/6W
Q1817	8-729-178-54	TRANSISTOR 2SC2785		R1808	1-247-849-00	CARBON	5.6K 5% 1/6W
Q1818	8-729-900-36	TRANSISTOR DTC124ES		R1809	1-249-408-11	CARBON	180 5% 1/6W
Q1819	8-729-900-36	TRANSISTOR DTC124ES		R1810	1-215-422-00	CARBON	1.1K 5% 1/6W
Q1820	8-729-900-36	TRANSISTOR DTC124ES		R1811	1-249-413-11	CARBON	470 5% 1/6W
Q1822	8-729-178-54	TRANSISTOR 2SC2785		R1813	1-249-413-11	CARBON	470 5% 1/6W
Q1823	8-729-178-54	TRANSISTOR 2SC2785		R1814	1-249-413-11	CARBON	470 5% 1/6W
Q1825	8-729-178-54	TRANSISTOR 2SC2785		R1815	1-249-412-11	CARBON	390 5% 1/6W
Q1826	8-729-178-54	TRANSISTOR 2SC2785		R1816	1-249-413-11	CARBON	470 5% 1/6W
Q1827	8-729-178-54	TRANSISTOR 2SC2785		R1817	1-215-422-00	CARBON	1.1K 5% 1/6W
Q1828	8-729-178-54	TRANSISTOR 2SC2785		R1819	1-249-413-11	CARBON	470 5% 1/6W
Q1829	8-729-178-54	TRANSISTOR 2SC2785		R1820	1-249-406-11	CARBON	120 5% 1/6W
Q1830	8-729-177-43	TRANSISTOR 2SD774		R1821	1-249-406-11	CARBON	120 5% 1/6W
Q1831	8-729-900-36	TRANSISTOR DTC124ES		R1822	1-249-406-11	CARBON	120 5% 1/6W
Q1832	8-729-178-54	TRANSISTOR 2SC2785		R1823	1-249-406-11	CARBON	120 5% 1/6W
Q1891	8-729-900-36	TRANSISTOR DTC124ES		R1824	1-247-881-00	CARBON	120K 5% 1/6W
<u>CONNECTOR</u>							
QB11	*1-566-058-11	PIN, CONNECTOR 6P		R1825	1-247-881-00	CARBON	120K 5% 1/6W
QB12	*1-566-056-11	PIN, CONNECTOR 4P		R1826	1-247-881-00	CARBON	120K 5% 1/6W
QB13	*1-566-056-11	PIN, CONNECTOR 4P		R1827	1-249-429-11	CARBON	10K 5% 1/6W
QB14	*1-566-054-11	PIN, CONNECTOR 2P		R1828	1-249-417-11	CARBON	1K 5% 1/6W
QB15	*1-566-057-11	PIN, CONNECTOR 5P		R1829	1-249-429-11	CARBON	10K 5% 1/6W
QB16	*1-566-056-11	PIN, CONNECTOR 4P		R1830	1-249-429-11	CARBON	10K 5% 1/6W
QB17	*1-566-059-11	PIN, CONNECTOR 7P		R1831	1-249-417-11	CARBON	1K 5% 1/6W
<u>RESISTOR</u>							
R1771	1-249-469-11	CARBON	100K 5% 1/4W	R1832	1-249-429-11	CARBON	10K 5% 1/6W
R1776	1-249-405-11	CARBON	100 5% 1/6W	R1833	1-249-429-11	CARBON	10K 5% 1/6W
R1777	1-249-405-11	CARBON	100 5% 1/6W	R1834	1-249-417-11	CARBON	1K 5% 1/6W
R1778	1-249-405-11	CARBON	100 5% 1/6W	R1835	1-249-428-11	CARBON	8.2K 5% 1/6W
R1779	1-249-441-11	CARBON	100K 5% 1/6W	R1836	1-249-422-11	CARBON	2.7K 5% 1/6W
R1780	1-249-433-11	CARBON	22K 5% 1/6W	R1837	1-249-417-11	CARBON	1K 5% 1/6W
R1781	1-249-441-11	CARBON	100K 5% 1/6W	R1838	1-247-849-00	CARBON	5.6K 5% 1/6W
R1782	1-249-425-11	CARBON	4.7K 5% 1/6W	R1839	1-247-849-00	CARBON	5.6K 5% 1/6W
R1783	1-249-469-11	CARBON	100K 5% 1/4W	R1841	1-249-433-11	CARBON	22K 5% 1/6W
R1784	1-249-433-11	CARBON	22K 5% 1/6W	R1842	1-249-433-11	CARBON	22K 5% 1/6W
				R1843	1-249-462-11	CARBON	22K 5% 1/4W
				R1844	1-249-405-11	CARBON	100 5% 1/6W
				R1845	1-249-433-11	CARBON	22K 5% 1/6W
				R1846	1-247-714-11	CARBON	1.2K 5% 1/4W

