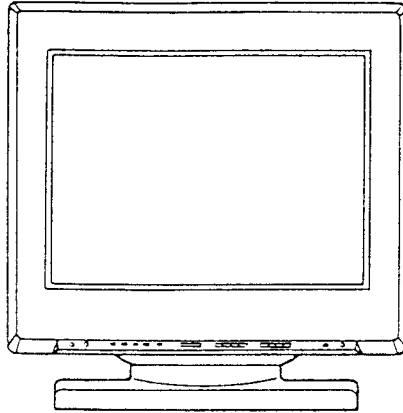


GDM-20SE1T

SERVICE MANUAL

AEP Model
Chassis No. SCC-G24G-A



N-1 CHASSIS

SPECIFICATIONS

| | |
|--------------------------|--|
| Picture tube | 0.31 mm phosphor trio pitch 20 inches measured diagonally (19" visual) 90° - degree deflection |
| Effective picture size | Approx. 388 × 292 mm (w/h) (15 × 11½ inches) |
| Resolution | Horizontal : Max. 1280 dots Vertical : Max. 1024 lines |
| Display picture size | Approx. 350 × 280 mm (w/h) (13⅞ × 11⅞ inches) or Approx. 373 × 280 mm (w/h) (14¼ × 10¾ inches) |
| Deflection frequency | Horizontal : 29 to 85 kHz Vertical : 50 to 150 Hz |
| AC input voltage/current | 100 to 120 V, 50/60 Hz, Max. 3.0 A 220 to 240 V, 50/60 Hz, 1.8 A |
| Dimensions | 474 × 474 × 501.5 mm (w/h/d) (18¾ × 18¾ × 19¾ inches) |
| Mass | Approx. 30 kg (66 lb 2 oz) |

Design and specifications are subject to change without notice.

MULTI-SCAN®
COLOR GRAPHIC DISPLAY
SONY®



POWER SAVING FUNCTION

The unit supports the computers corresponding to the "Power Saving Function".

Power saving operation

- The H sync or V sync is not present.



The unit goes into suspend mode.

- Both the H sync and V sync are not present.



The unit goes into active-off mode.

Note

As this unit has the Power Saving Function, if you turn on the unit with no signal input, the unit goes into Power Saving mode and waits for an input signal.

CAUTION

Turn power off and disconnect the power cord when you will disassemble the unit since.

TIMING SPECIFICATION

| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Resolution (H x V) | 640 x 480 | 720 x 400 | 800 x 600 | 832 x 624 | 1024 x 768 | 1024 x 768 | 1152 x 870 | 1280 x 1024 | 1280 x 1024 |
| Dot Clock (MHz) | 25.175 | 28.322 | 50.000 | 57.285 | 75.000 | 80.000 | 100.000 | 110.000 | 135.000 |
| Horizontal | | | | | | | | | |
| Hor. freq. (kHz) | 31.469 | 31.469 | 48.077 | 49.727 | 56.476 | 60.241 | 68.681 | 63.953 | 78.855 |
| H-total | 31.778 | 31.777 | 20.800 | 20.110 | 17.707 | 16.600 | 14.560 | 15.636 | 12.681 |
| H-blanking | 6.356 | 6.355 | 4.800 | 5.586 | 4.053 | 3.800 | 3.040 | 4.000 | 3.200 |
| H-Front porch | 0.636 | 0.636 | 1.120 | 0.559 | 0.320 | 0.550 | 0.320 | 0.727 | 0.237 |
| H-Sync. width | 3.813 | 3.813 | 2.400 | 1.117 | 1.813 | 1.200 | 1.280 | 1.018 | 1.067 |
| H-Back porch | 1.907 | 1.907 | 1.280 | 3.910 | 1.920 | 2.050 | 1.440 | 2.255 | 1.896 |
| H-Active (μ sec) | 25.422 | 25.422 | 16.000 | 14.524 | 13.653 | 12.800 | 11.520 | 11.636 | 9.481 |
| Vertical | | | | | | | | | |
| Ver. freq. (Hz) | 59.940 | 70.087 | 72.188 | 74.553 | 70.069 | 74.927 | 75.062 | 59.938 | 74.112 |
| V-total | 525 | 449 | 666 | 667 | 806 | 804 | 915 | 1067 | 1064 |
| V-blanking | 45 | 49 | 66 | 43 | 38 | 36 | 45 | 43 | 40 |
| V-Front porch | 10 | 12 | 37 | 3 | 3 | 3 | 3 | 1 | 0 |
| V-Sync. width | 2 | 2 | 6 | 3 | 6 | 3 | 3 | 5 | 30 |
| V-Back porch | 33 | 35 | 23 | 37 | 29 | 30 | 39 | 37 | 10 |
| V-Active (Lines) | 480 | 400 | 600 | 624 | 768 | 768 | 870 | 1024 | 1024 |
| Sync. | External | External | External | Internal | External | Internal | Internal | External | External |
| H-Polarity | (-) | (-) | (+) | N.A | (-) | N.A | N.A | (-) | (+) |
| V-Polarity | (-) | (+) | (+) | N.A | (-) | N.A | N.A | (-) | (+) |
| Scanning mode | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace |

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

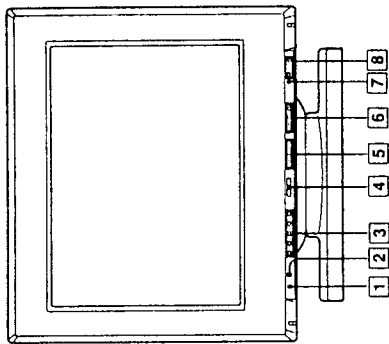
SAFETY-RELATED COMPONENT WARNING!!

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

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Function of Controls



1 RESET button
Press to reset the adjustment data to the factory-preset levels for the input signal being received.

2 CTRL (control) button
To reset all the adjustment data to the factory-preset levels, press the RESET button **1** while holding down this button.

3 Indicator
The indicator corresponding to the item selected with the SELECT button **4** lights up.
CENT: Centering
SIZE: Picture size
GEOM: Picture tilt/Horizontal pincushion
CONV: Convergence
C TEMP: Color temperature

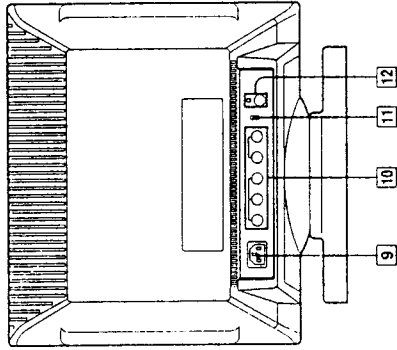
4 SELECT button
Press to select an item.
Hold down for more than one second until an indicator lights up, then press repeatedly to select an item **3**.

5 (brightness) buttons
Press + or - to adjust the picture brightness.
When an item is selected, use these buttons to adjust the picture size and centering in the vertical direction and the picture tilt.

6 (contrast) buttons
Press + or - to adjust the picture contrast.
When an item is selected, use these buttons to adjust the picture size and centering in the horizontal direction, the horizontal pincushion and the colour temperature.

7 POWER SAVING indicator
Lights up when the monitor is in Power Saving Mode.
Blinks when you reached the limit of the adjustable range or while in resetting mode.

8 power switch and indicator
Press to turn the monitor on or off. The indicator lights up when the monitor is turned on. To disconnect the power supply, disconnect the AC power cord.



9 AC IN connector
Plug in an AC power cord.

10 Video input connector (5 BNC)
The connector accepts RGB video signals (0.714 Vp-p, positive).
R
G
B
(CS)
HD
VD

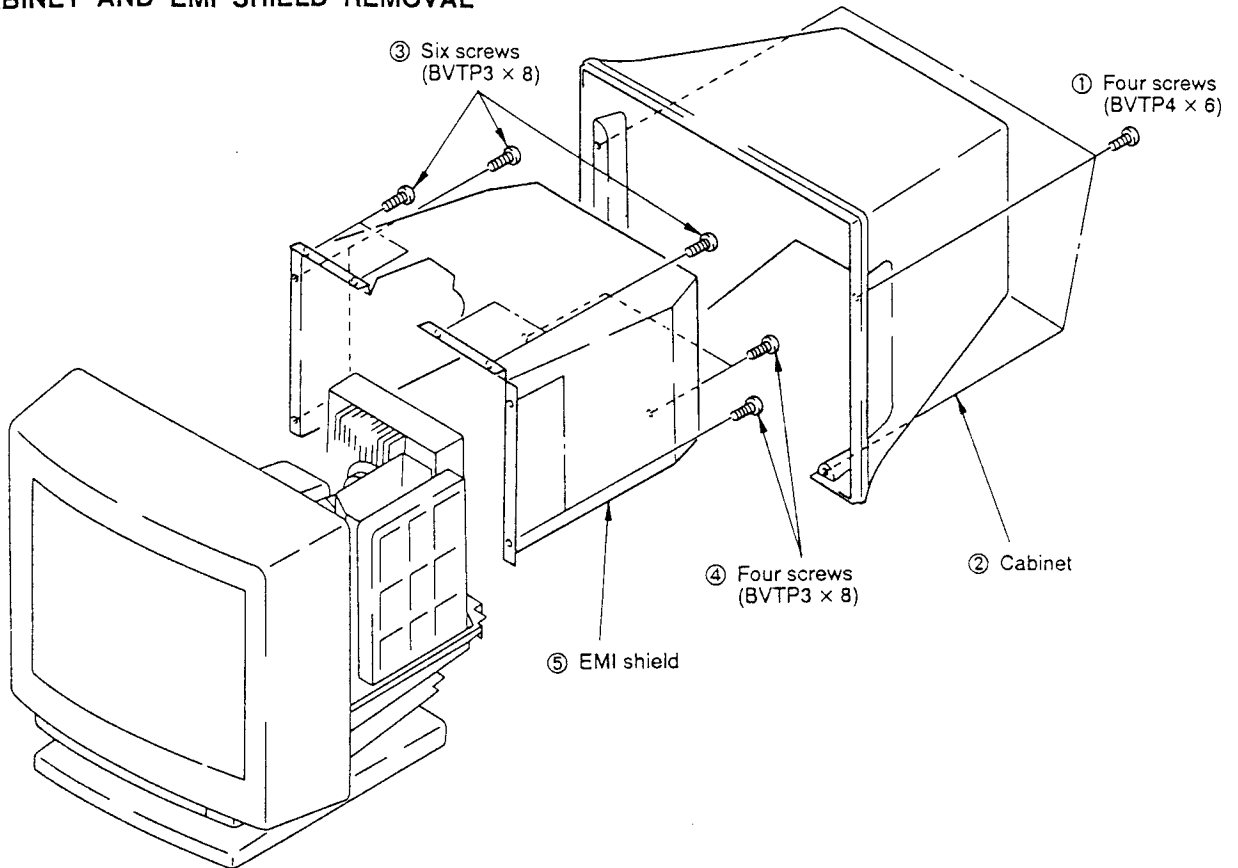
11 75 Ω /2 k Ω selector
Switches the impedance of the video input connector **10** termination to 75 Ω or to 2 k Ω .
(Default setting is 2 k Ω)

12 SERVICE button and terminal
The button and the terminal are to be used by service personnel only.

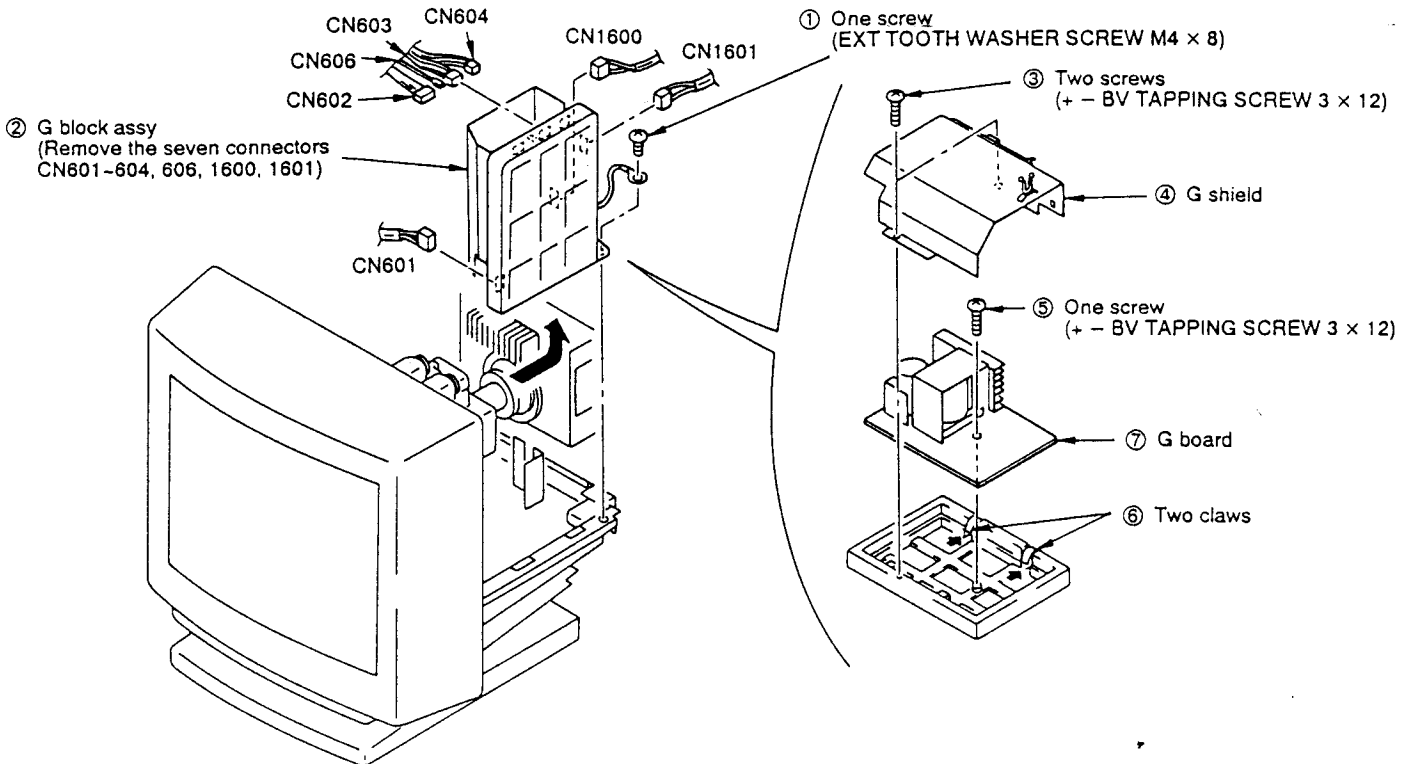
Note
If you use a computer or video board of high output level (about 1.0 Vp-p), you may not be able to obtain the optimum display. In such case, try decreasing the picture contrast, or use a computer or video board with a lower output level.

SECTION 1 DISASSEMBLY

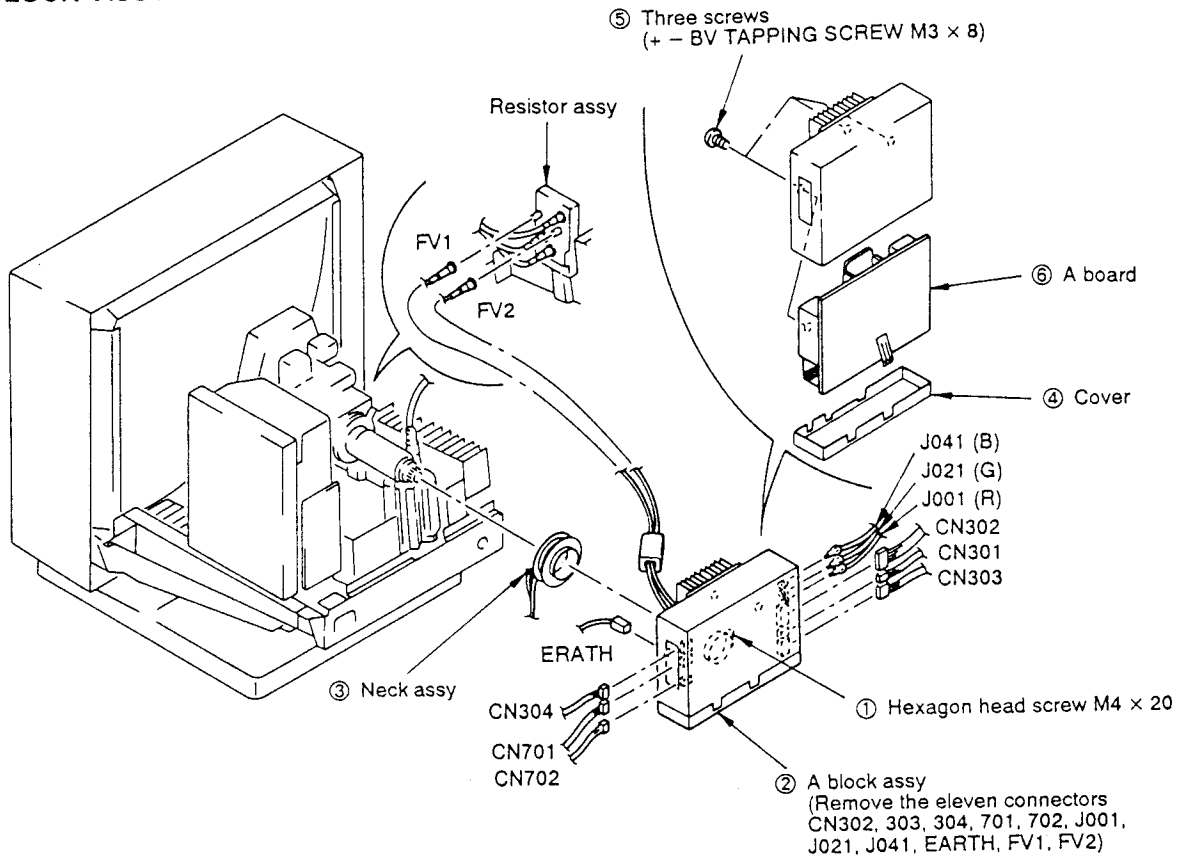
1-1. CABINET AND EMI SHIELD REMOVAL



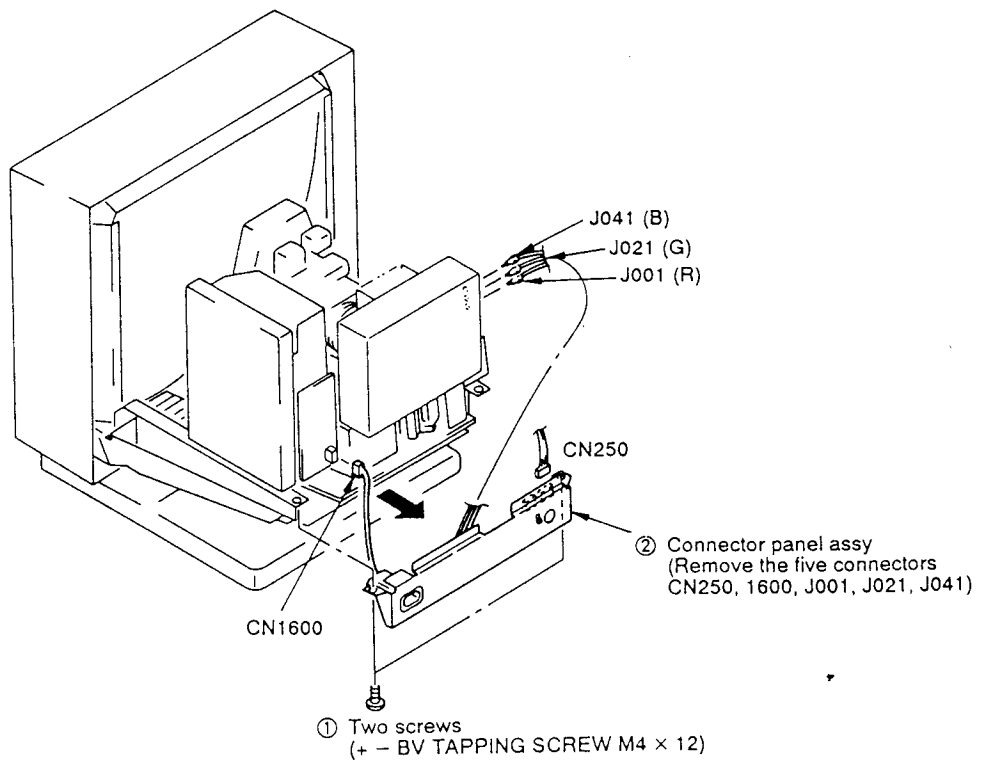
1-2. G BLOCK ASSY REMOVAL



1-3. A BLOCK ASSY REMOVAL



1-4. CONNECTOR PANEL ASSY REMOVAL

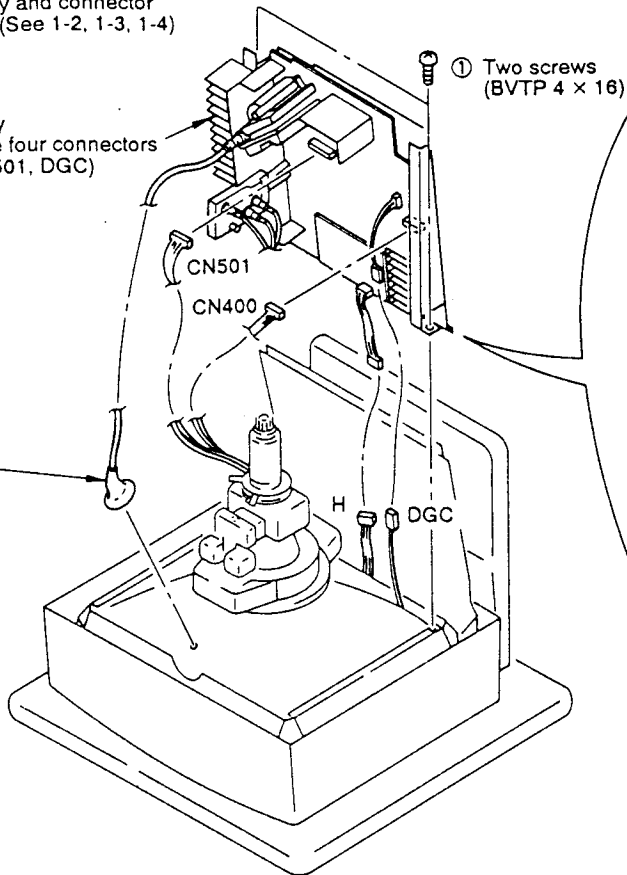


1-5. CHASSIS ASSY REMOVAL

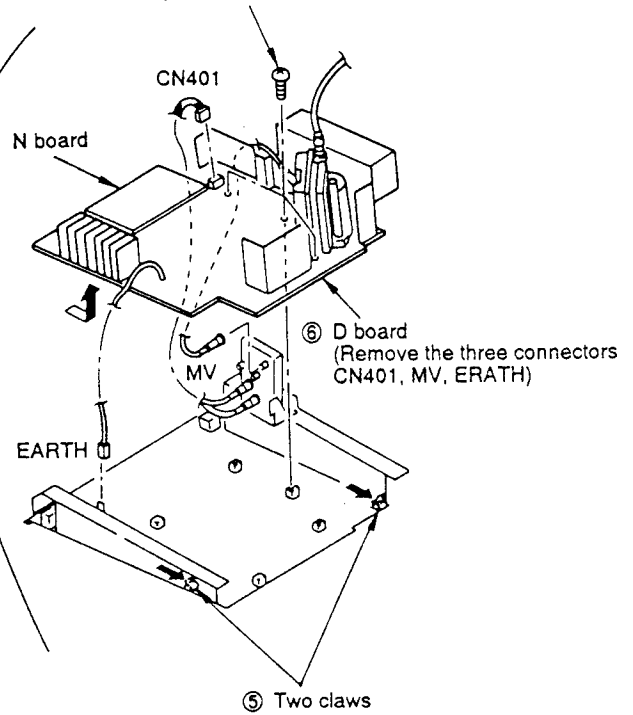
※ Remove the G block assy,
A block assy and connector
panel assy (See 1-2, 1-3, 1-4)

③ Chassis assy
(Remove the four connectors
CN H, 400, 501, DGC)

② Anode cap



④ Three screws
(+ - BV TAAPPING screw 3 x 12)

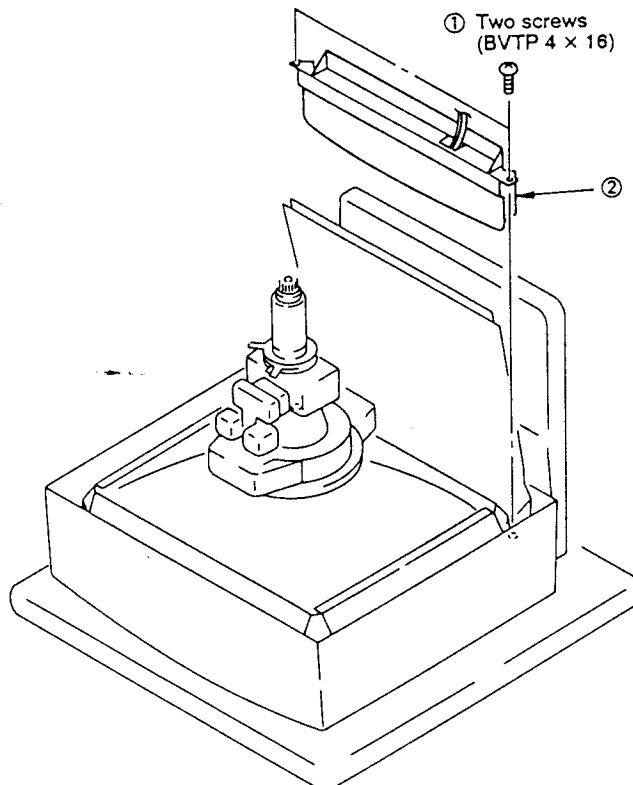


1-6. FRONT BLOCK ASSY REMOVAL

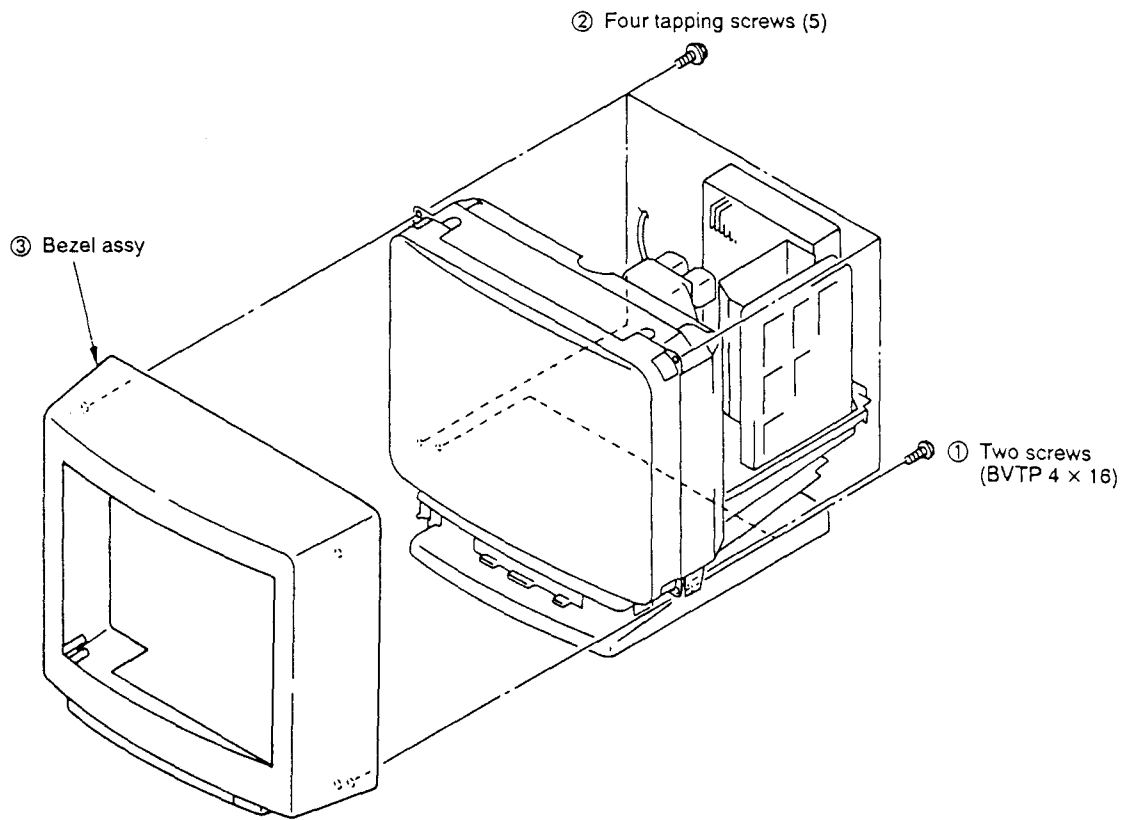
※ Remove the chassis assy
(See 1-5)

① Two screws
(BVTP 4 x 16)

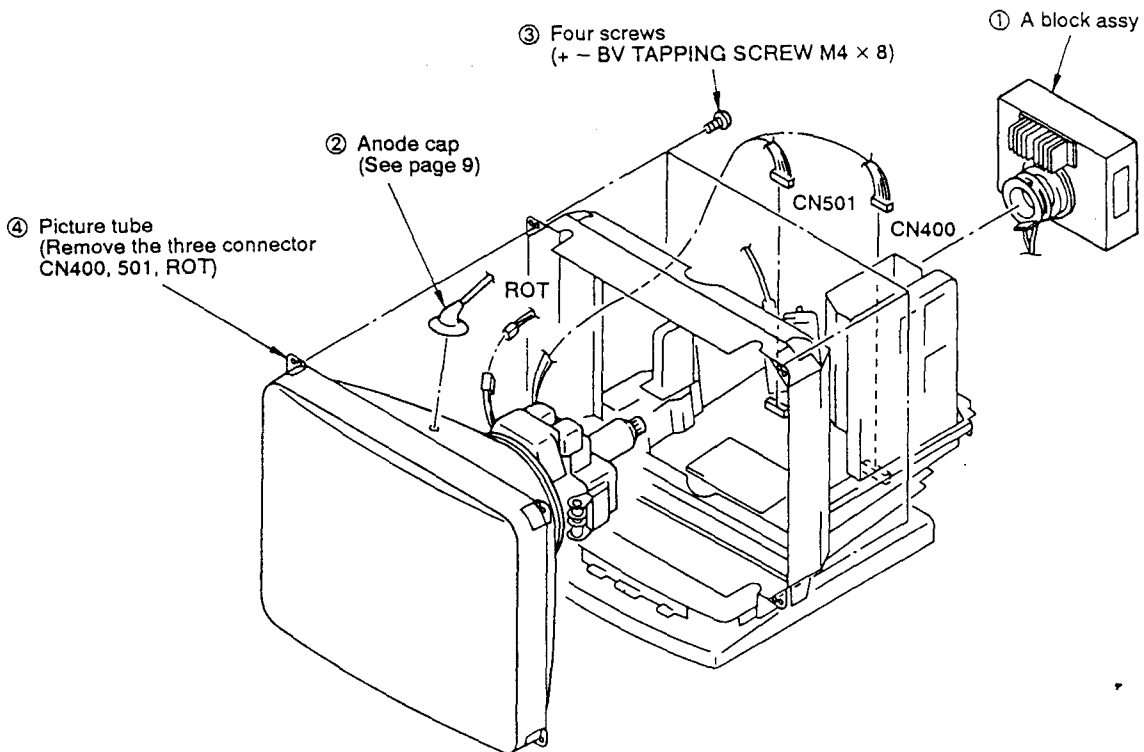
② Front block assy



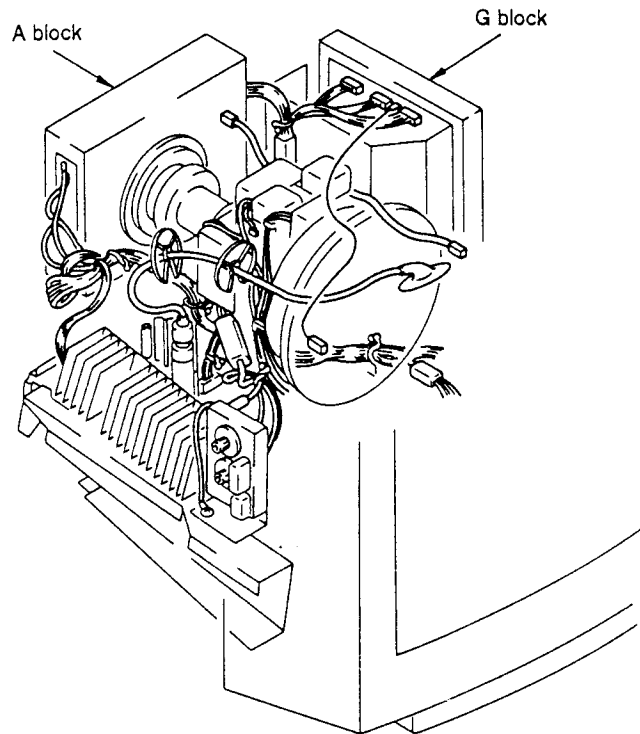
1-7. BEZEL ASSY REMOVAL



1-8. PICTURE TUBE REMOVAL



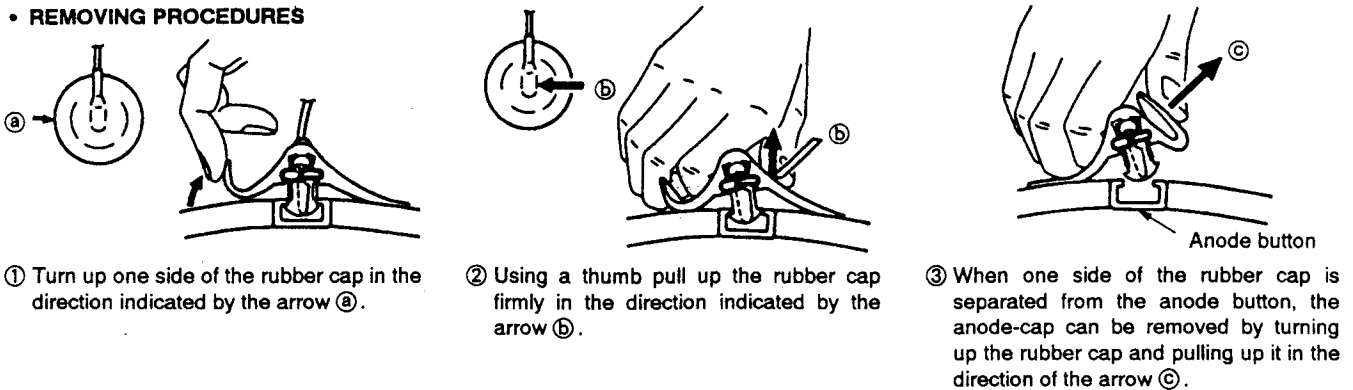
1-9. WIRING HARNESS LAYOUT



• REMOVAL OF ANODE-CAP

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

• REMOVING PROCEDURES



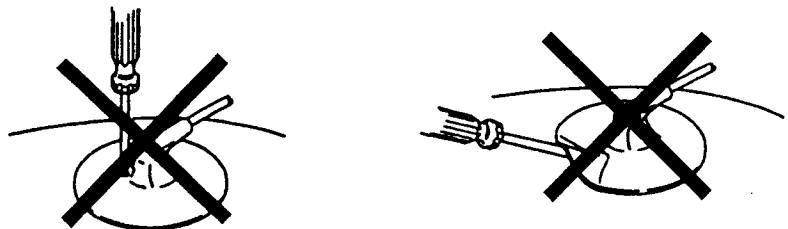
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

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 ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardy not to hurt inside of anode-caps!
A metal fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardy!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 2

SAFETY RELATED ADJUSTMENT

When replacing or repairing the shown below table, the following operational checks must be performed as a safety precaution against X-rays emissions from the unit.

| | |
|--------------------------------------|---|
| HV Regulator Circuit Check | D board ----- IC804, T800 • Mounted D board |
| HV. Hold-Down Circuit Check | D board ----- IC804, R826, R832, R842, R843, T800 • Mounted D board |
| Beam Current Protector Circuit Check | D board ----- IC804, T800 • Mounted D board |
| B+ Regulator Circuit Check | G board ----- IC602, IC603, R630 • Mounted G board • Power Supply Block |
| OVP Circuit Check | G board ----- D620, R631, R633, R635, Q610 • Mounted G board • Power Supply Block |

a) HV Regulator Check

- 1) Input a white dot signal and set the contrast and bright to the minimum level.

check point
pin ② of CN801, 9.00 ± 0.06 VDC

b) HV Hold-Down Check

- 1) Check if the raster disappears when the voltage less than 8.80 VDC is applied between pin ⑤ of CN801 and GND from the external power source.

c) Beam Protector-1 and Protector-2 Check

- 1) Record the initial value of ABL-SHUTDOWN, input the "255" for resistor value.
- 2) Reduce the resistance gradually from the maximum level using a variable resistor of more than 12 [K-ohm] and an ampermeter connected in series between pin ① of CN801 and GND.
- 3) Check that the protector circuit operates to disappear the raster when the current level drops less than 1.36 mA.
- 4) Back the value of ABL-SHUTDOWN to the initial regulation value.

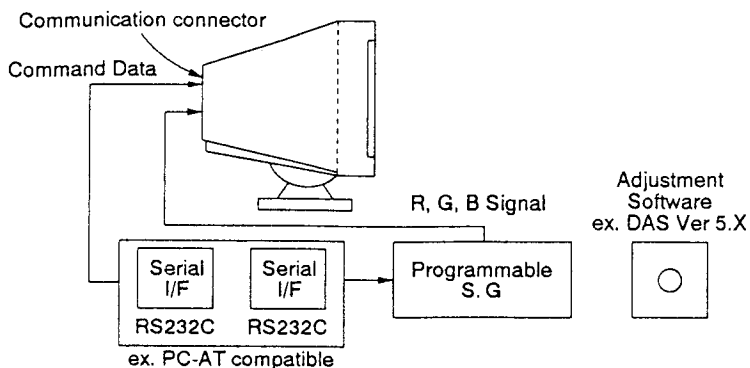
d) B+ Regulator Circuit Check

- 1) Input a white dot signal and set the contrast and bright to the minimum level.

check point
pin ① of CN602, 144.0 ± 3 VDC

SECTION 3 ADJUSTMENTS

Connect the communication cable of the computer (ex. PC-AT) to the connector located on the rear side of the monitor. Run the service software and then follow the instruction.



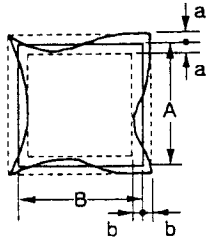
• White Balance Adjustment Methods (with HSI Function)

| Adjustments Procedure | Input signal | Value of CONT, BRT | Adjust point |
|---------------------------------------|------------------------------------|---|---|
| Input initial data | | | |
| 1 | Gray scale | | G2 |
| 2 | Black | CONT=0, BRT=255 Note 1 CUT MAX=150, G CUT OFF MIN | G. CUT OFF MAX, R. B CUT OFF MAX |
| 3 | Full white pattern | CONT =255, BRT=80 | G DRV |
| 4 | COPY G DRV data to R DRV and B DRV | | |
| 5 | Full white pattern | CONT=255, BRT=255 | R DRV, B DRV |
| 6 | | Confirm luminance | Incase of difference readjust CONT MAX/BRT MAX |
| 7 | Gray (30 IRE) | CONT=255, BRT=80 | R, B CUT MIN |
| 8 | Full white pattern | CONT=255, BRT=80 | R, B DRV Note 2 |
| 9 | Full white pattern | CONT=255, BRT=255 | CONT MAX/BRT MAX |
| 10 | Full white pattern | CONT=255, BRT=80 | CONT MAX/BRT MIN |
| 11 | Full white pattern | CONT=0, BRT=255 | CONT MIN/BRT MAX |
| 12 | Full white pattern | CONT=0, BRT=80 | CONT MIN/BRT MIN |
| 13 | | CONT=255, BRT=80 | Color save |
| Copy BLE data to RED, set color | | | |
| 1 | Black pattern | CONT=0, BRT=255 | R, B CUT OFF MAX |
| 2 | White pattern | CONT=255, BRT=255 | G DRV, B DRV |
| 3 | Gray (30IRE) | CONT=255, BRT=80 | R, B CUT MIN |
| 4 | Full white pattern | CONT=255, BRT=80 | G, B DRV Note 3 |
| 5 | | | Color save |
| Copy BLE data to GRN, set color | | | |
| 1 | Black pattern | CONT=0, BRT=255 | R, B CUT OFF MAX |
| 2 | White pattern | CONT=255, BRT=255 | R DRV, B DRV |
| 3 | Gray (30IRE) | CONT=255, BRT=80 | R, B CUT MIN |
| 4 | Full white pattern | CONT=255, BRT=80 | R, B DRV Note 3 |
| 5 | | | Color save |
| Copy BLE data to WHT, Set color NDX=0 | | | |
| 1 | Black pattern | CONT=0, BRT=255 | R, B CUT OFF MAX |
| 2 | White pattern | CONT=255, BRT=255 | G DRV, B DRV |
| 3 | Gray pattern | CONT=255, BRT=80 | R, B CUT MIN |
| 4 | Full white pattern | CONT=255, BRT=80 | G, B DRV Note 3 |
| 5 | | CONT=255, BRT=80 | Color save |
| Set color NDX=0 | | | |
| | Gray scale | CONT=255, BRT=80 | G2 should only be readjusted if the back ground raster is visible |
| Set color NDX=1 | | | |
| | | | Service save |
| Set color NDX=0, (6500 K) | | Hue=0, Sat=0 | |
| Set color NDX=1, (9300 K) | | Hue=168, Sat=255 | Hue, Sat |
| Set color NDX=2, (6500 K) | | Hue=0, Sat=0 | |
| Set color NDX=3, (5000 K) | | | Hue, Sat |
| Set control register #2 to 234 | | | |
| | | | Color save |

Note 1: $\frac{110 \times 255 - 80 \times (\text{G. CUT MAX value})}{175}$

Note 2: Return to 7 for Tracking.
Note 3: Return to 3 for Tracking.

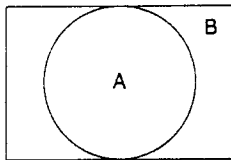
● **Vertical and Horizontal Position and Size Specification**



$a < 2.8 \text{ mm}$
 $b < 2.8 \text{ mm}$

| mode | A | B |
|---------|-----|-----|
| 16 × 10 | 360 | 270 |
| 16 × 12 | 373 | 280 |
| 20 × 16 | 350 | 280 |

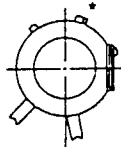
● **Convergence Specification**



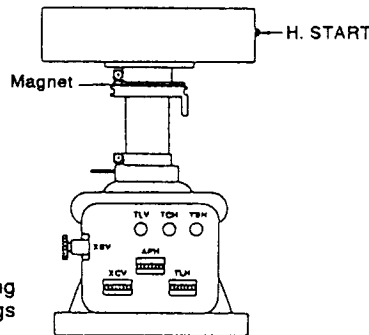
$A \leq 0.24 \text{ mm}$
 $B \leq 0.32 \text{ mm}$

● **CONVERGENCE ROUGH ADJUSTMENT**

- (1) Receive an image of the white crosshatch signals.
- (2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other (See figure).
- (3) Make rough adjustment of the H direction convergence by using H. STAT VR (right side of the video case).
- (4) Make a rough adjustment of the V direction convergence by using "V. STAT".



* Set so that the protruding parts of the 2 magnet rings agree with each other.



● **CONVERGENCE FINE ADJUSTMENT**

- (1) Input white crosshatch signals (white lines on black) in the prime mode. Adjust the screen size to 373 × 280.
- (2) Confirm that the values of "H. CONV" and "V. CONV" are "0" (center).
- (3) Turn the magnet ring (6-fold poles) behind DY and correct to zero. (See figure.)
- (4) Turn the H. STAT VR and set the parallel lines of the 3 colors R, G and B (vertical lines). Set the parallel lines of the 3 colors R, G and B with "V. CONV" (horizontal lines).
- (5) Turn the magnet ring (6-fold poles) behind the neck assembly and adjust so that the R-G distance of the parallel lines of the 3 colors and the B-G distance become identical.
- (6) Return the value of H. STAT VR and "V. CONV" used in (3) and set the misconvergence of the center of the screen to zero.

- (7) Fine adjustment of convergence
 - a) Set "V. CONV TOP" and "V. CONV BOT" to zero.
 - b) Turn the XBV reactor and adjust the XBV misconvergence. (The reactor on the far left side of the upper circuit board when seen from the CRT side.)
 - c) Turn the XCV reactor and adjust the XCV misconvergence. (The reactor on the near left side of the upper circuit board when seen from the side.)
- Note: When adjusting XBV, the "V. CONV" shall be reajusted.
 When XCV exceeds the adjustment range, oscillate the upper and lower parts of DY and adjust.
- d) Turn the APH reactor and adjust th H. AMP misconvergence. (The near center reactor of the upper circuit board when see from the CRT tube side.)
 - e) Turn the TLH reactor and adjust the H. TILT misconvergence. (The near right side reactor of the upper circuit board when seen from the CRT tube side.) (Note: Readjust H. STAT VR too.)
 - f) Adjust the YBH misconvergence with the VR YBH on the DY. (The far right side VR when seen from the CRT tube side.)
 - g) Adjust the YCH misconvergence with the VR YCH on DY. (The far center VR when seen from the CRT tube side.)
 - h) Adjust "V. CONV BOT".
 - i) Adjust "V. CONV TOP".
 - j) Adjust the upper and lower TLV with VR TLV on DY as necessity required. (The far left side VR when seen from the CRT tube side.) (Note: When the horizontal trapezoid does not agree with the specification, carry out left and right oscillation and tracking of DY.)
 - k) Confirm the convergence of the whole screen, and carry out H. STAT correction and the operations of c) - k), and Permalloy correction.
 - l) Confirm the convergence of the whole screen.
 - m) Switch the mode between the prime mode and the convergence check mode (mode 7), and confirm the convergence in each mode after having carried out fine adjustment with H. STAT and V. STAT on the front panel.
 - n) Fix the 2 places of the XBV, XCV, APH and TCH reactors and the 6-fold poles with a white pen.
 - o) Fix the DV spacer (large) and the Permalloy with RTV.

SECTION 4

TROUBLESHOOTING

This diagnostic troubleshooting guide uses the monitor symptom as a clue for selecting a repair procedure. Select the listed symptom closest to that of your monitor and follow the procedure given for that symptom in this troubleshooting guide. If the same trouble recurs even after you have changed a block or part, re-install the original block or part, then proceed to the next step.

| Symptoms | Repair Procedure |
|---|--|
| • No Power | <ol style="list-style-type: none">1. Check whether the internal power supply connector is connected.2. Inspect the power supply fuse. → If it has blown, change it. If it blows again, proceed to the next step.3. Change the Power block.4. Change the D board block. |
| • Sametime shutdown after work while | <ol style="list-style-type: none">1. Check the hold down voltage.2. Change the high voltage capacitor. C8053. Change the D board block. |
| • Abnormal coil demagnetization | <ol style="list-style-type: none">1. Change the Power block. |
| • No Picture | <ol style="list-style-type: none">1. Adjust the CONTRAST control.2. Confirm the input signal.3. Confirm connector between power block and D board.4. Inspect the power supply fuse. → If it has blown, change it. If it blows again, proceed to the next step.5. Change the Power block.6. Change the D board block.7. Change the A board.8. Change the U board.9. Change the CRT. |
| • Display area too small/large/short/tall/ narrow/wide | <ol style="list-style-type: none">1. Adjust the horizontal or vertical size.2. Change the D board block. |
| • Horizontal distortion | <ol style="list-style-type: none">1. Re-adjust using the service software.2. Change the D board block. |
| • Vertical distortion | <ol style="list-style-type: none">1. Re-adjust using the service software.2. Change the D board block. |
| • Picture tilted | <ol style="list-style-type: none">1. Make the tilt adjustment. |
| • Picture flickers | <ol style="list-style-type: none">1. Check the fastening of the ground line.2. Check the grounding of the connected computer.3. Change the D board Block. |
| • Brightness can not be adjusted | <ol style="list-style-type: none">1. Change the A board.2. Change the H board. |
| • Contrast can not be adjusted | <ol style="list-style-type: none">1. Change the A board.2. Change the H board. |
| • Picture too bright/dark | <ol style="list-style-type: none">1. Adjust the BRIGHTNESS control.2. Adjust the white balance.3. Adjust the CONTRAST and BRIGHT controls.4. Change the A board.5. Change the Power block.6. Change the CRT. |

For picture size, picture distortion, and other specifications, place the ball chart on the set and check and adjust.

5-1. BLOCK DIAGRAMS

... as a clue for selecting a repair procedure. Select the listed ...
... are given for that symptom in this troubleshooting guide. If the ...
... re-install the original block or part, then proceed to the next step.

Procedure

... after the internal power supply connector is connected.
... power supply fuse.
... blown, change it. If it blows again, proceed to the next step.
... Power block.
... D board block.

... old down voltage.
... night voltage capacitor. C805
... D board block.

... Power block.
... CONTRAST control.
... input signal.
... connector between power block and D board.
... power supply fuse.
... blown, change it. If it blows again, proceed to the next step.
... Power block.

... D board block.
... A board.
... J board.
... CRT.

... horizontal or vertical size.
... D board block.

... ing the service software.
... D board block.

... ing the service software.
... D board block.

... adjustment.

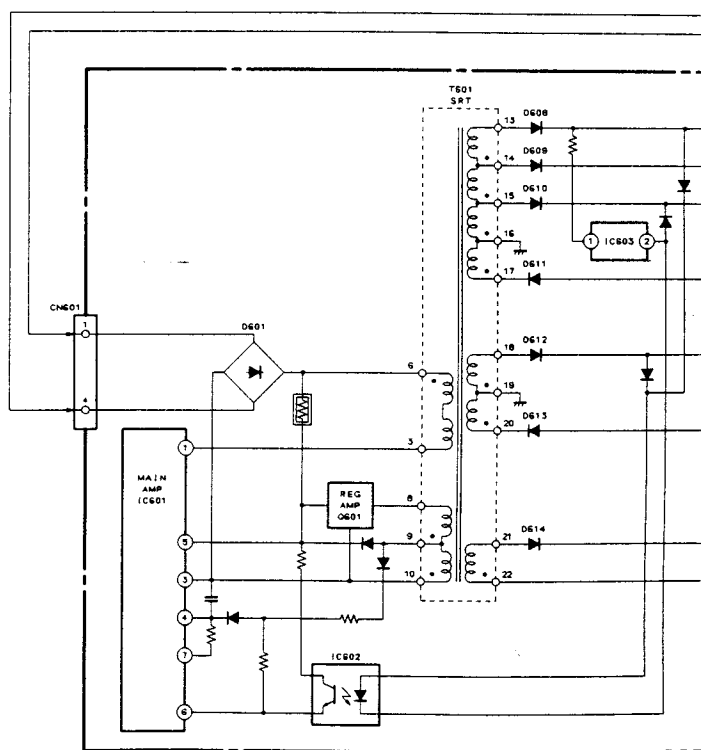
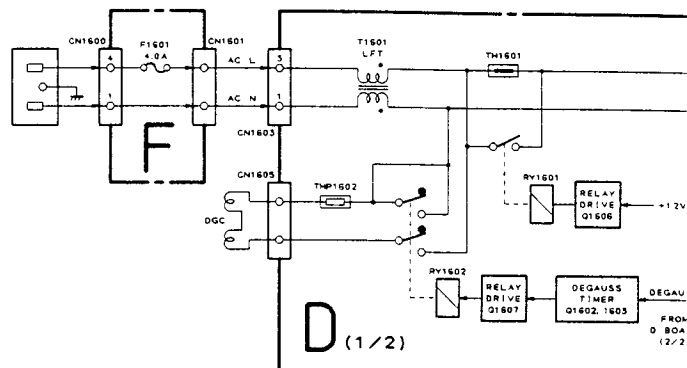
... tening of the ground line.
... ounding of the connected computer.
... D board Block.