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>		
R1847	1-249-437-11	CARBON	47K 5% 1/6W	R1923	1-249-421-11	CARBON	2.2K 5% 1/6W		
R1848	1-249-428-11	CARBON	8.2K 5% 1/6W	R1925	1-249-440-11	CARBON	82K 5% 1/6W		
R1849	1-249-437-11	CARBON	47K 5% 1/6W	R1926	1-249-440-11	CARBON	82K 5% 1/6W		
R1850	1-249-428-11	CARBON	8.2K 5% 1/6W	R1927	1-249-440-11	CARBON	82K 5% 1/6W		
R1851	1-249-465-11	CARBON	47K 5% 1/4W	R1928	1-249-405-11	CARBON	100 5% 1/6W		
R1852	1-249-428-11	CARBON	8.2K 5% 1/6W	R1929	1-247-849-00	CARBON	5.6K 5% 1/6W		
R1853	1-249-416-11	CARBON	820 5% 1/6W	R1930	1-247-714-11	CARBON	1.2K 5% 1/4W		
R1854	1-249-416-11	CARBON	820 5% 1/6W	R1931	1-249-417-11	CARBON	1K 5% 1/6W		
R1855	1-249-417-11	CARBON	1K 5% 1/6W	R1932	1-249-417-11	CARBON	1K 5% 1/6W		
R1856	1-249-417-11	CARBON	1K 5% 1/6W	R1935	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1857	1-247-713-11	CARBON	1K 5% 1/4W	R1936	1-249-430-11	CARBON	12K 5% 1/6W		
R1858	1-249-433-11	CARBON	22K 5% 1/6W	R1937	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1859	1-249-417-11	CARBON	1K 5% 1/6W	R1938	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1860	1-249-429-11	CARBON	10K 5% 1/6W	R1939	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1861	1-249-417-11	CARBON	1K 5% 1/6W	R1940	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1862	1-249-417-11	CARBON	1K 5% 1/6W	R1941	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1863	1-249-433-11	CARBON	22K 5% 1/6W	R1942	1-247-695-11	CARBON	39 5% 1/4W		
R1864	1-249-417-11	CARBON	1K 5% 1/6W	R1945	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1865	1-249-425-11	CARBON	4.7K 5% 1/6W	R1950	1-249-428-11	CARBON	8.2K 5% 1/6W		
R1866	1-249-412-11	CARBON	390 5% 1/6W	R1951	1-249-429-11	CARBON	10K 5% 1/6W		
R1867	1-249-417-11	CARBON	1K 5% 1/6W	R1952	1-215-865-11	METAL OXIDE	220 5% 1W F		
R1868	1-249-412-11	CARBON	390 5% 1/6W	R1953	1-249-423-11	CARBON	3.3K 5% 1/6W		
R1869	1-249-421-11	CARBON	2.2K 5% 1/6W	R1955	1-249-435-11	CARBON	33K 5% 1/6W		
R1870	1-249-421-11	CARBON	2.2K 5% 1/6W	R1956	1-249-434-11	CARBON	27K 5% 1/6W		
R1871	1-249-421-11	CARBON	2.2K 5% 1/6W	R1965	1-247-712-11	CARBON	820 5% 1/4W		
R1872	1-249-433-11	CARBON	22K 5% 1/6W	R1966	1-247-712-11	CARBON	820 5% 1/4W		
R1873	1-249-429-11	CARBON	10K 5% 1/6W	R1967	1-247-712-11	CARBON	820 5% 1/4W		
R1874	1-249-413-11	CARBON	470 5% 1/6W	R1968	1-247-881-00	CARBON	120K 5% 1/6W		
R1875	1-215-432-00	CARBON	3K 5% 1/6W	R1969	1-249-440-11	CARBON	82K 5% 1/6W		
R1876	1-249-420-11	CARBON	1.8K 5% 1/6W	R1971	1-249-417-11	CARBON	1K 5% 1/6W		
R1877	1-249-429-11	CARBON	10K 5% 1/6W	R1972	1-249-417-11	CARBON	1K 5% 1/6W		
R1879	1-249-469-11	CARBON	100K 5% 1/4W	R1973	1-249-417-11	CARBON	1K 5% 1/6W		
R1880	1-249-417-11	CARBON	1K 5% 1/6W	R1974	1-247-713-11	CARBON	1K 5% 1/4W		
R1881	1-249-422-11	CARBON	2.7K 5% 1/6W	*****					
R1882	1-249-417-11	CARBON	1K 5% 1/6W	*****					
R1883	1-249-433-11	CARBON	22K 5% 1/6W	*A-1330-801-A C BOARD, COMPLETE					
R1884	1-249-417-11	CARBON	1K 5% 1/6W	*****					
R1885	1-249-416-11	CARBON	820 5% 1/6W	1-526-798-21 SOCKET, CRT					
R1886	1-249-417-11	CARBON	1K 5% 1/6W	*4-379-160-01 COVER (REAR LID), CV					
R1887	1-247-715-11	CARBON	1.5K 5% 1/4W	*4-379-167-01 COVER (MAIN), CV					
R1888	1-249-417-11	CARBON	1K 5% 1/6W	<u>CONNECTOR</u>					
R1892	1-249-415-11	CARBON	680 5% 1/6W	C1	*1-506-371-00	2P PLUG (L)			
R1893	1-249-433-11	CARBON	22K 5% 1/6W	C2	*1-508-765-00	3P PLUG (M)			
R1894	1-249-428-11	CARBON	8.2K 5% 1/6W	C3	*1-508-765-00	3P PLUG (M)			
R1896	1-249-415-11	CARBON	680 5% 1/6W	C4	*1-566-055-11	PIN, CONNECTOR 3P			
R1898	1-247-849-00	CARBON	5.6K 5% 1/6W	C5	*1-566-061-11	PIN, CONNECTOR 9P			
R1899	1-247-849-00	CARBON	5.6K 5% 1/6W	C8	*1-508-784-00	1P PLUG			
R1901	1-249-429-11	CARBON	10K 5% 1/6W	<u>CAPACITOR</u>					
R1902	1-249-417-11	CARBON	1K 5% 1/6W	C701	1-162-116-00	CERAMIC	680PF	10%	2KV
R1903	1-249-412-11	CARBON	390 5% 1/6W	C702	1-129-714-00	FILM	0.01MF	10%	630V
R1921	1-249-424-11	CARBON	3.9K 5% 1/6W	C703	1-123-356-00	ELECT	10MF	20%	50V
R1922	1-249-424-11	CARBON	3.9K 5% 1/6W	C704	1-123-948-00	ELECT	22MF	20%	250V
				C705	1-108-692-81	MYLAR	0.01MF	10%	200V

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<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>		<u>Remark</u>
C706	1-129-751-00	FILM CERAMIC	0.1MF	10% 400V	R701	1-216-397-11	METAL OXIDE	4.7 5%	3W F
C707	1-102-116-00	CERAMIC	680PF	10% 50V	R702	1-202-848-00	SOLID	680K 10%	1/2W
C708	1-102-116-00	CERAMIC	680PF	10% 50V	R703	1-202-838-00	SOLID	100K 10%	1/2W
C709	1-102-116-00	CERAMIC	680PF	10% 50V	R704	1-202-846-00	SOLID	470K 10%	1/2W
C710	1-102-116-00	CERAMIC	680PF	10% 50V	R705	1-202-549-00	SOLID	100 5%	1/2W
C711	1-123-356-00	ELECT CERAMIC	10MF	20% 25V	R706	1-202-838-00	SOLID	100K 10%	1/2W
C712	1-102-114-00	CERAMIC	470PF	10% 50V	R707	1-202-842-11	SOLID	220K	1/2W
C713	1-102-116-00	CERAMIC	680PF	10% 50V	R708	1-202-818-00	SOLID	1K	1/2W
C714	1-162-622-11	CERAMIC	330PF	10% 6.3KV	R709	1-202-818-00	SOLID	1K	1/2W
C715	1-102-125-00	CERAMIC	0.0047MF	10% 50V	R710	1-202-818-00	SOLID	1K	1/2W
C718	1-102-074-00	CERAMIC	0.001MF	10% 50V	R711	1-202-837-00	SOLID	82K 10%	1/2W
C719	1-102-050-00	CERAMIC	0.01MF	500V	R712	1-202-842-11	SOLID	220K	1/2W
		<u>DIODE</u>			R713	1-216-486-00	METAL OXIDE	8.2K 5%	3W F
D701	8-719-911-19	DIODE 1SS119			R714	1-249-409-11	CARBON	220 5%	1/6W
D702	8-719-911-19	DIODE 1SS119			R716	1-216-486-00	METAL OXIDE	8.2K 5%	3W F
D703	8-719-911-19	DIODE 1SS119			R717	1-249-409-11	CARBON	220 5%	1/6W
D704	8-719-911-19	DIODE 1SS119			R720	1-216-486-00	METAL OXIDE	8.2K 5%	3W F
D705	8-719-911-19	DIODE 1SS119			R721	1-249-409-11	CARBON	220 5%	1/6W
D706	8-719-911-19	DIODE 1SS119			R722	1-249-405-11	CARBON	100 5%	1/6W
D707	8-719-911-19	DIODE 1SS119			R723	1-249-405-11	CARBON	100 5%	1/6W
D708	8-719-911-19	DIODE 1SS119			R724	1-249-405-11	CARBON	100 5%	1/6W
D709	8-719-911-19	DIODE 1SS119			R725	1-249-429-11	CARBON	10K 5%	1/6W
D710	8-719-901-83	DIODE 1SS83			R726	1-249-409-11	CARBON	220 5%	1/6W
D711	8-719-901-83	DIODE 1SS83			R727	1-249-429-11	CARBON	10K 5%	1/6W
D712	8-719-901-83	DIODE 1SS83			R728	1-215-404-00	CARBON	200 5%	1/6W
D713	8-719-901-83	DIODE 1SS83			R729	1-249-385-11	CARBON	2.2 5%	1/6W
		<u>COIL</u>			R730	1-249-408-11	CARBON	180 5%	1/6W
L701	1-407-711-00	MICRO INDUCTOR	330UH		R731	1-247-704-11	CARBON	220 5%	1/4W F
L702	1-407-705-00	MICRO INDUCTOR	100UH		R732	1-247-704-11	CARBON	220 5%	1/4W F
L703	1-407-703-00	MICRO INDUCTOR	68UH		R733	1-247-704-11	CARBON	220 5%	1/4W F
L704	1-408-442-11	MICRO INDUCTOR	10UH		R734	1-247-717-11	CARBON	2.2K 5%	1/4W
L705	1-408-404-00	MICRO INDUCTOR	3.9UH		R735	1-247-138-00	CARBON	2K 5%	1/4W
L706	1-407-705-00	MICRO INDUCTOR	100UH		R736	1-247-717-11	CARBON	2.2K 5%	1/4W
L707	1-408-434-00	MICRO INDUCTOR	2.2UH		R737	1-249-441-11	CARBON	100K 5%	1/6W
		<u>TRANSISTOR</u>			R739	1-247-887-00	CARBON	220K 5%	1/6W
Q701	8-729-326-11	TRANSISTOR	2SC2611		R740	1-215-902-11	METAL OXIDE	47K 5%	2W F
Q702	8-729-178-54	TRANSISTOR	2SC2785		R741	1-249-438-11	CARBON	56K 5%	1/6W
Q703	8-729-200-17	TRANSISTOR	2SA1091		R742	1-249-429-11	CARBON	10K 5%	1/6W F
Q704	8-729-326-11	TRANSISTOR	2SC2611		R743	1-249-429-11	CARBON	10K 5%	1/6W F
Q705	8-729-178-54	TRANSISTOR	2SC2785		R744	1-247-725-11	CARBON	10K 5%	1/4W F
Q706	8-729-200-17	TRANSISTOR	2SA1091		R745	1-247-713-11	CARBON	1K 5%	1/4W F
Q707	8-729-200-17	TRANSISTOR	2SA1091		R746	1-215-879-51	METAL OXIDE	47K 5%	1W
Q708	8-729-326-11	TRANSISTOR	2SC2611		R747	1-247-725-11	CARBON	10K 5%	1/4W F
Q709	8-729-178-54	TRANSISTOR	2SC2785		R775	1-247-779-00	CARBON	6.8 5%	1/6W
Q710	8-729-255-12	TRANSISTOR	2SC2551		R776	1-247-779-00	CARBON	6.8 5%	1/6W
Q712	8-729-255-12	TRANSISTOR	2SC2551		R777	1-249-441-11	CARBON	100K 5%	1/6W
Q714	8-729-200-17	TRANSISTOR	2SA1091		R799	1-202-842-11	SOLID	220K	1/2W
Q715	8-729-200-17	TRANSISTOR	2SA1091				<u>VARIABLE RESISTOR</u>		
Q716	8-729-200-17	TRANSISTOR	2SA1091		RV701	1-226-114-00	RES, ADJ, METAL GLAZE	2.2M	
					RV702	1-230-619-11	RES, ADJ, METAL GLAZE	110M	