... board.
... board.
... board.
... board.

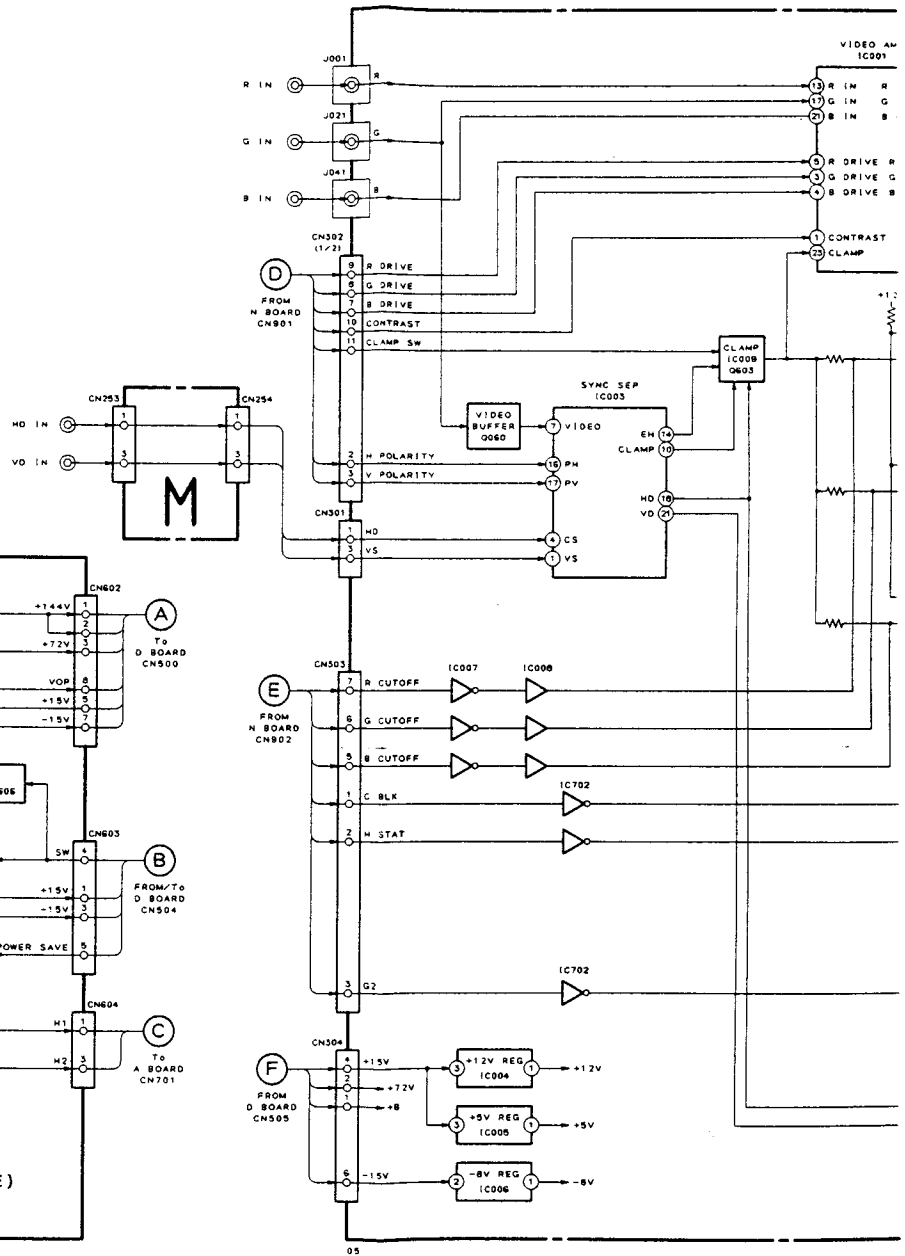
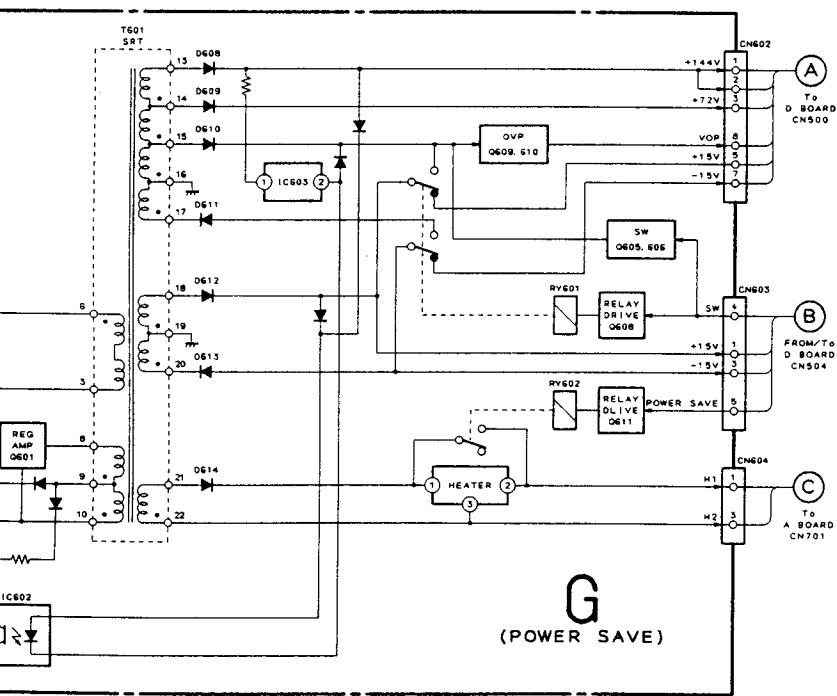
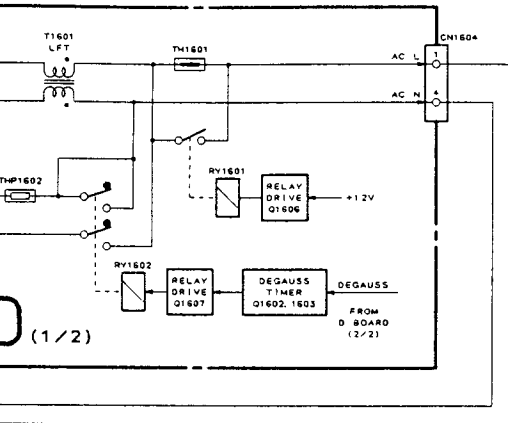
... RIGHTNESS control.
... white balance.
... CONTRAST and BRIGHT controls.

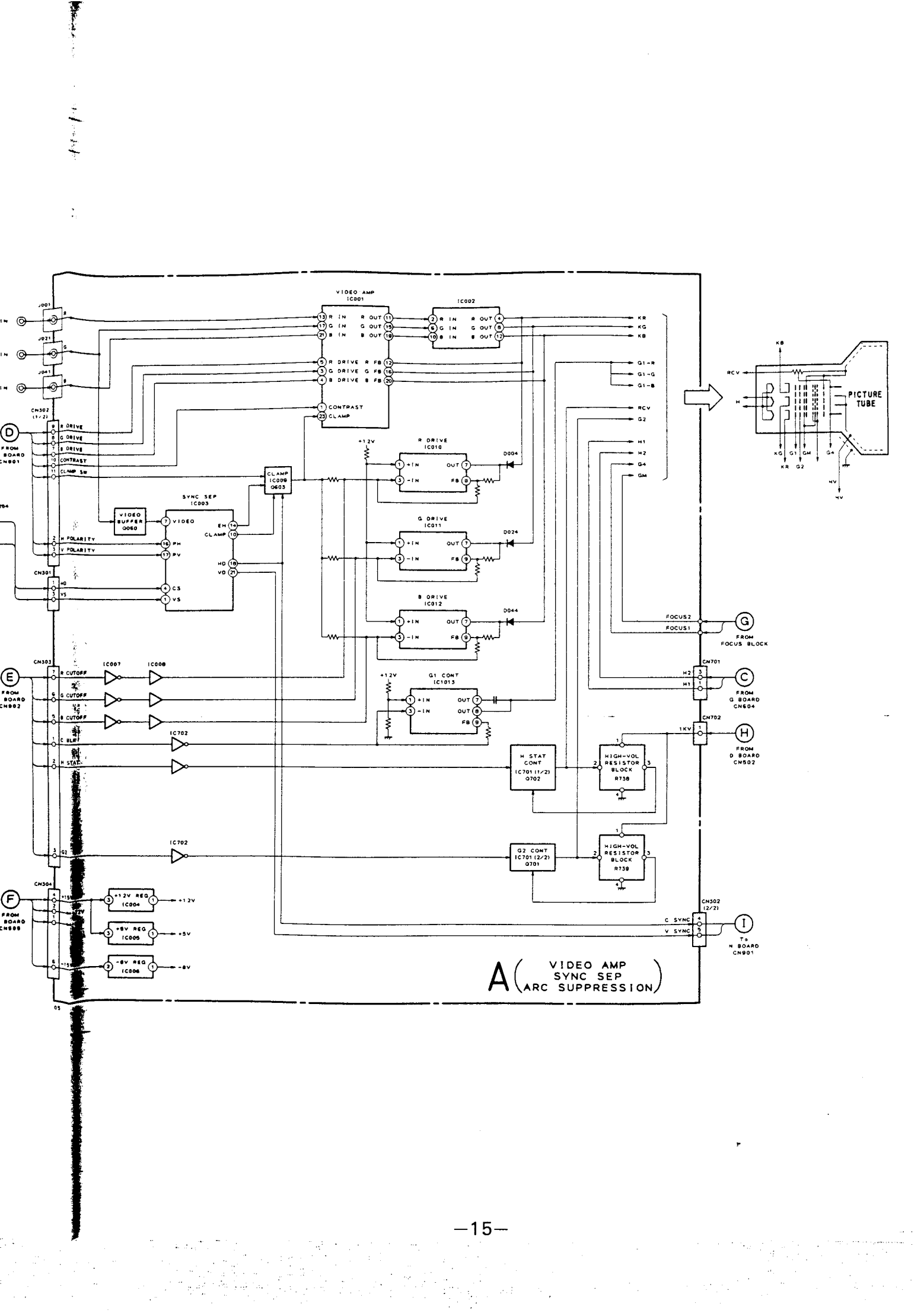
... board.
... power block.
... CRT.

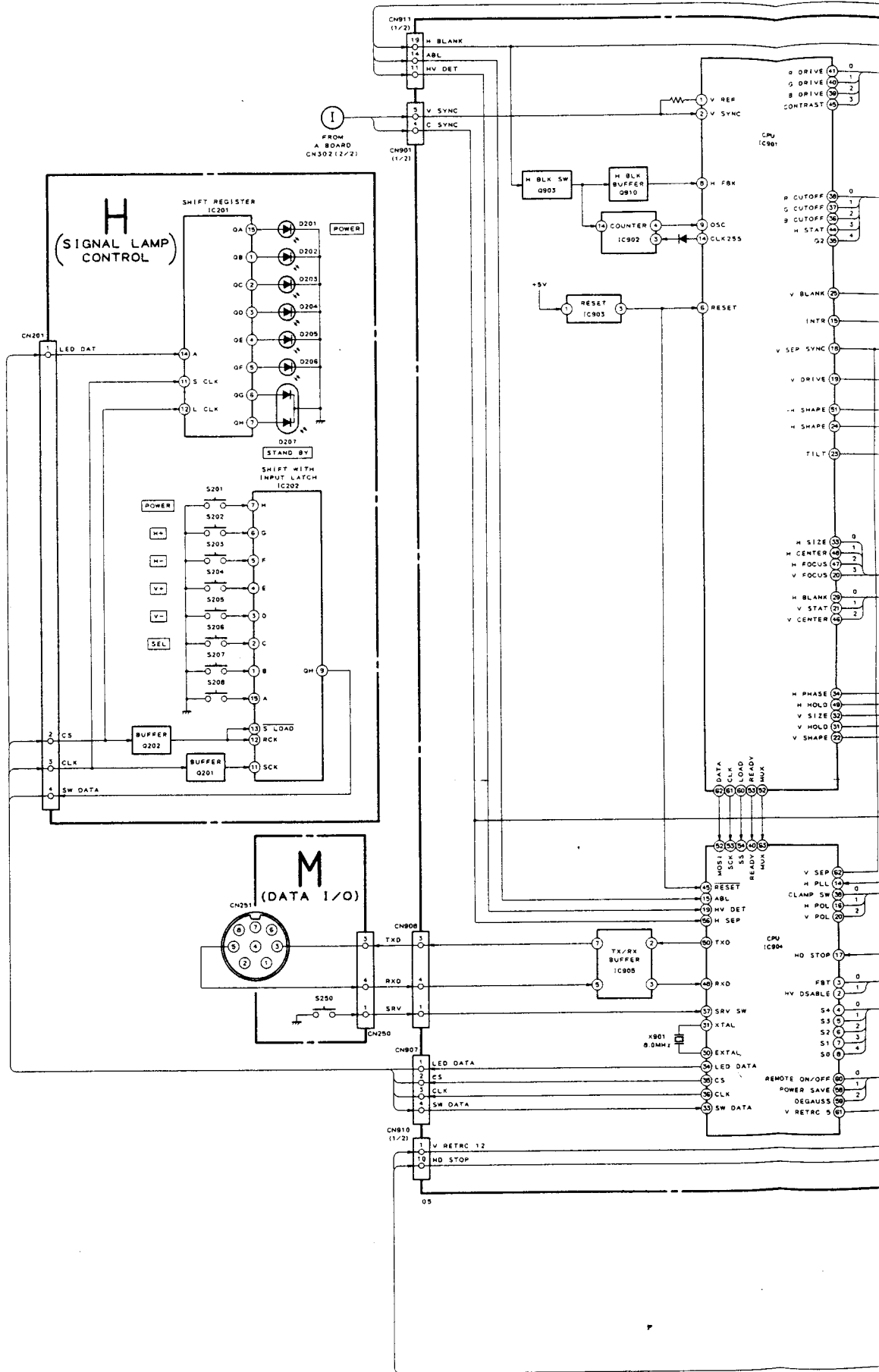
... ne ball chart on the set and check and adjust.

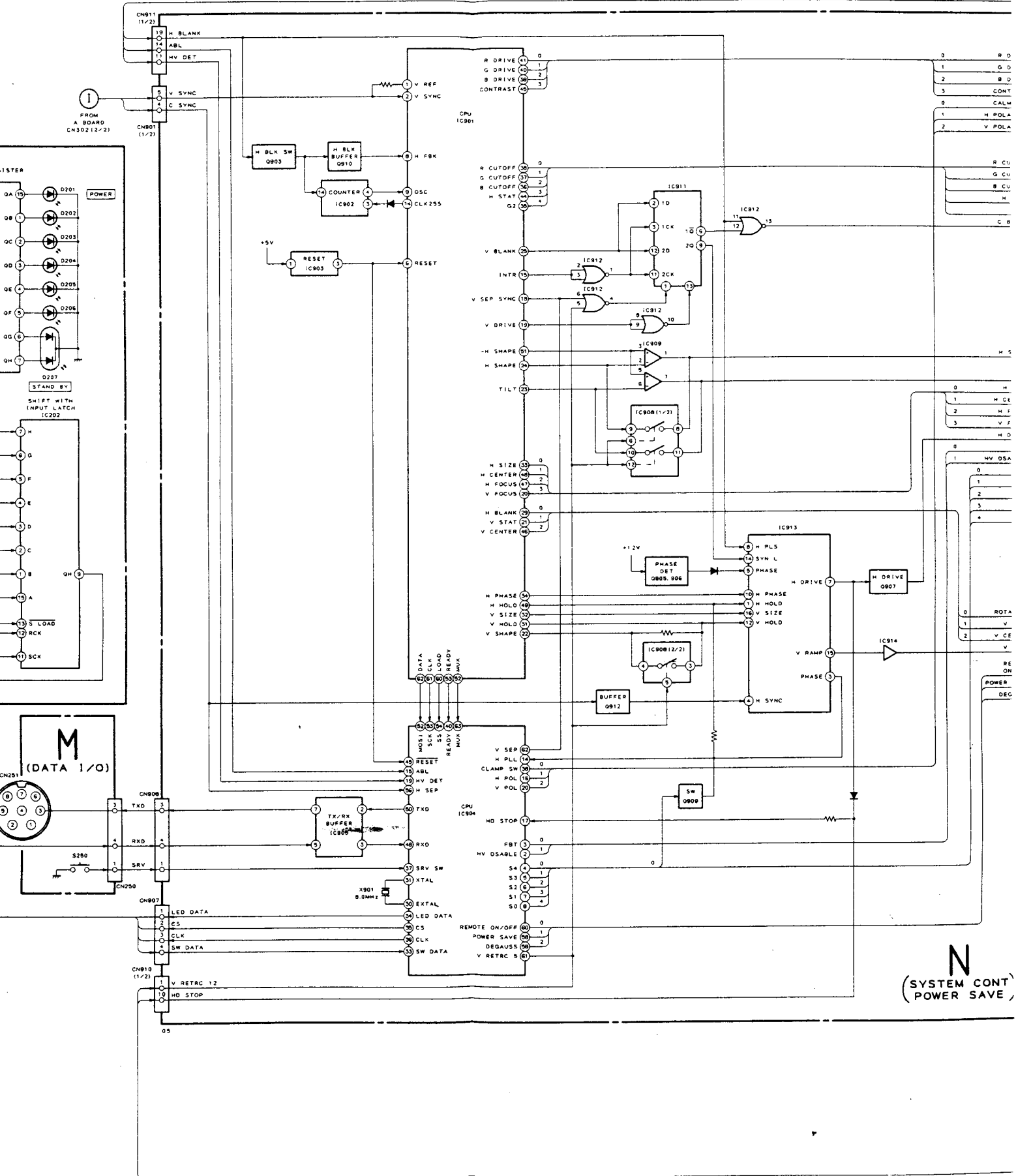


SECTION 5 DIAGRAMS

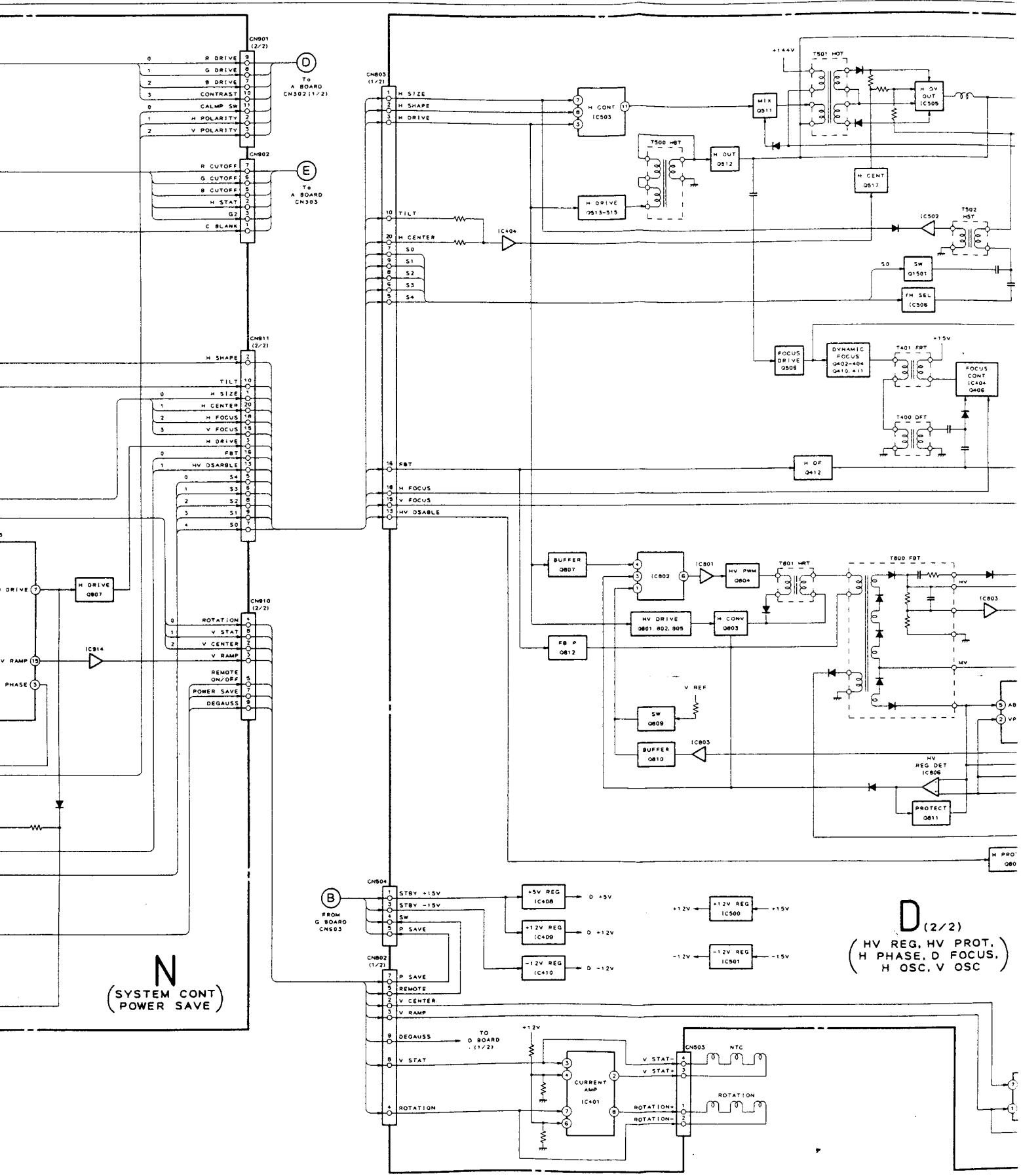








N
(SYSTEM CONT)
(POWER SAVE)



N
(SYSTEM CONT)
POWER SAVE

D (2/2)
(HV REG, HV PROT,
H PHASE, D FOCUS,
H OSC, V OSC)

POWER SAVING FUNCTION

The unit supports the computers corresponding to the "Power Saving Function".

Power saving operation

- The H sync or V sync is not present.



The unit goes into suspend mode.

- Both the H sync and V sync are not present.



The unit goes into active-off mode.

Note

As this unit has the Power Saving Function, if you turn on the unit with no signal input, the unit goes into Power Saving mode and waits for an input signal.

CAUTION

Turn power off and disconnect the power cord when you will disassemble the unit since.

TIMING SPECIFICATION

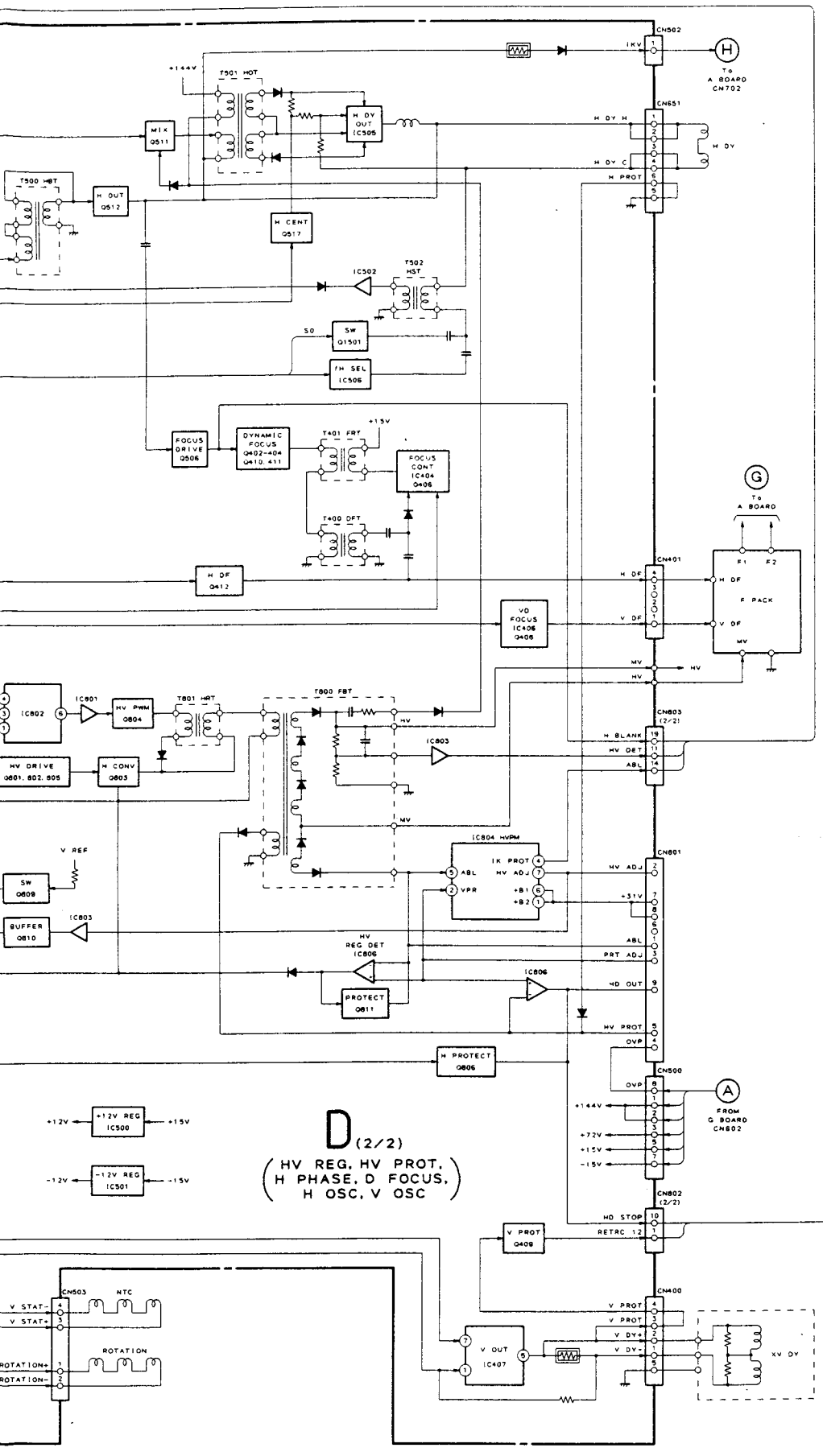
| Mode | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Resolution (H x V) | 640 x 480 | 720 x 400 | 800 x 600 | 832 x 624 | 1024 x 768 | 1024 x 768 | 1152 x 870 | 1280 x 1024 | 1280 x 1024 |
| Dot Clock (MHz) | 25.175 | 28.322 | 50.000 | 57.285 | 75.000 | 80.000 | 100.000 | 110.000 | 135.000 |
| Horizontal | | | | | | | | | |
| Hor. freq. (kHz) | 31.469 | 31.469 | 48.077 | 49.727 | 56.476 | 60.241 | 68.681 | 63.953 | 78.855 |
| H-total | 31.778 | 31.777 | 20.800 | 20.110 | 17.707 | 16.600 | 14.560 | 15.636 | 12.681 |
| H-blanking | 6.356 | 6.355 | 4.800 | 5.586 | 4.053 | 3.800 | 3.040 | 4.000 | 3.200 |
| H-Front porch | 0.636 | 0.636 | 1.120 | 0.559 | 0.320 | 0.550 | 0.320 | 0.727 | 0.237 |
| H-Sync. width | 3.813 | 3.813 | 2.400 | 1.117 | 1.813 | 1.200 | 1.280 | 1.018 | 1.067 |
| H-Back porch | 1.907 | 1.907 | 1.280 | 3.910 | 1.920 | 2.050 | 1.440 | 2.255 | 1.896 |
| H-Active (μ sec) | 25.422 | 25.422 | 16.000 | 14.524 | 13.653 | 12.800 | 11.520 | 11.636 | 9.481 |
| Vertical | | | | | | | | | |
| Ver. freq. (Hz) | 59.940 | 70.087 | 72.188 | 74.553 | 70.069 | 74.927 | 75.062 | 59.938 | 74.112 |
| V-total | 525 | 449 | 666 | 667 | 806 | 804 | 915 | 1067 | 1064 |
| V-blanking | 45 | 49 | 66 | 43 | 38 | 36 | 45 | 43 | 40 |
| V-Front porch | 10 | 12 | 37 | 3 | 3 | 3 | 3 | 1 | 0 |
| V-Sync. width | 2 | 2 | 6 | 3 | 6 | 3 | 3 | 5 | 30 |
| V-Back porch | 33 | 35 | 23 | 37 | 29 | 30 | 39 | 37 | 10 |
| V-Active (Lines) | 480 | 400 | 600 | 624 | 768 | 768 | 870 | 1024 | 1024 |
| Sync. | External | External | External | Internal | External | Internal | Internal | External | External |
| H-Polarity | (-) | (-) | (+) | N.A | (-) | N.A | N.A | (-) | (+) |
| V-Polarity | (-) | (+) | (+) | N.A | (-) | N.A | N.A | (-) | (+) |
| Scanning mode | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace | Non-interlace |

WARNING!!

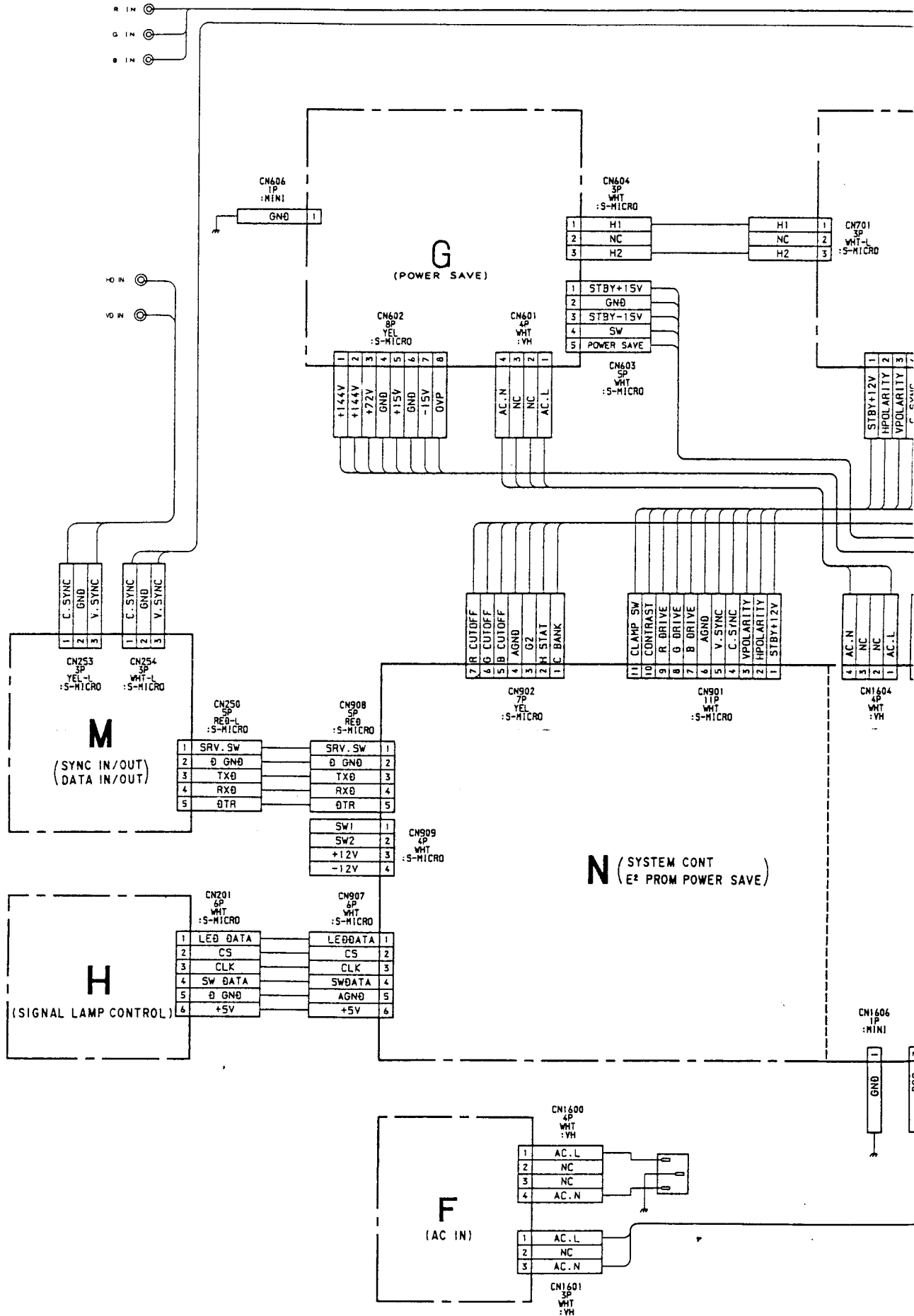
NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

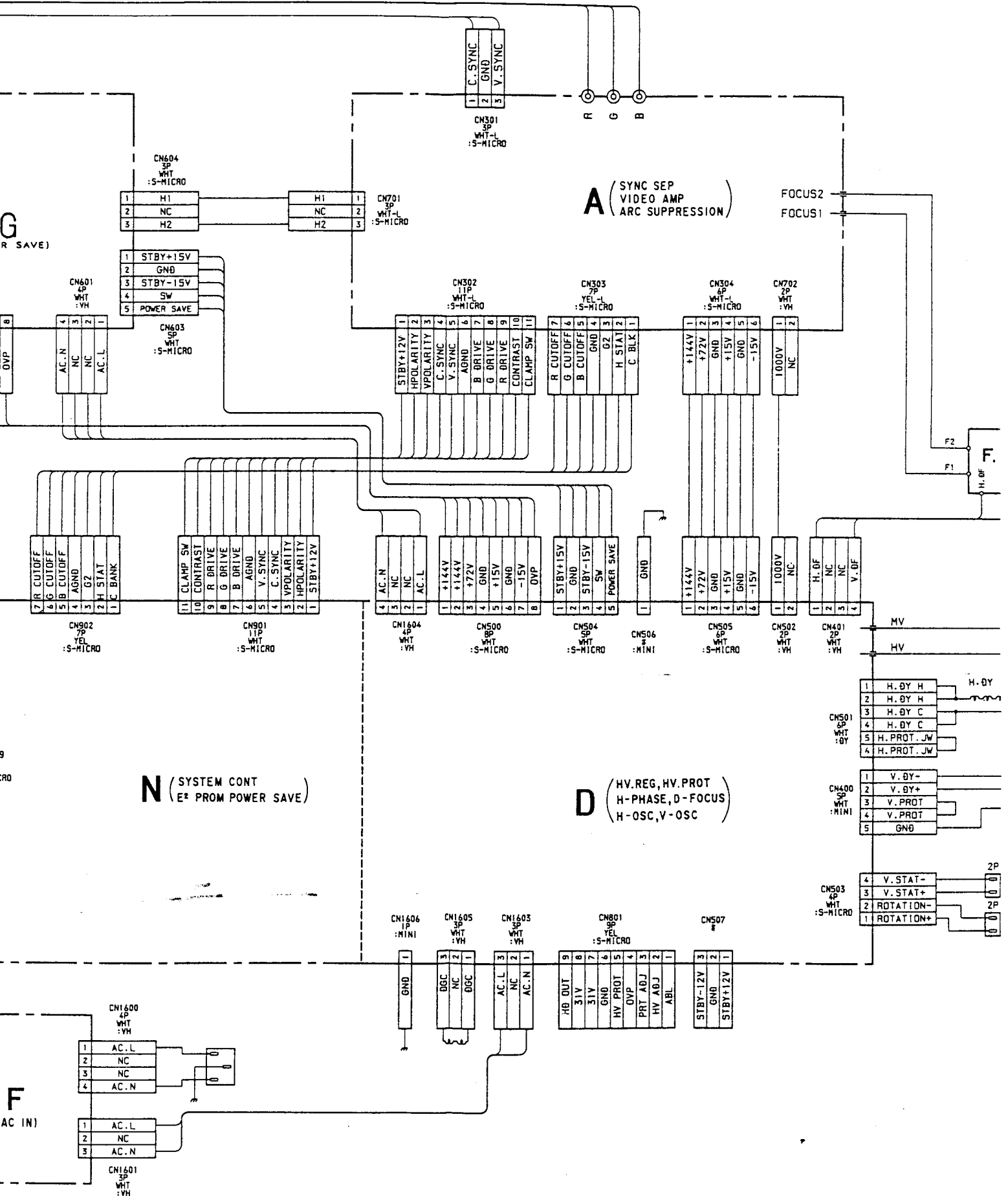
SAFETY-RELATED COMPONENT WARNING!!

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



5-2. FRAME SCHEMATIC DIAGRAM



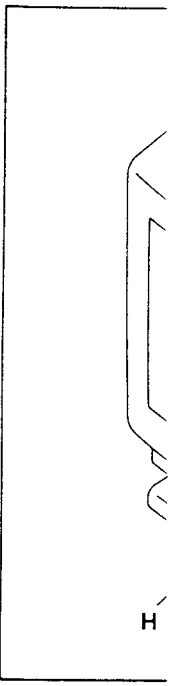
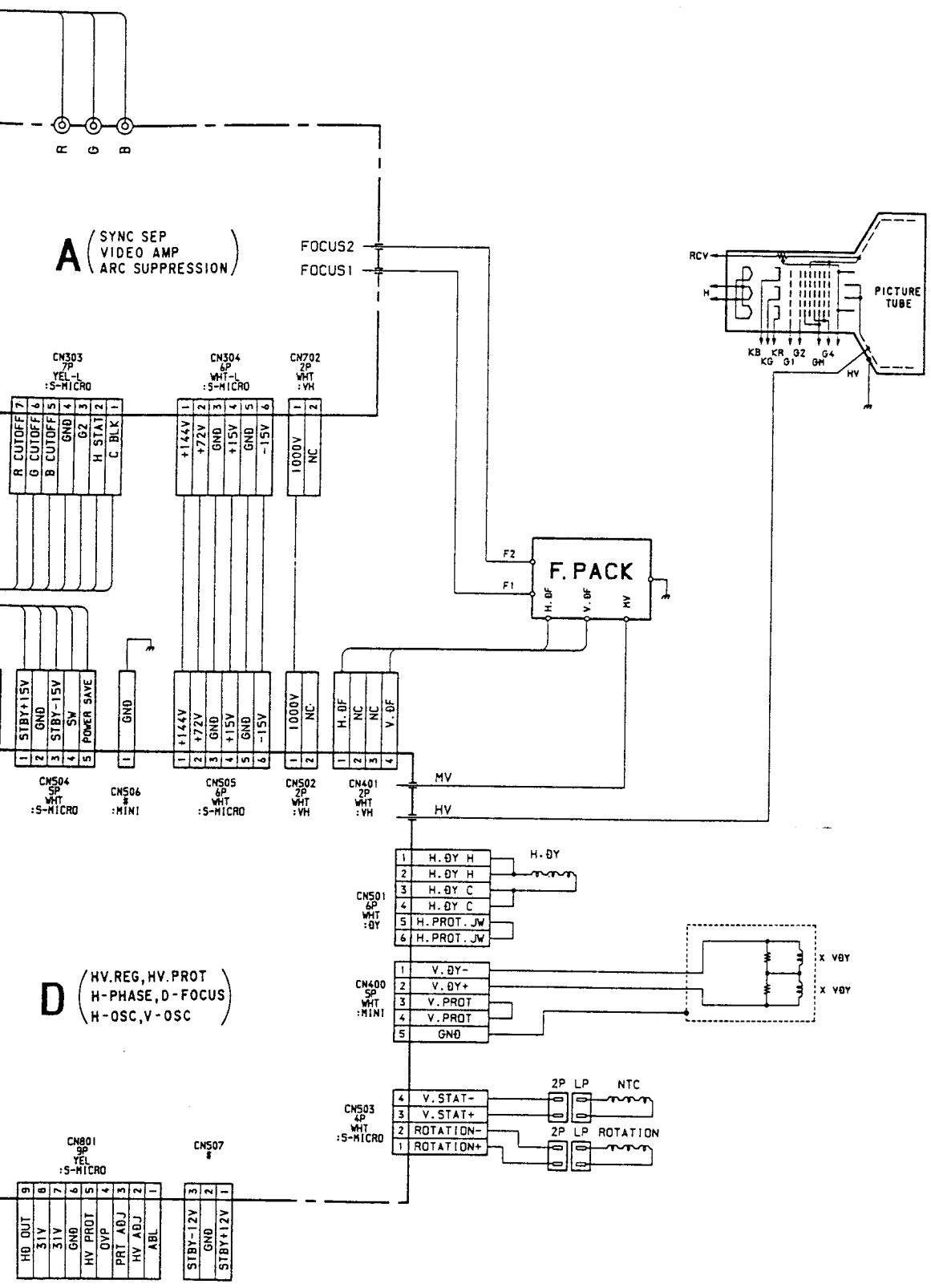


A (SYNC SEP VIDEO AMP ARC SUPPRESSION)

N (SYSTEM CONT E² PROM POWER SAVE)

D (HV.REG, HV.PROT H-PHASE, D-FOCUS H-OSC, V-OSC)

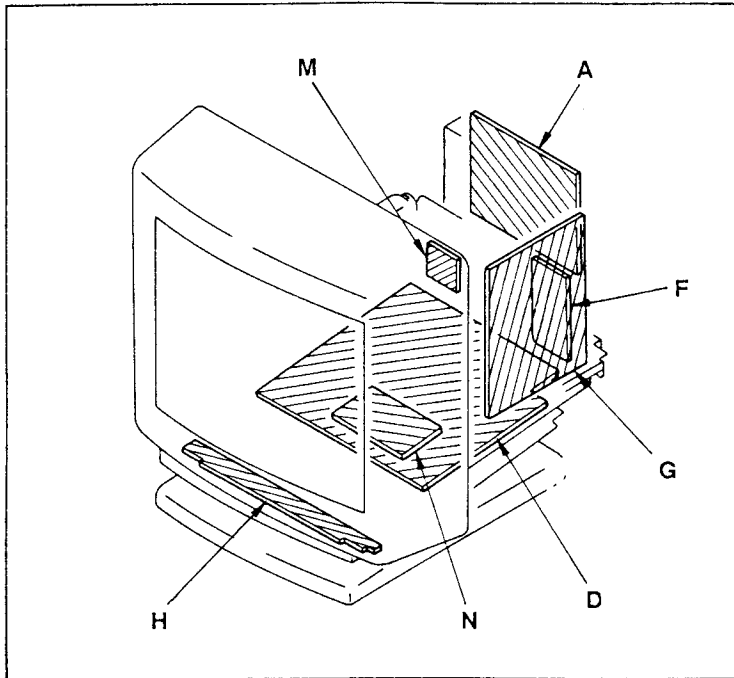
5-3. CIRCUIT



5-4. SCHEMATIC

- Note:
- All capacitors are 50 WV or less unless otherwise indicated.
 - Indication of resistor electrical power, if any, is as follows:
- | |
|-------------------|
| Pitch: 5 mm |
| Rating electrical |
- All resistors are in ohms unless otherwise indicated.
 - : nonflaming
 - : fusible
 - : internal
 - : panel component
 - All variable and potentiometer values are in ohms unless otherwise indicated.
 - : earth-ground
 - : earth-chassis
 - All voltages are in volts unless otherwise indicated.
 - Readings are taken at the terminals unless otherwise indicated.
 - Voltage variation tolerances are as follows:
 - * : Can not be guaranteed
 - Circled numbers indicate critical components
 - : B + bus
 - : B - bus

5-3. CIRCUIT BOARDS LOCATION



5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytic.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4 W (CHIP : 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- \triangle : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- \perp : earth-ground.
- : earth-chassis.
- All voltages are in V.
- Readings are taken with a 10 M Ω digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Can not be measured.
- Circled numbers are waveform references.
- : B + bus.
- : B - bus.