C **D**

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
RV703	1-228-731-00	RES, ADJ, CERAMIC CARBON 470K		C564	1-102-244-00	CERAMIC	220PF 10% 500V
RV705	1-228-729-00	RES, ADJ, CERAMIC CARBON 220K		C566	1-106-367-00	MYLAR	0.01MF 10% 100V
RV706	1-228-724-00	RES, ADJ, CERAMIC CARBON 10K		C568	1-106-212-00	MYLAR	0.047MF 10% 100V
				C570	1-102-212-00	CERAMIC	820PF 10% 500V
				C571	1-123-349-00	ELECT	1000MF 20% 35V
*****				C572	1-102-244-00	CERAMIC	220PF 10% 500V
*A-1345-708-A D BOARD, COMPLETE *****				C573	1-123-935-00	ELECT	33MF 20% 160V
				C574	1-106-369-00	MYLAR	0.012MF 10% 200V
				C575	1-123-024-00,	ELECT	33MF 160V
				C576	1-162-114-00	CERAMIC	0.0047MF 2KV
CAPACITOR				C578	1-124-902-00	ELECT	0.47MF 20% 50V
C503	1-108-614-91	MYLAR	0.001MF 10% 100V	C579	1-102-030-00	CERAMIC	330PF 10% 500V
C505	1-106-212-00	MYLAR	0.047MF 10% 100V	C580	1-108-689-11	MYLAR	0.0056MF 10% 200V
C506	1-124-902-00	ELECT	0.47MF 20% 50V	C581	1-136-512-11	FILM	0.0106MF 3% 1.4KV
C507	1-123-369-00	ELECT	4.7MF 20% 25V	C582	1-162-135-11	CERAMIC	560PF 10% 2KV
C508	1-108-627-91	MYLAR	0.012MF 10% 100V	C583	1-106-367-00	MYLAR	0.01MF 10% 100V
C509	1-106-220-00	MYLAR	0.1MF 10% 100V	C586	1-162-115-00	CERAMIC	330PF 10% 2KV
C510	1-106-367-00	MYLAR	0.01MF 10% 100V	C587	1-129-747-00	FILM	0.047MF 10% 400V
C511	1-123-330-00	ELECT	22MF 20% 16V	C588	1-136-513-11	FILM	0.82MF 5% 200V
C512	1-124-927-11	ELECT	4.7MF 20% 50V	C589	1-136-116-00	FILM	1MF 5% 200V
C513	1-130-868-00	FILM	0.0056MF 5% 50V	C590	1-123-356-00	ELECT	10MF 20% 25V
C514	1-123-356-00	ELECT	10MF 20% 16V	C593	1-124-555-00	ELECT	1000MF 20% 16V
C515	1-123-356-00	ELECT	10MF 20% 16V	C598	1-123-332-00	ELECT	47MF 20% 16V
C516	1-102-820-00	CERAMIC	330PF 5% 50V	C1510	1-106-367-00	MYLAR	0.01MF 10% 100V
C517	1-124-475-11	ELECT	470MF 20% 16V	C1515	1-124-477-11	ELECT	47MF 20% 25V
C518	1-106-371-00	MYLAR	0.015MF 10% 100V	C1516	1-124-927-11	ELECT	4.7MF 20% 50V
C519	1-136-173-00	FILM	0.47MF 5% 50V	C1517	1-124-902-00	ELECT	0.47MF 20% 50V
C520	1-124-902-00	ELECT	0.47MF 20% 50V	C1518	1-108-630-91	MYLAR	0.022MF 10% 100V
C521	1-124-902-00	ELECT	0.47MF 20% 50V	C1519	1-124-791-11	ELECT	1MF 20% 50V
C522	1-124-791-11	ELECT	1MF 20% 50V	C1520	1-123-875-91	ELECT	10MF 20% 50V
C523	1-106-367-00	MYLAR	0.01MF 10% 100V	C1521	1-108-855-00	MYLAR	0.33MF 10% 50V
C524	1-108-622-91	MYLAR	0.0047MF 10% 100V	C1522	1-108-837-00	MYLAR	0.01MF 10% 50V
C525	1-108-425-00	MYLAR	0.022MF 10% 200V	C1524	1-106-172-00	MYLAR	0.001MF 5% 50V
C526	1-123-321-00	ELECT	220MF 20% 16V	C1525	1-124-927-11	ELECT	4.7MF 20% 50V
C531	1-123-356-00	ELECT	10MF 20% 50V	C1526	1-102-971-00	CERAMIC	82PF 5% 50V
C532	1-124-005-11	ELECT	4.7MF 20% 50V	C1527	1-123-356-00	ELECT	10MF 20% 50V
C535	1-131-501-00	TANTALUM	3.3MF 10% 10V	C1528	1-123-356-00	ELECT	10MF 20% 50V
C536	1-131-375-00	TANTALUM	4.7MF 10% 6.3V	C1529	1-124-791-11	ELECT	1MF 20% 50V
C537	1-123-875-91	ELECT	10MF 20% 50V	C1531	1-102-231-11	CERAMIC	47PF 10% 500V
C538	1-124-117-00	ELECT	680MF 10% 25V	C1532	1-124-445-00	ELECT	100MF 20% 16V
C542	1-123-356-00	ELECT	10MF 20% 16V				
C544	1-130-996-00	FILM	0.047MF 5% 50V	D1	*1-508-766-00	4P PLUG (M)	
C546	1-124-477-11	ELECT	47MF 20% 25V	D2	*1-566-055-11	PIN, CONNECTOR 3P	
C551	1-108-630-91	MYLAR	0.022MF 10% 100V	D3	*1-566-054-11	PIN, CONNECTOR 2P	
C552	1-102-030-00	CERAMIC	330PF 10% 500V	D4	*1-508-767-00	5P PLUG	
C553	1-106-192-00	MYLAR	0.0068MF 10% 100V	D5	*1-508-765-00	3P PLUG (M)	
C554	1-123-345-00	ELECT	100MF 20% 35V	D6	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P	
C556	1-123-943-00	ELECT	1MF 20% 250V	D7	*1-566-056-11	PIN, CONNECTOR 4P	
C557	1-123-356-00	ELECT	10MF 20% 25V	D9	*1-566-055-11	PIN, CONNECTOR 3P	
C558	1-123-356-00	ELECT	10MF 20% 16V	D10	*1-508-766-00	4P PLUG (M)	
C559	1-124-192-00	ELECT	4.7MF 20% 50V	D11	*1-508-765-00	3P PLUG (M)	
C560	1-106-208-00	MYLAR	0.033MF 10% 100V				
C561	1-108-614-91	MYLAR	0.001MF 10% 100V				
C562	1-108-616-91	MYLAR	0.0015MF 10% 100V				
C563	1-123-943-00	ELECT	1MF 20% 250V				
CONNECTOR							