Reference information

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

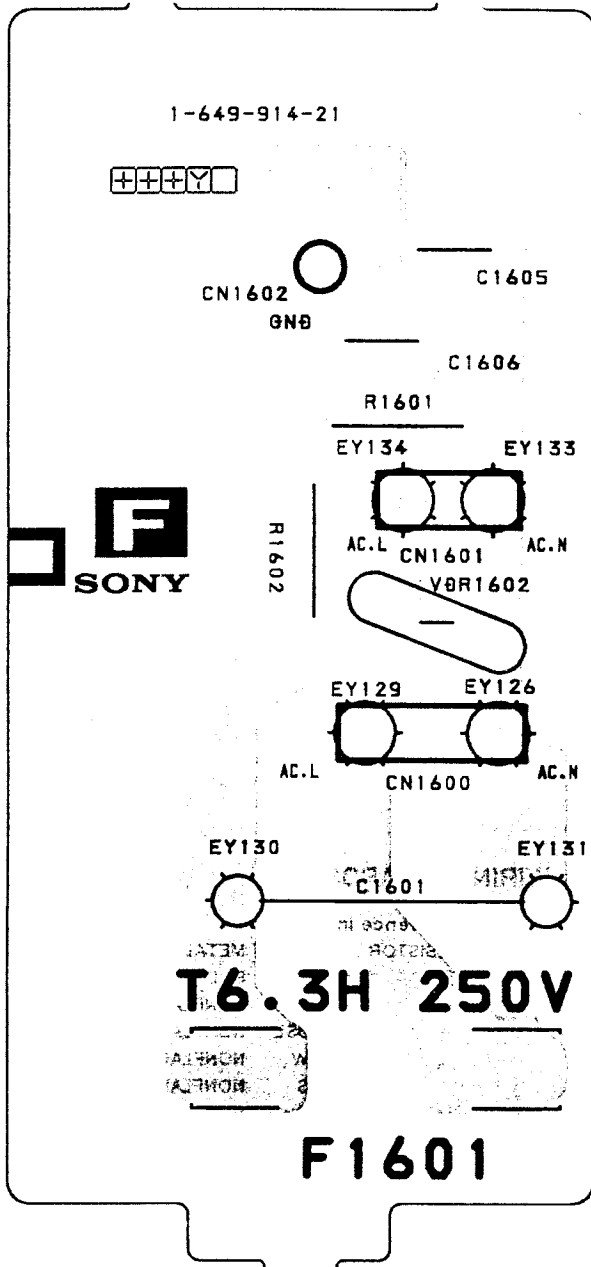
Note: The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

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

F

[AC IN]

- F Board -



• D B

- IC401
- IC404
- IC406
- IC407
- IC408
- IC409
- IC410
- IC500
- IC501
- IC502
- IC503
- IC505
- IC506
- IC801
- IC802
- IC803
- IC804
- IC806

TRAN

- Q402
- Q403
- Q404
- Q406
- Q408
- Q409
- Q410
- Q411
- Q412
- Q506
- Q511
- Q512
- Q513
- Q514
- Q515
- Q517
- Q518
- Q519
- Q520
- Q521
- Q522
- Q801
- Q802
- Q803
- Q804
- Q805
- Q806
- Q807
- Q809
- Q810
- Q811
- Q812
- Q1501
- Q1603
- Q1606
- Q1607

• D BOARD

- D Board -

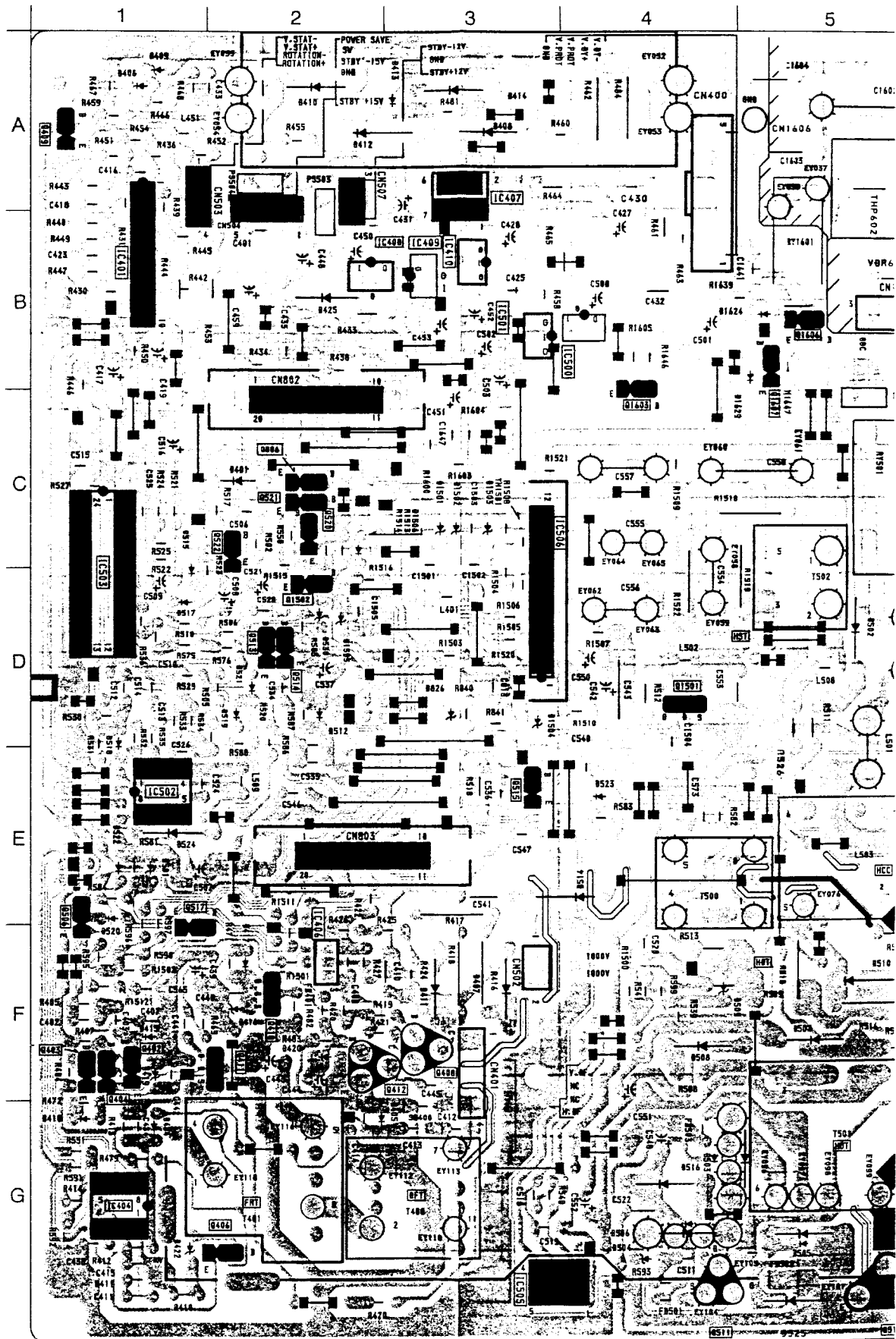
| IC | | DIODE | | D815 | F-6 |
|------------|-----|-------|-----|-------|-----|
| IC401 | B-1 | D404 | G-1 | D816 | E-7 |
| IC404 | G-1 | D405 | G-2 | D817 | E-7 |
| IC406 | F-2 | D406 | A-1 | D819 | D-7 |
| IC407 | A-3 | D407 | F-3 | D820 | D-6 |
| IC408 | B-2 | D408 | A-3 | D821 | E-7 |
| IC409 | B-3 | D409 | A-1 | D823 | D-6 |
| IC410 | B-3 | D410 | A-2 | D824 | F-6 |
| IC500 | B-4 | D411 | F-3 | D825 | G-7 |
| IC501 | B-3 | D412 | A-2 | D826 | D-3 |
| IC502 | E-1 | D413 | A-3 | D827 | D-7 |
| IC503 | C-1 | D414 | A-3 | D828 | C-6 |
| IC505 | G-3 | D415 | F-1 | D829 | E-7 |
| IC506 | C-3 | D416 | F-2 | D1501 | C-3 |
| IC801 | C-7 | D417 | F-2 | D1502 | C-3 |
| IC802 | D-6 | D418 | G-1 | D1503 | C-3 |
| IC803 | E-6 | D419 | F-1 | D1504 | D-2 |
| IC804 | D-7 | D420 | F-2 | D1505 | D-2 |
| IC806 | D-6 | D421 | E-6 | D1624 | C-6 |
| | | D422 | G-1 | D1629 | B-5 |
| TRANSISTOR | | D425 | B-2 | | |
| | | D501 | E-1 | | |
| Q402 | F-1 | D502 | C-5 | | |
| Q403 | F-1 | D503 | G-4 | | |
| Q404 | F-1 | D504 | G-4 | | |
| Q406 | G-2 | D505 | G-5 | | |
| Q408 | F-3 | D506 | G-4 | | |
| Q409 | A-1 | D507 | F-5 | | |
| Q410 | F-2 | D508 | F-4 | | |
| Q411 | F-2 | D509 | G-4 | | |
| Q412 | F-2 | D510 | F-5 | | |
| Q506 | F-1 | D511 | G-6 | | |
| Q511 | G-4 | D512 | D-2 | | |
| Q512 | G-5 | D513 | C-6 | | |
| Q513 | D-2 | D514 | E-4 | | |
| Q514 | D-2 | D515 | D-1 | | |
| Q515 | E-3 | D516 | G-5 | | |
| Q517 | F-1 | D517 | D-1 | | |
| Q518 | C-6 | D518 | D-1 | | |
| Q519 | C-6 | D519 | D-2 | | |
| Q520 | D-3 | D520 | E-1 | | |
| Q521 | C-3 | D521 | D-1 | | |
| Q522 | C-2 | D522 | E-1 | | |
| Q801 | C-8 | D523 | E-3 | | |
| Q802 | C-8 | D524 | E-1 | | |
| Q803 | D-8 | D801 | C-8 | | |
| Q804 | F-7 | D802 | C-7 | | |
| Q805 | C-7 | D803 | C-7 | | |
| Q806 | D-3 | D805 | C-6 | | |
| Q807 | C-6 | D806 | D-7 | | |
| Q809 | D-7 | D807 | D-8 | | |
| Q810 | D-7 | D808 | E-7 | | |
| Q811 | D-6 | D809 | E-6 | | |
| Q812 | B-8 | D810 | D-7 | | |
| Q1501 | D-4 | D811 | E-6 | | |
| Q1603 | C-4 | D812 | D-8 | | |
| Q1606 | C-6 | D813 | D-8 | | |
| Q1607 | B-4 | D814 | E-6 | | |

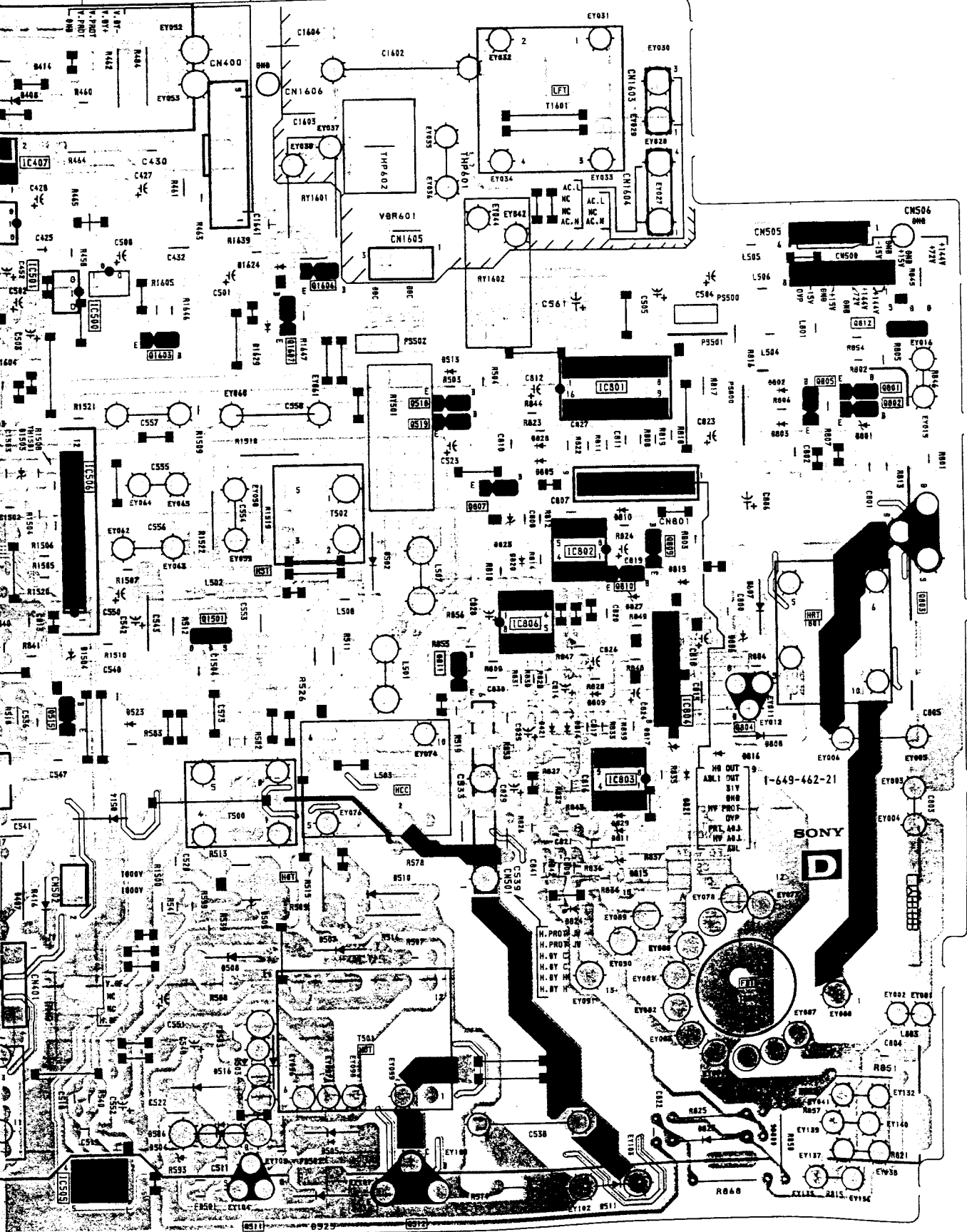
A
B
C
D
E
F
G

D [HV. REG. HV. PROT
H-PHASE, D-FOCUS
H-OSC, V-OSC]

- D Board -

- F-6
- E-7
- E-7
- D-7
- D-6
- E-7
- D-6
- F-6
- G-7
- D-3
- D-7
- C-6
- E-7
- C-3
- C-3
- D-2
- D-2
- C-6
- C-1
- B-5





(1) Schematic Diagrams of D, F Boards

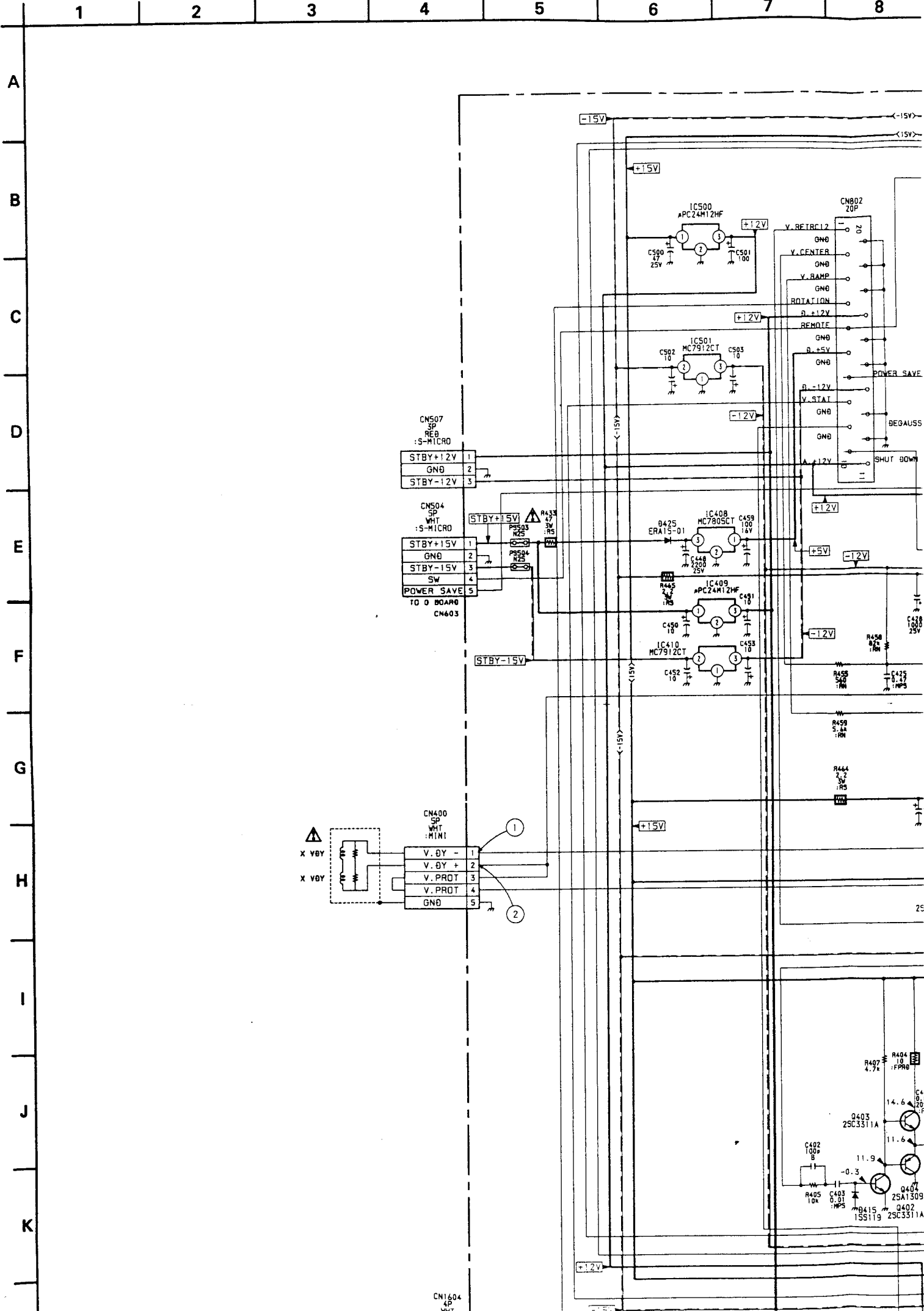
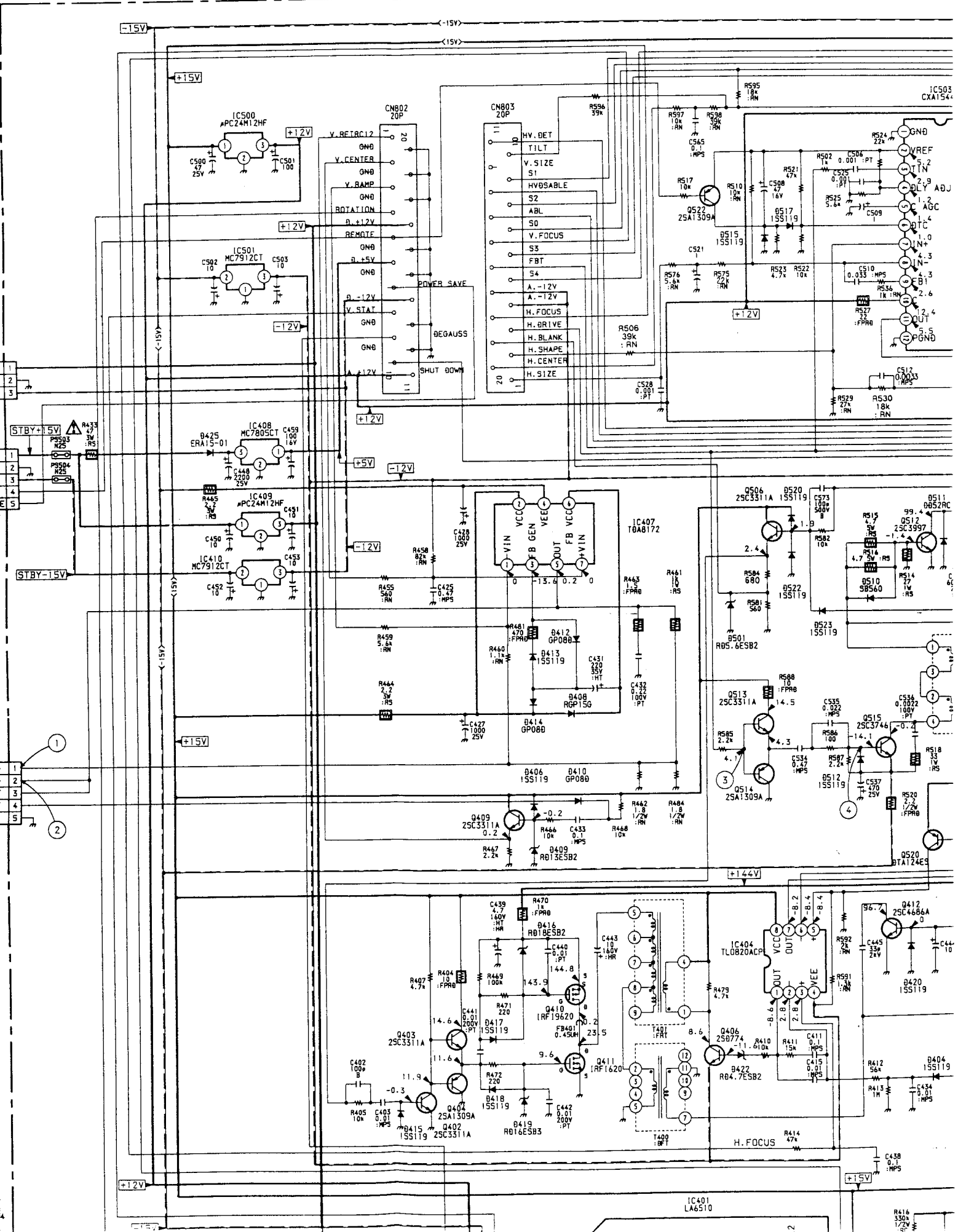
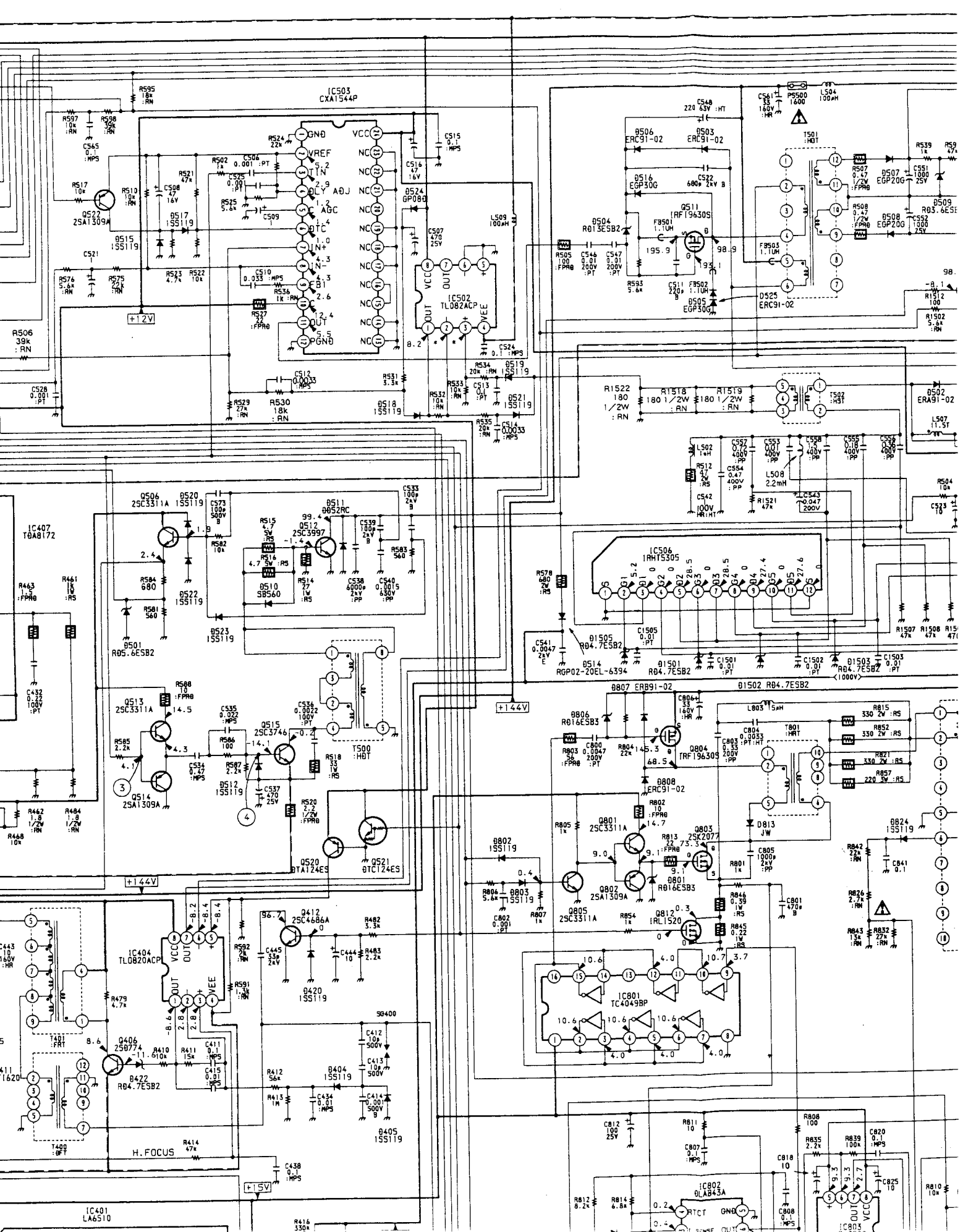
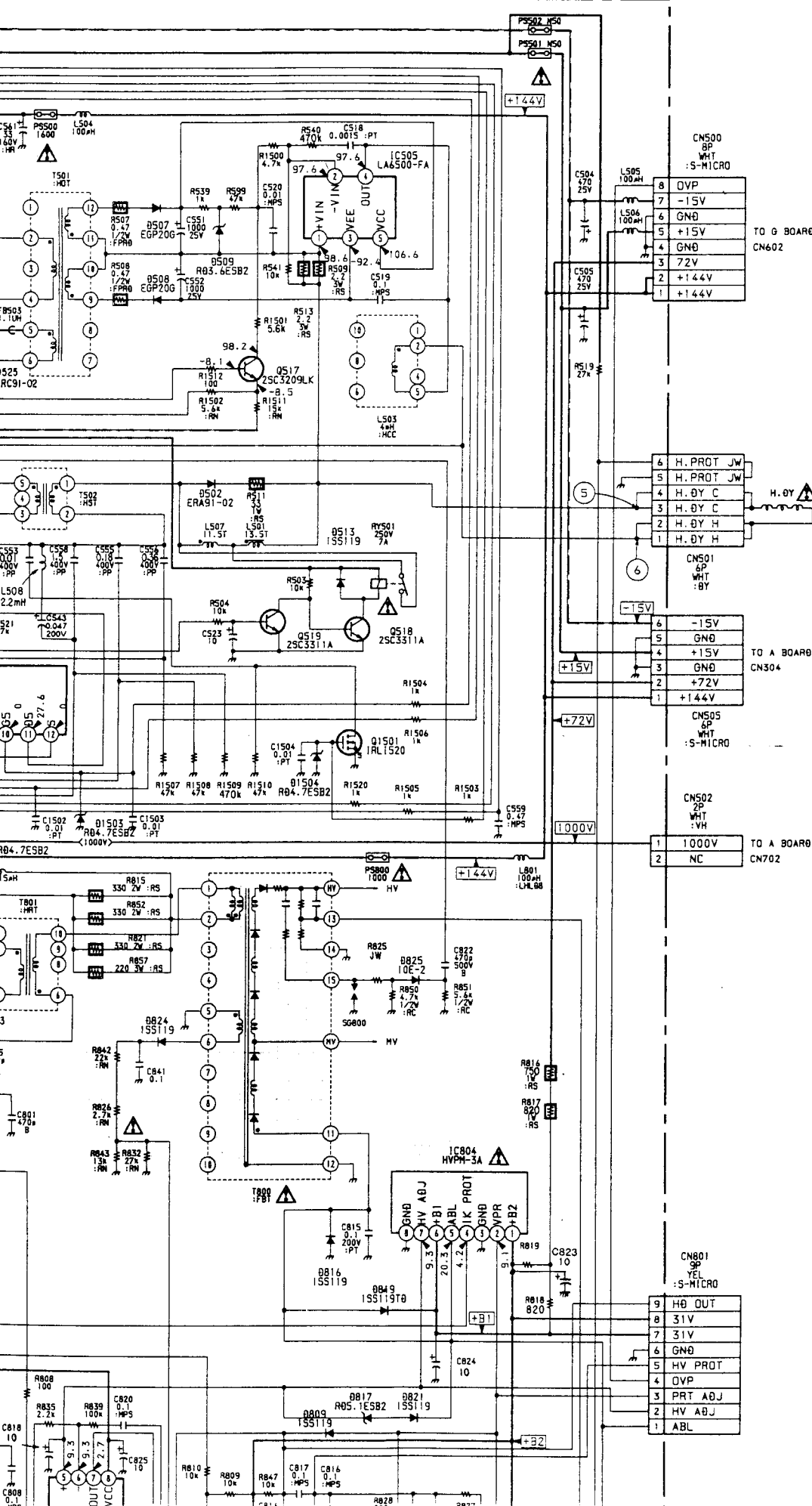


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CN500
8P
WHT
:S-MICRO

| | |
|---|--------|
| 8 | DVP |
| 7 | -15V |
| 6 | GND |
| 5 | +15V |
| 4 | GND |
| 3 | 72V |
| 2 | +1.44V |
| 1 | +1.44V |

TO G BOARD
CN602

| | |
|---|------------|
| 6 | H. PROT JW |
| 5 | H. PROT JW |
| 4 | H. OY C |
| 3 | H. OY C |
| 2 | H. OY H |
| 1 | H. OY H |

CN501
6P
WHT
:BY

-15V

| | |
|---|--------|
| 6 | -15V |
| 5 | GND |
| 4 | +15V |
| 3 | GND |
| 2 | +72V |
| 1 | +1.44V |

TO A BOARD
CN304

CN505
6P
WHT
:S-MICRO

+72V

1000V

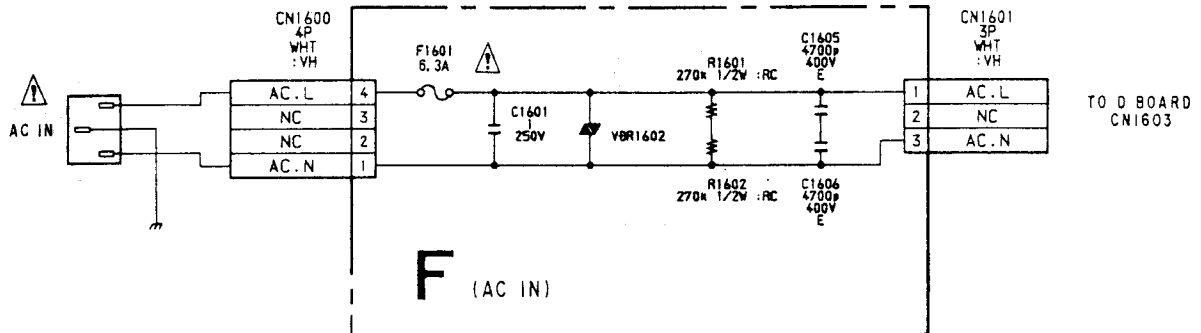
| | |
|---|-------|
| 1 | 1000V |
| 2 | NC |

TO A BOARD
CN702

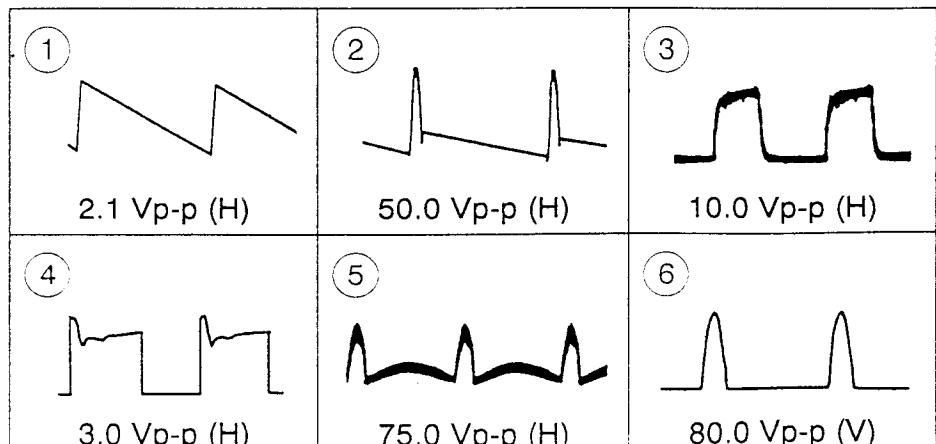
CN801
9P
YEL
:S-MICRO

| | |
|---|---------|
| 9 | H0 OUT |
| 8 | 31V |
| 7 | 31V |
| 6 | GND |
| 5 | HV PROT |
| 4 | DVP |
| 3 | PRT ADJ |
| 2 | HV ADJ |
| 1 | ABL |

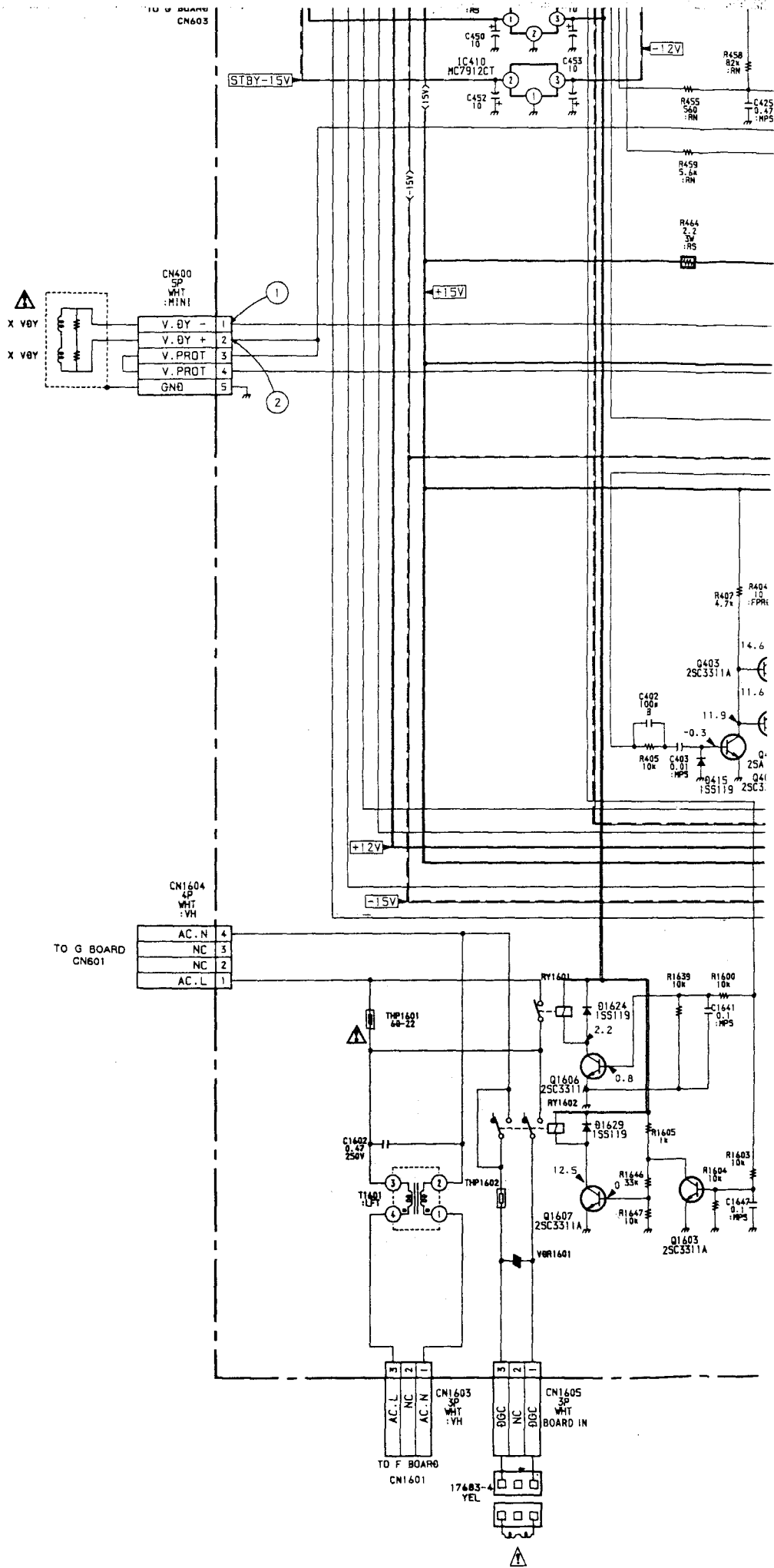
A
B
C
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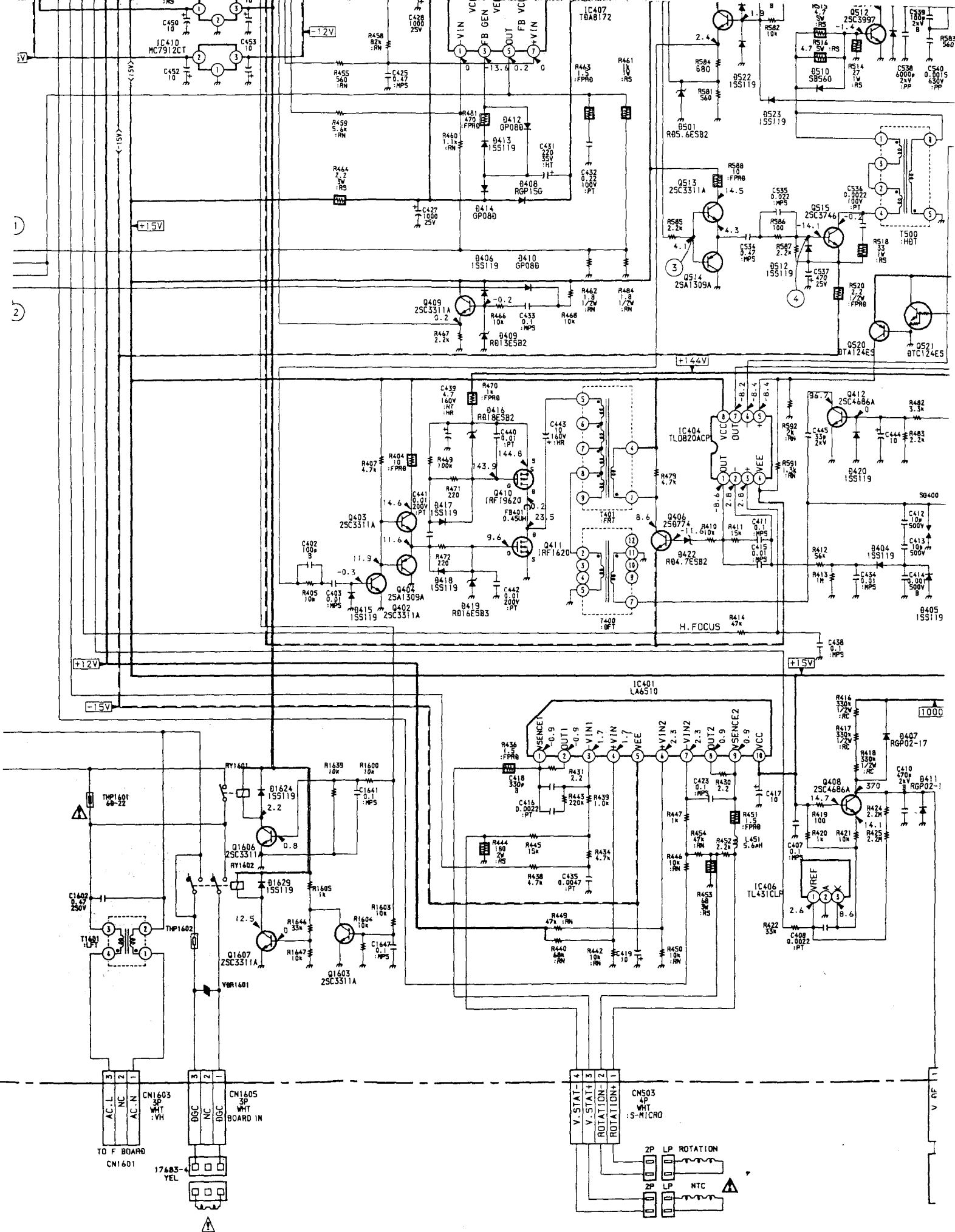


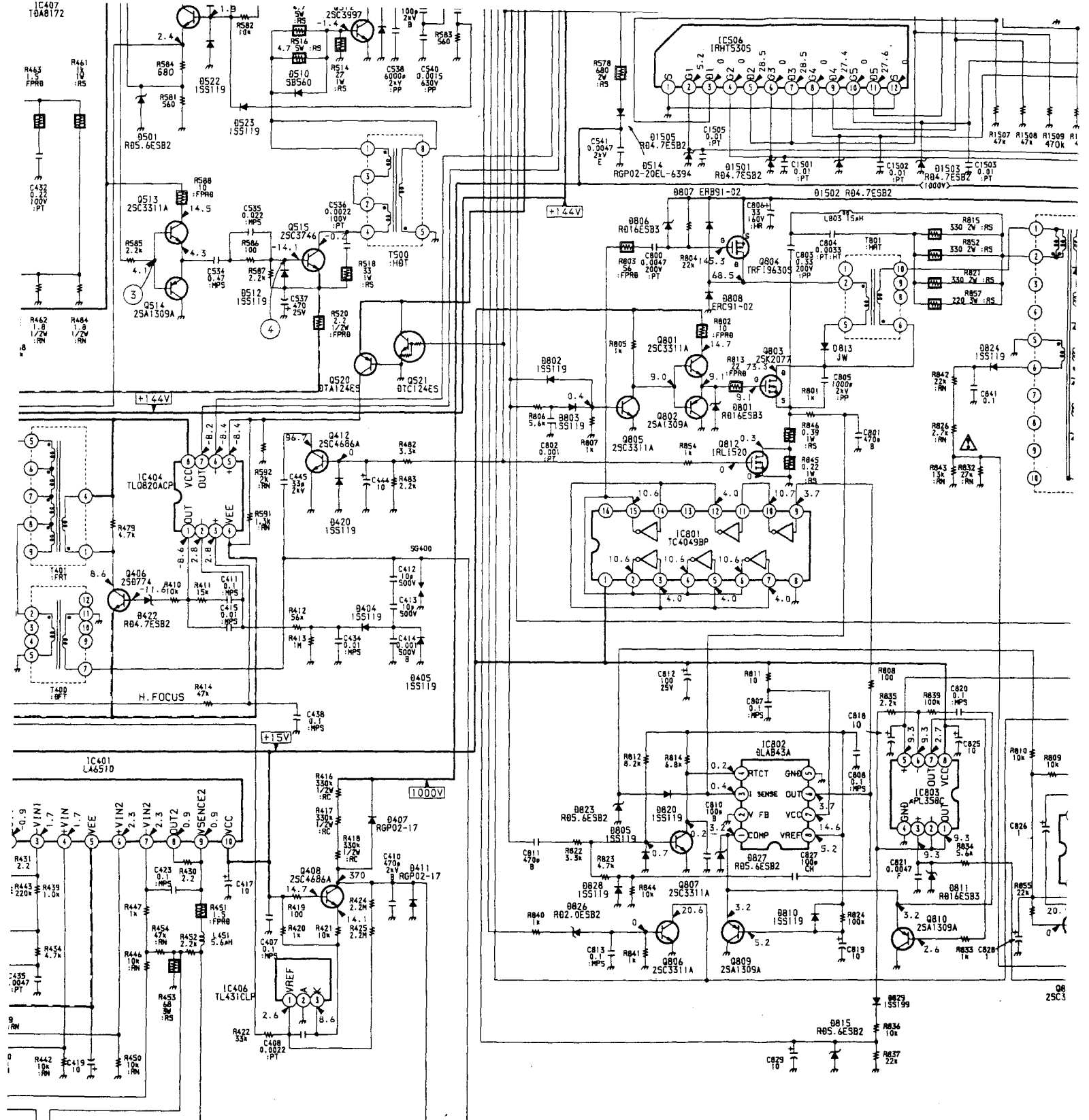
D BOARD WAVEFORMS



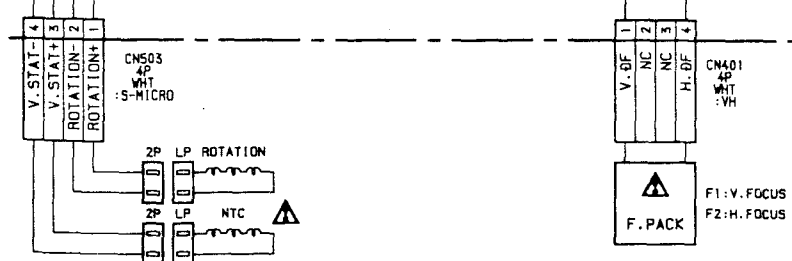
F
G
H
I
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K
L
M
N
O
P

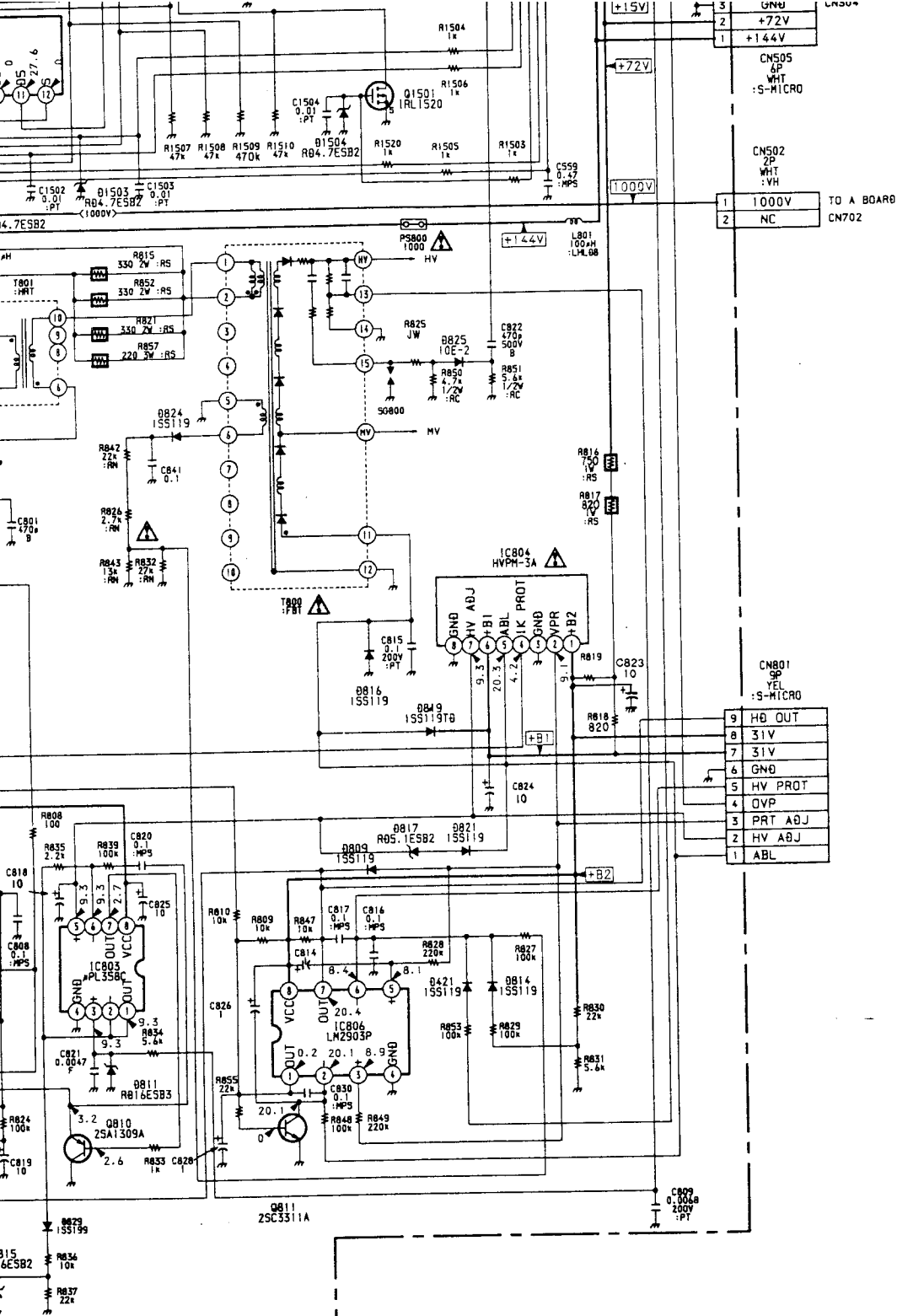






D (HV. REG. HV. PROT.
H-PHASE. θ-FOCUS.)
H-OSC. V-OSC





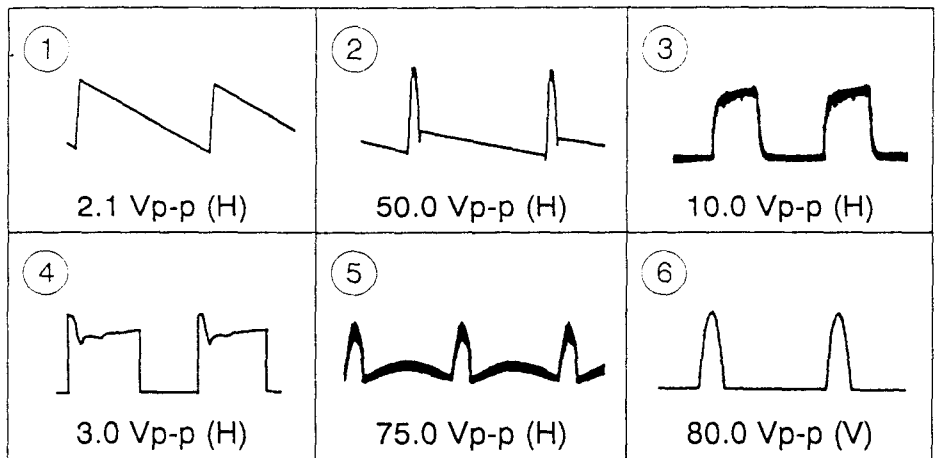
TO A BOARD
CN702

| | |
|---|---------|
| 9 | HV OUT |
| 8 | 31V |
| 7 | 31V |
| 6 | GND |
| 5 | HV PROT |
| 4 | OVP |
| 3 | PRT ADJ |
| 2 | HV ADJ |
| 1 | ABL |

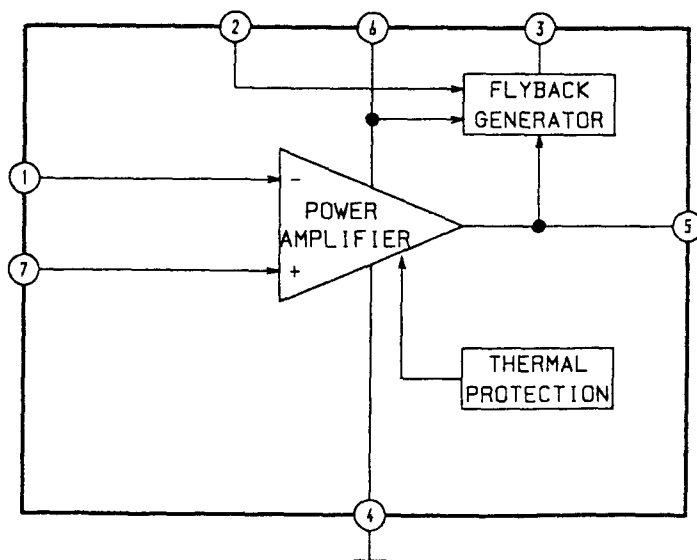
D (HV. REG. HV. PROT.
H-PHASE. O-FOCUS.
H-OSC. V-OSC)

F
G
H
I
J
K
L
M
N
O
P

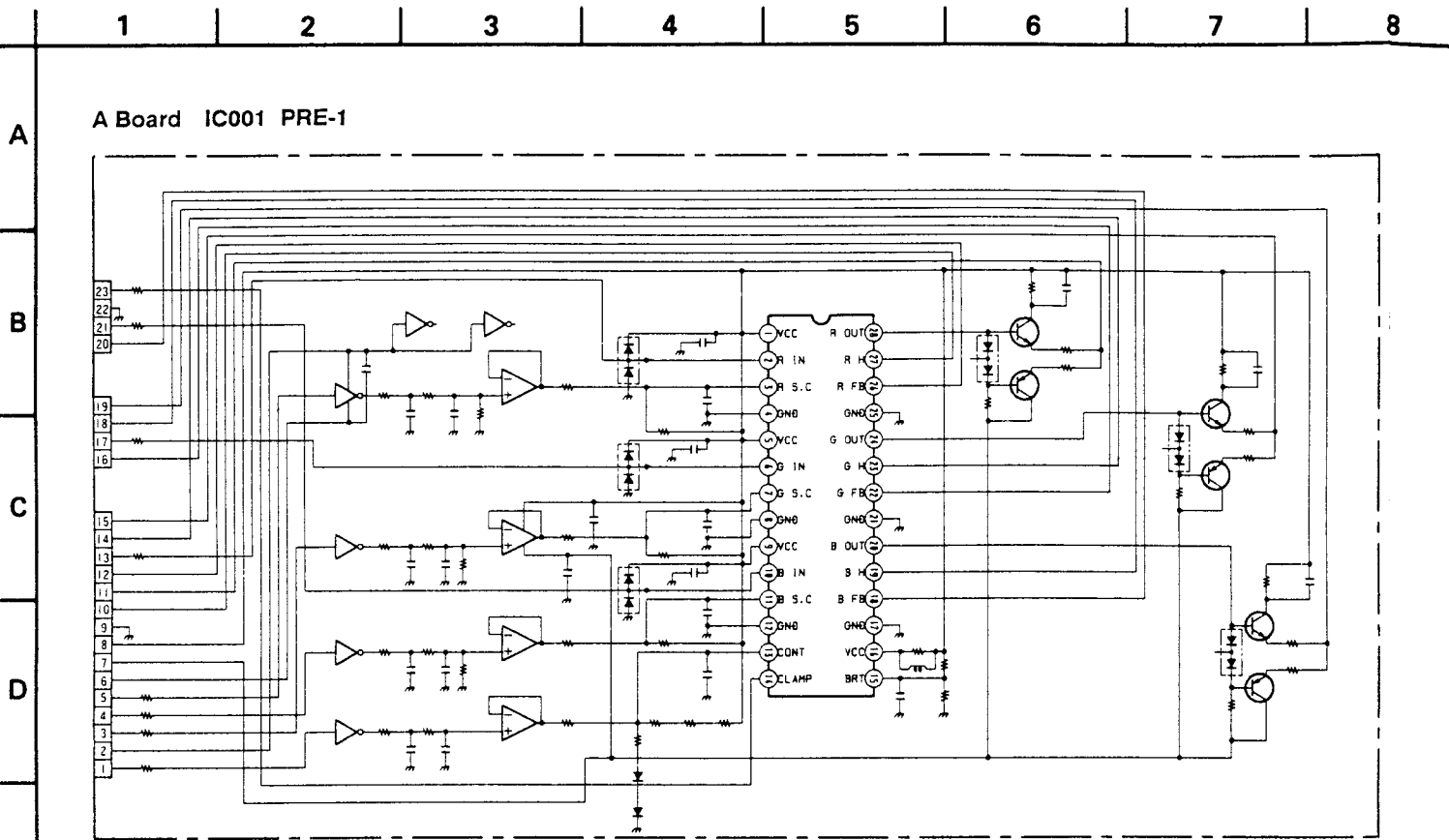
D BOARD WAVEFORMS



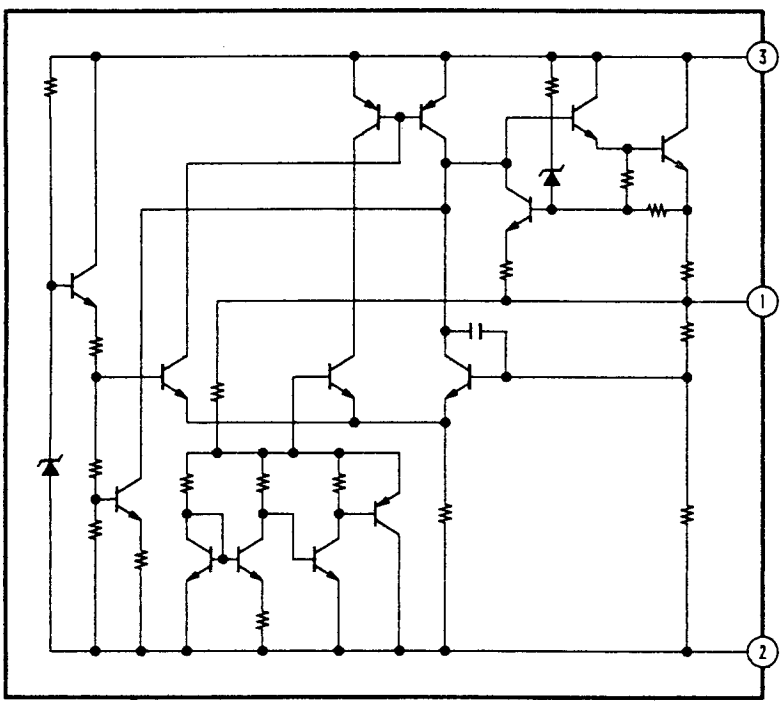
D Board IC407 TDA8172



(2) Schematic Diagram of A Board

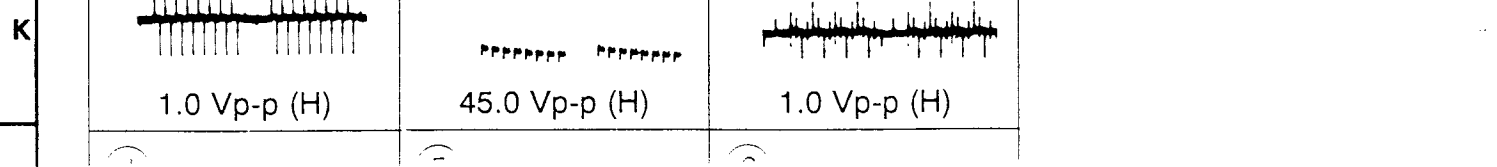
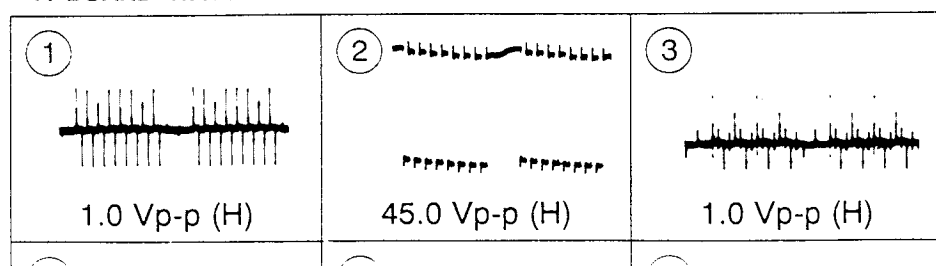


A Board IC005 NJM78L05A

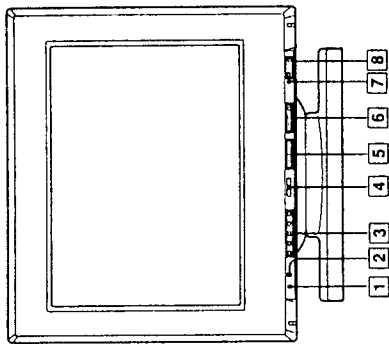


R IN ⊕
G IN ⊕
B IN ⊕

A BOARD WAVEFORMS



Function of Controls



1 RESET button
Press to reset the adjustment data to the factory-preset levels for the input signal being received.

2 CTRL (control) button
To reset all the adjustment data to the factory-preset levels, press the RESET button **1** while holding down this button.

3 Indicator
The indicator corresponding to the item selected with the SELECT button **4** lights up.
CENT: Centering
SIZE: Picture size
GEOM: Picture tilt/Horizontal pincushion
CONV: Convergence
C TEMP: Color temperature

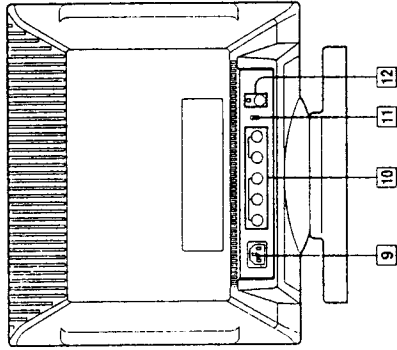
4 SELECT button
Press to select an item.
Hold down for more than one second until an indicator lights up, then press repeatedly to select an item **3**.

5 (brightness) buttons
Press + or - to adjust the picture brightness.
When an item is selected, use these buttons to adjust the picture size and centering in the vertical direction and the picture tilt.

6 (contrast) buttons
Press + or - to adjust the picture contrast.
When an item is selected, use these buttons to adjust the picture size and centering in the horizontal direction, the horizontal pincushion and the colour temperature.

7 POWER SAVING indicator
Lights up when the monitor is in Power Saving Mode.
Blinks when you reached the limit of the adjustable range or while in resetting mode.

8 power switch and indicator
Press to turn the monitor on or off. The indicator lights up when the monitor is turned on. To disconnect the power supply, disconnect the AC power cord.



9 AC IN connector
Plug in an AC power cord.

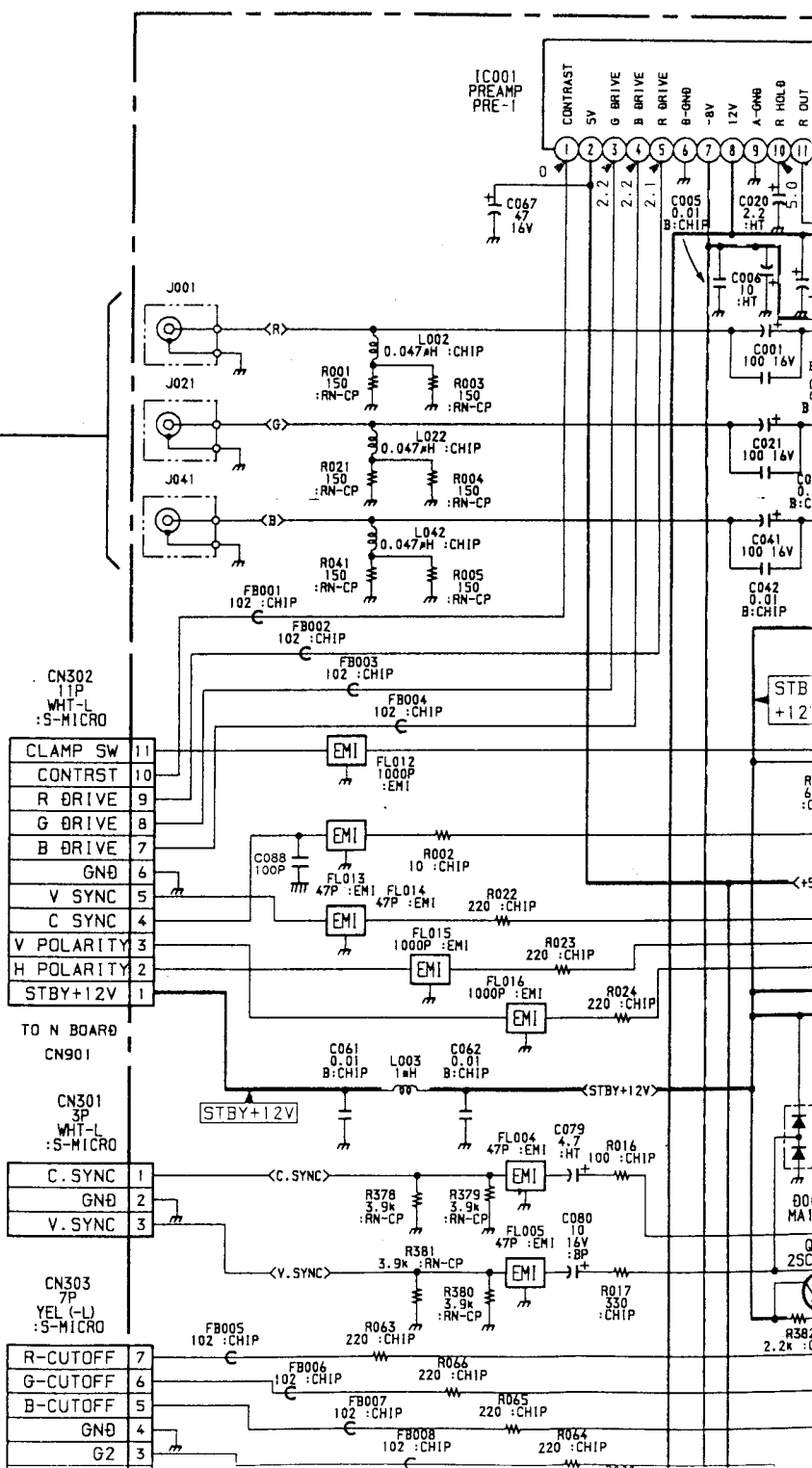
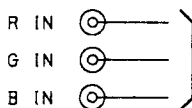
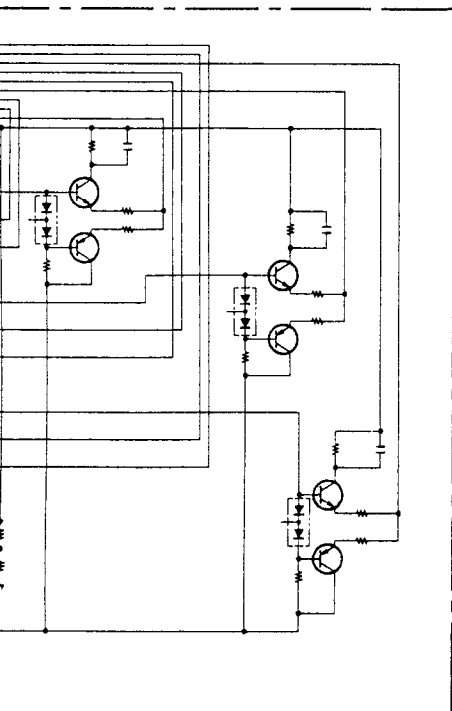
10 Video input connector (5 BNC)
The connector accepts RGB video signals (0.714 Vp-p, positive).
R
G
B
(CS)
HD
VD

11 75 Ω /2 k Ω selector
Switches the impedance of the video input connector **10** termination to 75 Ω or to 2 k Ω .
(Default setting is 2 k Ω)

12 SERVICE button and terminal
The button and the terminal are to be used by service personnel only.

Note

If you use a computer or video board of high output level (about 1.0 Vp-p), you may not be able to obtain the optimum display. In such case, try decreasing the picture contrast, or use a computer or video board with a lower output level.



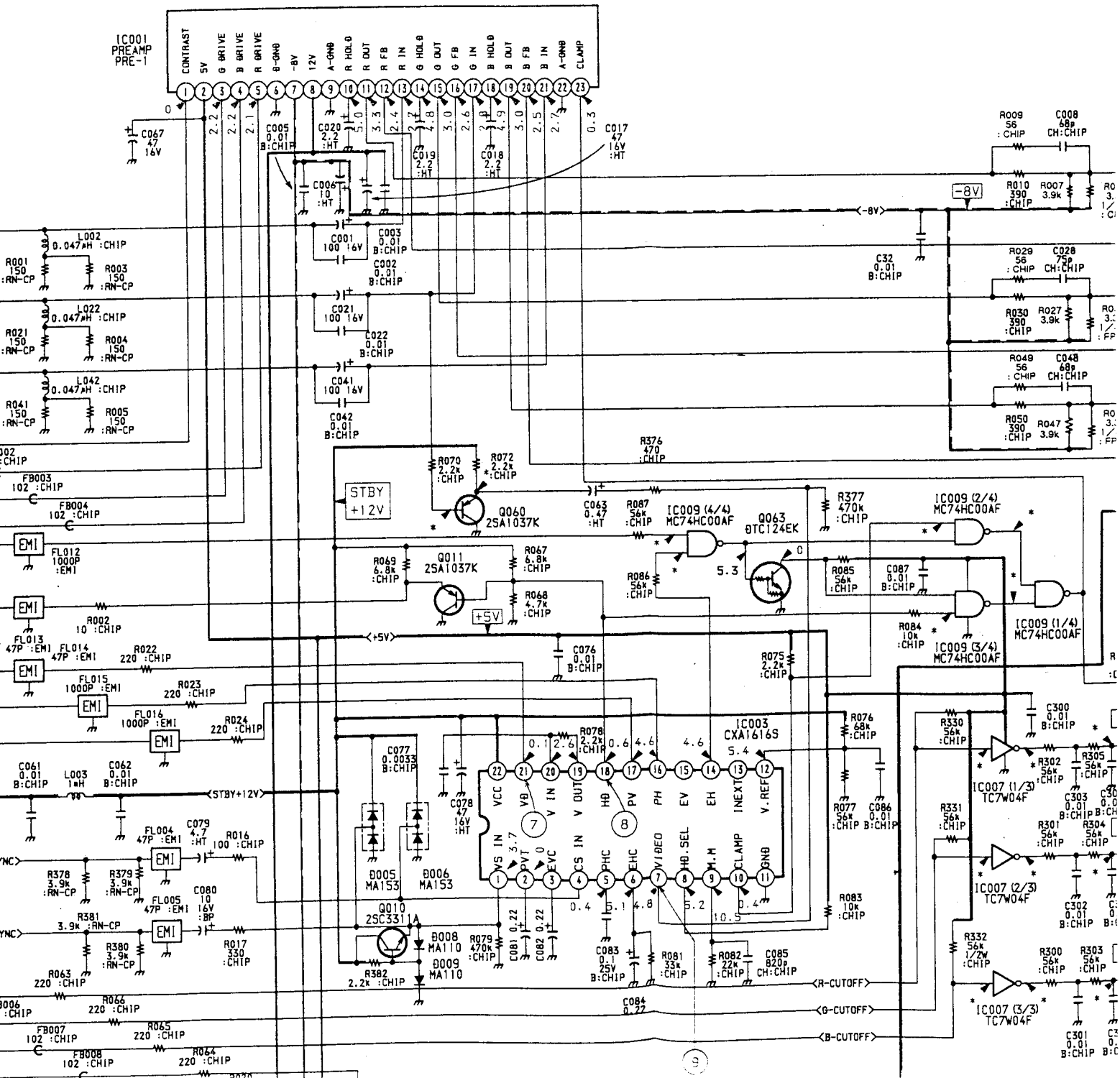
TO M BOARD
CN254

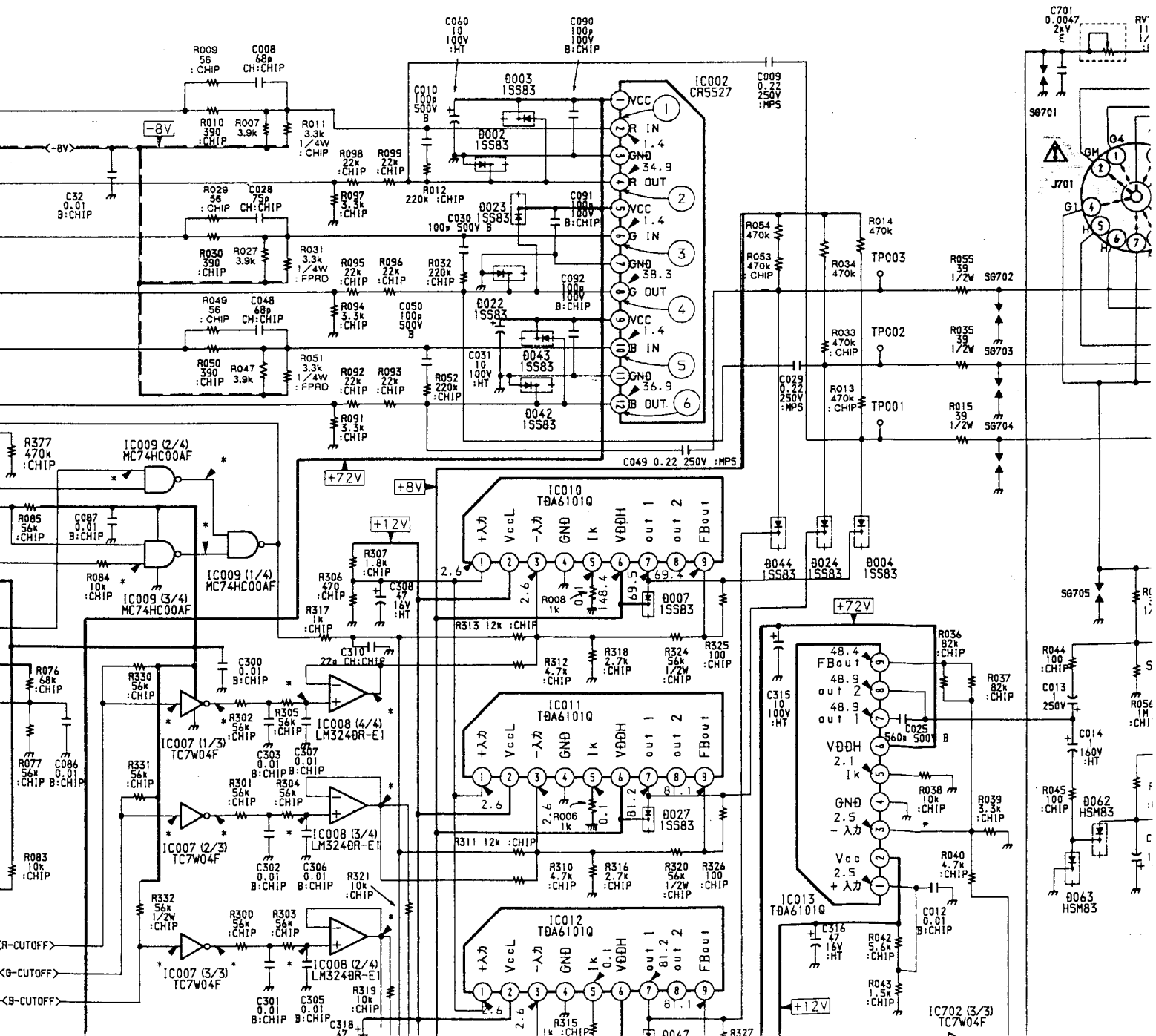
| | |
|------------|----|
| CLAMP SW | 11 |
| CONTRST | 10 |
| R DRIVE | 9 |
| G DRIVE | 8 |
| B DRIVE | 7 |
| GND | 6 |
| V SYNC | 5 |
| C SYNC | 4 |
| V POLARITY | 3 |
| H POLARITY | 2 |
| STBY+12V | 1 |

TO N BOARD
CN901

| | |
|---------|---|
| C. SYNC | 1 |
| GND | 2 |
| V. SYNC | 3 |

| | |
|----------|---|
| R-CUTOFF | 7 |
| G-CUTOFF | 6 |
| B-CUTOFF | 5 |
| GND | 4 |
| G2 | 3 |





ARC

A

B

C

D

E

F

G

H

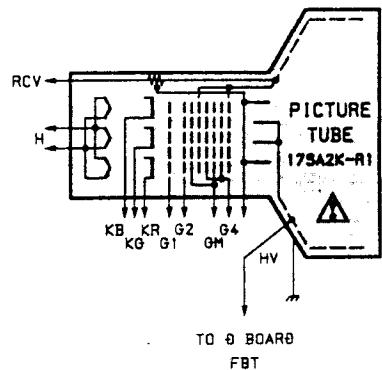
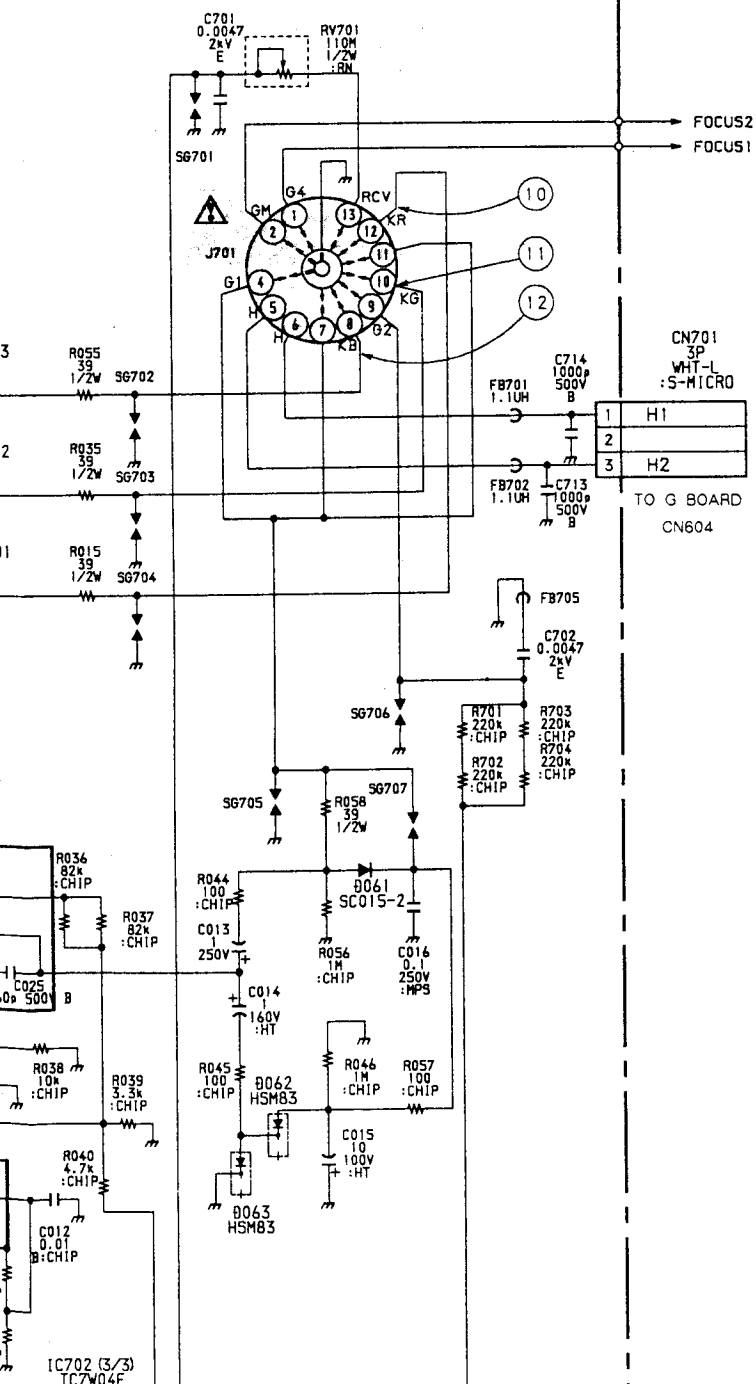
I

J

K

(SYNC SEP VIDEO AMP)
 ARC SUPPRESSION

A






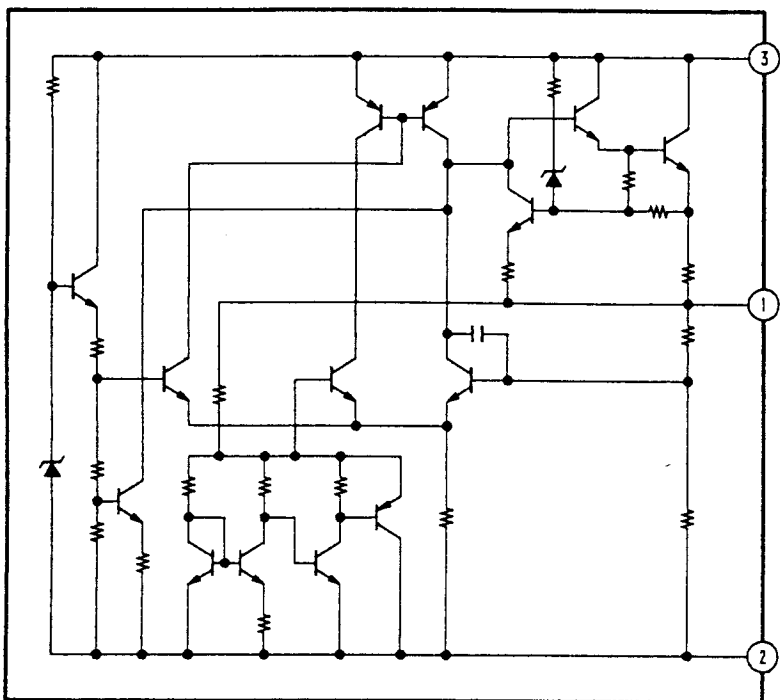
CN701
 3P
 WHT-L
 S-MICRO

| | |
|---|----|
| 1 | H1 |
| 2 | |
| 3 | H2 |

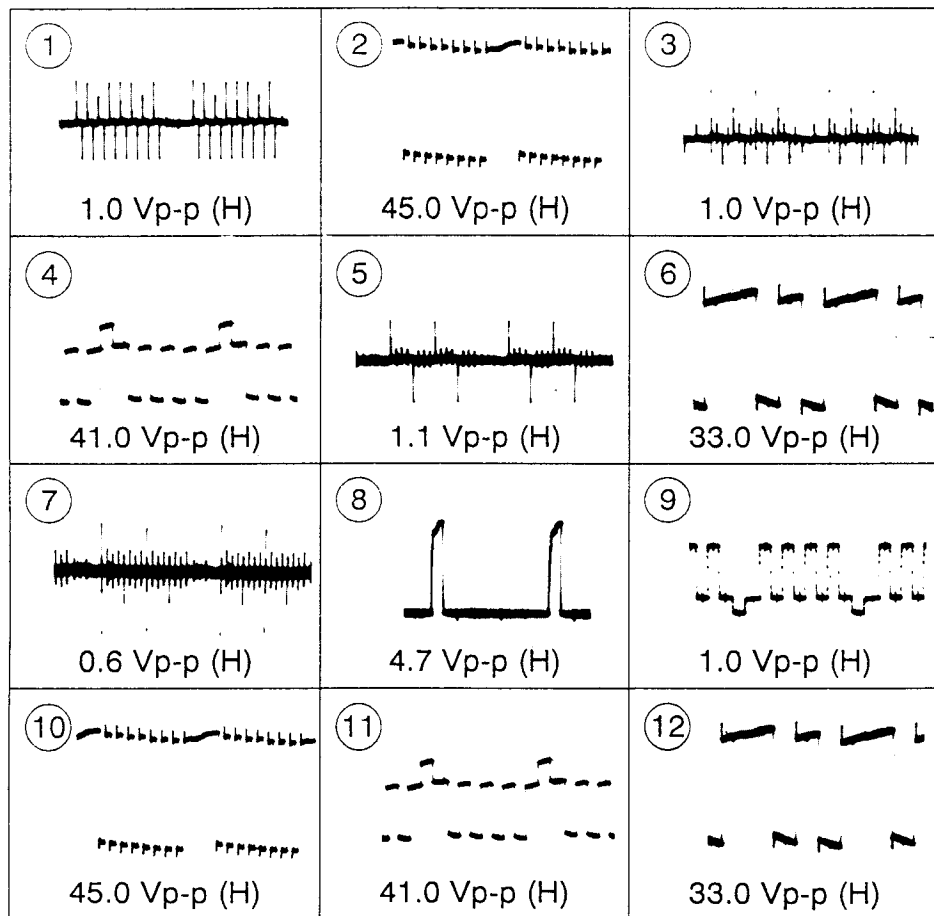
TO G BOARD
 CN604

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H
I
J
K
L
M
N
O

R IN 
G IN 
B IN 



A BOARD WAVEFORMS

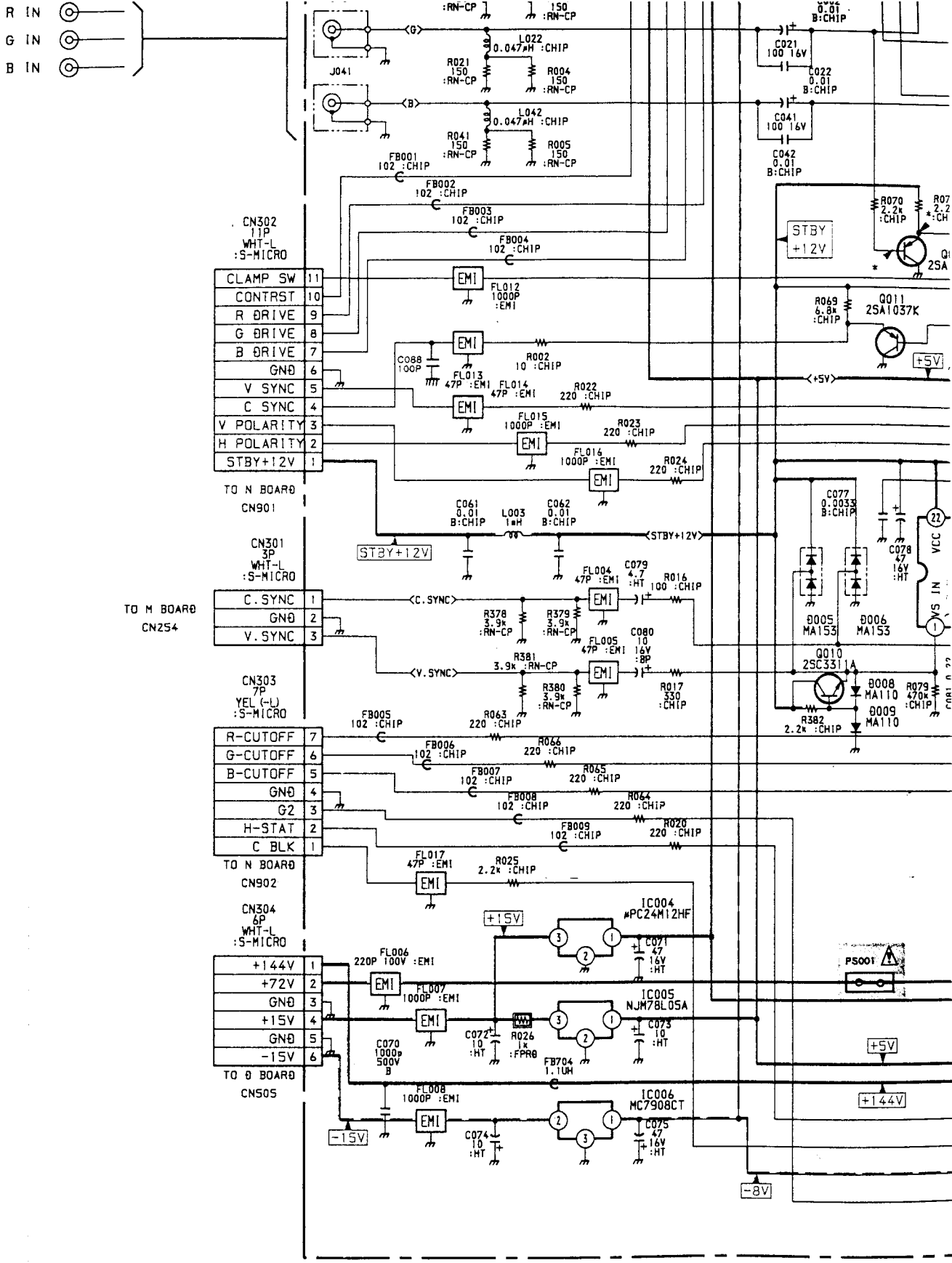


Schematic diagrams

←   boards

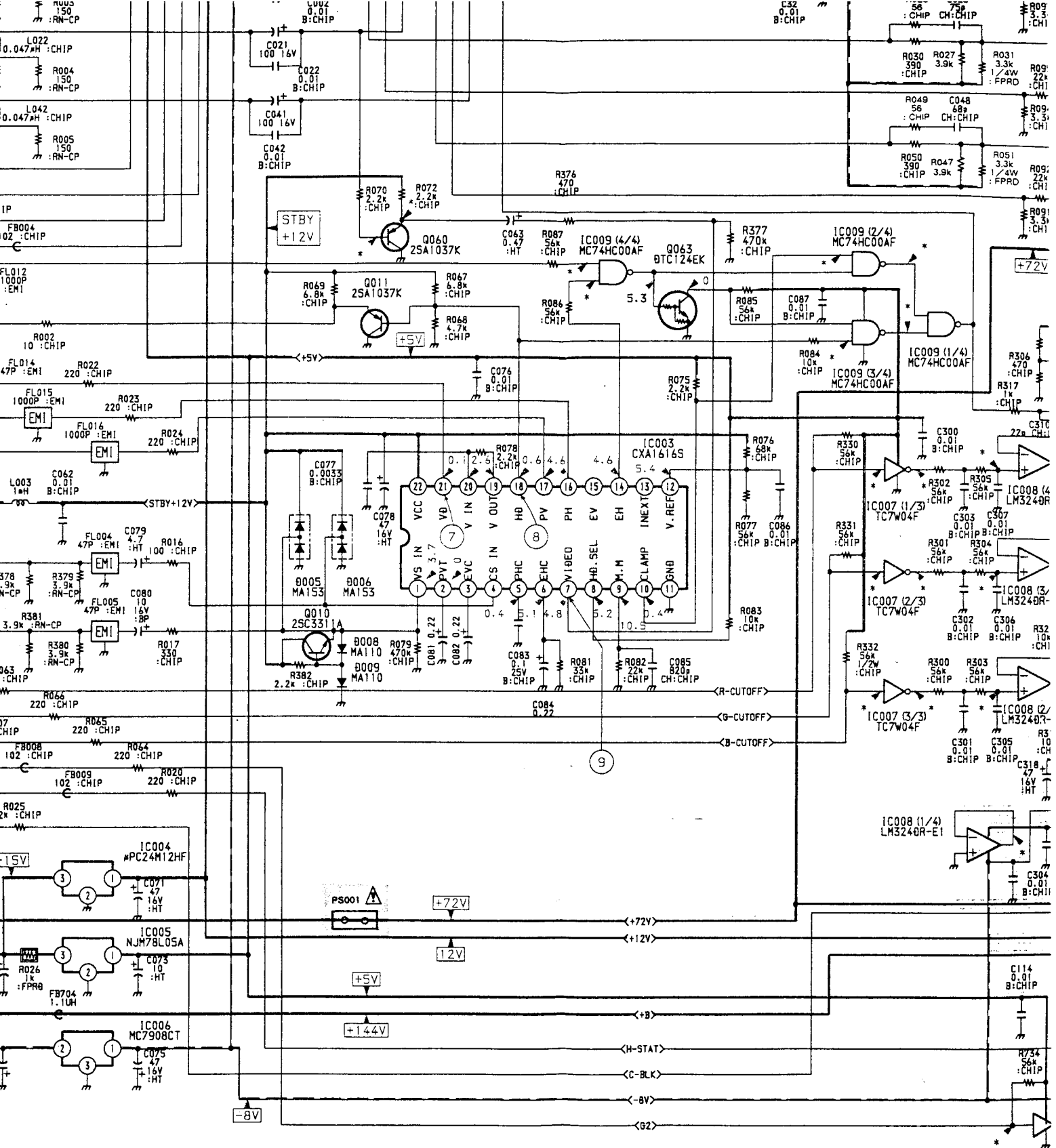
Schematic diagram

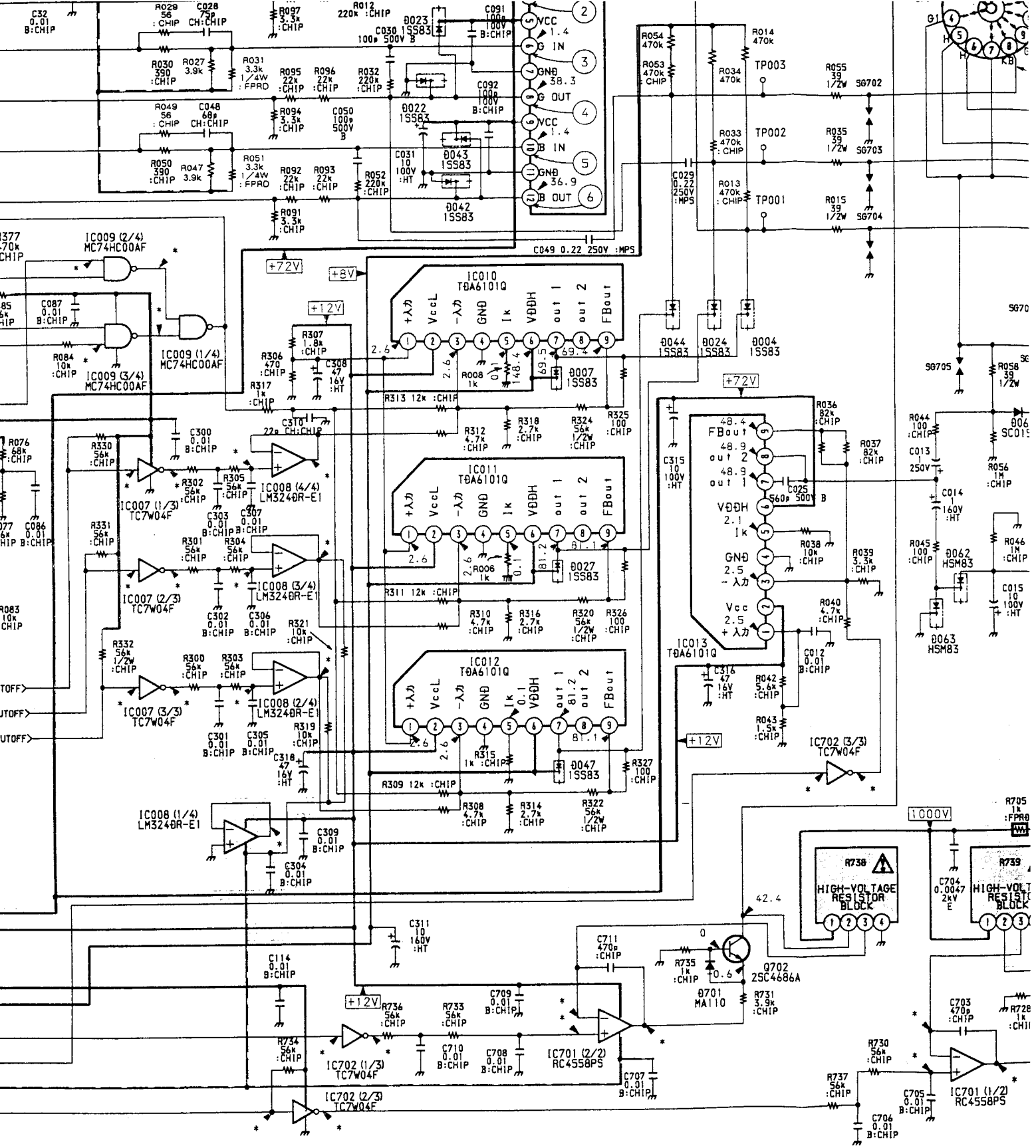
 board →

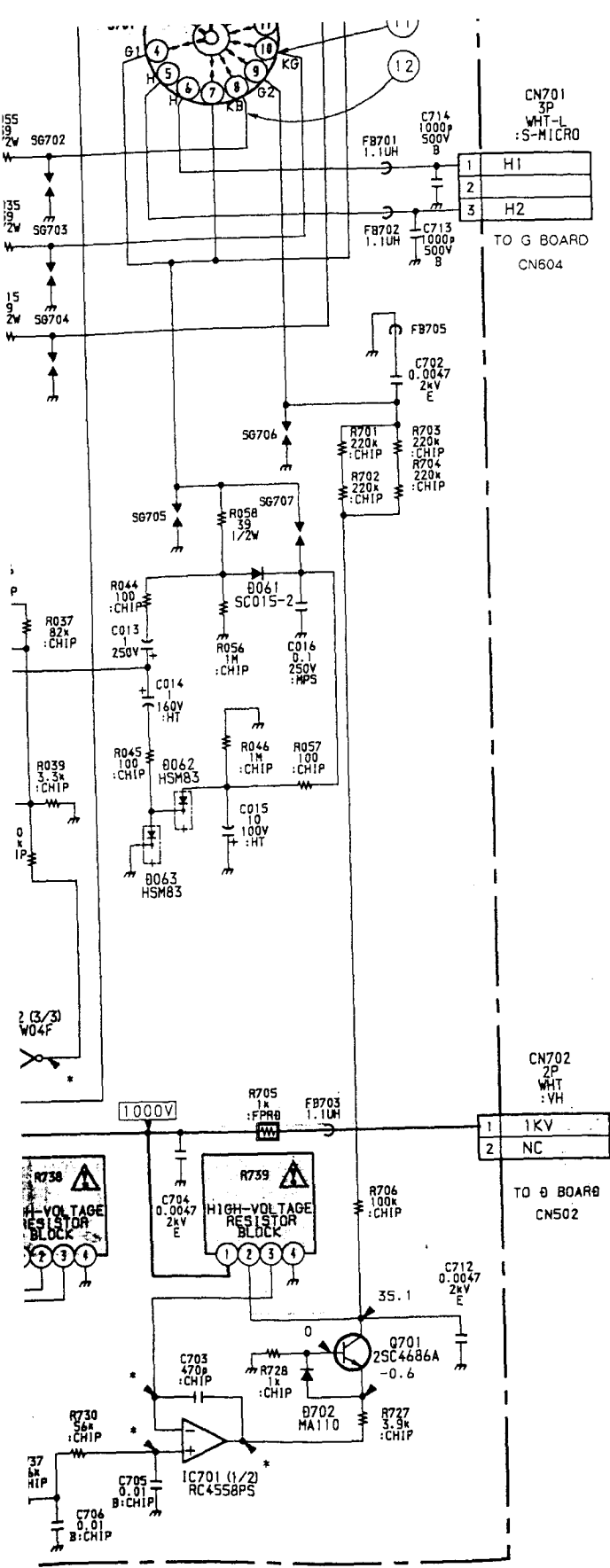


Schematic diagram

A board →





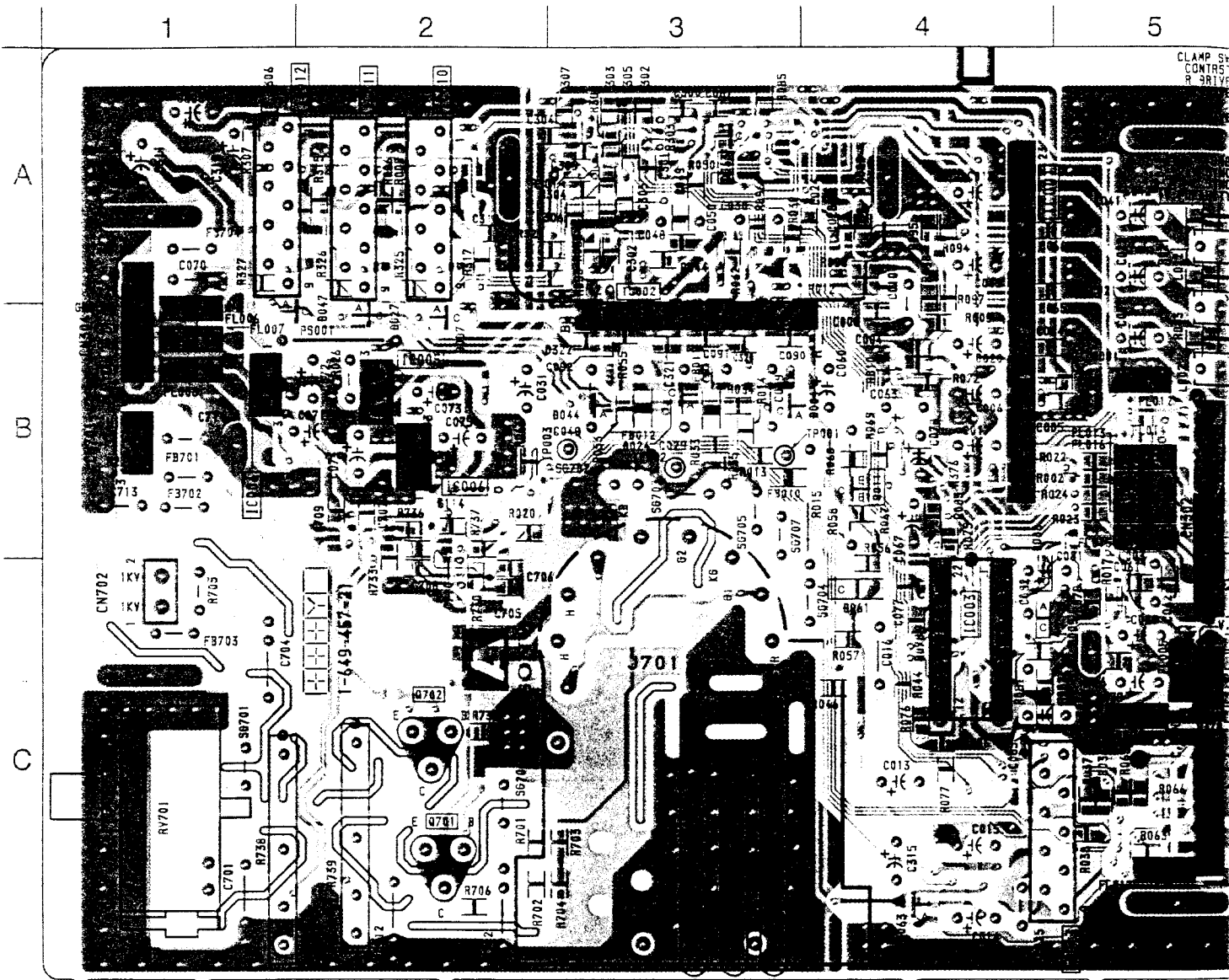


B-SS8243KJ...-A..

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W
X
Y
Z

A SYNC SEP
VIDEO AMP
ARC SUPPRESSION

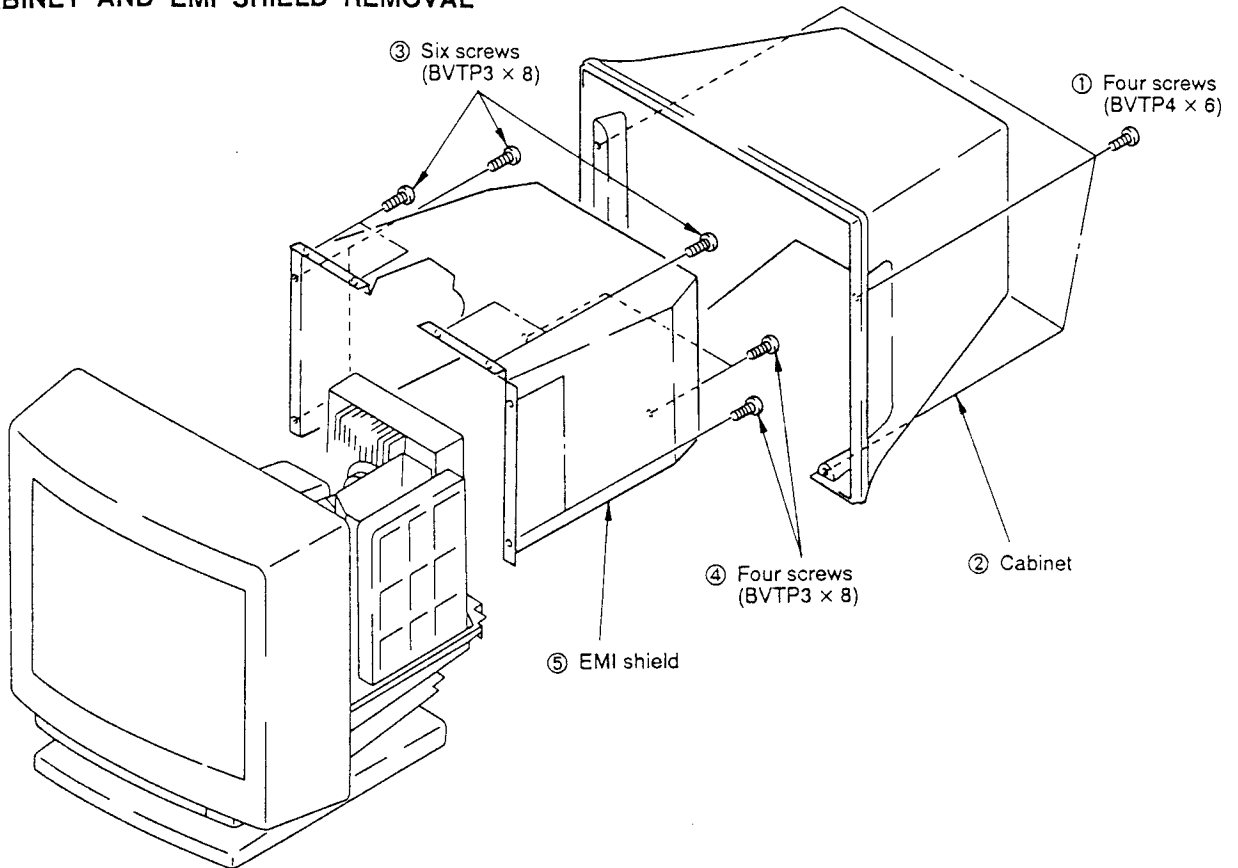
- A Board (Conductor Side) -



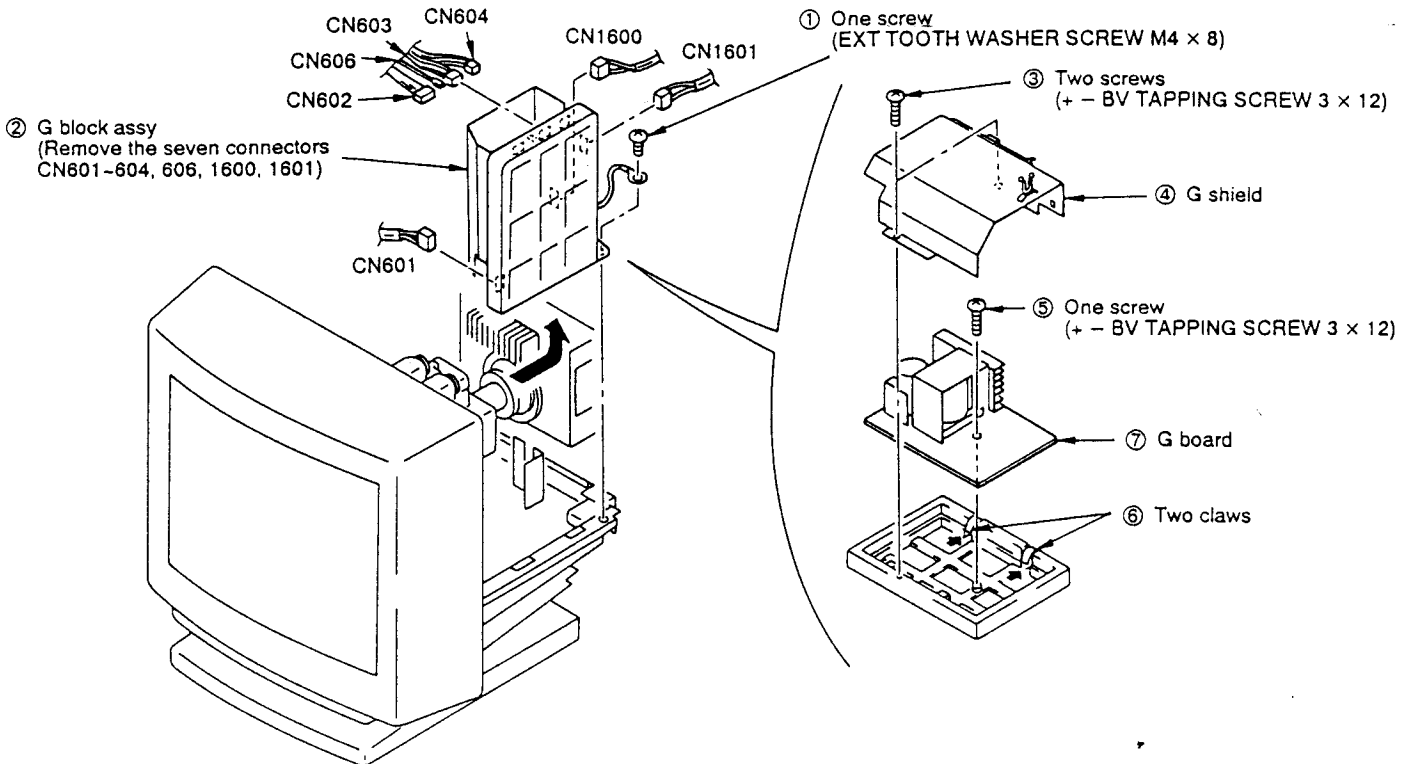
- [Pattern] : Pattern from the side which enables seeing.
- [Pattern] : Pattern of the rear side.