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<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
D14	*1-566-054-11	PIN, CONNECTOR 2P <u>DIODE</u>		L564	1-407-717-00	MICRO INDUCTOR 1MMH	
				L1510	1-459-115-00	COIL, DCC-H	
D501	8-719-911-19	DIODE 1SS119				<u>NEON LAMP</u>	
D502	8-719-911-55	DIODE U05G		NL601	1-519-237-11	LAMP, NEON	
D504	8-719-911-19	DIODE 1SS119				<u>TRANSISTOR</u>	
D505	8-719-911-19	DIODE 1SS119		Q505	8-729-178-54	TRANSISTOR 2SC2785	
D507	8-719-100-35	DIODE RD5.6E-B2		Q506	8-729-178-54	TRANSISTOR 2SC2785	
D509	8-719-110-06	DIODE RD8.2ES-B1		Q507	8-729-178-54	TRANSISTOR 2SC2785	
D510	8-719-911-19	DIODE 1SS119		Q508	8-729-117-54	TRANSISTOR 2SA1175	
D551	8-719-911-55	DIODE U05G		Q551	8-729-168-82	TRANSISTOR 2SC2688	
D554	8-719-300-65	DIODE ES1F		Q552	8-729-203-80	TRANSISTOR 2SD1555-LB-S1	
D557	8-719-918-77	DIODE V19G		4-367-513-00		SPACER, MICA; Q552	
D558	8-719-300-76	DIODE RH1A		Q553	8-729-313-42	TRANSISTOR 2SD1134	
D560	8-719-305-15	DIODE GH3F		Q1510	8-729-117-54	TRANSISTOR 2SA1175	
D561	8-719-928-08	DIODE ERD28-08S		Q1511	8-729-178-54	TRANSISTOR 2SC2785	
D562	8-719-300-65	DIODE ES1F		Q1512	8-729-900-36	TRANSISTOR DTC124ES	
D1510	8-719-911-55	DIODE U05G		Q1513	8-729-900-63	TRANSISTOR DTA124ES	
D1511	8-719-911-19	DIODE 1SS119		Q1514	8-729-900-36	TRANSISTOR DTC124ES	
D1512	8-719-911-19	DIODE 1SS119		Q1515	8-729-900-36	TRANSISTOR DTC124ES	
D1513	8-719-911-55	DIODE U05G		Q1516	8-729-105-73	TRANSISTOR 2SK523-L2	
D1514	8-719-911-55	DIODE U05G		Q1517	8-729-900-36	TRANSISTOR DTC124ES	
D1516	8-759-157-40	DIODE UPC574J		Q1518	8-729-900-36	TRANSISTOR DTC124ES	
D1517	8-719-918-77	DIODE V19G		Q1519	8-729-178-54	TRANSISTOR 2SC2785	
D1518	8-719-918-77	DIODE V19G		Q1520	8-729-178-54	TRANSISTOR 2SC2785	
D1521	8-719-911-19	DIODE 1SS119		Q1521	8-729-117-54	TRANSISTOR 2SA1175	
D1522	8-719-000-12	DIODE MC931		Q1522	8-729-177-43	TRANSISTOR 2SD774	
				Q1523	8-729-103-43	TRANSISTOR 2SB734	
		<u>FUSE</u>				<u>RESISTOR</u>	
F501	A.1-532-285-11	FUSE, TIME-LAG 1.25A/250V		R501	1-247-725-11	CARBON	10K 5% 1/4W
	*1-533-189-11	HOLDER, FUSE; F501		R503	1-249-422-11	CARBON	2.7K 5% 1/6W
				R504	1-249-411-11	CARBON	330 5% 1/6W
IC501	8-759-100-60	IC UPC1377C		R505	1-247-702-11	CARBON	150 5% 1/4W
IC502	8-759-170-12	IC UPC78M12H		R506	1-247-700-11	CARBON	100 5% 1/4W
IC551	8-759-105-82	IC UPC1378H-P 3-701-833-01 HEAD, WASHER, TAPPING SCREW; IC551		R507	1-246-536-00	CARBON	430K 5% 1/4W
IC552	8-759-145-58	IC UPC4558C		R508	1-249-462-11	CARBON	22K 5% 1/4W
IC1510	8-759-145-58	IC UPC4558C		R509	1-249-433-11	CARBON	22K 5% 1/6W
IC1511	8-759-145-58	IC UPC4558C		R510	1-247-881-00	CARBON	120K 5% 1/6W
IC1512	8-759-909-70	IC CX23025		R511	1-247-868-00	CARBON	36K 5% 1/6W
		<u>COIL</u>		R512	1-249-411-11	CARBON	330 5% 1/6W
L551	1-459-678-11	HLC		R513	1-249-468-11	CARBON	82K 5% 1/4W
L552	1-459-390-00	COIL (WITH CORE)		R514	1-247-723-11	CARBON	6.8K 5% 1/4W
L555	1-408-227-00	MICRO INDUCTOR 470UH		R515	1-249-459-11	CARBON	12K 5% 1/4W
L556	1-407-699-00	MICRO INDUCTOR 33UH		R516	1-249-435-11	CARBON	33K 5% 1/6W
L557	1-459-407-00	COIL, FERRITE CHOKE		R517	1-249-407-11	CARBON	150 5% 1/6W
L558	1-407-365-00	COIL, CHOKE		R518	1-247-701-11	CARBON	120 5% 1/4W
L559	1-407-364-00	COIL, SPOOK CHOKE 3.3UH		R519	1-247-849-00	CARBON	5.6K 5% 1/6W
L560	1-407-695-00	MICRO INDUCTOR 15UH		R520	1-249-419-11	CARBON	1.5K 5% 1/6W
L562	1-408-239-00	MICRO INDUCTOR 4.7MMH		R521	1-249-417-11	CARBON	1K 5% 1/6W
L563	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE		R522	1-249-439-11	CARBON	68K 5% 1/6W