SECTION 1 DISASSEMBLY

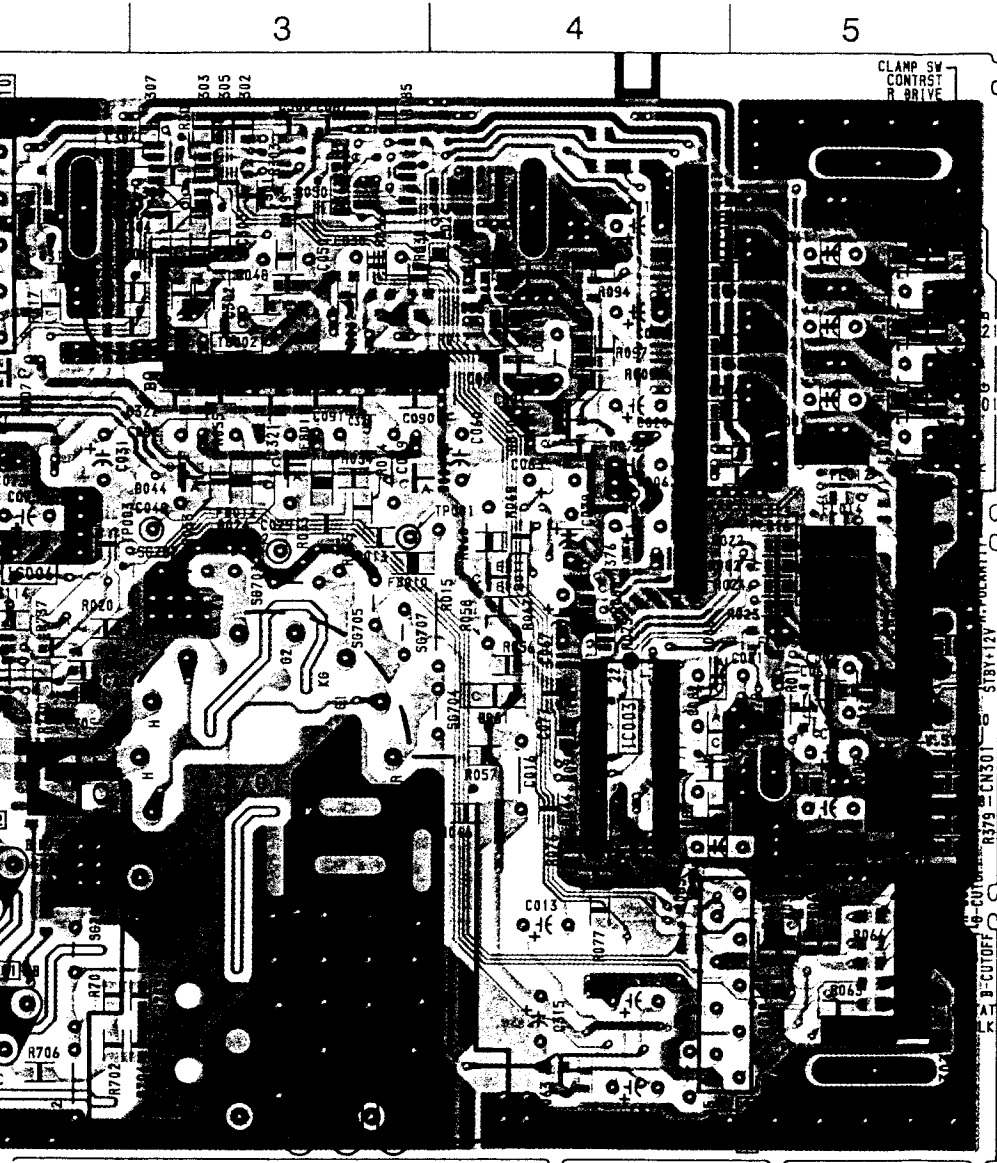
1-1. CABINET AND EMI SHIELD REMOVAL



1-2. G BLOCK ASSY REMOVAL



A SYNC SEP
VIDEO AMP
ARC SUPPRESSION



• A BOARD

| IC | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| IC001 | B-4 | B-1 |
| IC002 | B-3 | B-3 |
| IC003 | C-4 | |
| IC004 | B-1 | B-4 |
| IC005 | B-2 | B-4 |
| IC006 | B-2 | B-4 |
| IC007 | | A-3 |
| IC008 | | A-3 |
| IC009 | | A-3 |
| IC010 | A-2 | A-4 |
| IC011 | A-2 | A-4 |
| IC012 | A-1 | A-4 |
| IC013 | C-4 | C-1 |
| IC701 | | B-4 |
| IC702 | | B-4 |

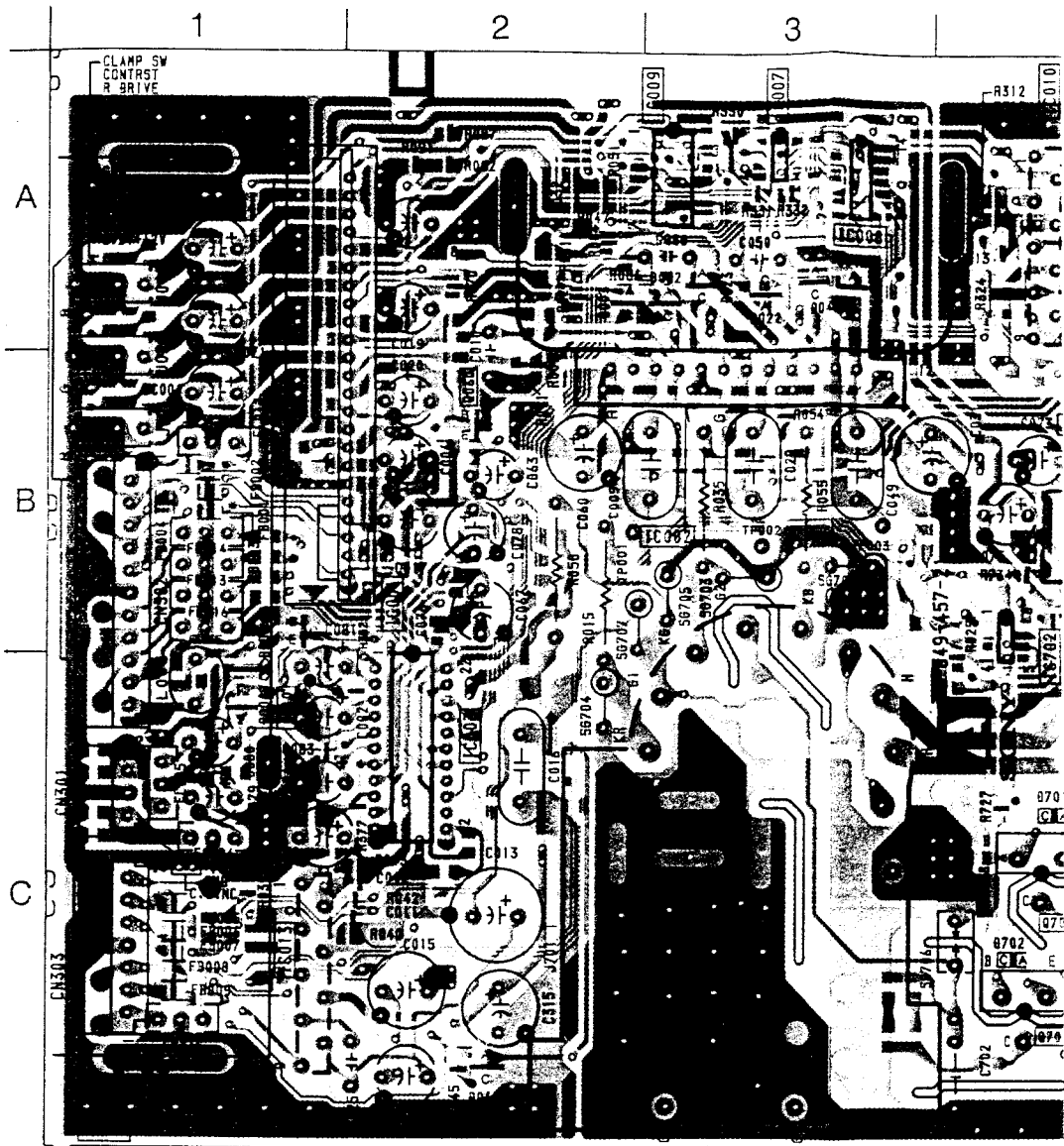
| TRANSISTOR | | |
|------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| Q010 | | B-1 |
| Q011 | B-4 | |
| Q060 | | B-2 |
| Q063 | A-3 | |
| Q701 | C-2 | C-4 |
| Q702 | C-2 | C-4 |

| DIODE | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| D002 | | A-3 |
| D003 | | A-2 |
| D004 | B-3 | |
| D005 | | C-1 |
| D006 | | C-1 |
| D007 | B-2 | |
| D008 | C-4 | |
| D009 | C-4 | |
| D022 | | A-3 |
| D023 | | A-3 |
| D024 | B-3 | |
| D027 | B-2 | |
| D042 | | A-3 |
| D043 | | A-3 |
| D044 | B-3 | |
| D047 | B-1 | |
| D061 | C-4 | |
| D062 | | C-2 |
| D063 | C-4 | |
| D701 | | C-4 |
| D702 | | C-4 |

| VARIABLE RESISTOR | | |
|-------------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| RV701 | C-1 | C-5 |

- A Board (Component Side) -

• A BOARD



- [Solid black pattern] : Pattern from the side which enables seeing.
- [Stippled pattern] : Pattern of the rear side.

| IC | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| IC001 | B-4 | B-1 |
| IC002 | B-3 | B-3 |
| IC003 | C-4 | |
| IC004 | B-1 | B-4 |
| IC005 | B-2 | B-4 |
| IC006 | B-2 | B-4 |
| IC007 | | A-3 |
| IC008 | | A-3 |
| IC009 | | A-3 |
| IC010 | A-2 | A-4 |
| IC011 | A-2 | A-4 |
| IC012 | A-1 | A-4 |
| IC013 | C-4 | C-1 |
| IC701 | | B-4 |
| IC702 | | B-4 |

| TRANSISTOR | | |
|------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| Q010 | | B-1 |
| Q011 | B-4 | |
| Q060 | | B-2 |
| Q063 | A-3 | |
| Q701 | C-2 | C-4 |
| Q702 | C-2 | C-4 |

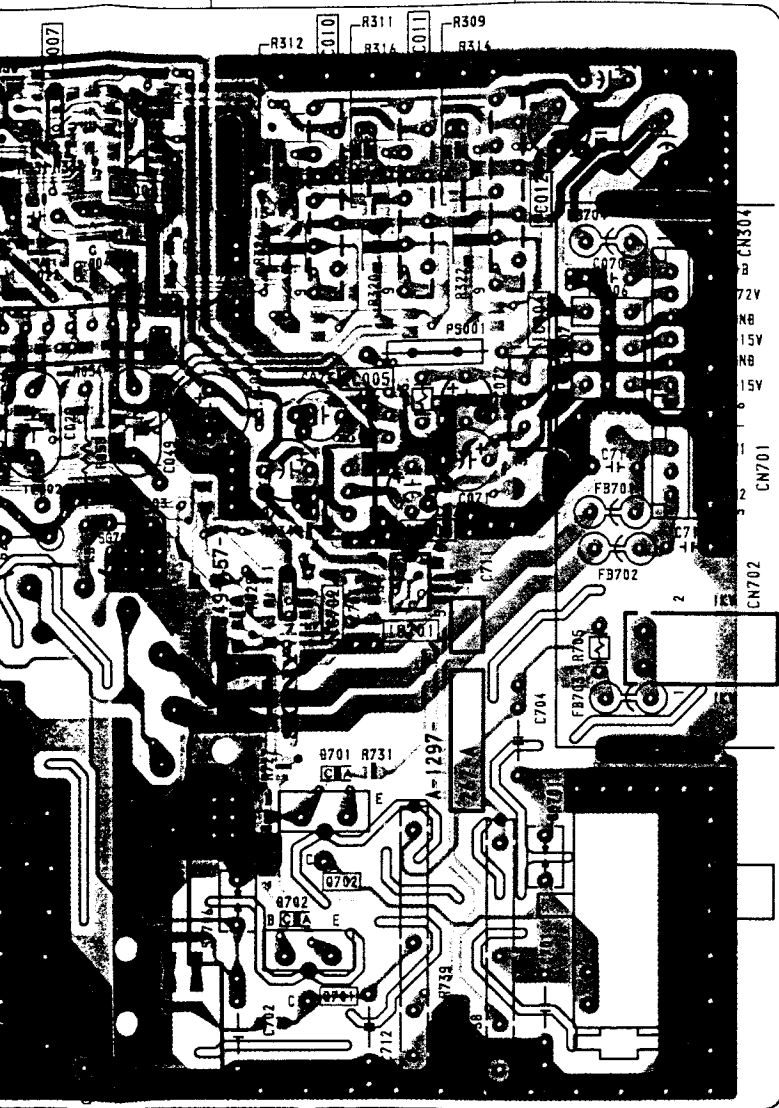
| DIODE | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| D002 | | A-3 |
| D003 | | A-2 |
| D004 | B-3 | |
| D005 | | C-1 |
| D006 | | C-1 |
| D007 | B-2 | |
| D008 | C-4 | |
| D009 | C-4 | |
| D022 | | A-3 |
| D023 | | A-3 |
| D024 | B-3 | |
| D027 | B-2 | |
| D042 | | A-3 |
| D043 | | A-3 |
| D044 | B-3 | |
| D047 | B-1 | |
| D061 | C-4 | |
| D062 | | C-2 |
| D063 | C-4 | |
| D701 | | C-4 |
| D702 | | C-4 |

| VARIABLE RESISTOR | | |
|-------------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| RV701 | C-1 | C-5 |

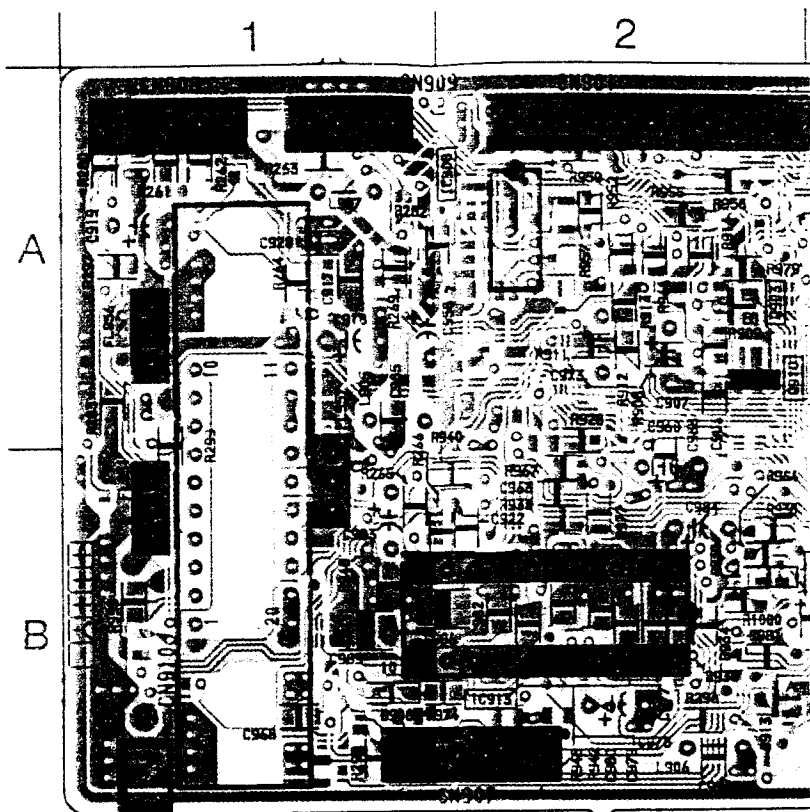
3

4

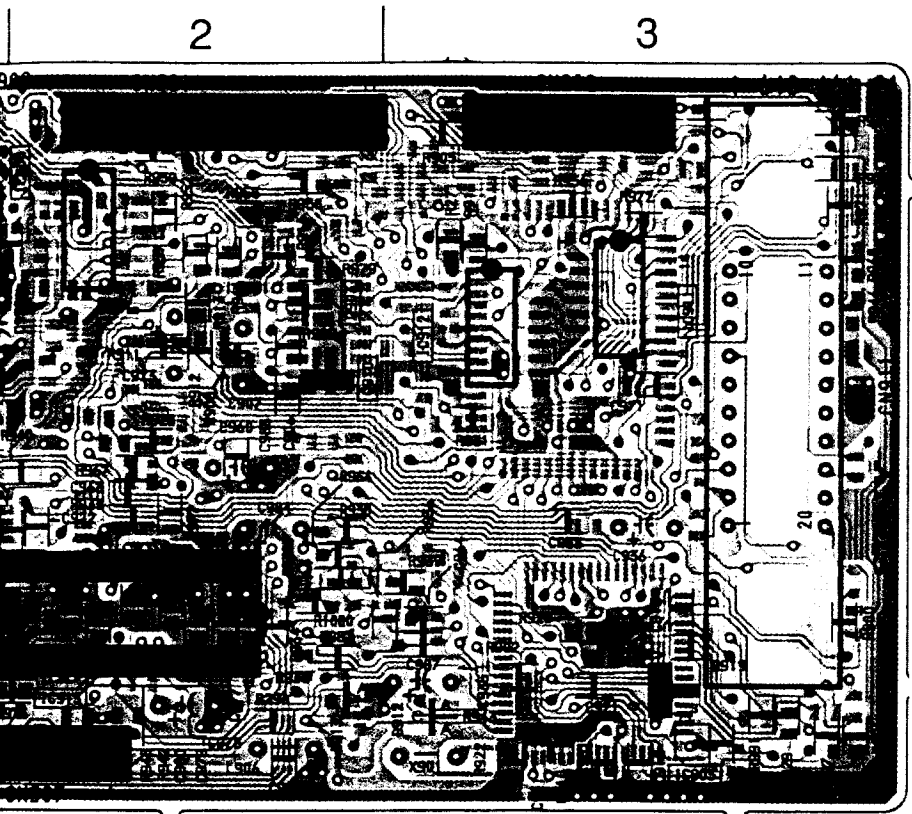
5



- N Board (Conductor Side) -



- [Pattern] : Pattern from the side which enables seeing.
- [Pattern] : Pattern of the rear side.



• N BOARD

| IC | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| IC901 | | A - 1 |
| IC902 | | A - 2 |
| IC903 | B - 3 | |
| IC904 | | B - 1 |
| IC905 | | A - 3 |
| IC908 | A - 2 | |
| IC909 | | A - 3 |
| IC911 | A - 3 | |
| IC912 | A - 3 | |
| IC913 | B - 2 | B - 2 |
| IC914 | | B - 3 |

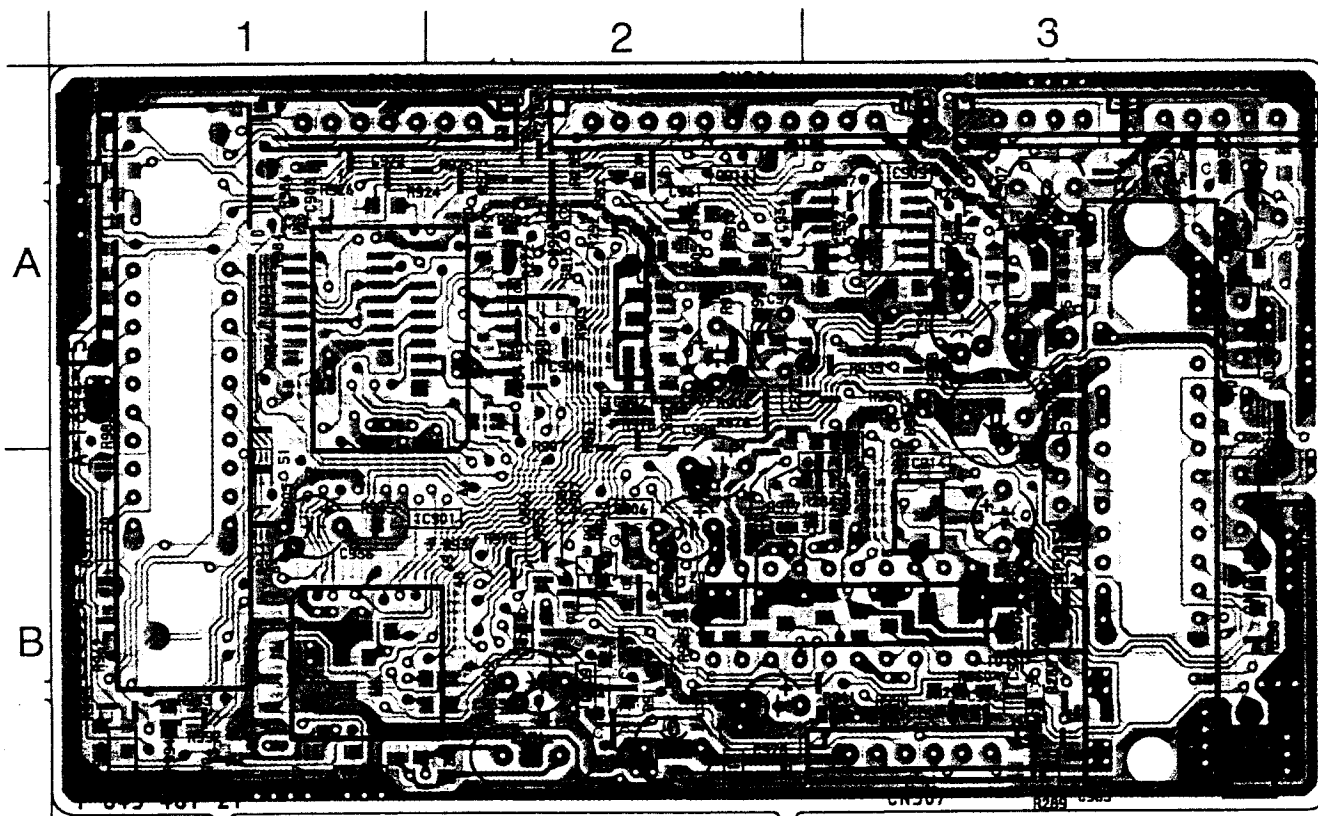
| TRANSISTOR | | |
|------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| Q903 | A - 2 | |
| Q905 | | B - 2 |
| Q906 | B - 2 | |
| Q907 | | B - 3 |
| Q909 | | B - 2 |
| Q910 | A - 2 | |
| Q912 | | B - 2 |

| DIODE | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| D901 | | A - 2 |
| D902 | | B - 3 |
| D903 | | A - 3 |
| D904 | | A - 3 |
| D905 | | B - 1 |
| D906 | | B - 3 |
| D907 | | B - 2 |
| D908 | B - 1 | |
| D909 | | B - 2 |
| D910 | | B - 2 |
| D911 | | B - 2 |
| D912 | B - 3 | |
| D913 | B - 2 | |
| D914 | | B - 2 |
| D915 | | B - 3 |
| D917 | | B - 3 |
| D920 | | A - 2 |

| CRYSTAL | | |
|---------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| X901 | B - 3 | B - 2 |

s seeing.

- N Board (Component Side) -

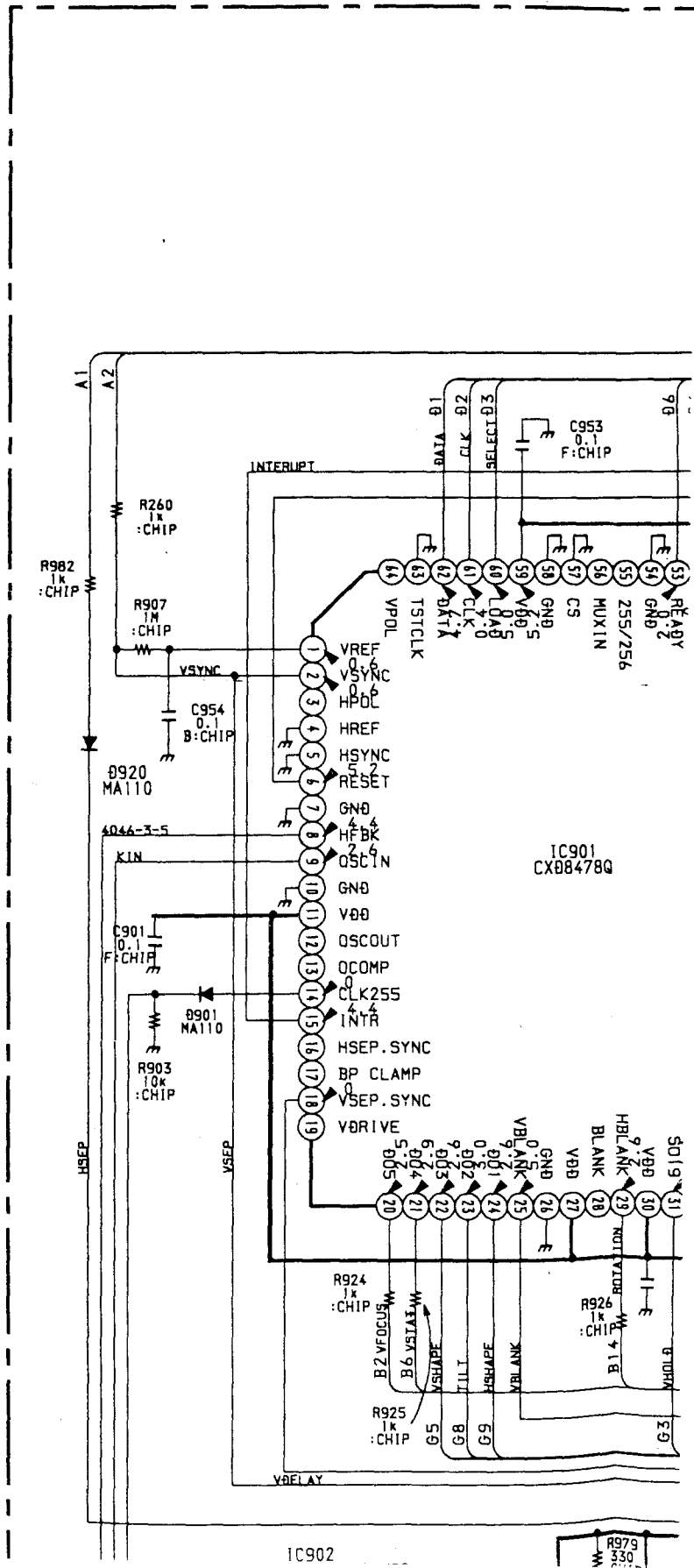


- [Hatched Pattern] : Pattern from the side which enables seeing.
- [Dotted Pattern] : Pattern of the rear side.

(3) Schematic Diagram of N Board

1 2 3 4 5 6 7 8

A
B
C
D
E
F
G
H
I
J
K



CN901
11P
WHT
:S-MICRO
TO A BOARD
CN302

| | | | |
|----|-----------|---|---------|
| 1 | STBY+12V | 1 | C BLANK |
| 2 | HPOLARITY | 2 | HSTAT |
| 3 | VPOLARITY | | |
| 4 | C-SYNC | | |
| 5 | V-SYNC | | |
| 6 | AGND | | |
| 7 | B DRIVE | | |
| 8 | G DRIVE | | |
| 9 | R DRIVE | | |
| 10 | CONTRAST | | |
| 11 | CLAMP SW | | |
| | | 1 | C BLANK |
| | | 2 | HSTAT |

R285 470 :CHIP
R286 2.2k :CHIP

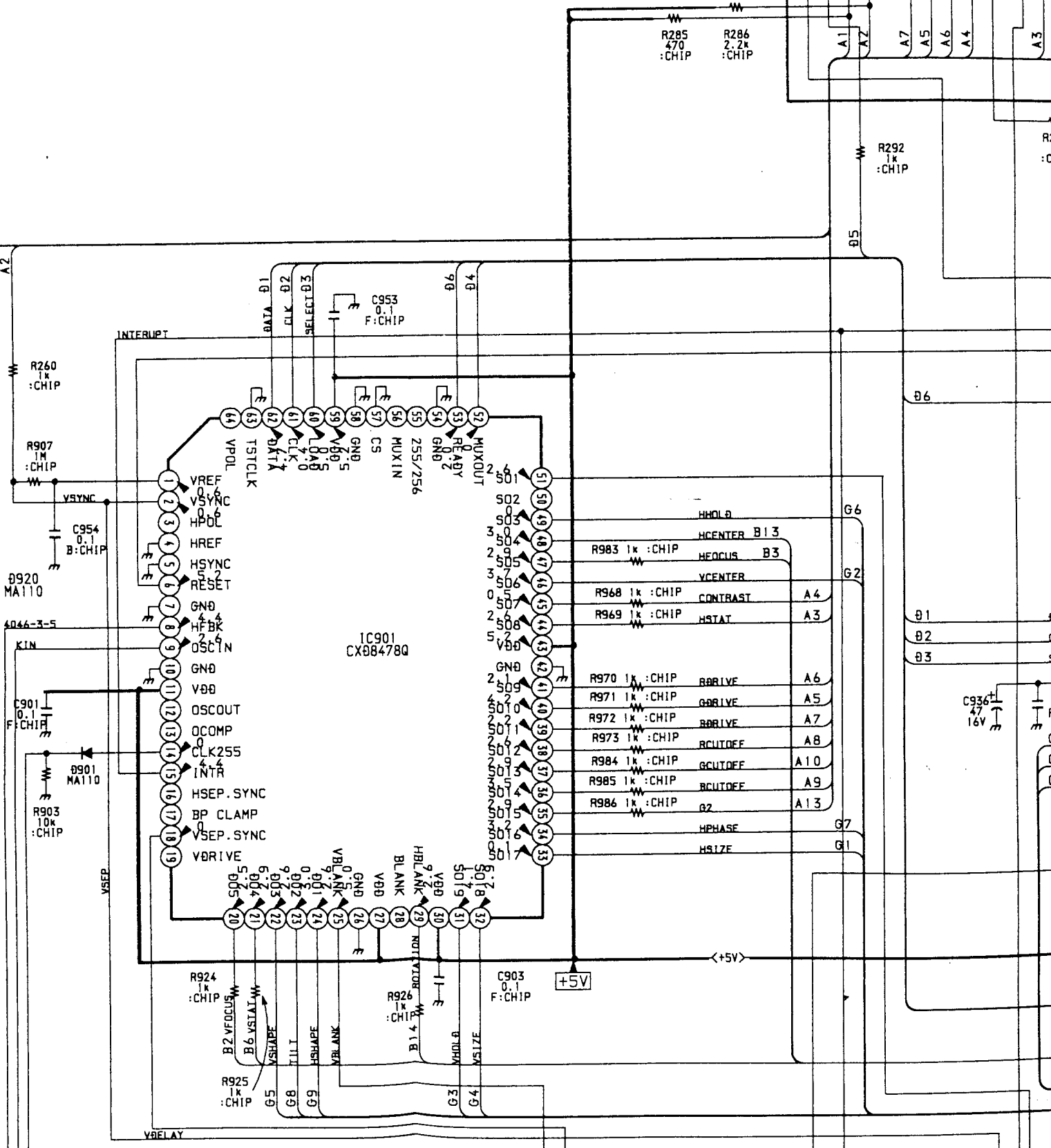
R292 1k :CHIP

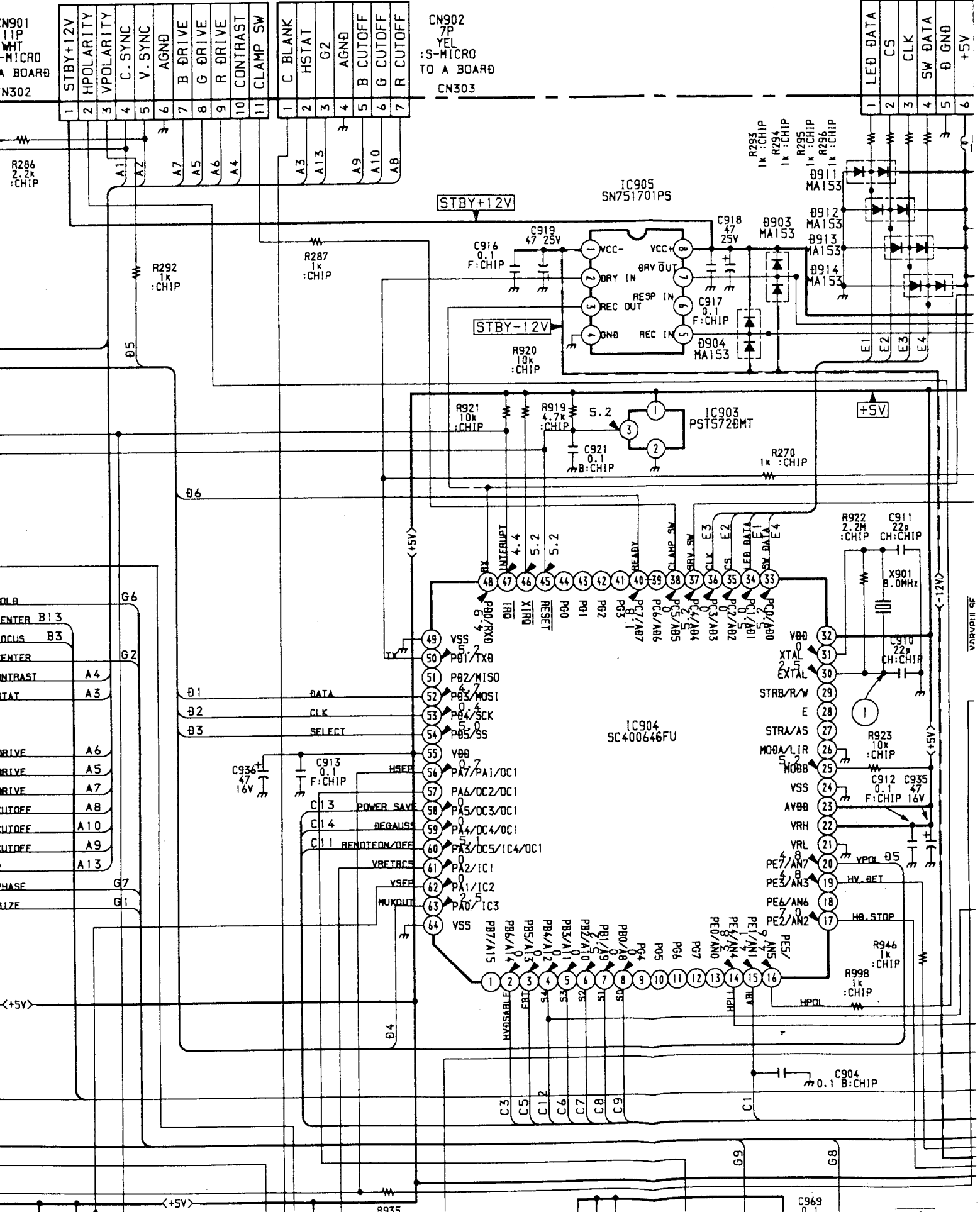
C953 0.1 F:CHIP

IC901 CX98478Q

C903 0.1 F:CHIP

C936 47 16V





N901
11P
MHT
MICRO
BOARD
N302

CN902
7P
YEL
:5-MICRO
TO A BOARD
CN303

LED DATA
1
2 CS
3 CLK
4 SW DATA
5 Ø GND
6 +5V

ENTER B13
OCUS B3
ENTER
CONTRAST A4
STAT A3
DRIVE A6
DRIVE A5
DRIVE A7
CUTOFF A8
CUTOFF A10
CUTOFF A9
A13

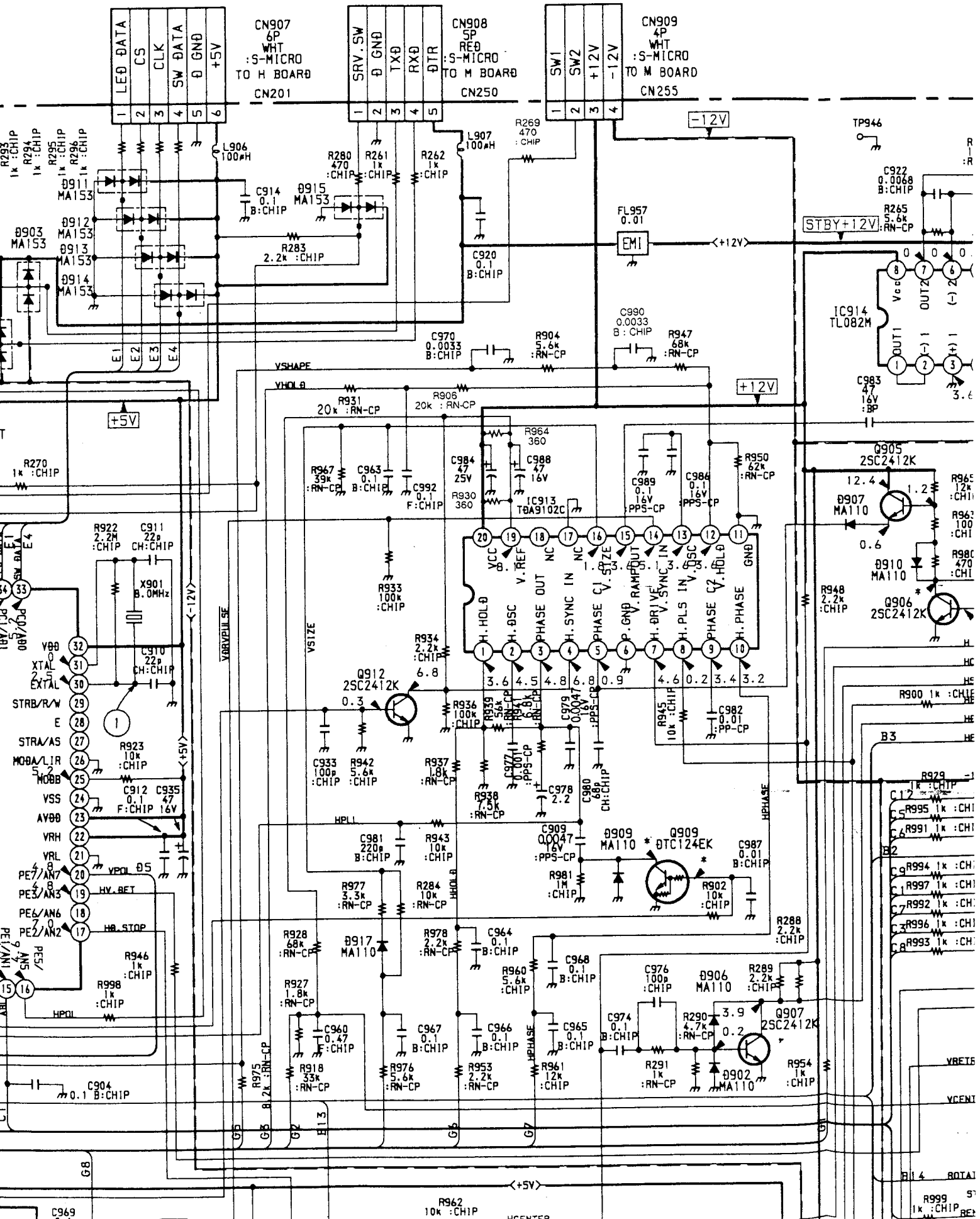
PHASE G7
LIZE G1

VARV III GF

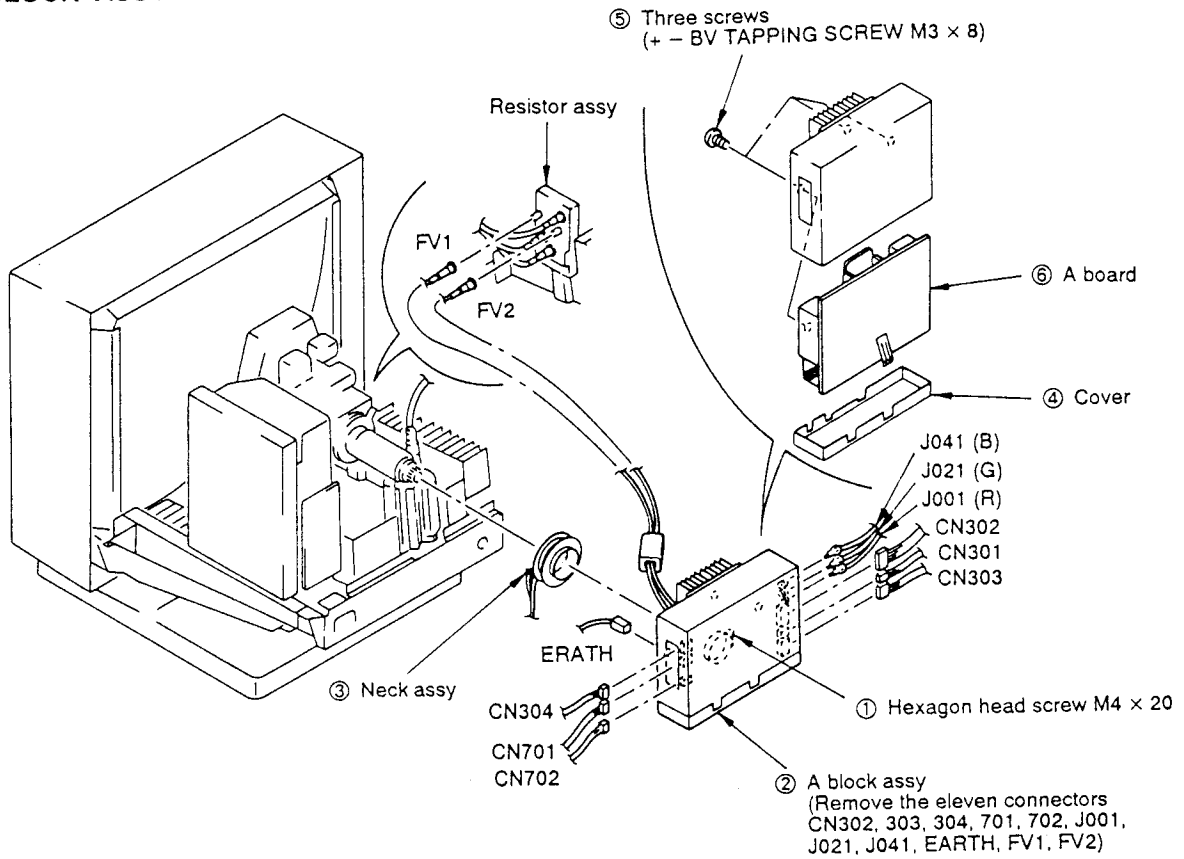
<+5V>

<+5V>

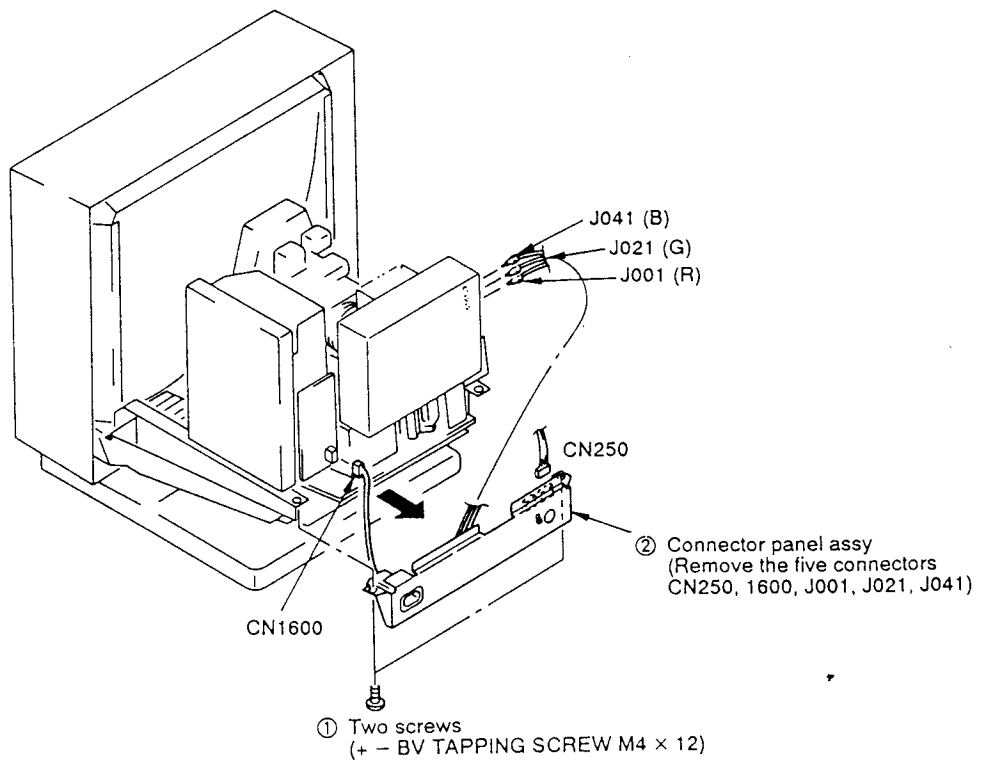
C969
0.1
B:CHIP



1-3. A BLOCK ASSY REMOVAL

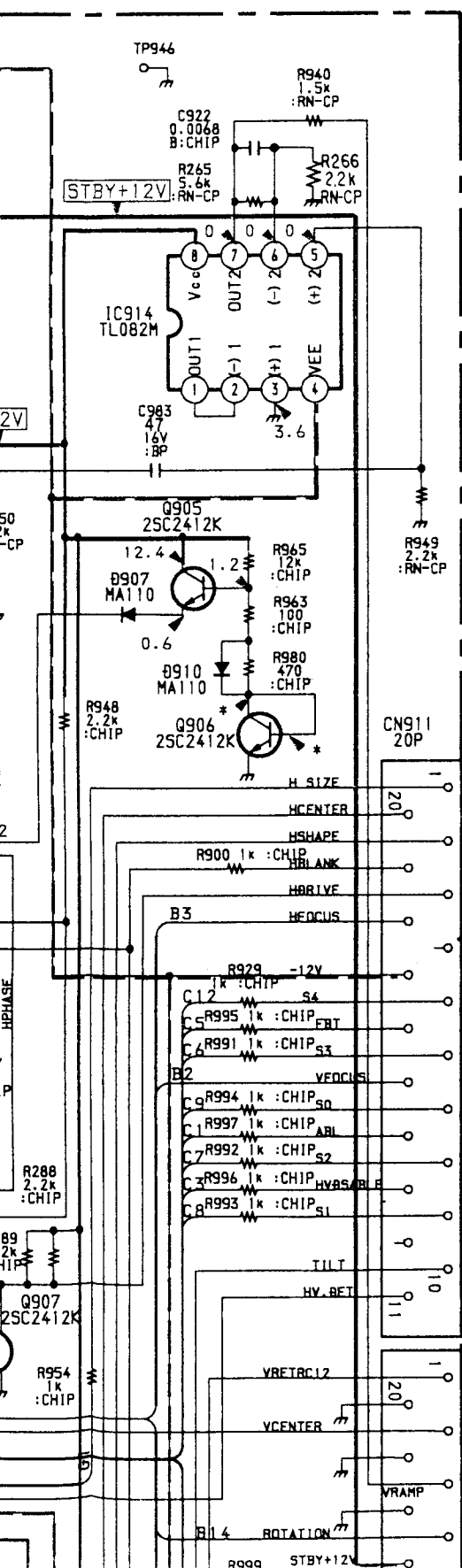
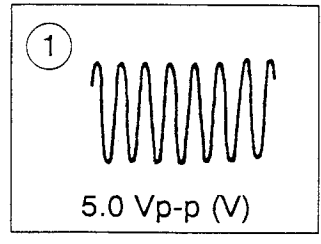


1-4. CONNECTOR PANEL ASSY REMOVAL

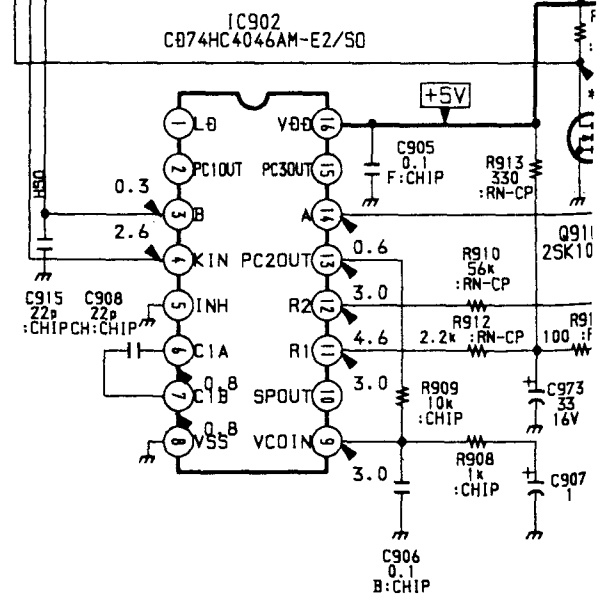
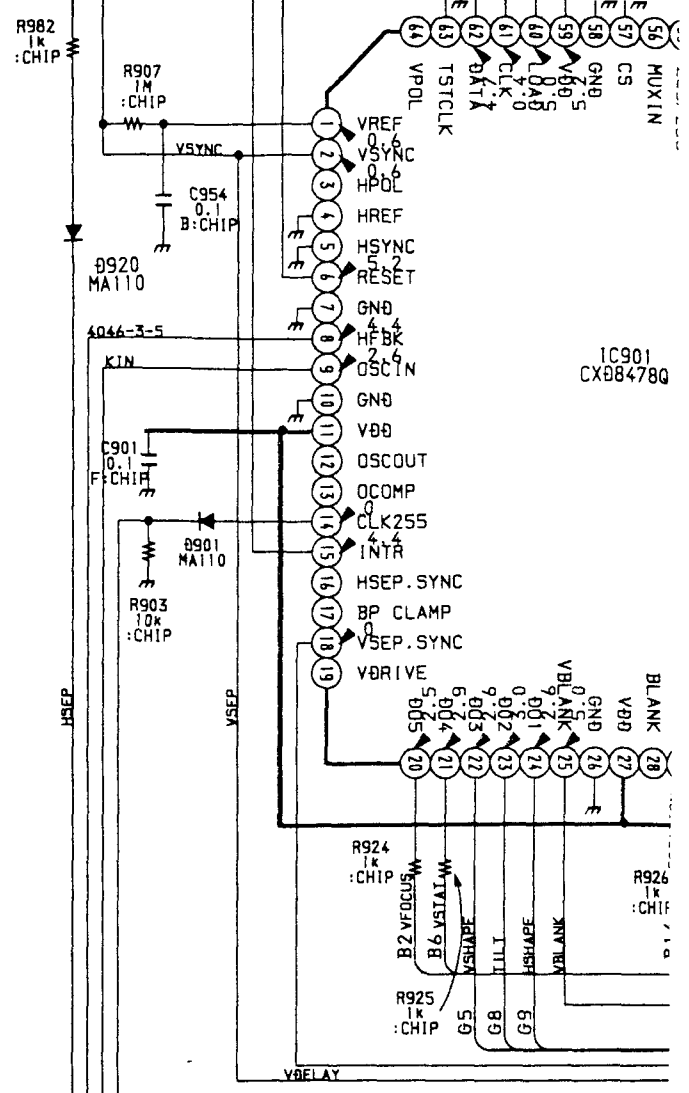


A
B
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K

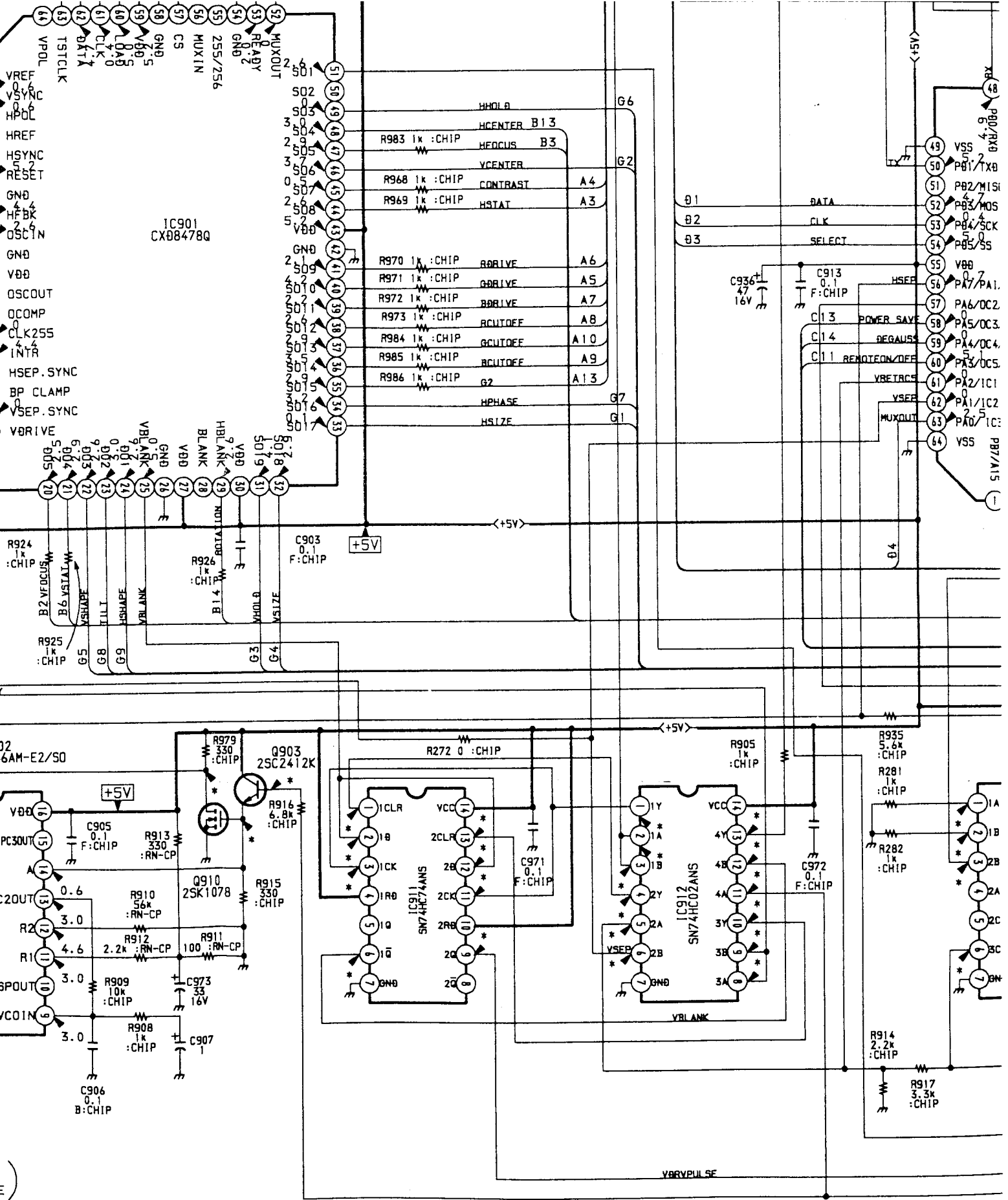
N BOARD WAVEFORM

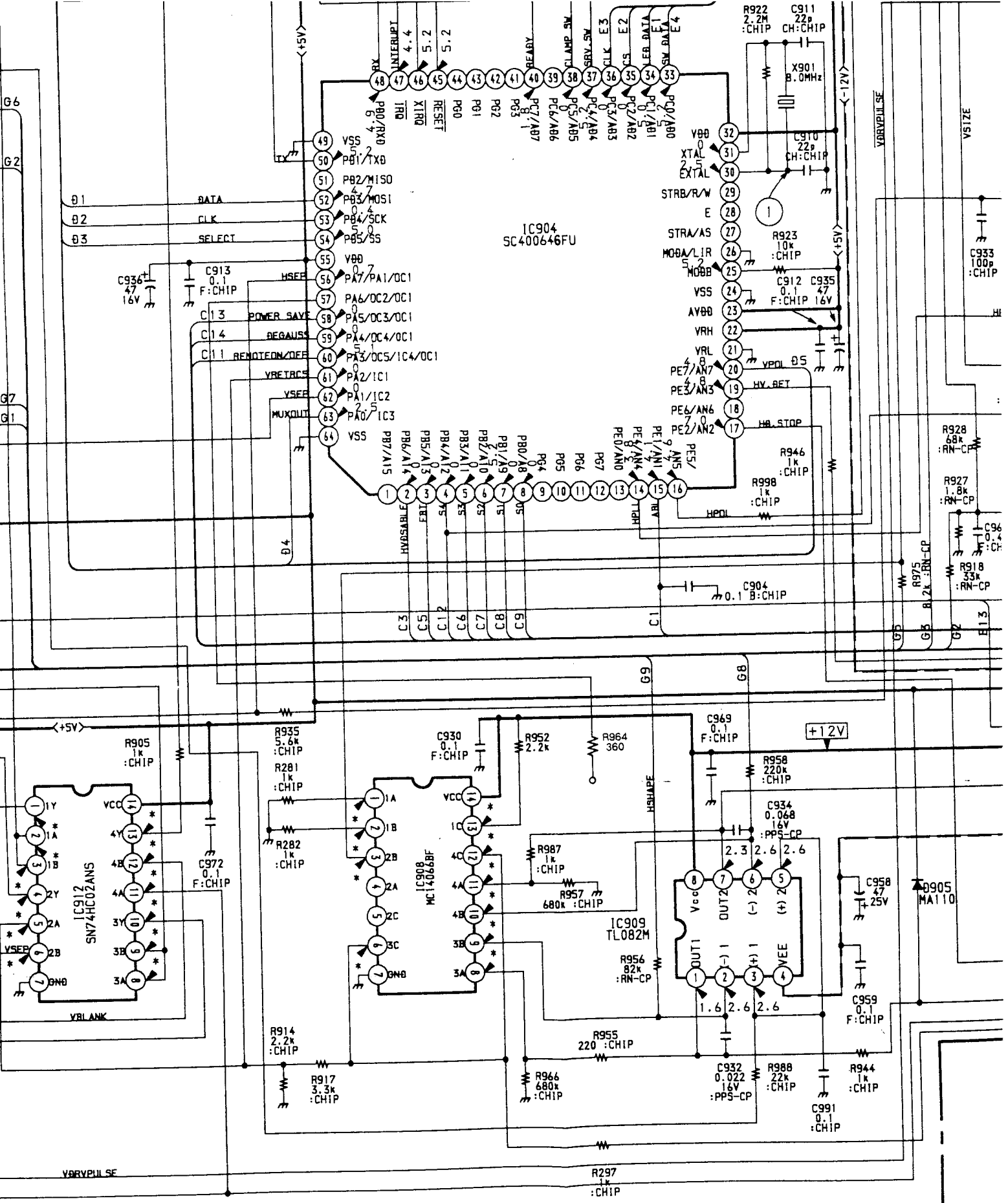


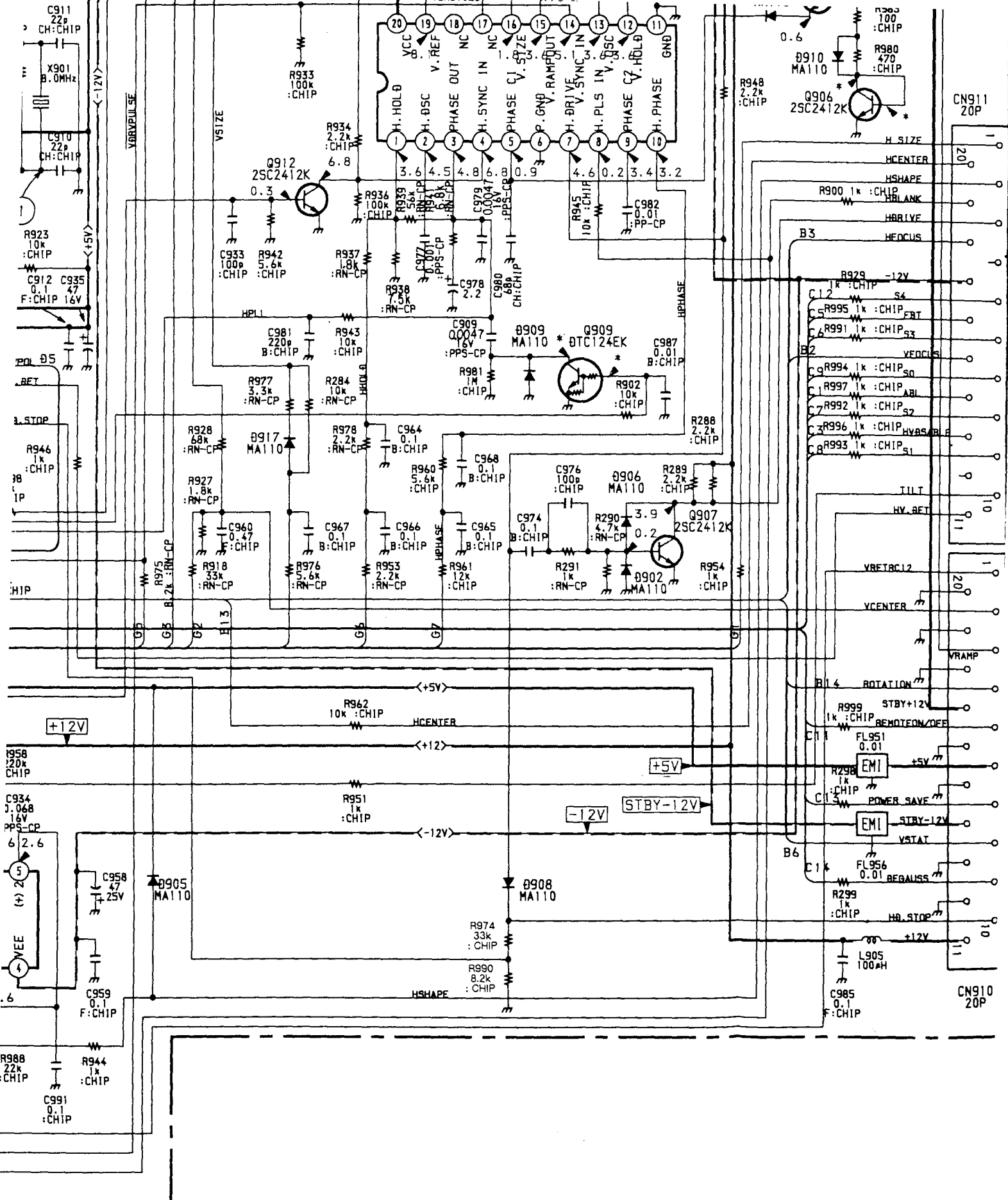
F
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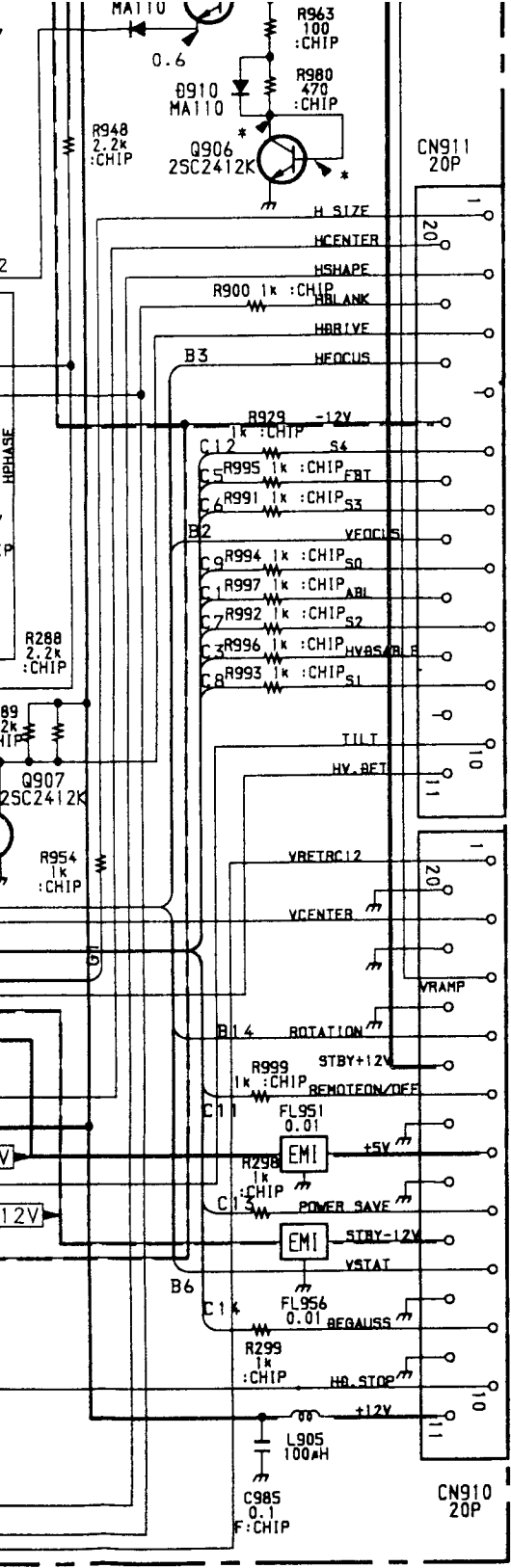


N (SYSTEM CONT
E²PROM POWER SAVE)









F
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F

G

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J

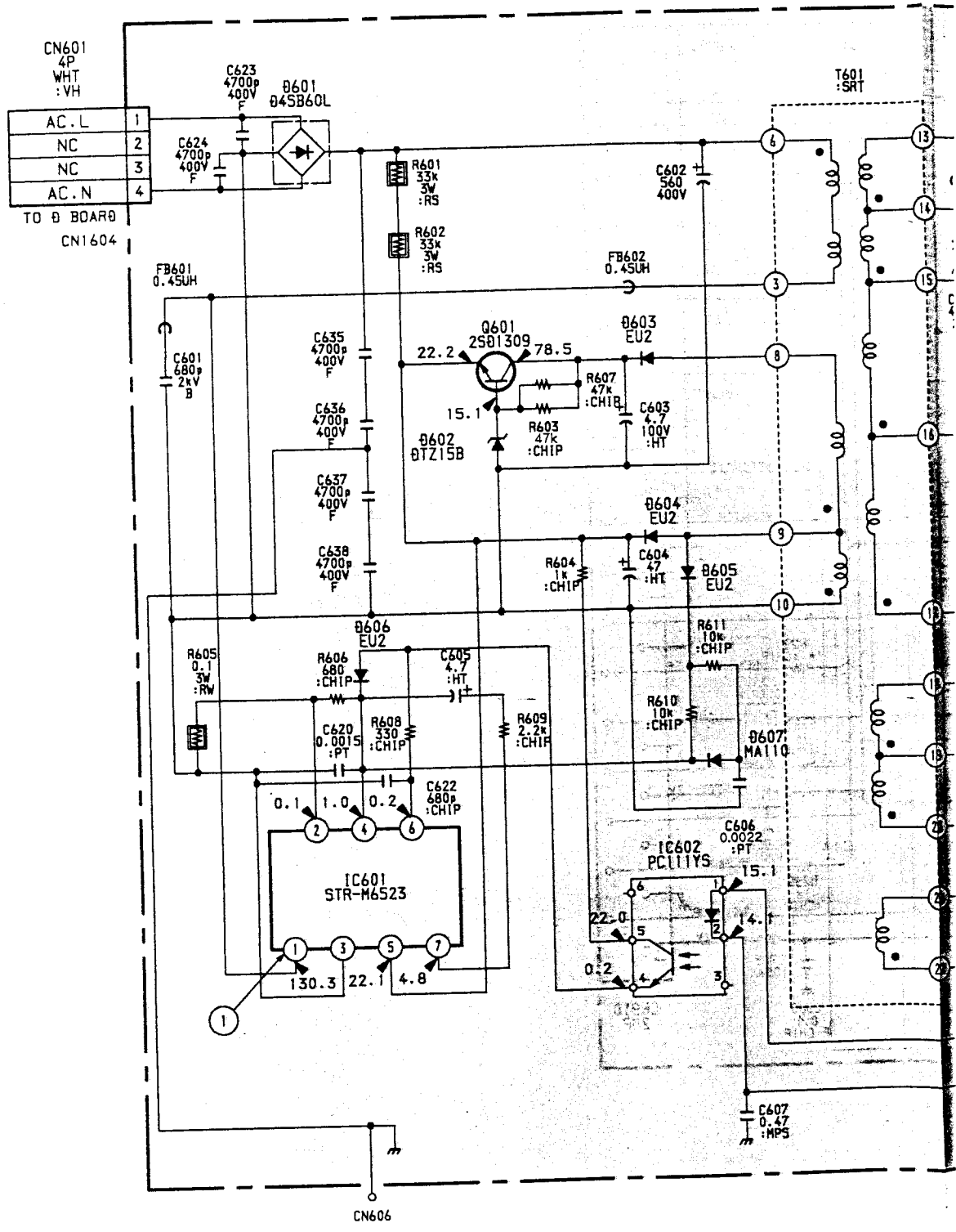
K

L

M

N

O

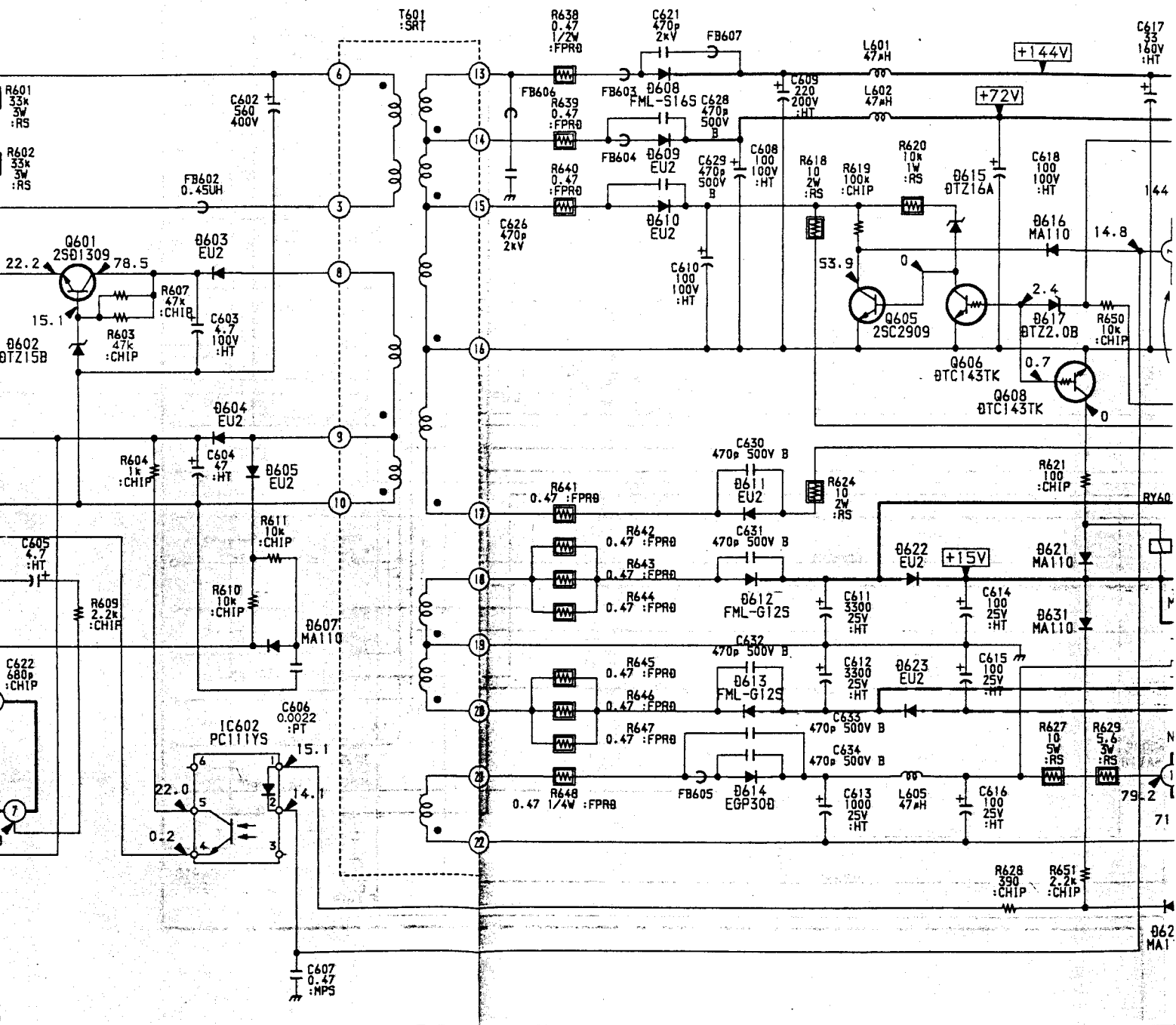


Schematic diagram

Schematic diagrams

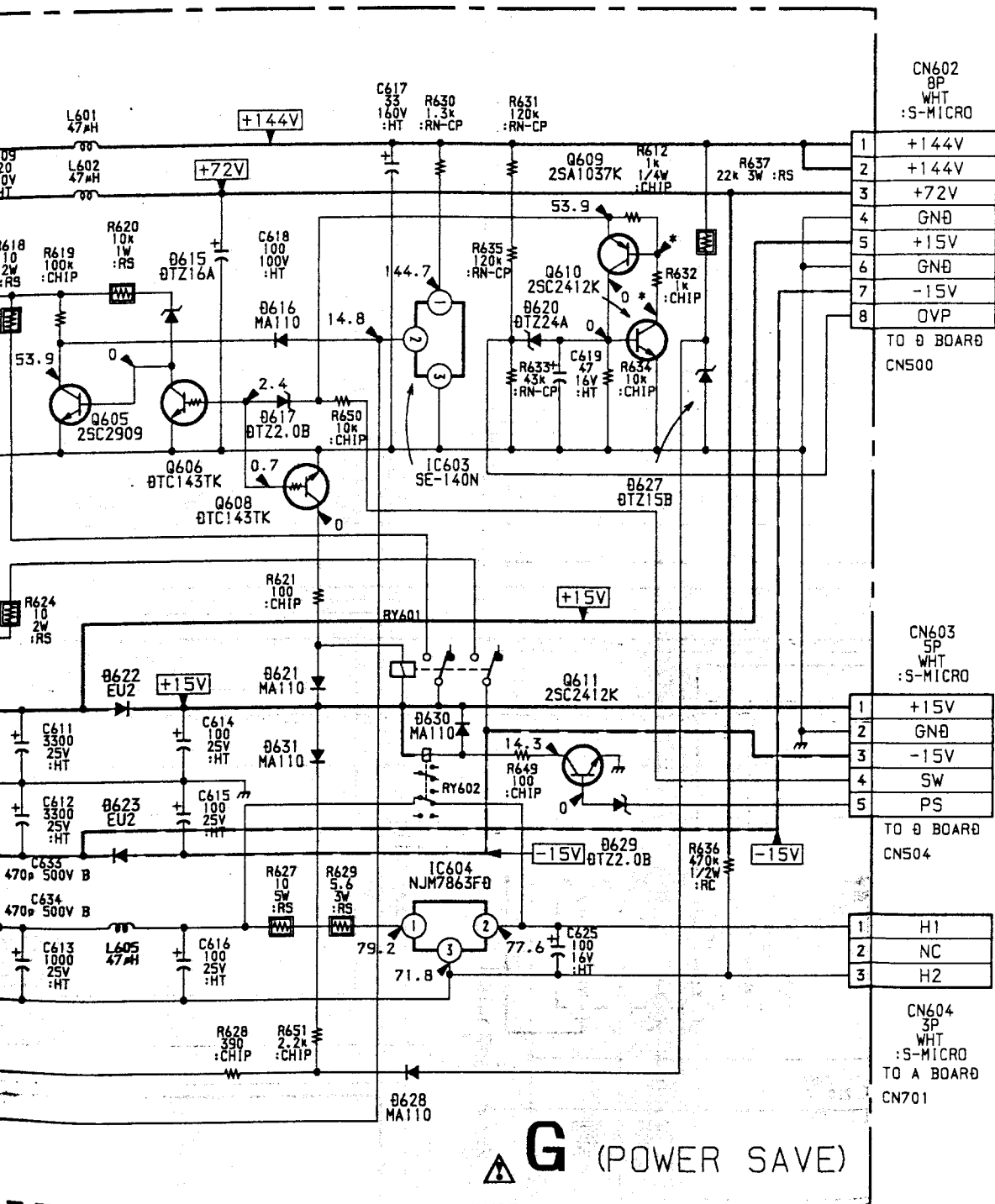
← [N] board

[G] [M] [H] boards →



Schematic diagrams

G M H boards →



CN602
8P
WHT
:S-MICRO

| | |
|---|-------|
| 1 | +144V |
| 2 | +144V |
| 3 | +72V |
| 4 | GNB |
| 5 | +15V |
| 6 | GNB |
| 7 | -15V |
| 8 | OVP |

TO Ø BOARD
CNS500

Ø201
SEL1422G-C.

POWER

R210
470
:CHIP

CN603
5P
WHT
:S-MICRO

| | |
|---|------|
| 1 | +15V |
| 2 | GNB |
| 3 | -15V |
| 4 | SW |
| 5 | PS |

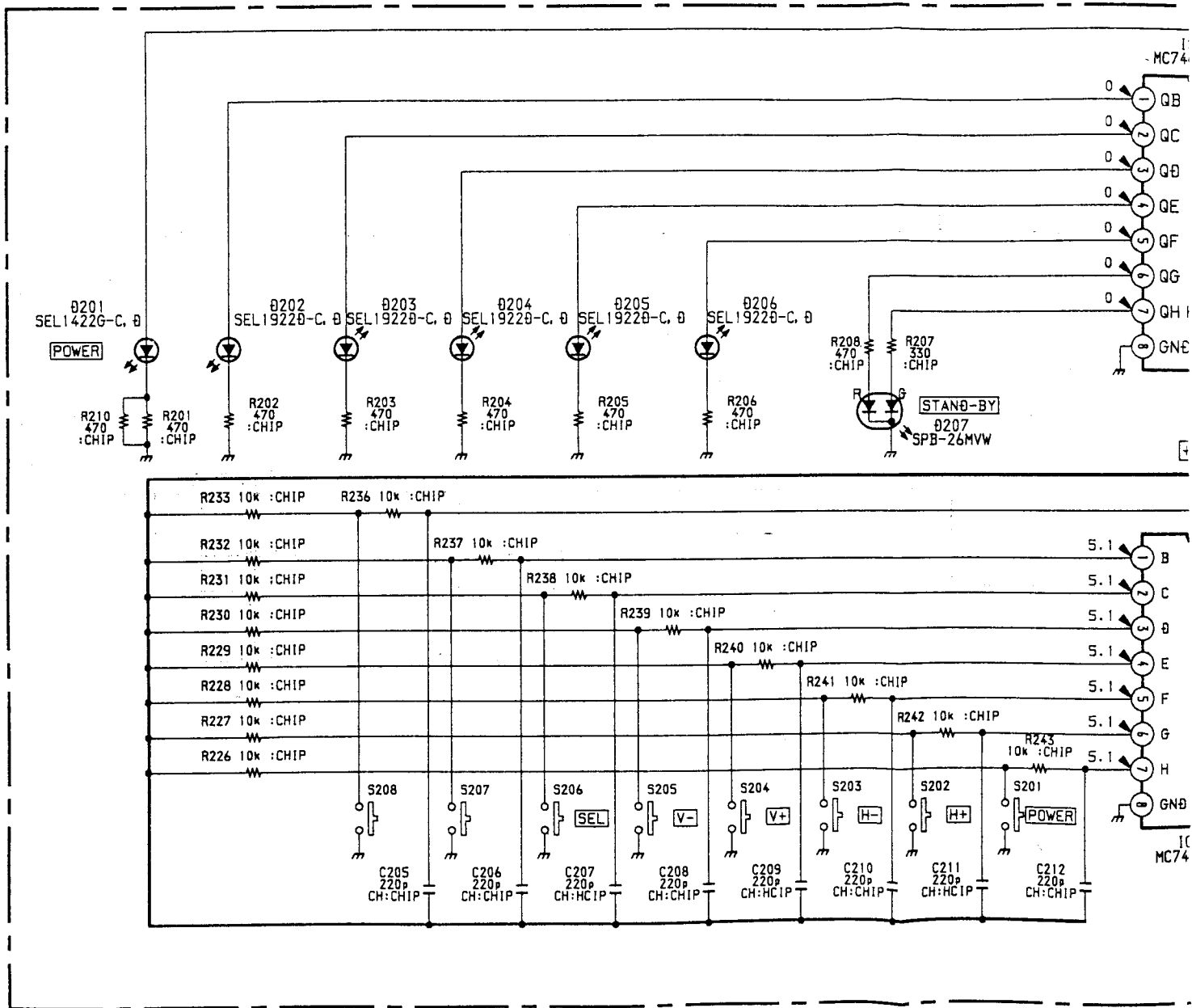
TO Ø BOARD
CNS04

| | |
|---|----|
| 1 | H1 |
| 2 | NC |
| 3 | H2 |

CN604
3P
WHT
:S-MICRO
TO A BOARD
CN701

G (POWER SAVE)

B-SS8243<J...>-G..

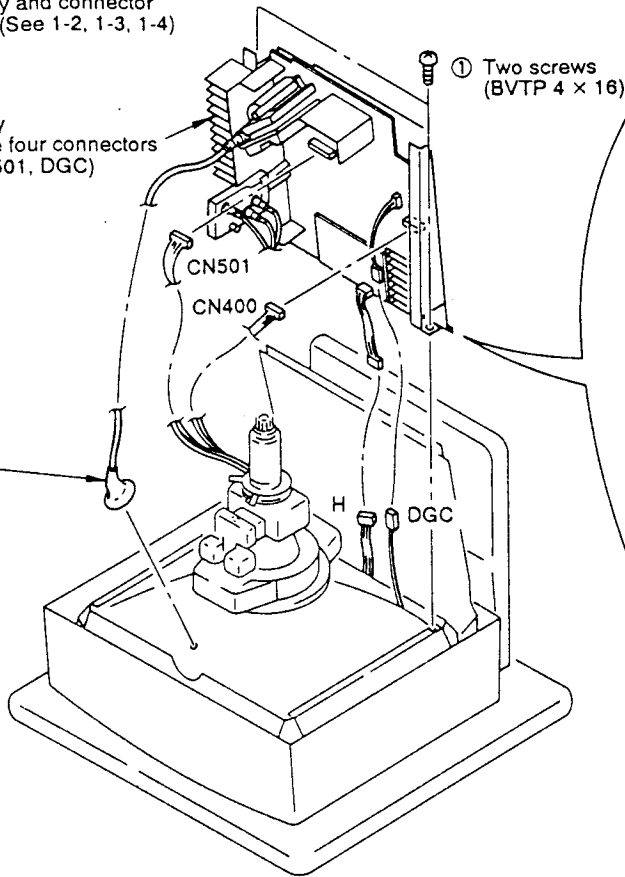


1-5. CHASSIS ASSY REMOVAL

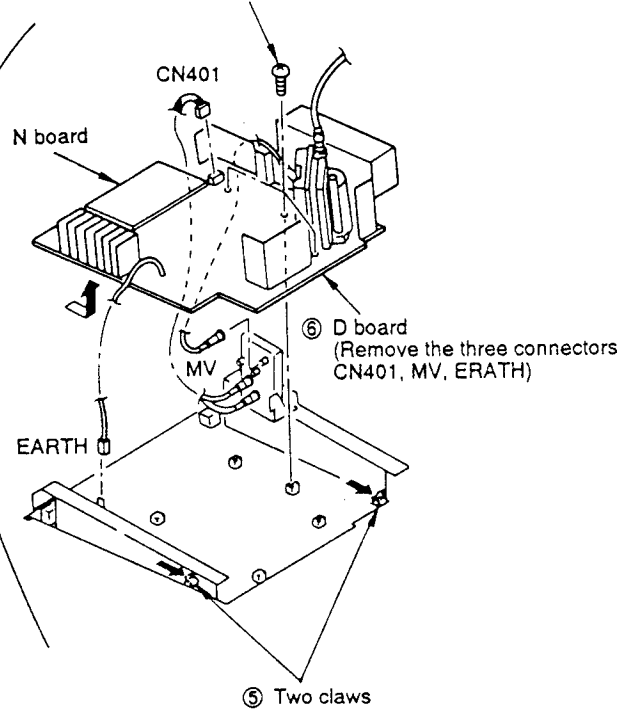
※ Remove the G block assy,
A block assy and connector
panel assy (See 1-2, 1-3, 1-4)

③ Chassis assy
(Remove the four connectors
CN H, 400, 501, DGC)

② Anode cap



④ Three screws
(+ - BV TAAPPING screw 3 x 12)

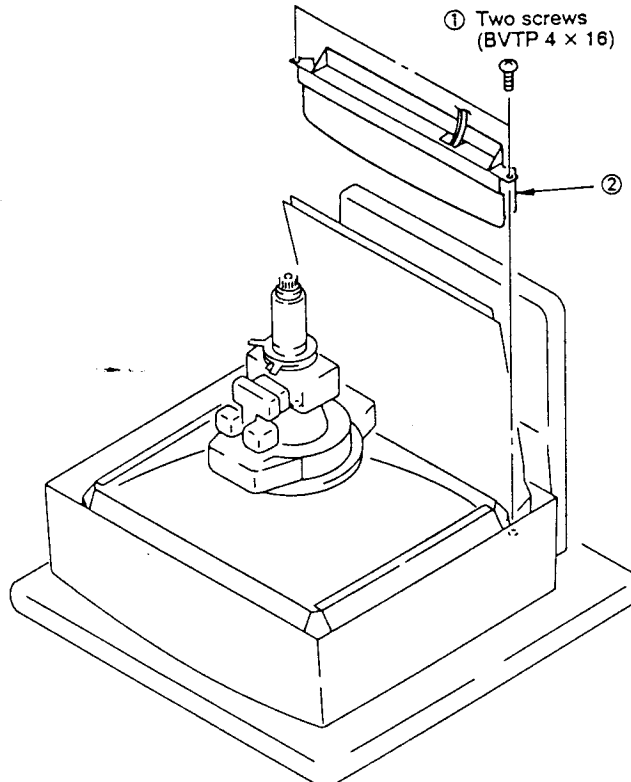


1-6. FRONT BLOCK ASSY REMOVAL

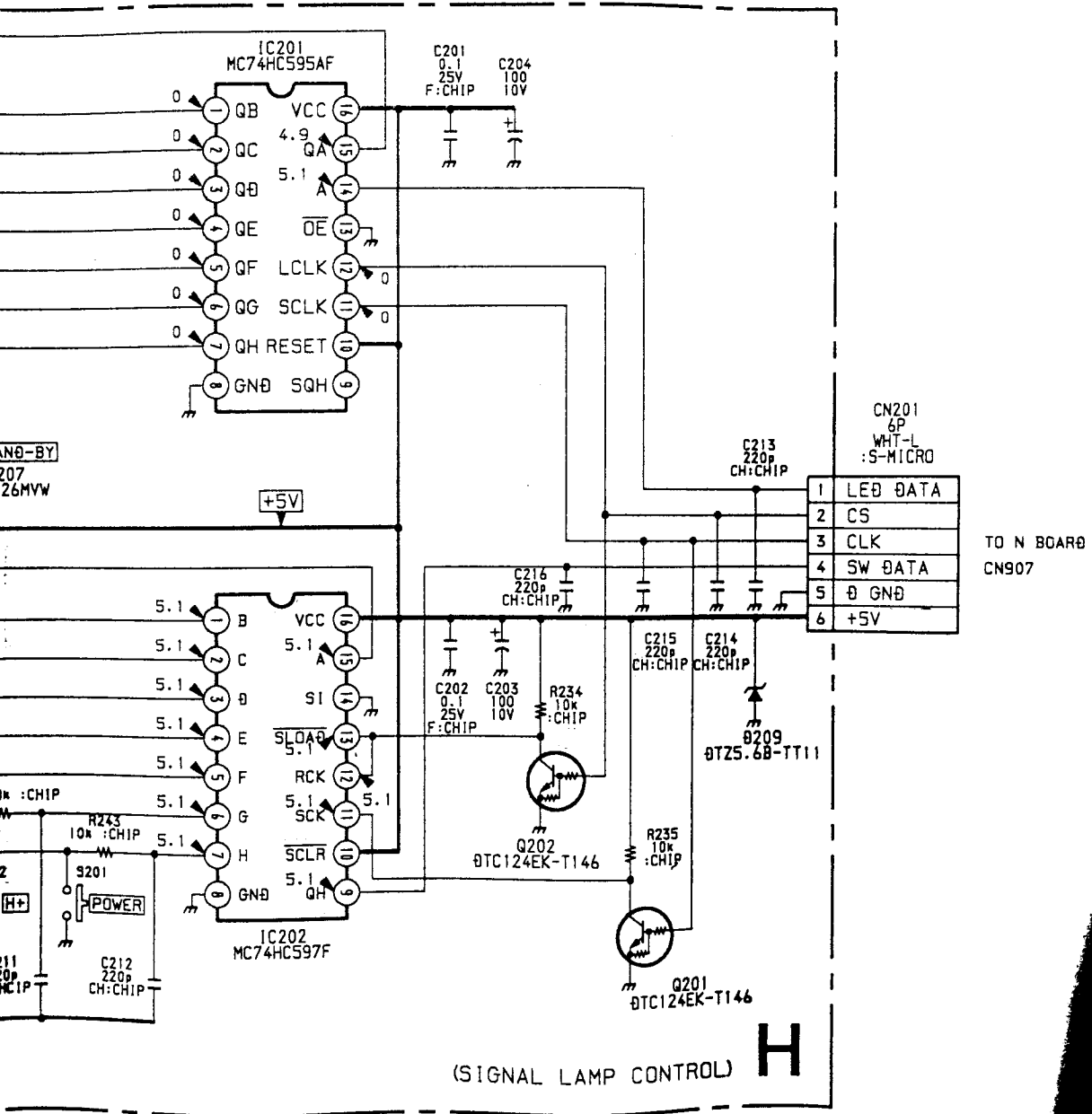
※ Remove the chassis assy
(See 1-5)

① Two screws
(BVTP 4 x 16)

② Front block assy



F
G
H
I
J
K
L
M
N
O



| | |
|---|----------|
| 1 | LED DATA |
| 2 | CS |
| 3 | CLK |
| 4 | SW DATA |
| 5 | Ø GND |
| 6 | +5V |

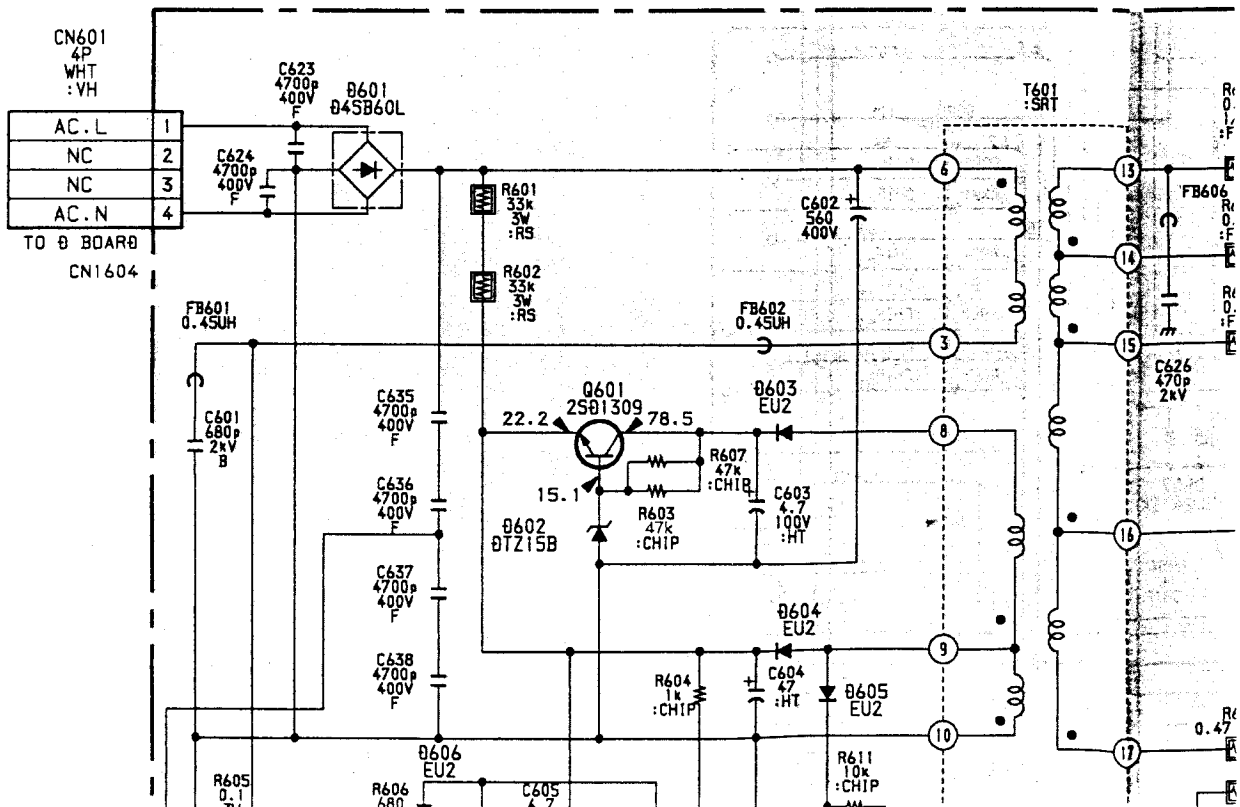
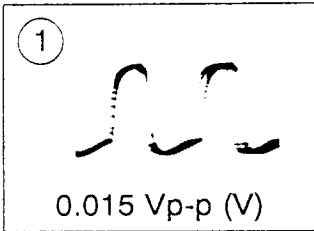
TO N BOARD
CN907

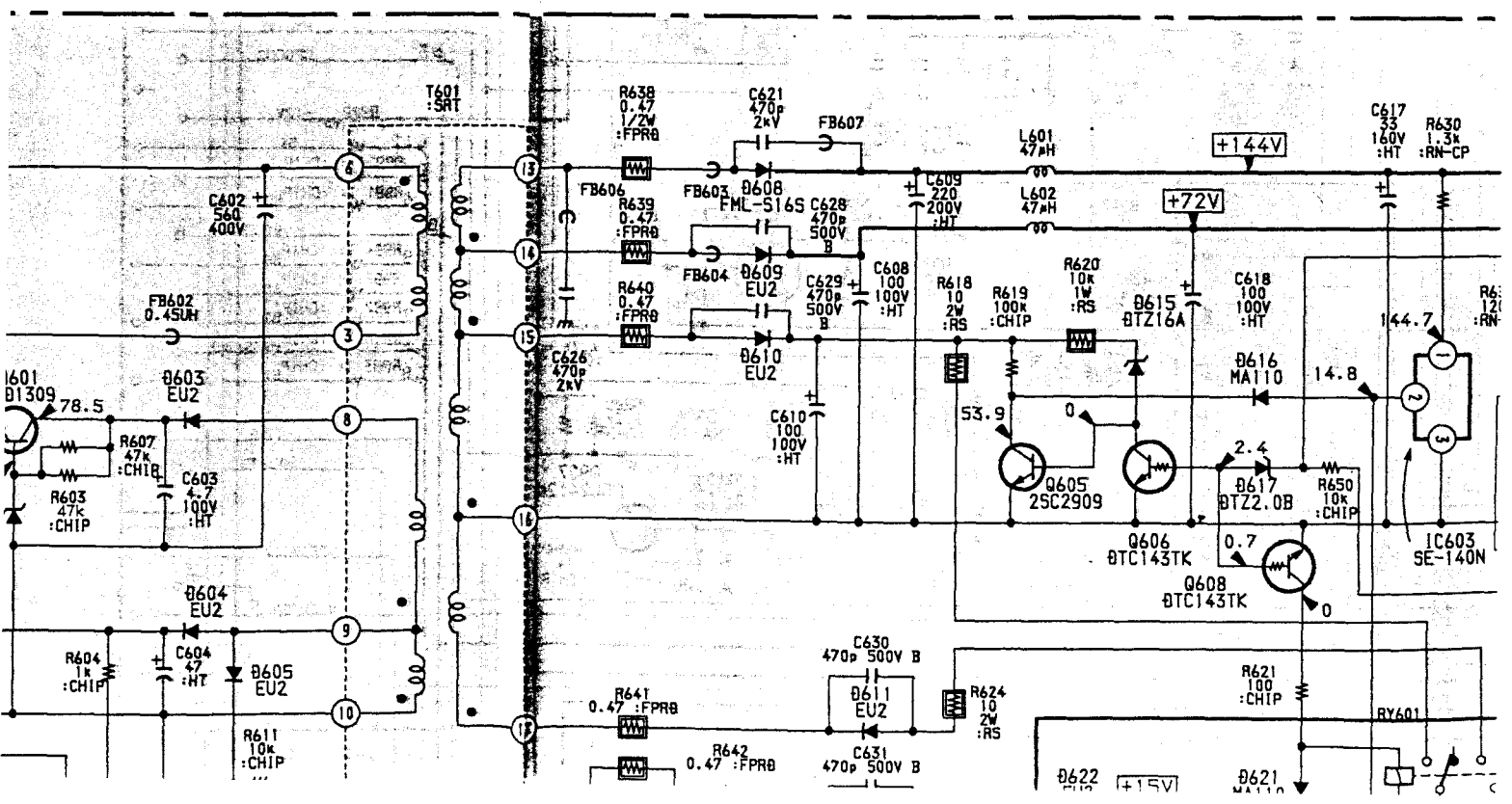
(SIGNAL LAMP CONTROL) **H**

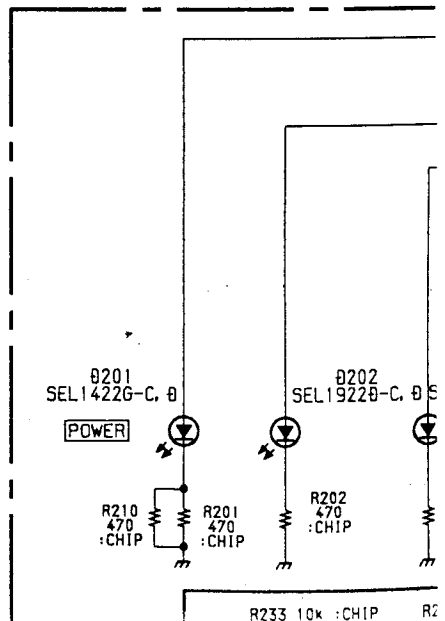
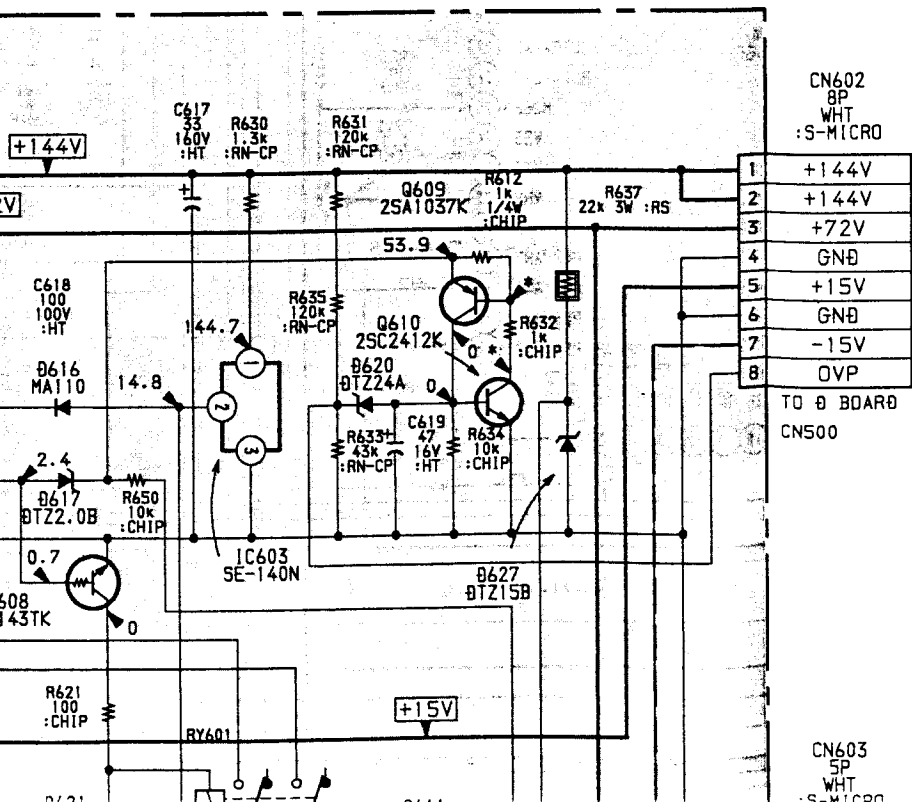
(4) Schematic Diagrams of H, G and M Boards