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

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RM-668

PVM-2130QM
RM-668

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R523	1-215-447-00	METAL		R583	1-249-433-11	CARBON		R1547	1-249-429-11	CARBON		*A-1375-066-A	HC BOARD, COMPLETE		
R524	1-214-756-00	METAL		R584	1-246-511-00	CARBON		R1548	1-215-493-00	CARBON		C982	1-130-023-00	FILM	0.0027MF 5% 50V
R525	1-249-429-11	CARBON		R585	1-247-719-11	CARBON		R1549	1-247-895-00	CARBON		C983	1-130-028-00	FILM	0.0068MF 5% 50V
R526	1-215-876-00	METAL OXIDE		R586	1-249-428-11	CARBON		R1550	1-247-895-00	CARBON		C984	1-108-837-00	MYLAR	0.01MF 10% 50V
R527	1-249-412-11	CARBON		R587	1-246-523-00	CARBON		R1551	1-249-437-11	CARBON		C985	1-123-617-00	ELECT	10MF 20% 16V
R528	1-249-405-11	CARBON		R588	1-249-422-11	CARBON		R1552	1-247-849-00	CARBON		C986	1-123-356-00	ELECT	10MF 20% 25V
R529	1-214-743-00	METAL		R589	1-249-424-11	CARBON		R1553	1-247-881-00	CARBON					
R530	1-214-753-00	METAL		R590	1-249-421-11	CARBON		R1554	1-247-887-00	CARBON					
R531	1-214-747-00	METAL		R591	1-215-871-11	METAL OXIDE		R1555	1-249-441-11	CARBON					
R532	1-249-424-11	CARBON		R592	1-249-417-11	CARBON		R1556	1-249-419-11	CARBON					
R533	1-249-424-11	CARBON		R593	1-249-417-11	CARBON		R1557	1-249-435-11	CARBON					
R534	1-247-849-00	CARBON		R594	1-249-435-11	CARBON		R1558	1-249-440-11	CARBON					
R535	1-249-429-11	CARBON		R595	1-249-421-11	CARBON		R1559	1-216-349-00	METAL OXIDE					
R536	1-216-350-11	METAL OXIDE		R596	1-249-420-11	CARBON		R1560	1-216-430-11	METAL OXIDE					
R537	1-214-413-11	CARBON		R597	1-249-409-11	CARBON		R1561	1-216-430-11	METAL OXIDE					
R538	1-247-872-00	CARBON		R598	1-246-525-00	CARBON		R1562	1-249-440-11	CARBON					
R539	1-249-413-11	CARBON		R599	1-249-431-11	CARBON		R1563	1-249-409-11	CARBON					
R540	1-247-872-00	CARBON		R600	1-215-469-00	METAL		R1564	1-249-419-11	CARBON					
R541	1-249-429-11	CARBON		R601	1-215-451-00	METAL		R1565	1-216-349-00	METAL OXIDE					
R542	1-214-779-00	METAL		R602	1-247-722-11	CARBON		R1566	1-216-430-11	METAL OXIDE					
R543	1-215-493-00	CARBON		R603	1-215-869-11	METAL OXIDE		R1567	1-216-430-11	METAL OXIDE					
R544	1-214-781-00	METAL		R604	1-247-773-00	CARBON		R1568	1-249-419-11	CARBON					
R545	1-214-765-00	METAL		R605	1-249-429-11	CARBON		R1569	1-249-417-11	CARBON					
R546	1-249-424-11	CARBON		R606	1-249-429-11	CARBON		R1570	1-249-382-11	CARBON					
R547	1-249-429-11	CARBON		R607	1-249-437-11	CARBON		R1571	1-249-382-11	CARBON					
R548	1-249-421-11	CARBON		R608	1-249-429-11	CARBON		R1572	1-247-883-00	CARBON					
R549	1-247-704-11	CARBON		R609	1-249-433-11	CARBON		R1573	1-247-773-00	CARBON					
R550	1-214-681-00	METAL		R610	1-249-430-11	CARBON		R1574	1-249-424-11	CARBON					
R551	1-247-746-11	CARBON		R611	1-249-429-11	CARBON		R1575	1-249-416-11	CARBON					
R552	1-246-533-00	CARBON		R612	1-249-429-11	CARBON		R1576	1-249-416-11	CARBON					
R553	1-249-431-11	CARBON		R613	1-249-429-11	CARBON		R1577	1-249-432-11	CARBON					
R554	1-246-523-00	CARBON		R614	1-249-429-11	CARBON		R1578	1-249-416-11	CARBON					
R555	1-249-425-11	CARBON		R615	1-249-429-11	CARBON		R1579	1-249-429-11	CARBON					
R556	1-247-743-11	CARBON		R616	1-249-429-11	CARBON		R1580	1-249-405-11	CARBON					
R557	1-249-432-11	CARBON		R617	1-249-429-11	CARBON		R1581	1-228-723-00	RES, ADJ, CERAMIC	CARBON 4.7K				
R558	1-249-437-11	CARBON		R618	1-249-425-11	CARBON		R1582	1-228-717-00	RES, ADJ, CERAMIC	CARBON 220				
R559	1-215-479-00	CARBON		R619	1-249-429-11	CARBON		R1583	1-228-724-99-XX	RES, ADJ, METAL GLAZE	1K				
R560	1-247-895-00	CARBON		R620	1-249-437-11	CARBON		R1584	1-228-725-00	RES, ADJ, CERAMIC	CARBON 22K				
R561	1-249-429-11	CARBON		R621	1-249-429-11	CARBON		R1585	1-228-720-00	RES, ADJ, CERAMIC	CARBON 1K				
R562	1-249-425-11	CARBON		R622	1-249-409-11	CARBON		R1586	1-228-727-00	RES, ADJ, CERAMIC	CARBON 47K				
R563	1-247-719-11	CARBON		R623	1-249-438-11	CARBON		R1587	1-228-722-00	RES, ADJ, CERAMIC	CARBON 3.3K				
R564	1-216-428-00	METAL OXIDE		R624	1-249-431-11	CARBON		R1588	1-249-405-11	CARBON					
R565	1-249-429-11	CARBON		R625	1-249-423-11	CARBON		R1589	1-249-417-11	CARBON					
R566	1-247-711-11	CARBON		R626	1-249-423-11	CARBON		R1590	1-249-408-11	CARBON					
R567	1-249-418-11	CARBON		R627	1-249-423-11	CARBON		R1591	1-249-427-11	CARBON					
R568	1-247-715-11	CARBON		R628	1-249-431-11	CARBON		R1592	1-237-349-11	RES, VAR, CARBON	10K				
R569	1-249-410-11	CARBON		R629	1-249-431-11	CARBON		R1593	1-237-712-11	RES, VAR, CARBON	10K				
R570	1-249-417-11	CARBON		R630	1-249-431-11	CARBON		R1594	1-237-712-11	RES, VAR, CARBON	10K				
R571	1-247-711-11	CARBON		R631	1-249-413-11	CARBON		R1595	1-237-712-11	RES, VAR, CARBON	10K				
R572	1-249-418-11	CARBON		R632	1-249-418-11	CARBON		R1596	1-237-712-11	RES, VAR, CARBON	10K				
R573	1-216-445-11	METAL OXIDE		R633	1-249-423-11	CARBON		R1597	1-237-712-11	RES, VAR, CARBON	10K				
R574	1-249-409-11	CARBON		R634	1-215-480-00	CARBON		R1598	1-237-712-11	RES, VAR, CARBON	10K				
R575															