1 2 3 4 5 6 7 8

G BOARD WAVEFORM

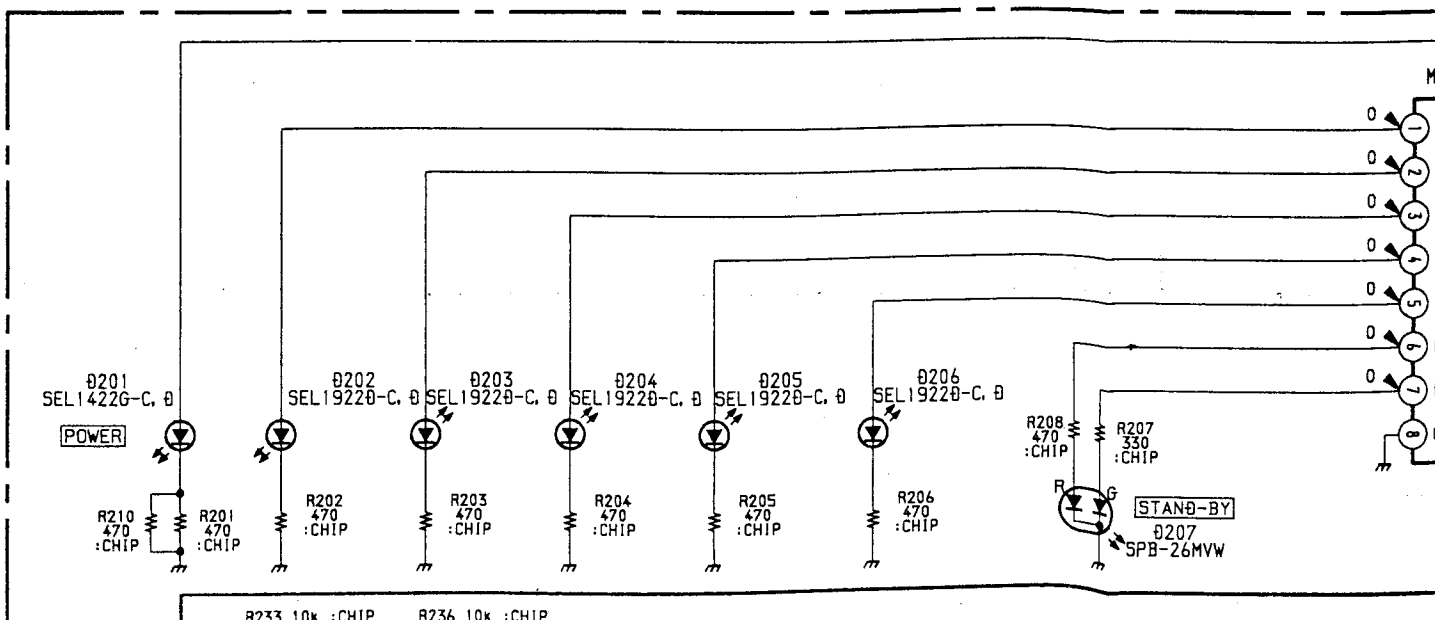




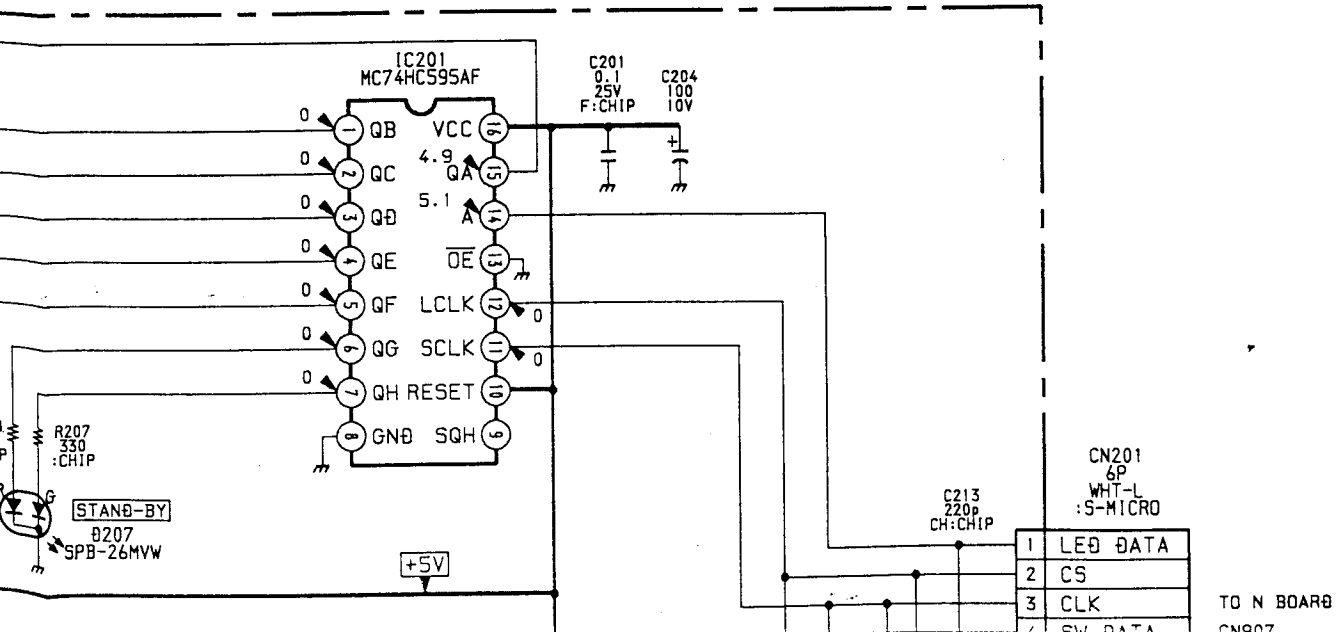
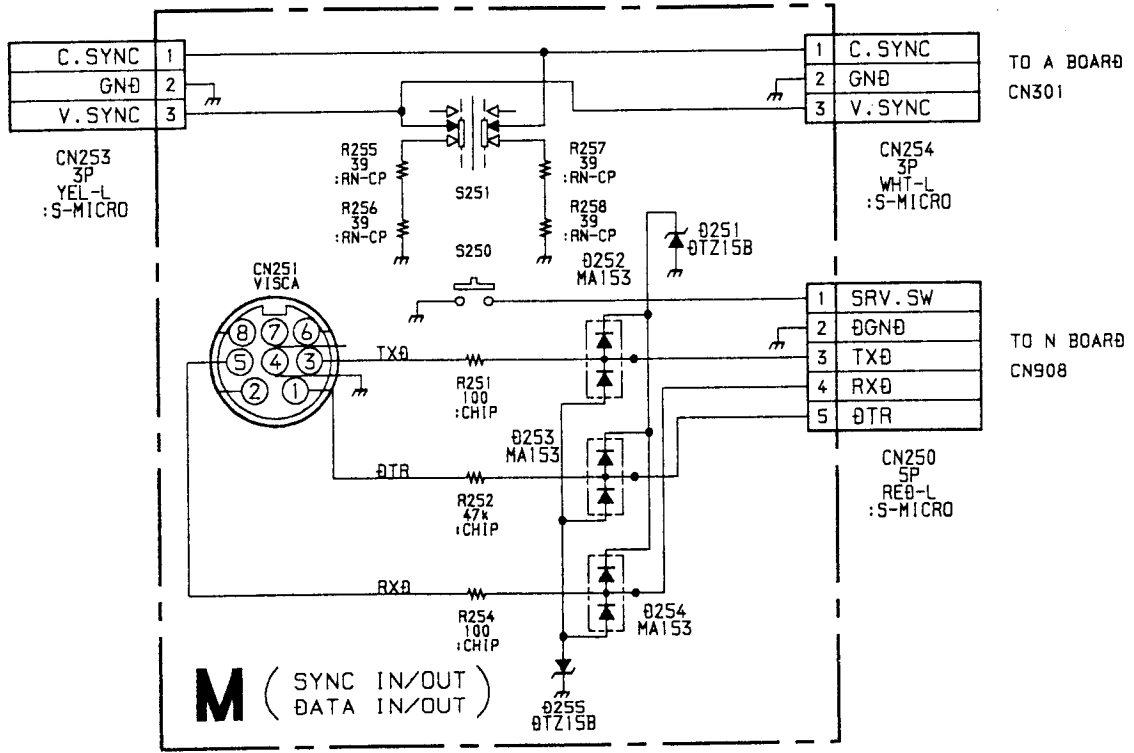


| |
|---------|
| C. SYNC |
| GN0 |
| V. SYNC |

CN253
3P
YEL-L
:S-MICRO



A
B
C
D
E
F
G
H
I
J
K



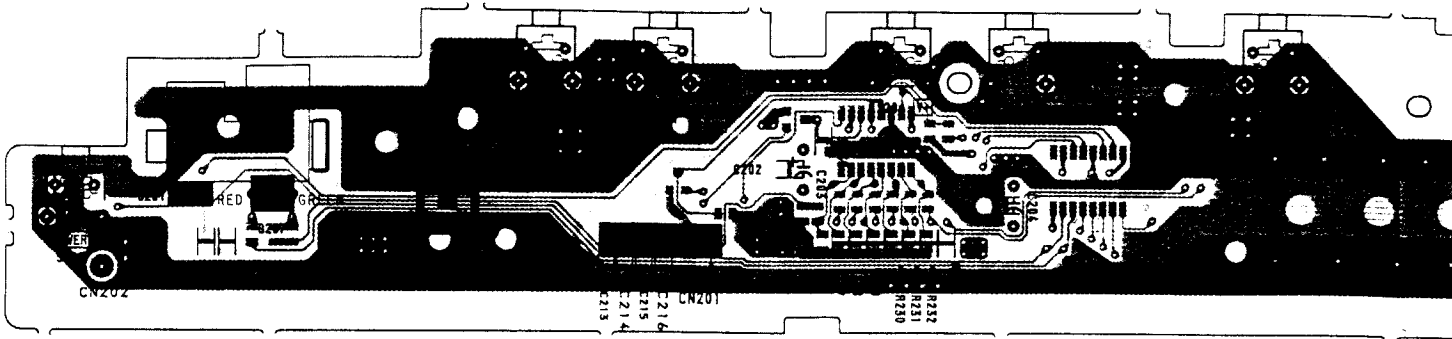
H

[SIGNAL LAMP CONTROL]

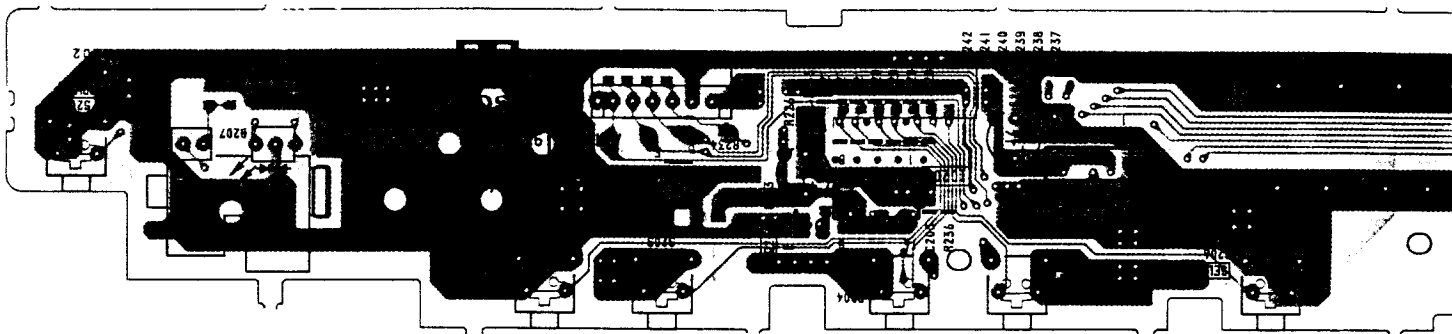
M

[DATA IN/OUT]

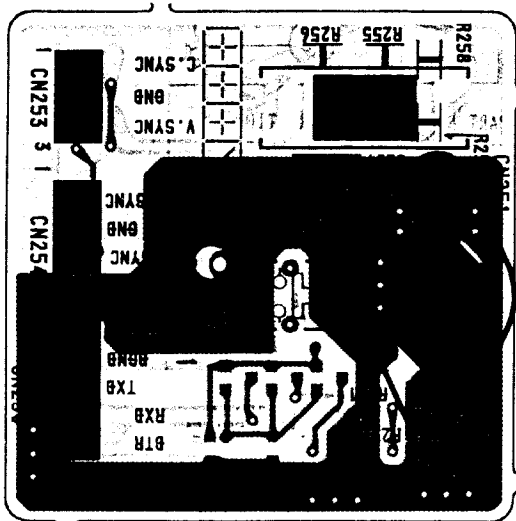
- H Board (Conductor Side) -



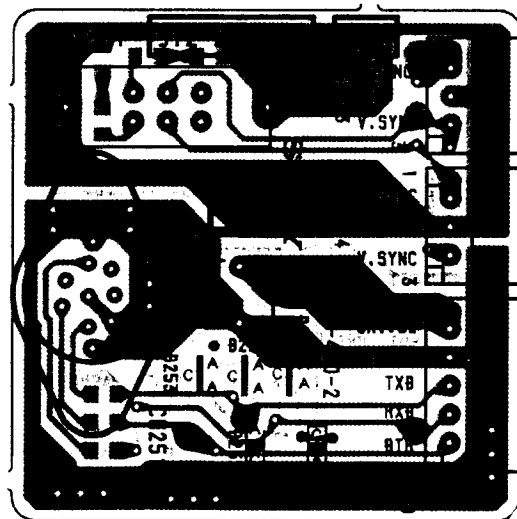
- H Board (Component Side) -



- M Board (Conductor Side) -

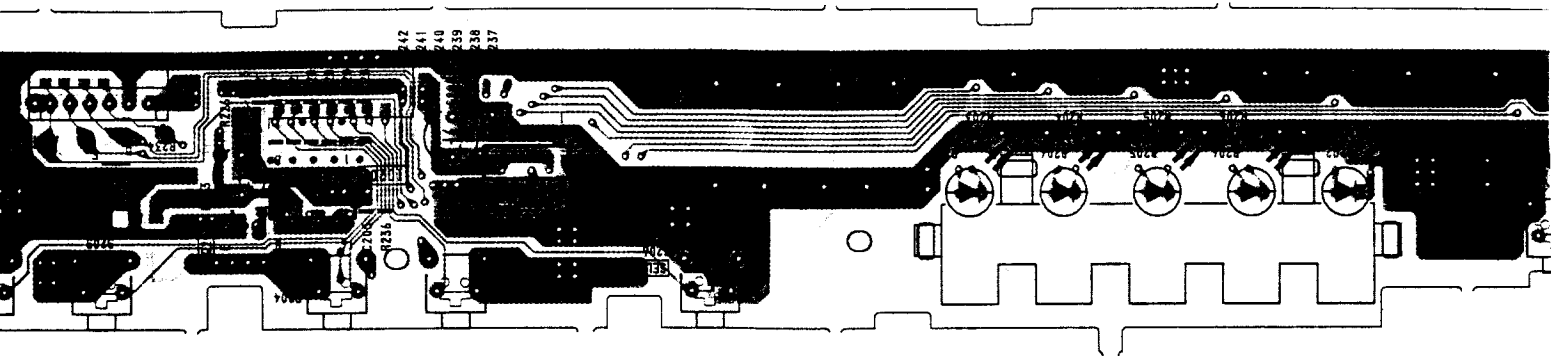
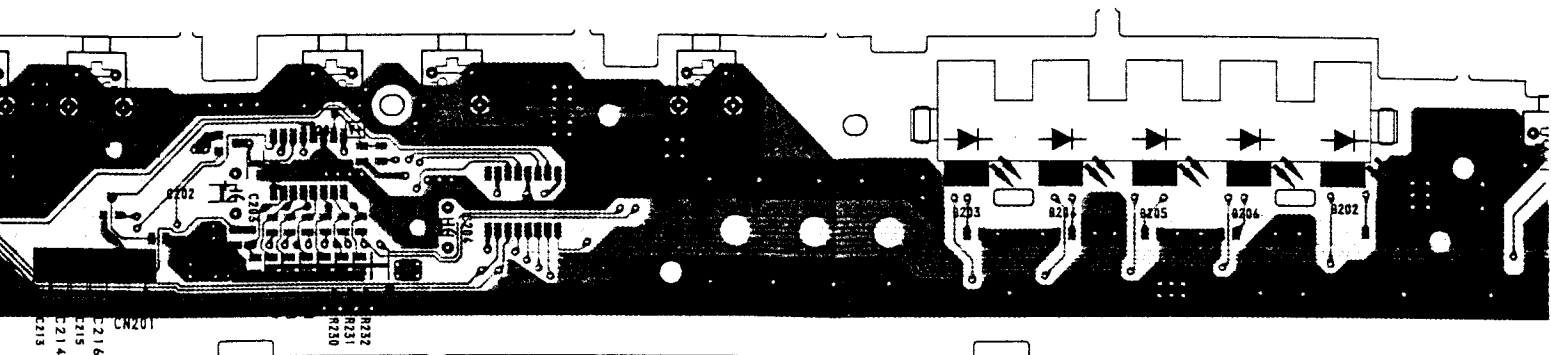


- M Board (Component Side) -

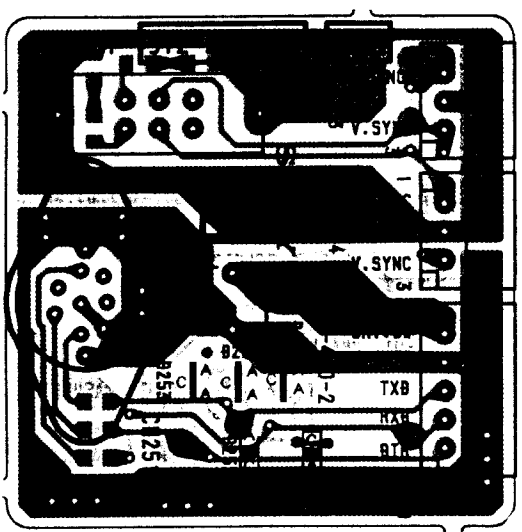


H [SIGNAL LAMP CONTROL]

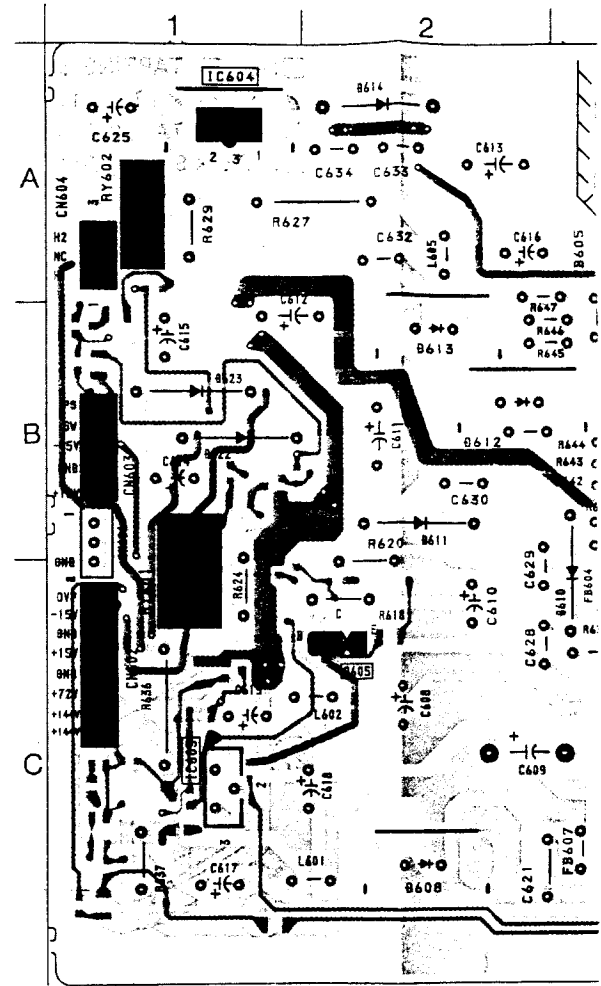
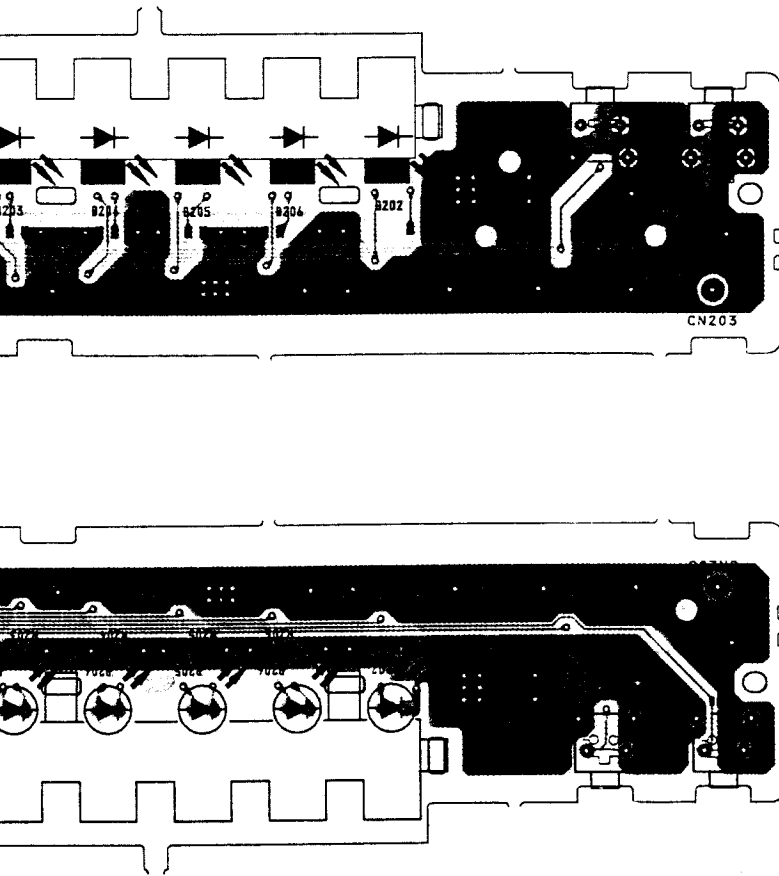
M [DATA IN/OUT]



- M Board (Component Side) -



- G Board (Conductor Side) -

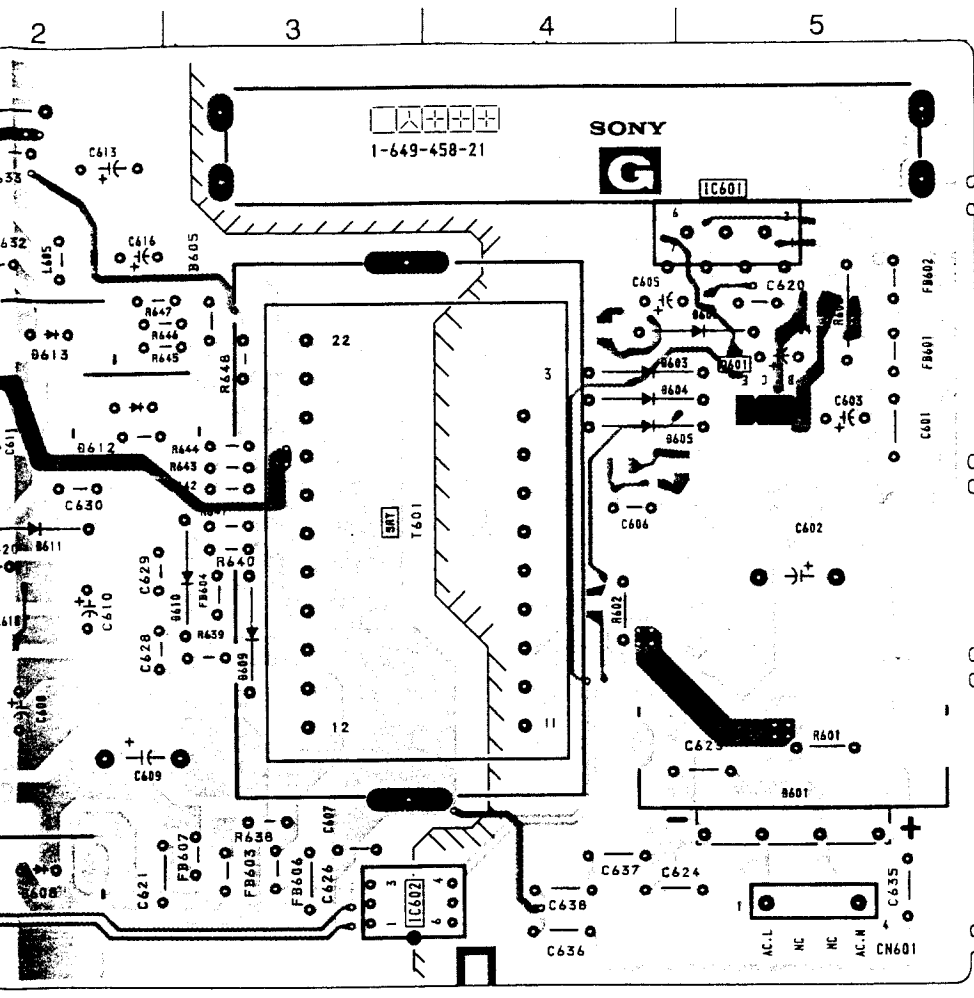


- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



[POWER SAVE]

- G B



• G BOARD

| IC | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| IC601 | A-5 | A-1 |
| IC602 | C-3 | C-3 |
| IC603 | C-1 | C-5 |
| IC604 | A-1 | A-5 |

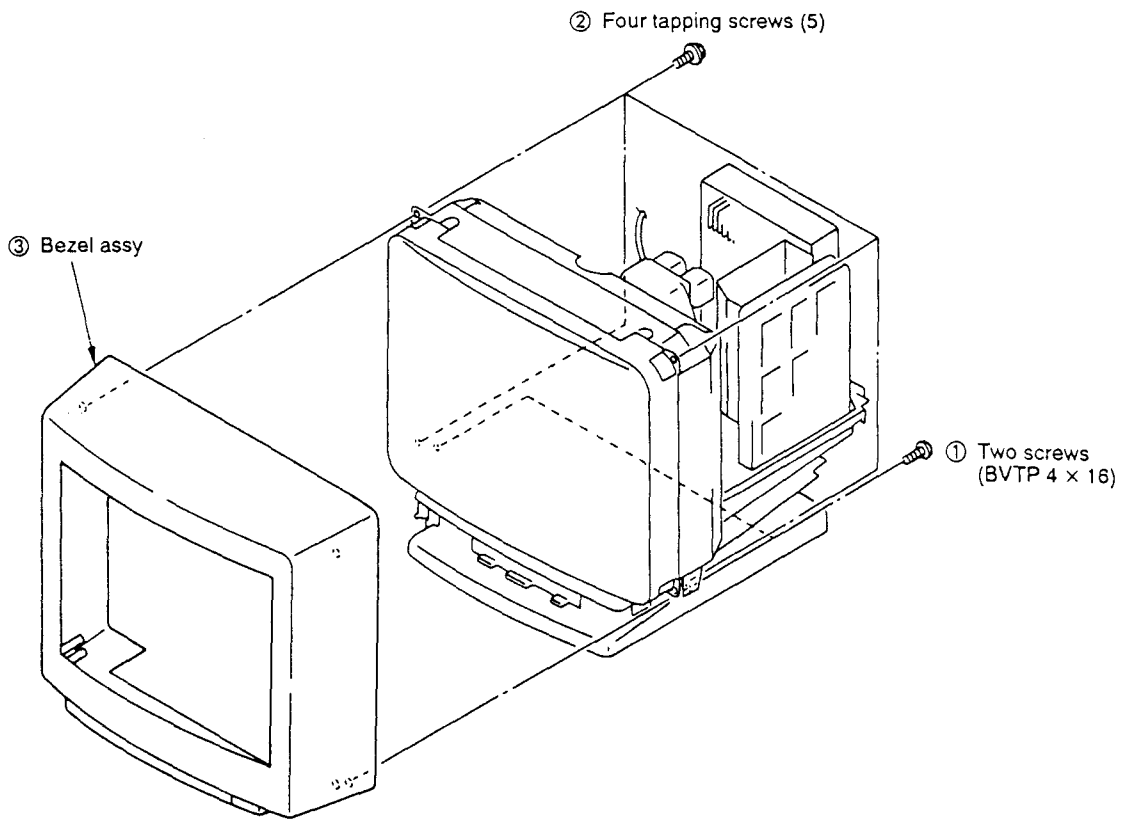
| TRANSISTOR | | |
|------------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| Q601 | B-5 | B-1 |
| Q605 | C-2 | C-5 |
| Q606 | | C-5 |
| Q608 | | B-5 |
| Q609 | | C-5 |
| Q610 | | C-5 |
| Q611 | | B-5 |

| DIODE | | |
|-------|------------------|------------------|
| | (Conductor Side) | (Component Side) |
| D601 | C-5 | C-1 |
| D602 | | A-1 |
| D603 | B-4 | B-2 |
| D604 | B-4 | B-2 |
| D605 | B-4 | B-2 |
| D606 | B-5 | B-1 |
| D607 | | B-2 |
| D608 | C-2 | C-4 |
| D609 | C-3 | C-3 |
| D610 | C-3 | C-4 |
| D611 | B-2 | B-4 |
| D612 | B-2 | B-4 |
| D613 | B-2 | B-4 |
| D614 | A-2 | A-4 |
| D615 | | C-5 |
| D616 | | C-5 |
| D617 | | B-5 |
| D620 | | C-5 |
| D621 | | B-5 |
| D622 | B-1 | B-5 |
| D623 | B-1 | B-5 |
| D627 | | C-5 |
| D628 | | C-5 |
| D629 | | B-5 |
| D630 | | A-5 |
| D631 | | C-5 |

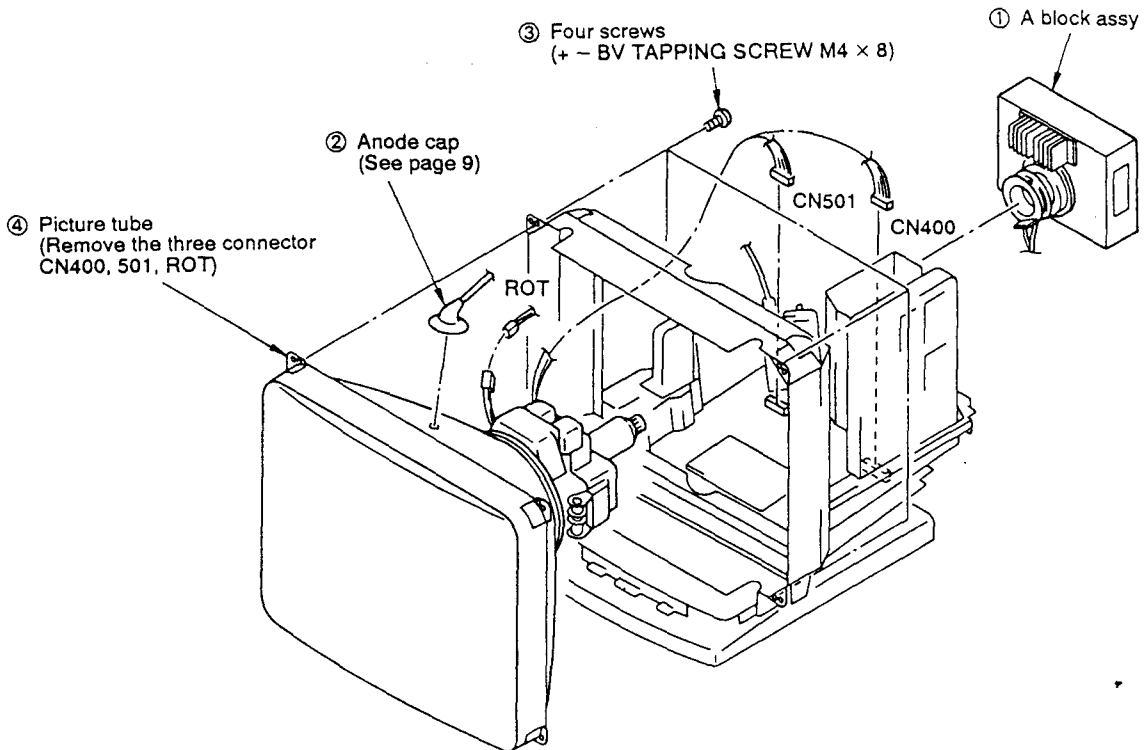


ch enables seeing.

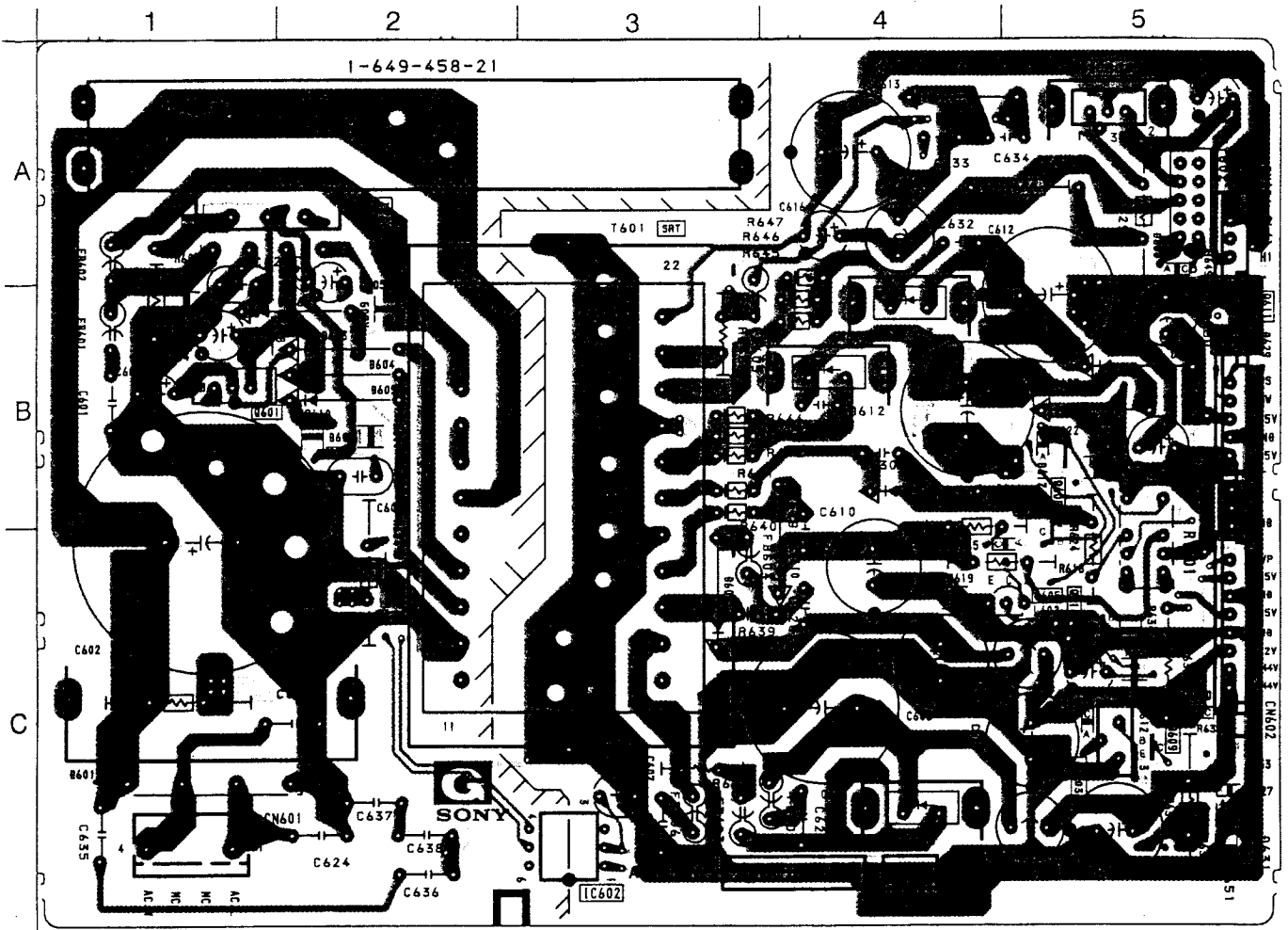
1-7. BEZEL ASSY REMOVAL



1-8. PICTURE TUBE REMOVAL



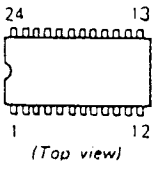
E] - G Board (Component Side) -



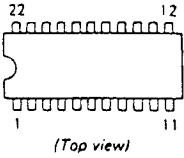
- [Pattern with diagonal lines] : Pattern from the side which enables seeing.
- [Pattern with cross-hatch] : Pattern of the rear side.

5-5. SEMICONDUCTORS

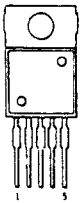
CXA1544P



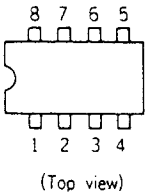
CXA1616S



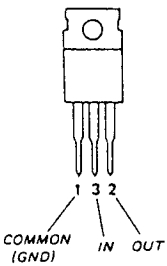
LA6500-FA



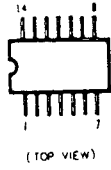
LM358P
LM2903DQ
LM2903P
SN751701PS-ELL2000
TL082ACP
TL082CP
μPC358C



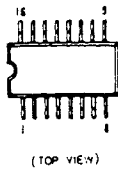
LM7912CT
MC7908CT
MC7912CT
NJM79M08FA



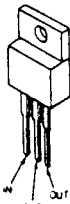
MC14066BF
MC74HC00AF
SN74HC02ANS



MC74HC595AF
MC74HC597F-T2



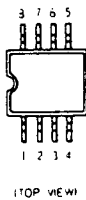
MC7805CT



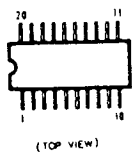
NJM78L05A



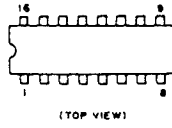
RC4558PS
TL082CPS
TL082M



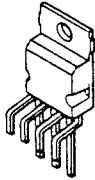
SN74HC74ANS



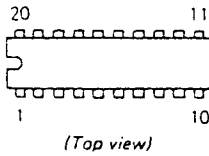
TC4049BP



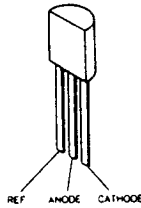
TDA8172



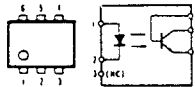
TDA9102C



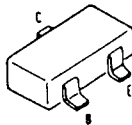
TL431CLP



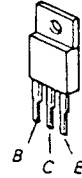
PC111YS



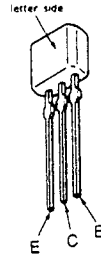
DTC124EK
DTC143TK
2SA1037K-QR
2SA1162-Q
2SC1623-L5L6
2SC2412K-QR



IRFI9620
2SC3746



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



2SC2909



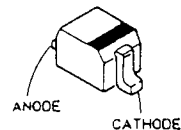
2SD1309



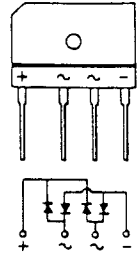
2SC3209LK
2SD774-34



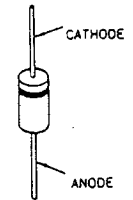
DTZ5.6B
MA110



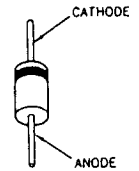
D4SB60L



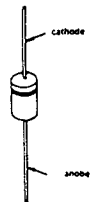
EGP20G
ERA15-01TP1
ERA34-10
ERB91-02
EU-2
GP08D
HSM83
RGP15G
1SS83
10E2



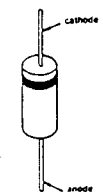
EGP30G
RGP02-17
RGP02-17EL-6433



ERC91-02
RGP02-20EL-6394



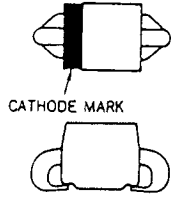
ERD09-15J



MA153
1SS226

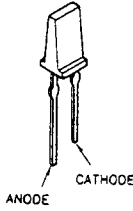


SC015-2



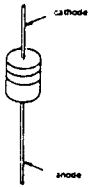
CATHODE MARK

SEL1422G-C, D
SEL1922D-C



ANODE CATHODE

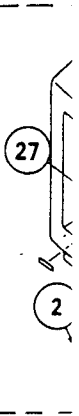
RD13ES-B2
RD16ES-B3
RD18ES-B2
RD2.0ES-B2
RD3.6ES-B2
RD4.7ES-B2
RD5.1ES-B2
RD5.6ES-B2
1SS119



NOTE:
• Item
crip
are
• The
part
numb

6-1.

□: +
■: B
○: +
△: P



REF. N

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

SECTION 6 EXPLODED VIEWS

NOTE:

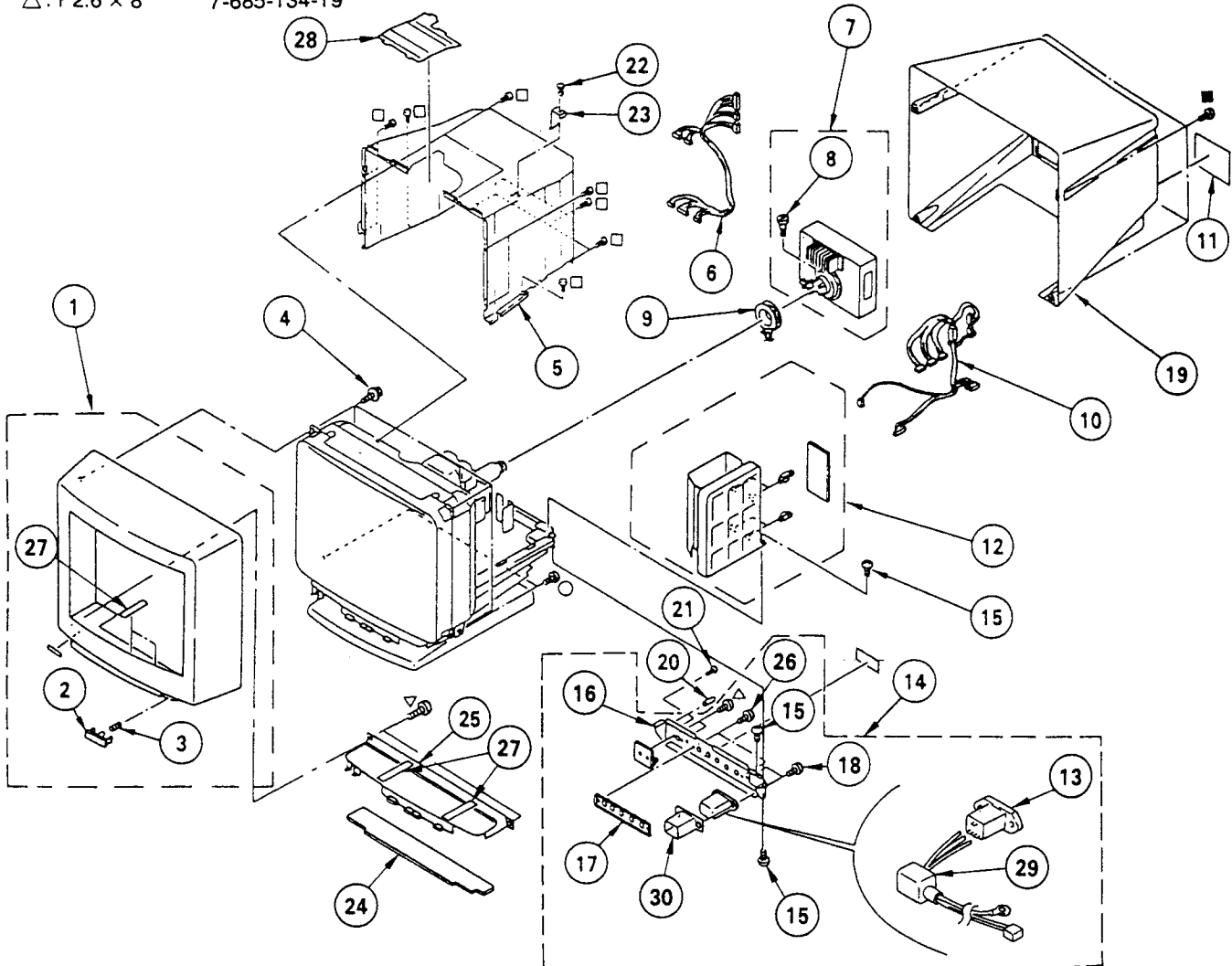
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

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

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

6-1. CHASSIS

- : + - BV TAPPING SCREW (M4 x 8) 7-682-561-04
- : BVTP4 x 16 7-685-663-79
- : + - BV TAPPING SCREW (M4 x 12) 7-682-563-04
- △: P2.6 x 8 7-685-134-19

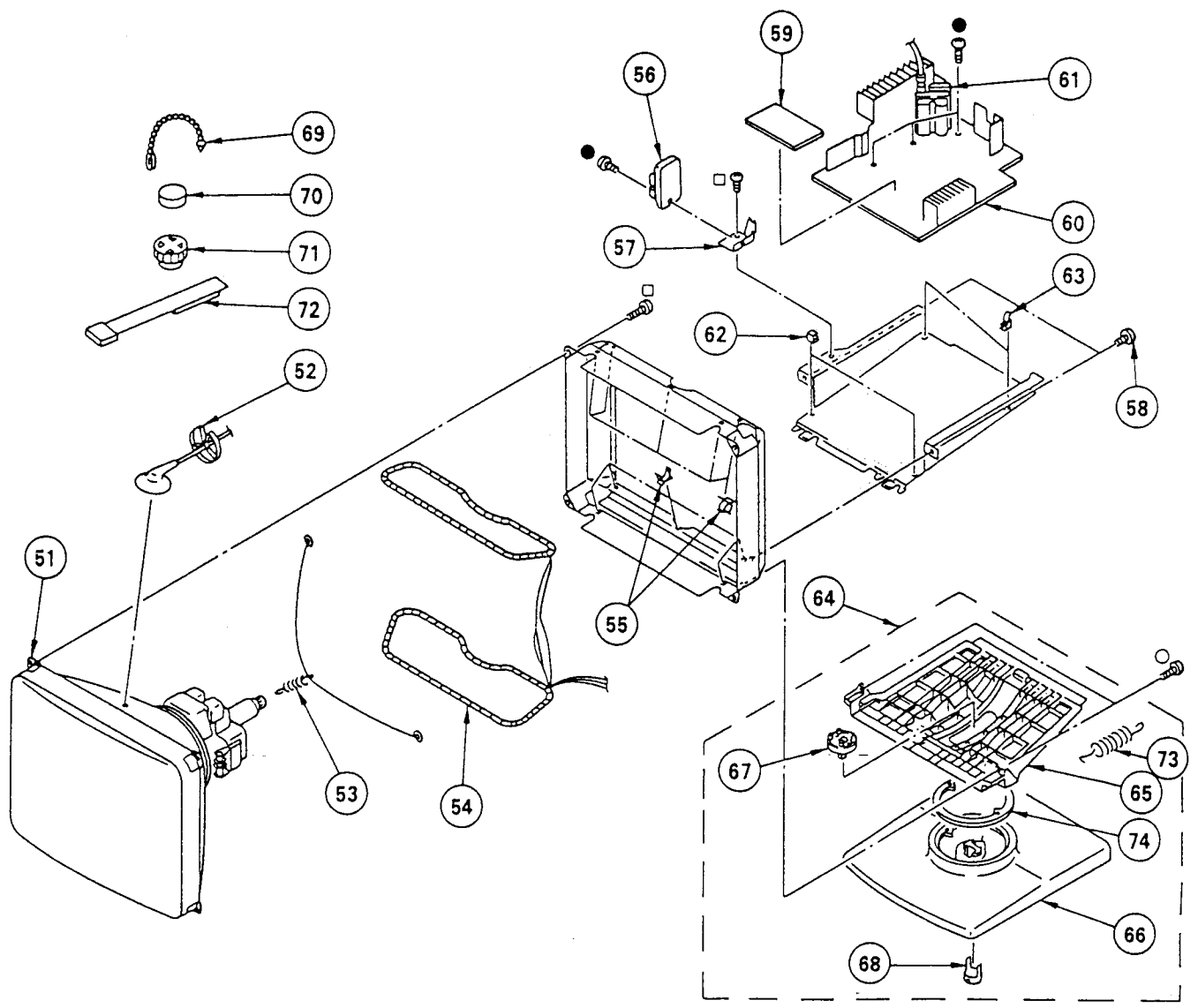


| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|----------------|--|---------------------------|----------|---------------|----------------------------------|--------|
| 1 | X-4031-936-1 | BEZEL ASSEMBLY | 2, 3 | 15 | 4-389-025-01 | SCREW (M4X8) (EXT TOOTH WASHER) | |
| 2 | 4-041-622-21 | BUTTON, POWER | | 16 | *4-043-076-01 | PANEL (STD), CONNECTOR | |
| 3 | 3-571-801-01 | SPRING, COMPRESSION | | 17 | 1-537-583-11 | TERMINAL BOARD ASSY, I/O | |
| 4 | 4-365-808-01 | SCREW (5), TAPPING | | 18 | 4-381-960-31 | SCREW (M3X12), TAPPING, (+-)(BV) | |
| 5 | *X-4031-649-2 | SHIELD ASSY, EMI | | 19 | X-4031-937-1 | CABINET | |
| 6 | 1-900-076-10 | CONNECTOR ASSY (MAIN HARNESS) | | 20 | 4-038-522-01 | CAP (VISCA) | |
| 7 | 8-934-583-00 | VIDEO AMP. MCBN ASSY (A BOARD) | | 21 | 4-043-000-01 | PLUG | |
| 8 | 4-041-627-01 | SCREW (M4X20), HEXAGON HEAD | | 22 | 4-374-303-01 | RIVET, NYLON | |
| 9 | △.1-452-729-11 | NECK ASSEMBLY, PICTURE TUBE (NA3011) | | 23 | 4-043-404-01 | HOLDER, G BRACKET | |
| 10 | 1-900-048-40 | CONNECTOR ASSY, MICRO 8P (SUB HARNESS) | | 24 | 8-934-705-00 | CONTROL BLOCK ASSY (H BOARD) | |
| 11 | *4-033-056-02 | LABEL, CAUTION | | 25 | X-4031-589-1 | BOX ASSY, CONTROL | |
| 12 | △.8-934-585-00 | POWER BLOCK (G BOARD) | | 26 | 4-034-937-21 | SCREW (M3), TAPPING | |
| 13 | △.1-251-141-11 | INLET, AC (3P) | | 27 | *2-283-838-01 | CUSHION (SMALL) | |
| 14 | 8-934-708-00 | CONNECTOR PANEL ASSY (M BOARD) | 13, 15-18, 26, 27, 30, 31 | 28 | *4-042-119-01 | COVER, ANODE CAP | |
| | | | | 29 | *4-605-946-01 | COVER, 3P INLET | |
| | | | | 30 | *4-044-711-01 | HOLDER, INLET | |