PVM-2130QM
RM-668

PVM-2130QM
RM-668

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Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark	
C204	1-123-332-00	ELECT	47MF 20% 16V			TRANSISTOR		D920	9-990-893-01	LED TLY263P		D945	8-719-911-19	DIODE 1SS119		
C205	1-106-222-00	MYLAR	0.12MF 10% 100V		Q201	8-729-178-54	TRANSISTOR 2SC2785		D921	9-990-893-01	LED TLY263P		D946	8-719-911-19	DIODE 1SS119	
C206	1-102-125-00	CERAMIC	0.0047MF 10% 50V		Q207	8-729-177-43	TRANSISTOR 2SD774		D922	9-990-893-01	LED TLY263P		D947	8-719-911-19	DIODE 1SS119	
C207	1-102-125-00	CERAMIC	0.0047MF 10% 50V					D923	9-990-893-01	LED TLY263P		D948	9-990-901-01	LED TLS263P		
C208	1-106-222-00	MYLAR	0.12MF 10% 100V			RESISTOR		D924	9-990-893-01	LED TLY263P		D949	9-990-901-01	LED TLS263P		
C209	1-123-369-00	ELECT	4.7MF 20% 25V		R201	1-249-441-11	CARBON	100K 5% 1/6W	D925	9-990-893-01	LED TLY263P		D950	9-990-893-01	LED TLY263P	
C210	1-123-369-00	ELECT	4.7MF 20% 25V		R202	1-249-441-11	CARBON	100K 5% 1/6W	D926	9-990-893-01	LED TLY263P		D951	9-990-893-01	LED TLY263P	
C211	1-123-369-00	ELECT	4.7MF 20% 25V		R203	1-249-419-11	CARBON	1.5K 5% 1/6W	D927	9-990-893-01	LED TLY263P		D952	9-990-893-01	LED TLY263P	
C212	1-123-369-00	ELECT	4.7MF 20% 25V		R204	1-249-429-11	CARBON	10K 5% 1/6W	D928	9-990-893-01	LED TLY263P		D953	9-990-893-01	LED TLY263P	
C213	1-123-321-00	ELECT	220MF 20% 16V		R205	1-249-429-11	CARBON	10K 5% 1/6W	D929	9-990-893-01	LED TLY263P		D954	9-990-893-01	LED TLY263P	
C214	1-124-905-11	ELECT	3.3MF 20% 50V		R206	1-249-429-11	CARBON	10K 5% 1/6W	D930	9-990-893-01	LED TLY263P		D955	9-990-893-01	LED TLY263P	
C215	1-124-905-11	ELECT	3.3MF 20% 50V		R207	1-249-419-11	CARBON	1.5K 5% 1/6W	D931	9-990-893-01	LED TLY263P		D956	9-990-893-01	LED TLY263P	
C218	1-123-324-00	ELECT	1000MF 20% 16V		R208	1-249-419-11	CARBON	1.5K 5% 1/6W		RESISTOR		D957	9-990-893-01	LED TLY263P		
C219	1-124-445-00	ELECT	1000MF 20% 16V		R209	1-249-432-11	CARBON	18K 5% 1/6W	R905	1-247-700-11	CARBON	100 5% 1/4W	D958	9-990-893-01	LED TLY263P	
C221	1-124-925-11	ELECT	2.2MF 20% 50V		R210	1-249-432-11	CARBON	18K 5% 1/6W	R906	1-247-704-11	CARBON	220 5% 1/4W	D959	9-990-893-01	LED TLY263P	
C222	1-123-332-00	ELECT	47MF 20% 16V		R212	1-249-425-11	CARBON	4.7K 5% 1/6W	R907	1-247-700-11	CARBON	100 5% 1/4W	D960	9-990-893-01	LED TLY263P	
C224	1-124-925-11	ELECT	2.2MF 20% 50V		R213	1-249-405-11	CARBON	100 5% 1/6W	R908	1-247-704-11	CARBON	220 5% 1/4W	D961	9-990-893-01	LED TLY263P	
C226	1-123-356-00	ELECT	10MF 20% 25V		R221	1-215-865-11	METAL OXIDE	220 5% 1W F	R909	1-247-700-11	CARBON	100 5% 1/4W	D962	9-990-893-01	LED TLY263P	
C227	1-123-349-00	ELECT	1000MF 20% 35V		R223	1-247-881-00	CARBON	120K 5% 1/6W	R910	1-247-704-11	CARBON	220 5% 1/4W	D963	9-990-893-01	LED TLY263P	
C228	1-108-633-81	MYLAR	0.039MF 10% 100V		R224	1-249-412-11	CARBON	390 5% 1/6W	R911	1-247-700-11	CARBON	100 5% 1/4W	D964	9-990-893-01	LED TLY263P	
C229	1-124-908-11	ELECT	22MF 20% 25V		R226	1-247-881-00	CARBON	120K 5% 1/6W	R912	1-247-704-11	CARBON	220 5% 1/4W	D965	9-990-893-01	LED TLY263P	
C230	1-106-222-00	MYLAR	0.12MF 10% 100V		R227	1-249-412-11	CARBON	390 5% 1/6W	R913	1-247-700-11	CARBON	100 5% 1/4W	D966	9-990-901-01	LED TLS263P	
C231	1-123-336-00	ELECT	470MF 20% 25V		R228	1-249-429-11	CARBON	10K 5% 1/6W	R914	1-247-704-11	CARBON	220 5% 1/4W		RESISTOR		
C232	1-108-633-81	MYLAR	0.039MF 10% 100V		R229	1-249-385-11	CARBON	2.2 5% 1/6W F	R915	1-247-700-11	CARBON	100 5% 1/4W	R940	1-247-703-11	CARBON	180 5% 1/4W
C233	1-124-908-11	ELECT	22MF 20% 25V		R230	1-249-429-11	CARBON	10K 5% 1/6W	R916	1-247-704-11	CARBON	220 5% 1/4W	R941	1-247-700-11	CARBON	100 5% 1/4W
C234	1-106-222-00	MYLAR	0.12MF 10% 100V		R231	1-249-385-11	CARBON	2.2 5% 1/6W F	R917	1-247-704-11	CARBON	220 5% 1/4W	R942	1-247-704-11	CARBON	220 5% 1/4W
C235	1-123-336-00	ELECT	470MF 20% 25V		R236	1-249-423-11	CARBON	3.3K 5% 1/6W	R918	1-247-704-11	CARBON	220 5% 1/4W	R943	1-247-700-11	CARBON	100 5% 1/4W
C244	1-123-332-00	ELECT	47MF 20% 16V		R243	1-249-417-11	CARBON	1K 5% 1/6W	R919	1-247-704-11	CARBON	220 5% 1/4W	R944	1-247-704-11	CARBON	220 5% 1/4W
C245	1-124-477-11	ELECT	47MF 20% 25V		R244	1-249-417-11	CARBON	1K 5% 1/6W		SWITCH		R945	1-247-700-11	CARBON	100 5% 1/4W	
C283	1-123-332-00	ELECT	47MF 20% 16V		R245	1-249-417-11	CARBON	1K 5% 1/6W	S905	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R946	1-247-700-11	CARBON	100 5% 1/4W
		DIODE		R246	1-249-417-11	CARBON	1K 5% 1/6W	S906	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R947	1-247-700-11	CARBON	100 5% 1/4W	
D201	8-719-101-61	DIODE RD6.2E-L2						S907	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R948	1-247-700-11	CARBON	100 5% 1/4W	
D202	8-719-101-86	DIODE RD13E-L2						S908	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R949	1-247-700-11	CARBON	100 5% 1/4W	
D203	8-719-911-19	DIODE 1SS119						S909	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R950	1-247-700-11	CARBON	100 5% 1/4W	
D204	8-719-911-19	DIODE 1SS119						S910	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)		R951	1-247-700-11	CARBON	100 5% 1/4W	
D206	8-719-911-19	DIODE 1SS119						S911	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)						
D207	8-719-911-19	DIODE 1SS119						S912	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)						
D210	8-719-911-19	DIODE 1SS119						S913	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)						
D211	8-719-911-19	DIODE 1SS119						S914	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)						
D1519	8-719-110-37	DIODE RD13ES-B3						S915	1-553-766-00	MT SWITCH (KEY BOARD SWITCH)						
		IC								SWITCH						
IC201	8-759-276-30	IC TA7630P														
IC204	8-759-205-84	IC TA7273P			</td											

N

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
	*9-990-898-01	N BOARD (KEY BOARD UNIT B)	

IC

IC935 8-741-138-70 IC BX1387 (DETECTOR)

MISCELLANEOUS

▲.1-237-614-11 RESISTOR ASSY, HIGH-VOLTAGE

▲.1-426-315-11 COIL, DEMAGNETIZATION

T604 ▲.1-439-372-32 TRANSFORMER ASSY, FLYBACK

▲.1-451-295-11 DEFLECTION YOKE (SY-153E)

1-452-032-00 MAGNET, DISK; 10MM Ø

1-452-094-00 MAGNET, ROTATABLE DISK; 15MM Ø

1-452-277-00 MAGNET, BMC

1-464-803-11 KEY BOARD UNIT (A)

1-464-804-11 KEY BOARD UNIT (B)

▲.1-534-820-13 POWER CORD (AEP,AUS ONLY)

▲.1-559-409-11 CORD,POWER (WG ONLY)

S901 ▲.1-554-965-12 SWITCH, PUSH (AC POWER)(1 KEY)

V901 ▲.8-736-955-05 PICTURE TUBE (A51JKQ10X)

ACCESSORIES AND PACKING MATERIALS

<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
A-1470-789-A	COMMANDER ASSY (RM-668)	
*4-377-015-01	BAG, PROTECTION	
*4-382-067-01	CUSHION (UPPER) (ASSY)	
*4-382-068-01	CUSHION (LOWER) (ASSY)	
*4-383-143-01	INDIVIDUAL CARTON	
4-482-400-11	MANUAL, INSTRUCTION	

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