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

6-2. PICTURE TUBE

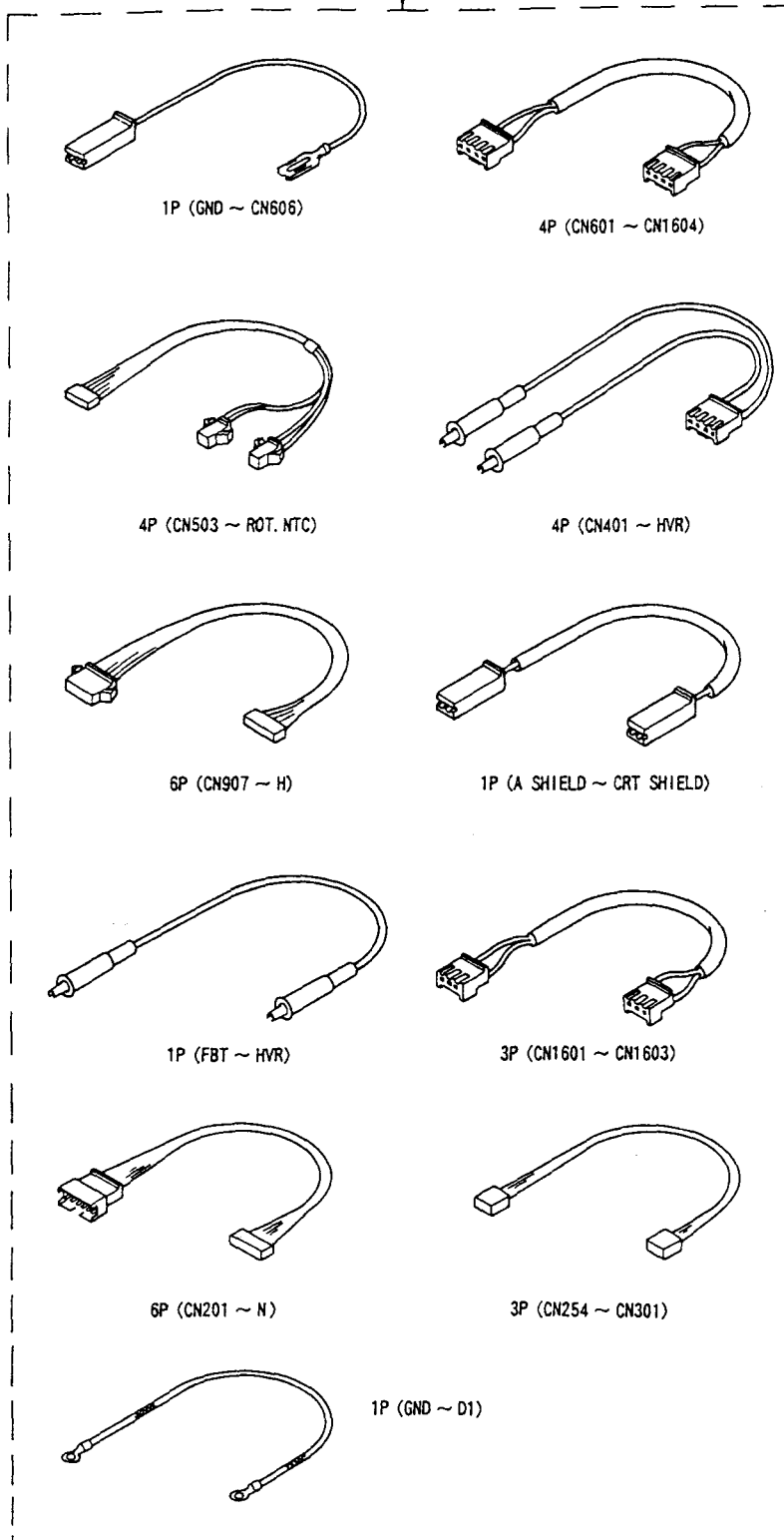
- : + - BV TAPPING SCREW (3 x 12) 7-685-648-79
- : + - BV TAPPING SCREW (M4 x 8) 7-682-561-04
- : + - BV TAPPING SCREW (M4 x 12) 7-682-563-04



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|-----------------------|---------------------------------------|---------------|----------|---------------|-------------------------------------|--------|
| 51 | Δ 8-736-048-90 | ITC ASSY (20SQ8-R1) (CRT, DY, NA) | | 65 | *4-041-636-71 | COVER, BOTTOM | |
| 52 | *3-704-372-01 | HOLDER, HV CABLE | | 66 | *X-4031-938-1 | BASE ASSY, STAND | |
| 53 | 4-369-318-00 | SPRING, TENSION | | 67 | 4-041-623-01 | STOPPER (A) | |
| 54 | Δ 1-406-790-31 | COIL, DEMAGNETIZATION | | 68 | 4-041-621-01 | STOPPER (B) | |
| 55 | *4-395-824-01 | HOLDER, DEGAUSSING COIL | | 69 | 4-308-870-00 | CLIP, LEAD WIRE | |
| 56 | Δ 1-223-417-11 | FOCUS VR PACK | | 70 | 1-452-032-00 | MAGNET, DISK; 10MM ϕ | |
| 57 | 4-042-036-01 | BRACKET, FOCUS | | 71 | 1-452-094-00 | MAGNET, ROTATABLE DISK; 15MM ϕ | |
| 58 | 4-389-025-01 | SCREW (M4X8) (EXT TOOTH WASHER) | | 72 | X-4030-584-1 | PERMALLOY ASSY, CORRECTION | |
| 59 | 8-934-823-00 | MICON MCB (N BOARD) | | 73 | 4-042-282-01 | SPRING, TENSION | |
| 60 | 8-934-704-00 | DEFLECTION MCB ASSY (D BOARD) | | 74 | *4-041-625-01 | RING, TILT SWIVEL | |
| 61 | Δ 1-453-162-11 | TRANSFORMER ASSY, FLYBACK (NX-2780A1) | | | | | |
| 62 | *3-701-903-11 | HOLDER, PC BOARD | | | | | |
| 63 | *3-703-141-00 | HOLDER, PCB | | | | | |
| 64 | A-1481-819-A | STAND ASSEMBLE BLOCK | 65-68, 73, 74 | | | | |

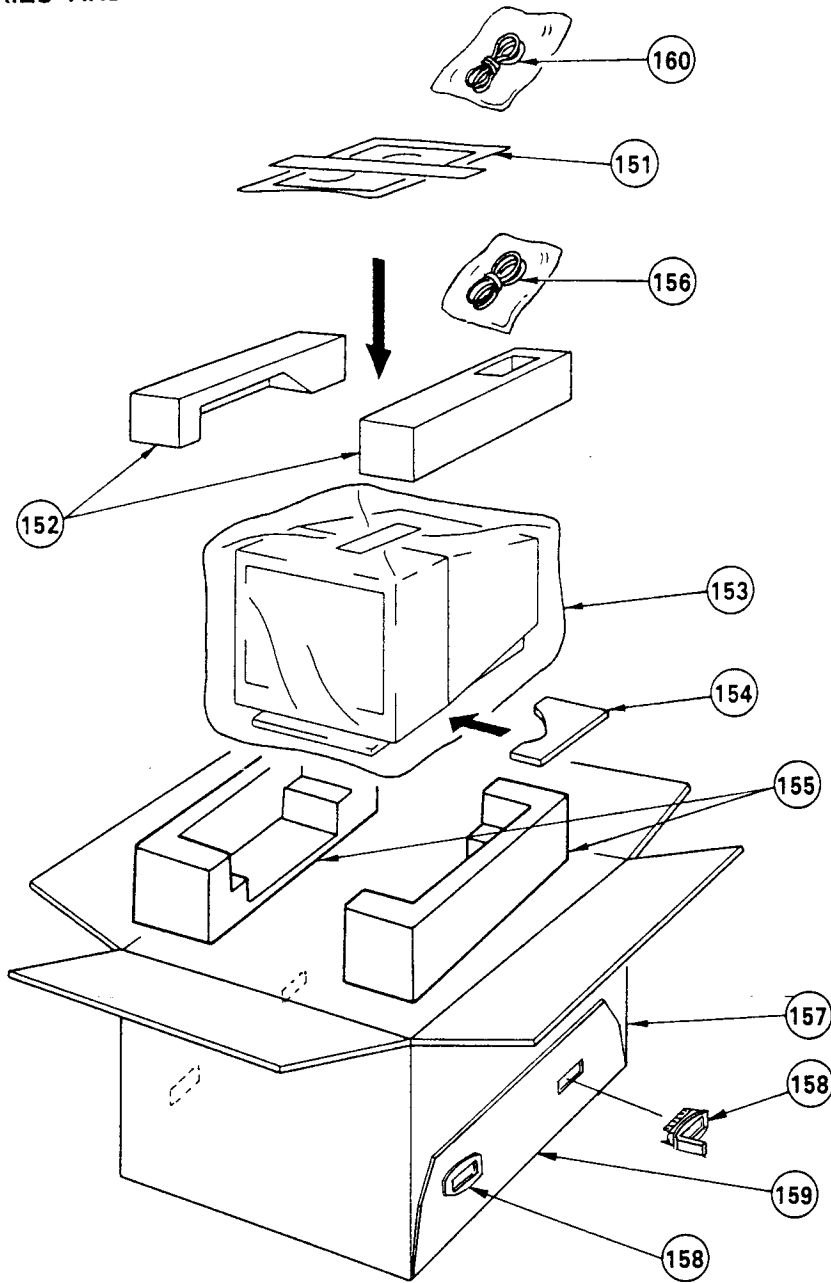
6-3. KIT

101



| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|--------|
| 101 | A-1500-655-A | CABLE ASSY | |

6-4. ACCESSORIES AND PACKING MATERIALS



| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|---------------|------------------------|--------|----------|----------------|-------------------------------------|--------|
| 151 | 3-757-760-12 | MANUAL, INSTRUCTION | | 156 | ▲ 1-765-581-11 | CORD SET, POWER SUPPLY (10.0A/250V) | |
| 152 | *4-041-498-01 | CUSHION (UPPER) (ASSY) | | 157 | *4-045-160-01 | INDIVIDUAL CARTON | |
| 153 | 4-368-079-01 | BAG, PROTECTION | | 158 | *4-396-077-01 | JOINT | |
| 154 | *4-041-505-01 | PAD | | 159 | *4-038-264-01 | TRAY | |
| 155 | *4-041-499-01 | CUSHION (LOWER) (ASSY) | | 160 | 1-590-226-11 | CABLE (SMF-400) | |

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

SECTION 7 ELECTRICAL PARTS LIST

F A J

NOTE:

The components identified by shading and mark Δ 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.

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

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

CAPACITORS COILS
• MF : μ F, PF : μ MF • MMH : mH, UH : μ H

RESISTORS
• All resistors are in ohms
• F : nonflammable

| REF.NO. PART NO. | DESCRIPTION | REMARK | REF.NO. PART NO. | DESCRIPTION | REMARK |
|----------------------------|---|-------------------|------------------|---------------------------|------------------|
| F BOARD, COMPLETE ***** | | | C018 | 1-126-387-11 ELECT | 2.2MF 20% 50V |
| 1-533-250-11 | HOLDER, FUSE | | C019 | 1-126-387-11 ELECT | 2.2MF 20% 50V |
| 4-044-615-01 | COVER, FUSE | | C020 | 1-126-387-11 ELECT | 2.2MF 20% 50V |
| <CAPACITOR> | | | C021 | 1-126-101-11 ELECT | 100MF 20% 16V |
| C1601A | 1-107-533-51 FILM | 1MF 20% 250V | C022 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C1605A | 1-162-578-51 CERAMIC | 0.0047MF 20% 400V | C025 | 1-102-157-00 CERAMIC | 560PF 10% 500V |
| C1606A | 1-162-578-51 CERAMIC | 0.0047MF 20% 400V | C028 | 1-163-114-00 CERAMIC CHIP | 75PF 5% 50V |
| <CONNECTOR> | | | C029 | 1-136-191-11 FILM | 0.22MF 10% 250V |
| CN1600* | 1-580-689-11 PIN, CONNECTOR (PC BOARD) 4P | | C030 | 1-162-117-00 CERAMIC | 100PF 10% 500V |
| CN1601 | 1-691-960-11 PIN, CONNECTOR (PC BOARD) 3P | | C031 | 1-124-667-11 ELECT | 10MF 20% 100V |
| <FUSE> | | | C032 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| F1601A | 1-576-233-11 FUSE (H.B.C.) (6.3A/250V) | | C041 | 1-126-101-11 ELECT | 100MF 20% 16V |
| <RESISTOR> | | | C042 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| R1601A | 1-202-879-91 SOLID | 270K 20% 1/2W | C048 | 1-163-113-00 CERAMIC CHIP | 68PF 5% 50V |
| R1602A | 1-202-879-91 SOLID | 270K 20% 1/2W | C049 | 1-136-191-11 FILM | 0.22MF 10% 250V |
| <VARISTOR> | | | C050 | 1-162-117-00 CERAMIC | 100PF 10% 500V |
| NVDR160. | 1-807-180-31 VARISTOR ZNR-14DK471U | | C060 | 1-124-667-11 ELECT | 10MF 20% 100V |
| ***** | | | C061 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| 8-934-583-00 | VIDEO AMP.MCB ASSY (A BOARD) | | C062 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| ***** | | | C063 | 1-124-042-51 ELECT | 0.47MF 20% 50V |
| 4-382-854-01 | SCREW (M3X8), P, SW (+) | | C067 | 1-126-803-11 ELECT | 47MF 20% 16V |
| <CAPACITOR> | | | C070 | 1-162-318-11 CERAMIC | 0.001MF 10% 500V |
| C001 | 1-126-101-11 ELECT | 100MF 20% 16V | C071 | 1-126-803-11 ELECT | 47MF 20% 16V |
| C002 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C072 | 1-124-667-11 ELECT | 10MF 20% 50V |
| C003 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C073 | 1-124-667-11 ELECT | 10MF 20% 50V |
| C005 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C074 | 1-124-667-11 ELECT | 10MF 20% 50V |
| C006 | 1-124-667-11 ELECT | 10MF 20% 50V | C075 | 1-126-803-11 ELECT | 47MF 20% 16V |
| C008 | 1-163-113-00 CERAMIC CHIP | 68PF 5% 50V | C076 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C009 | 1-136-191-11 FILM | 0.22MF 10% 250V | C077 | 1-164-182-11 CERAMIC CHIP | 0.0033MF 10% 50V |
| C010 | 1-162-117-00 CERAMIC | 100PF 10% 500V | C078 | 1-126-803-11 ELECT | 47MF 20% 16V |
| C012 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C079 | 1-126-163-11 ELECT | 4.7MF 20% 50V |
| C013 | 1-124-634-11 ELECT | 1MF 20% 250V | C080 | 1-126-320-11 ELECT | 10MF 20% 16V |
| C014 | 1-124-798-11 ELECT | 1MF 20% 160V | C081 | 1-124-464-11 ELECT | 0.22MF 20% 50V |
| C015 | 1-124-667-11 ELECT | 10MF 20% 100V | C082 | 1-124-464-11 ELECT | 0.22MF 20% 50V |
| C016 | 1-136-189-00 FILM | 0.1MF 10% 250V | C083 | 1-164-004-11 CERAMIC CHIP | 0.1MF 10% 25V |
| C017 | 1-126-803-11 ELECT | 47MF 20% 16V | C084 | 1-124-464-11 ELECT | 0.22MF 20% 50V |
| C085 | 1-163-139-00 CERAMIC CHIP | 820PF 5% 50V | C086 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C087 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C088 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C090 | 1-164-162-11 CERAMIC CHIP | 100PF 5% 100V | C091 | 1-164-162-11 CERAMIC CHIP | 100PF 5% 100V |
| C092 | 1-164-162-11 CERAMIC CHIP | 100PF 5% 100V | C114 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C300 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C301 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C302 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C303 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C304 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C305 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |
| C306 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V | C307 | 1-164-232-11 CERAMIC CHIP | 0.01MF 10% 50V |

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

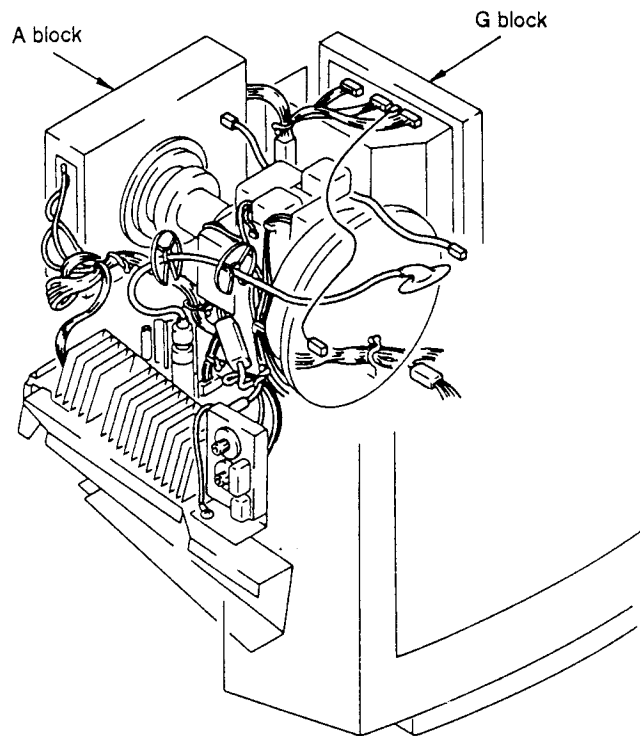
| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|---------------|------------------------------|----------|
| C308 | 1-126-803-11 | ELECT 47MF | 20% 16V |
| C309 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C310 | 1-163-235-11 | CERAMIC CHIP 22PF | 5% 50V |
| C311 | 1-128-475-11 | ELECT 10MF | 20% 160V |
| C315 | 1-124-667-11 | ELECT 10MF | 20% 100V |
| C316 | 1-126-803-11 | ELECT 47MF | 20% 16V |
| C318 | 1-126-803-11 | ELECT 47MF | 20% 16V |
| C701 | 1-162-114-00 | CERAMIC 0.0047MF | 2KV |
| C702 | 1-162-114-00 | CERAMIC 0.0047MF | 2KV |
| C703 | 1-163-133-00 | CERAMIC CHIP 470PF | 5% 50V |
| C704 | 1-162-114-00 | CERAMIC 0.0047MF | 2KV |
| C705 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C706 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C707 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C708 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C709 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C710 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C711 | 1-163-133-00 | CERAMIC CHIP 470PF | 5% 50V |
| C712 | 1-162-114-00 | CERAMIC 0.0047MF | 2KV |
| C713 | 1-162-318-11 | CERAMIC 0.001MF | 10% 500V |
| C714 | 1-162-318-11 | CERAMIC 0.001MF | 10% 500V |
| <CONNECTOR> | | | |
| CN301 | *1-564-518-11 | PLUG, CONNECTOR 3P | |
| CN302 | *1-564-526-11 | PLUG, CONNECTOR 11P | |
| CN303 | *1-564-522-11 | PLUG, CONNECTOR 7P | |
| CN304 | *1-564-521-11 | PLUG, CONNECTOR 6P | |
| CN701 | *1-564-518-11 | PLUG, CONNECTOR 3P | |
| CN702 | *1-766-179-11 | PIN, CONNECTOR (PC BOARD) 2P | |
| <DIODE> | | | |
| D002 | 8-719-901-83 | DIODE 1SS83 | |
| D003 | 8-719-901-83 | DIODE 1SS83 | |
| D004 | 8-719-901-83 | DIODE 1SS83 | |
| D005 | 8-719-800-76 | DIODE 1SS226 | |
| D006 | 8-719-800-76 | DIODE 1SS226 | |
| D007 | 8-719-901-83 | DIODE 1SS83 | |
| D008 | 8-719-404-46 | DIODE MA110 | |
| D009 | 8-719-404-46 | DIODE MA110 | |
| D022 | 8-719-901-83 | DIODE 1SS83 | |
| D023 | 8-719-901-83 | DIODE 1SS83 | |
| D024 | 8-719-901-83 | DIODE 1SS83 | |
| D027 | 8-719-901-83 | DIODE 1SS83 | |
| D042 | 8-719-901-83 | DIODE 1SS83 | |
| D043 | 8-719-901-83 | DIODE 1SS83 | |
| D044 | 8-719-901-83 | DIODE 1SS83 | |
| D047 | 8-719-901-83 | DIODE 1SS83 | |
| D061 | 8-719-018-47 | DIODE SC015-2 | |
| D062 | 8-719-901-83 | DIODE 1SS83 | |
| D063 | 8-719-901-83 | DIODE 1SS83 | |
| D701 | 8-719-404-46 | DIODE MA110 | |
| D702 | 8-719-404-46 | DIODE MA110 | |
| <FERRITE BEAD> | | | |
| FB001 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB002 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB003 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB004 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB005 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB006 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|-----------------------|------------------------------|--------|
| FB007 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB008 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB009 | 1-414-235-11 | INDUCTOR, FERRITE BEAD | |
| FB010 | 1-500-104-21 | BEAD, FERRITE (SMD) | |
| FB011 | 1-500-104-21 | BEAD, FERRITE (SMD) | |
| FB012 | 1-500-104-21 | BEAD, FERRITE (SMD) | |
| FB701 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB702 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB703 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB704 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| FB705 | 1-543-298-11 | BEAD, FERRITE | |
| <FILTER> | | | |
| FLO04 | 1-421-928-11 | FILTER, NOISE | |
| FLO05 | 1-421-928-11 | FILTER, NOISE | |
| FLO06 | 1-236-164-11 | ENCAPSULATED COMPONENT | |
| FLO07 | 1-424-464-11 | FILTER, NOISE | |
| FLO08 | 1-424-464-11 | FILTER, NOISE | |
| FLO12 | 1-424-464-11 | FILTER, NOISE | |
| FLO13 | 1-421-928-11 | FILTER, NOISE | |
| FLO14 | 1-421-928-11 | FILTER, NOISE | |
| FLO15 | 1-424-464-11 | FILTER, NOISE | |
| FLO16 | 1-424-464-11 | FILTER, NOISE | |
| FLO17 | 1-421-928-11 | FILTER, NOISE | |
| <IC> | | | |
| IC001 | 1-467-361-21 | AMPLIFIER BLOCK, PRE (PRE-1) | |
| IC002 | 8-749-010-30 | IC CR5527E-C | |
| IC003 | 8-752-057-43 | IC CXA1616S | |
| IC004 | 8-759-143-11 | IC UPC24M12HF | |
| IC005 | 8-759-708-05 | IC NJM78L05A | |
| IC006 | 8-759-012-70 | IC MC7908CT | |
| IC007 | 8-759-242-74 | IC TC7W04F | |
| IC008 | 8-759-060-00 | IC BA10324AF | |
| IC009 | 8-759-032-01 | IC MC74HC00AF | |
| IC010 | 8-759-168-72 | IC TDA6101Q | |
| IC011 | 8-759-168-72 | IC TDA6101Q | |
| IC012 | 8-759-168-72 | IC TDA6101Q | |
| IC013 | 8-759-168-72 | IC TDA6101Q | |
| IC701 | 8-759-996-43 | IC RC4558PS | |
| IC702 | 8-759-242-74 | IC TC7W04F | |
| <JACK> | | | |
| JO01 | *1-568-547-11 | JACK, MINIATURE PIN | |
| JO21 | *1-568-547-11 | JACK, MINIATURE PIN | |
| JO41 | *1-568-547-11 | JACK, MINIATURE PIN | |
| J701 | Δ 1-251-116-11 | SOCKET, PICTURE TUBE | |
| <COIL> | | | |
| LO02 | 1-412-999-11 | INDUCTOR CHIP 47N | |
| LO03 | 1-410-686-11 | INDUCTOR 1MMH | |
| LO22 | 1-412-999-11 | INDUCTOR CHIP 47N | |
| LO42 | 1-412-999-11 | INDUCTOR CHIP 47N | |
| <IC LINK> | | | |
| PS001 | Δ 1-532-832-21 | LINK, IC | |
| <TRANSISTOR> | | | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|------------|--------------|-----------------------------|--------|
| Q010 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | |
| Q011 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q060 | 8-729-216-22 | TRANSISTOR 2SA1162-G | |
| Q063 | 8-729-901-00 | TRANSISTOR DTC124EK | |
| Q701 | 8-729-020-07 | TRANSISTOR 2SC4686A(LBSONY) | |
| Q702 | 8-729-020-07 | TRANSISTOR 2SC4686A(LBSONY) | |
| <RESISTOR> | | | |
| R001 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R002 | 1-216-001-00 | METAL GLAZE 10 5% 1/10W | |
| R003 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R004 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R005 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R006 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R007 | 1-216-063-00 | METAL GLAZE 3.9K 5% 1/10W | |
| R008 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R009 | 1-216-019-00 | METAL GLAZE 56 5% 1/10W | |
| R010 | 1-216-641-11 | METAL CHIP 390 0.50% 1/10W | |
| R011 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R012 | 1-216-105-00 | METAL GLAZE 220K 5% 1/10W | |
| R013 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R014 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R015 | 1-247-734-11 | CARBON 39 5% 1/2W | |
| R016 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R017 | 1-216-037-00 | METAL GLAZE 330 5% 1/10W | |
| R020 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R021 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R022 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R023 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R024 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R025 | 1-216-057-00 | METAL GLAZE 2.2K 5% 1/10W | |
| R026 | 1-249-417-11 | CARBON 1K 5% 1/4W F | |
| R027 | 1-216-063-00 | METAL GLAZE 3.9K 5% 1/10W | |
| R029 | 1-216-019-00 | METAL GLAZE 56 5% 1/10W | |
| R030 | 1-216-641-11 | METAL CHIP 390 0.50% 1/10W | |
| R031 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R032 | 1-216-105-00 | METAL GLAZE 220K 5% 1/10W | |
| R033 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R034 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R035 | 1-247-734-11 | CARBON 39 5% 1/2W | |
| R036 | 1-216-095-00 | METAL GLAZE 82K 5% 1/10W | |
| R037 | 1-216-095-00 | METAL GLAZE 82K 5% 1/10W | |
| R038 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R039 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R040 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R041 | 1-216-631-11 | METAL CHIP 150 0.50% 1/10W | |
| R042 | 1-216-067-00 | METAL GLAZE 5.6K 5% 1/10W | |
| R043 | 1-216-053-00 | METAL GLAZE 1.5K 5% 1/10W | |
| R044 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R045 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R046 | 1-216-121-00 | METAL GLAZE 1M 5% 1/10W | |
| R047 | 1-216-063-00 | METAL GLAZE 3.9K 5% 1/10W | |
| R049 | 1-216-019-00 | METAL GLAZE 56 5% 1/10W | |
| R050 | 1-216-641-11 | METAL CHIP 390 0.50% 1/10W | |
| R051 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R052 | 1-216-105-00 | METAL GLAZE 220K 5% 1/10W | |
| R053 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R054 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R055 | 1-247-734-11 | CARBON 39 5% 1/2W | |
| R056 | 1-216-121-00 | METAL GLAZE 1M 5% 1/10W | |
| R057 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R058 | 1-247-734-11 | CARBON 39 5% 1/2W | |
| R063 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-----------------------------|--------|
| R064 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R065 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R066 | 1-216-033-00 | METAL GLAZE 220 5% 1/10W | |
| R067 | 1-216-069-00 | METAL GLAZE 6.8K 5% 1/10W | |
| R068 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R069 | 1-216-069-00 | METAL GLAZE 6.8K 5% 1/10W | |
| R070 | 1-216-057-00 | METAL GLAZE 2.2K 5% 1/10W | |
| R072 | 1-216-057-00 | METAL GLAZE 2.2K 5% 1/10W | |
| R075 | 1-216-057-00 | METAL GLAZE 2.2K 5% 1/10W | |
| R076 | 1-216-093-00 | METAL GLAZE 68K 5% 1/10W | |
| R077 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R078 | 1-216-057-00 | METAL GLAZE 2.2K 5% 1/10W | |
| R079 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R081 | 1-216-085-00 | METAL GLAZE 33K 5% 1/10W | |
| R082 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R083 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R084 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R085 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R086 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R087 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R091 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R092 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R093 | 1-216-083-00 | METAL GLAZE 27K 5% 1/10W | |
| R094 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R095 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R096 | 1-216-083-00 | METAL GLAZE 27K 5% 1/10W | |
| R097 | 1-216-061-00 | METAL GLAZE 3.3K 5% 1/10W | |
| R098 | 1-216-081-00 | METAL GLAZE 22K 5% 1/10W | |
| R099 | 1-216-083-00 | METAL GLAZE 27K 5% 1/10W | |
| R300 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R301 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R302 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R303 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R304 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R305 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R306 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| R307 | 1-216-055-00 | METAL GLAZE 1.8K 5% 1/10W | |
| R308 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R309 | 1-216-075-00 | METAL GLAZE 12K 5% 1/10W | |
| R310 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R311 | 1-216-075-00 | METAL GLAZE 12K 5% 1/10W | |
| R312 | 1-216-065-00 | METAL GLAZE 4.7K 5% 1/10W | |
| R313 | 1-216-075-00 | METAL GLAZE 12K 5% 1/10W | |
| R314 | 1-216-059-00 | METAL GLAZE 2.7K 5% 1/10W | |
| R315 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R316 | 1-216-059-00 | METAL GLAZE 2.7K 5% 1/10W | |
| R317 | 1-216-049-00 | METAL GLAZE 1K 5% 1/10W | |
| R318 | 1-216-059-00 | METAL GLAZE 2.7K 5% 1/10W | |
| R319 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R320 | 1-220-329-11 | METAL GLAZE 56K 5% 1/2W | |
| R321 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| R322 | 1-220-329-11 | METAL GLAZE 56K 5% 1/2W | |
| R324 | 1-220-329-11 | METAL GLAZE 56K 5% 1/2W | |
| R325 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R326 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R327 | 1-216-025-00 | METAL GLAZE 100 5% 1/10W | |
| R330 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R331 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R332 | 1-216-091-00 | METAL GLAZE 56K 5% 1/10W | |
| R376 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| R377 | 1-216-113-00 | METAL GLAZE 470K 5% 1/10W | |
| R378 | 1-216-665-11 | METAL CHIP 3.9K 0.50% 1/10W | |
| R379 | 1-216-665-11 | METAL CHIP 3.9K 0.50% 1/10W | |

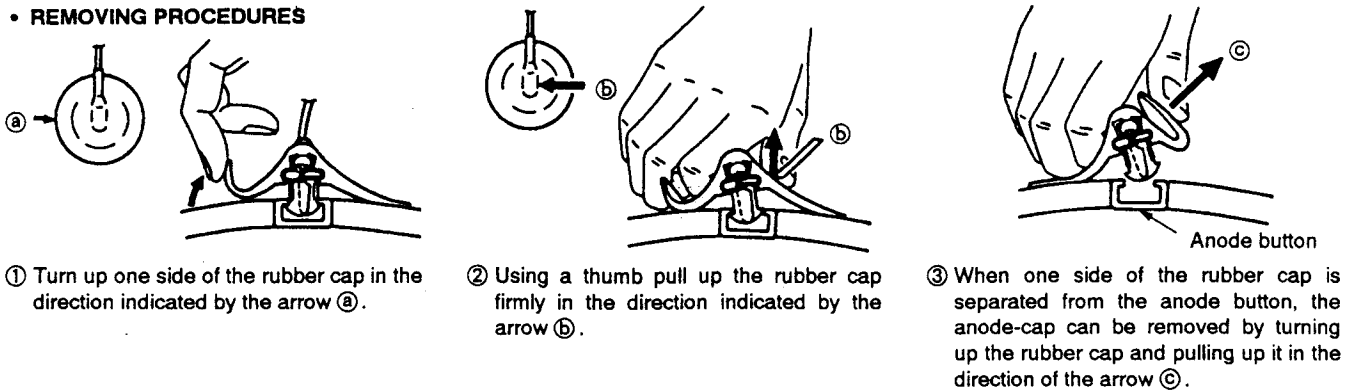
1-9. WIRING HARNESS LAYOUT



• REMOVAL OF ANODE-CAP

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

• REMOVING PROCEDURES



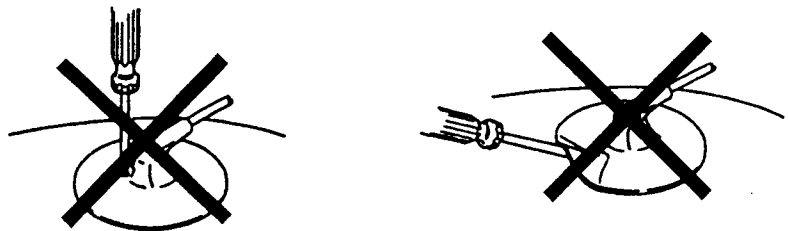
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

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 ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardy not to hurt inside of anode-caps!
A metal fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardy!
The shatter-hook terminal will stick out or hurt the rubber.



A M G

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

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-----------------------|--------------------------------|-------------------------------|-------------------|----------|----------|-------------|--------|
| R380 | 1-216-665-11 | METAL CHIP | 3.9K 0.50% 1/10W | | | | |
| R381 | 1-216-665-11 | METAL CHIP | 3.9K 0.50% 1/10W | | | | |
| R382 | 1-216-057-00 | METAL GLAZE | 2.2K 5% 1/10W | | | | |
| R701 | 1-216-105-00 | METAL GLAZE | 220K 5% 1/10W | | | | |
| R702 | 1-216-105-00 | METAL GLAZE | 220K 5% 1/10W | | | | |
| R703 | 1-216-105-00 | METAL GLAZE | 220K 5% 1/10W | | | | |
| R704 | 1-216-105-00 | METAL GLAZE | 220K 5% 1/10W | | | | |
| R705 | 1-249-417-11 | CARBON | 1K 5% 1/4W | | | | |
| R706 | 1-216-097-00 | METAL GLAZE | 100K 5% 1/10W | | | | |
| R727 | 1-216-063-00 | METAL GLAZE | 3.9K 5% 1/10W | | | | |
| R728 | 1-216-049-00 | METAL GLAZE | 1K 5% 1/10W | | | | |
| R730 | 1-216-091-00 | METAL GLAZE | 56K 5% 1/10W | | | | |
| R731 | 1-216-063-00 | METAL GLAZE | 3.9K 5% 1/10W | | | | |
| R733 | 1-216-091-00 | METAL GLAZE | 56K 5% 1/10W | | | | |
| R734 | 1-216-091-00 | METAL GLAZE | 56K 5% 1/10W | | | | |
| R735 | 1-216-049-00 | METAL GLAZE | 1K 5% 1/10W | | | | |
| R736 | 1-216-091-00 | METAL GLAZE | 56K 5% 1/10W | | | | |
| R737 | 1-216-091-00 | METAL GLAZE | 56K 5% 1/10W | | | | |
| R738 | Δ 1-239-748-11 | RESISTOR BLOCK (HIGH-VOLTAGE) | | | | | |
| R739 | Δ 1-239-748-11 | RESISTOR BLOCK (HIGH-VOLTAGE) | | | | | |
| <VARIABLE RESISTOR> | | | | | | | |
| RV701 | 1-223-410-11 | RES. ADJ. METAL FILM 110M | | | | | |
| <SPARK GAP> | | | | | | | |
| SG701 | 1-519-422-11 | GAP, SPARK | | | | | |
| SG702 | 1-519-504-11 | GAP, DISCHARGE | | | | | |
| SG703 | 1-519-504-11 | GAP, DISCHARGE | | | | | |
| SG704 | 1-519-504-11 | GAP, DISCHARGE | | | | | |
| SG705 | 1-519-504-11 | GAP, DISCHARGE | | | | | |
| SG706 | 1-519-422-11 | GAP, SPARK | | | | | |
| SG707 | 1-519-504-11 | GAP, DISCHARGE | | | | | |
| ***** | | | | | | | |
| 8-934-708-00 | CONNECTOR PANEL ASSY (M BOARD) | | | | | | |
| ***** | | | | | | | |
| <CONNECTOR> | | | | | | | |
| CN250 | *1-564-520-11 | PLUG, CONNECTOR 5P | | | | | |
| CN251 | 1-691-803-11 | SOCKET, DIN | | | | | |
| CN253 | *1-564-518-11 | PLUG, CONNECTOR 3P | | | | | |
| CN254 | *1-564-518-11 | PLUG, CONNECTOR 3P | | | | | |
| <DIODE> | | | | | | | |
| D251 | 8-719-977-49 | DIODE DTZ15B | | | | | |
| D252 | 8-719-800-76 | DIODE 1SS226 | | | | | |
| D253 | 8-719-800-76 | DIODE 1SS226 | | | | | |
| D254 | 8-719-800-76 | DIODE 1SS226 | | | | | |
| D255 | 8-719-977-49 | DIODE DTZ15B | | | | | |
| <RESISTOR> | | | | | | | |
| R251 | 1-216-025-00 | METAL GLAZE | 100 5% 1/10W | | | | |
| R252 | 1-216-089-91 | METAL GLAZE | 47K 5% 1/10W | | | | |
| R254 | 1-216-025-00 | METAL GLAZE | 100 5% 1/10W | | | | |
| R255 | 1-216-617-11 | METAL CHIP | 39 0.50% 1/10W | | | | |
| R256 | 1-216-617-11 | METAL CHIP | 39 0.50% 1/10W | | | | |
| R257 | 1-216-617-11 | METAL CHIP | 39 0.50% 1/10W | | | | |
| R258 | 1-216-617-11 | METAL CHIP | 39 0.50% 1/10W | | | | |
| <SWITCH> | | | | | | | |
| S250 | 1-572-482-11 | SWITCH, KEY BOARD (1 KEY) | | | | | |
| S251 | 1-570-157-81 | SWITCH, SLIDE | | | | | |
| ***** | | | | | | | |
| Δ 8-934-585-00 | POWER BLOCK (G BOARD) | | | | | | |
| ***** | | | | | | | |
| Δ 4-374-846-01 | COVER, CAPACITOR, CAP TYPE | | | | | | |
| Δ 4-382-854-01 | SCREW (M3X8), P, SW (+) | | | | | | |
| Δ 4-382-854-11 | SCREW (M3X10), P, SW (+) | | | | | | |
| <CAPACITOR> | | | | | | | |
| C601 | Δ 1-162-116-91 | CERAMIC | 680PF 10% 2KV | | | | |
| C602 | Δ 1-107-576-11 | ELECT | 560MF 20% 400V | | | | |
| C603 | Δ 1-124-794-91 | ELECT | 4.7MF 20% 100V | | | | |
| C604 | Δ 1-124-513-91 | ELECT | 47MF 20% 50V | | | | |
| C605 | Δ 1-124-045-91 | ELECT | 4.7MF 20% 50V | | | | |
| C606 | Δ 1-130-475-91 | MYLAR | 0.0022MF 5% 50V | | | | |
| C607 | Δ 1-137-194-81 | FILM | 0.47MF 5% 50V | | | | |
| C608 | Δ 1-123-605-85 | ELECT | 100MF 20% 100V | | | | |
| C609 | Δ 1-125-700-11 | ELECT | 220MF 20% 200V | | | | |
| C610 | Δ 1-123-605-85 | ELECT | 100MF 20% 100V | | | | |
| C611 | Δ 1-124-785-51 | ELECT | 3300MF 20% 25V | | | | |
| C612 | Δ 1-124-785-51 | ELECT | 3300MF 20% 25V | | | | |
| C613 | Δ 1-123-606-51 | ELECT | 1000MF 20% 25V | | | | |
| C614 | Δ 1-124-127-91 | ELECT | 100MF 20% 25V | | | | |
| C615 | Δ 1-124-127-91 | ELECT | 100MF 20% 25V | | | | |
| C616 | Δ 1-124-127-91 | ELECT | 100MF 20% 25V | | | | |
| C617 | Δ 1-124-803-85 | ELECT | 33MF 20% 160V | | | | |
| C618 | Δ 1-123-605-85 | ELECT | 100MF 20% 100V | | | | |
| C619 | Δ 1-124-035-91 | ELECT | 47MF 20% 16V | | | | |
| C620 | Δ 1-130-473-91 | MYLAR | 0.0015MF 5% 50V | | | | |
| C621 | Δ 1-162-134-91 | CERAMIC | 470PF 10% 2KV | | | | |
| C622 | Δ 1-104-537-91 | FILM CHIP | 680PF 5% 50V | | | | |
| C623 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| C624 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| C625 | Δ 1-123-973-91 | ELECT | 100MF 20% 16V | | | | |
| C626 | Δ 1-162-134-91 | CERAMIC | 470PF 10% 2KV | | | | |
| C628 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C629 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C630 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C631 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C632 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C633 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C634 | Δ 1-102-228-91 | CERAMIC | 470PF 10% 500V | | | | |
| C635 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| C636 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| C637 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| C638 | Δ 1-161-953-71 | CERAMIC | 0.0047MF 20% 400V | | | | |
| <CONNECTOR> | | | | | | | |
| CN601 | *1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | | | | |
| CN602 | *1-564-511-51 | PLUG, CONNECTOR 8P | | | | | |
| CN603 | *1-564-508-51 | PLUG, CONNECTOR 5P | | | | | |
| CN604 | *1-564-506-51 | PLUG, CONNECTOR 3P | | | | | |
| CN606 | Δ 1-695-915-21 | TAB (CONTACT) | | | | | |
| <DIODE> | | | | | | | |

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

G

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|--------------|------------------------------|--------|----------------|--------------|------------------------------|--------|
| D601 Δ | 8-719-510-53 | DIODE D4S860L | | R602 Δ | 1-215-926-71 | METAL OXIDE 33K 5% 3W | F |
| D602 Δ | 8-719-978-65 | DIODE DTZ15B-TT11 | | R603 Δ | 1-220-293-91 | METAL GLAZE 47K 5% 1/4W | |
| D603 Δ | 8-719-312-94 | DIODE EU2-V1 | | R604 Δ | 1-220-264-91 | METAL GLAZE 1K 5% 1/4W | |
| D604 Δ | 8-719-312-94 | DIODE EU2-V1 | | R605 Δ | 1-217-237-11 | WIREWOUND 0.1 10% 3W | F |
| D605 Δ | 8-719-312-94 | DIODE EU2-V1 | | R606 Δ | 1-220-262-91 | METAL GLAZE 680 5% 1/4W | |
| D606 Δ | 8-719-312-94 | DIODE EU2-V1 | | R607 Δ | 1-220-293-91 | METAL GLAZE 47K 5% 1/4W | |
| D607 Δ | 8-719-404-47 | DIODE MA110-TX | | R608 Δ | 1-218-478-91 | METAL GLAZE 330 5% 1/4W | |
| D608 Δ | 8-719-045-47 | DIODE FML-S16S | | R609 Δ | 1-220-277-91 | METAL GLAZE 2.2K 5% 1/4W | |
| D609 Δ | 8-719-312-94 | DIODE EU2-V1 | | R610 Δ | 1-220-285-91 | METAL GLAZE 10K 5% 1/4W | |
| D610 Δ | 8-719-312-94 | DIODE EU2-V1 | | R611 Δ | 1-220-285-91 | METAL GLAZE 10K 5% 1/4W | |
| D611 Δ | 8-719-312-94 | DIODE EU2-V1 | | R612 Δ | 1-220-264-91 | METAL GLAZE 1K 5% 1/4W | |
| D612 Δ | 8-719-045-48 | DIODE FML-G12S | | R618 Δ | 1-215-880-71 | METAL OXIDE 10 5% 2W | F |
| D613 Δ | 8-719-045-48 | DIODE FML-G12S | | R619 Δ | 1-220-313-91 | METAL GLAZE 100K 5% 1/4W | |
| D614 Δ | 8-719-979-50 | DIODE EGP30D | | R620 Δ | 1-215-875-71 | METAL OXIDE 10K 5% 1W | F |
| D615 Δ | 8-719-978-68 | DIODE DTZ16A-TT11 | | R621 Δ | 1-220-258-91 | METAL GLAZE 100 5% 1/4W | |
| D616 Δ | 8-719-404-47 | DIODE MA110-TX | | R624 Δ | 1-215-880-71 | METAL OXIDE 10 5% 2W | F |
| D617 Δ | 8-719-977-89 | DIODE DTZ2.08-TT11 | | R627 Δ | 1-217-298-11 | WIREWOUND 10 10% 5W | F |
| D620 Δ | 8-719-978-84 | DIODE DTZ24A-TT11 | | R628 Δ | 1-220-260-91 | METAL GLAZE 390 5% 1/4W | |
| D621 Δ | 8-719-404-47 | DIODE MA110-TX | | R629 Δ | 1-216-398-71 | METAL OXIDE 5.6 5% 3W | F |
| D622 Δ | 8-719-312-94 | DIODE EU2-V1 | | R630 Δ | 1-216-654-91 | METAL CHIP 1.3K 0.50% 1/10W | |
| D623 Δ | 8-719-312-94 | DIODE EU2-V1 | | R631 Δ | 1-218-754-91 | METAL CHIP 120K 0.50% 1/10W | |
| D627 Δ | 8-719-978-65 | DIODE DTZ15B-TT11 | | R632 Δ | 1-220-264-91 | METAL GLAZE 1K 5% 1/4W | |
| D628 Δ | 8-719-404-47 | DIODE MA110-TX | | R633 Δ | 1-216-690-91 | METAL CHIP 43K 0.50% 1/10W | |
| D629 Δ | 8-719-977-89 | DIODE DTZ2.08-TT11 | | R634 Δ | 1-220-285-91 | METAL GLAZE 10K 5% 1/4W | |
| D630 Δ | 8-719-404-47 | DIODE MA110-TX | | R635 Δ | 1-218-754-91 | METAL CHIP 120K 0.50% 1/10W | |
| D631 Δ | 8-719-404-47 | DIODE MA110-TX | | R636 Δ | 1-202-881-91 | SOLID 470K 20% 1/2W | |
| <FERRITE BEAD> | | | | R637 Δ | 1-215-925-71 | METAL OXIDE 22K 5% 3W | F |
| FB601 Δ | 1-410-397-11 | FERRITE BEAD INDUCTOR 1.1UH | | R638 Δ | 1-260-288-71 | CARBON 0.47 5% 1/2W | F |
| FB602 Δ | 1-410-397-11 | FERRITE BEAD INDUCTOR 1.1UH | | R639 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| FB603 Δ | 1-410-396-51 | FERRITE BEAD INDUCTOR 0.45UH | | R640 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| FB604 Δ | 1-410-396-51 | FERRITE BEAD INDUCTOR 0.45UH | | R641 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| FB605 Δ | 1-410-396-51 | FERRITE BEAD INDUCTOR 0.45UH | | R642 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| FB606 Δ | 1-412-911-21 | INDUCTOR, FERRITE BEAD | | R643 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| FB607 Δ | 1-412-911-21 | INDUCTOR, FERRITE BEAD | | R644 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| <IC> | | | | R645 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| IC601 Δ | 8-749-924-69 | IC STR-M6523 | | R646 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| IC602 Δ | 8-749-923-50 | PHOTO COUPLER PC111YS | | R647 Δ | 1-249-377-91 | CARBON 0.47 5% 1/4W | F |
| IC603 Δ | 8-749-921-86 | IC SE-140N | | R648 Δ | 1-249-443-71 | CARBON 0.47 5% 1/4W | F |
| IC604 Δ | 8-759-164-53 | IC NJM7863FD | | R649 Δ | 1-220-258-91 | METAL GLAZE 100 5% 1/4W | |
| <COIL> | | | | R650 Δ | 1-220-285-91 | METAL GLAZE 10K 5% 1/4W | |
| L601 Δ | 1-412-533-41 | INDUCTOR 47UH | | R651 Δ | 1-220-277-91 | METAL GLAZE 2.2K 5% 1/4W | |
| L602 Δ | 1-412-533-41 | INDUCTOR 47UH | | <RELAY> | | | |
| L605 Δ | 1-412-533-41 | INDUCTOR 47UH | | RY601 Δ | 1-515-986-12 | RELAY | |
| <TRANSISTOR> | | | | RY602 Δ | 1-515-796-11 | RELAY | |
| Q601 Δ | 8-729-114-87 | TRANSISTOR 2SD1309-L | | <TRANSFORMER> | | | |
| Q605 Δ | 8-729-823-99 | TRANSISTOR 2SC2909-AA | | T601 Δ | 1-423-889-12 | TRANSFORMER, CONVERTER (SRT) | |
| Q606 Δ | 8-729-901-23 | TRANSISTOR DTC143TK-T146 | | ***** | | | |
| Q608 Δ | 8-729-901-23 | TRANSISTOR DTC143TK-T146 | | | | | |
| Q609 Δ | 8-729-920-72 | TRANSISTOR 2SA1037K-T-146-QR | | | | | |
| Q610 Δ | 8-729-920-75 | TRANSISTOR 2SC2412K-T-146-QR | | | | | |
| Q611 Δ | 8-729-920-75 | TRANSISTOR 2SC2412K-T-146-QR | | | | | |
| <RESISTOR> | | | | | | | |
| R601 Δ | 1-215-926-71 | METAL OXIDE 33K 5% 3W | F | | | | |

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

D V

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------------|---------------|------------------------------|--------|----------------|--------------|------------------------------|--------|
| C825 | 1-126-964-11 | ELECT 10MF 20% | 50V | D510 | 8-719-984-73 | DIODE SB560 | |
| C826 | 1-124-903-11 | ELECT 1MF 20% | 50V | D511 | 8-719-045-42 | DIODE DD52RC | |
| C827 | 1-102-106-00 | CERAMIC 100PF 10% | 50V | D512 | 8-719-911-19 | DIODE 1SS119 | |
| C828 | 1-124-903-11 | ELECT 1MF 20% | 50V | D513 | 8-719-911-19 | DIODE 1SS119 | |
| C829 | 1-126-964-11 | ELECT 10MF 20% | 50V | D514 | 8-719-018-82 | DIODE RGP02-20EL-6394 | |
| C830 | 1-136-165-00 | FILM 0.1MF 5% | 50V | D515 | 8-719-911-19 | DIODE 1SS119 | |
| C841 | 1-136-165-00 | FILM 0.1MF 5% | 50V | D516 | 8-719-979-57 | DIODE EGP30G | |
| C1501 | 1-130-483-00 | MYLAR 0.01MF 5% | 50V | D517 | 8-719-911-19 | DIODE 1SS119 | |
| C1502 | 1-130-483-00 | MYLAR 0.01MF 5% | 50V | D518 | 8-719-911-19 | DIODE 1SS119 | |
| C1503 | 1-130-483-00 | MYLAR 0.01MF 5% | 50V | D519 | 8-719-911-19 | DIODE 1SS119 | |
| C1504 | 1-130-483-00 | MYLAR 0.01MF 5% | 50V | D520 | 8-719-911-19 | DIODE 1SS119 | |
| C1505 | 1-130-483-00 | MYLAR 0.01MF 5% | 50V | D521 | 8-719-911-19 | DIODE 1SS119 | |
| C1602 Δ | 1-137-241-11 | FILM 0.47MF 20% | 250V | D522 | 8-719-911-19 | DIODE 1SS119 | |
| C1641 | 1-136-165-00 | FILM 0.1MF 5% | 50V | D523 | 8-719-911-19 | DIODE 1SS119 | |
| C1647 | 1-136-165-00 | FILM 0.1MF 5% | 50V | D524 | 8-719-908-03 | DIODE GP08D | |
| <CONNECTOR> | | | | D530 | 8-719-109-75 | DIODE RD4.3ESB2 | |
| CN400 | *1-573-986-11 | PIN, CONNECTOR (PC BOARD) 5P | | D801 | 8-719-110-46 | DIODE RD16ESB3 | |
| CN401 | *1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | D802 | 8-719-911-19 | DIODE 1SS119 | |
| CN500 | *1-564-511-11 | PLUG, CONNECTOR 8P | | D803 | 8-719-911-19 | DIODE 1SS119 | |
| CN501 | *1-568-536-11 | PLUG (MINIATURE DY) 6P | | D805 | 8-719-911-19 | DIODE 1SS119 | |
| CN502 | 1-764-101-11 | PIN, CONNECTOR (PC BOARD) 2P | | D806 | 8-719-110-46 | DIODE RD16ESB3 | |
| CN503 | *1-564-507-11 | PLUG, CONNECTOR 4P | | D807 | 8-719-941-74 | DIODE ERB91-02 | |
| CN504 | *1-564-508-11 | PLUG, CONNECTOR 5P | | D808 | 8-719-920-67 | DIODE ERC91-02 | |
| CN505 | *1-564-509-11 | PLUG, CONNECTOR 6P | | D809 | 8-719-911-19 | DIODE 1SS119 | |
| CN801 | *1-564-512-11 | PLUG, CONNECTOR 9P | | D810 | 8-719-911-19 | DIODE 1SS119 | |
| CN802 | *1-764-042-11 | PIN, CONNECTOR (STAKING) 20P | | D811 | 8-719-110-46 | DIODE RD16ESB3 | |
| CN803 | *1-764-042-11 | PIN, CONNECTOR (STAKING) 20P | | D814 | 8-719-911-19 | DIODE 1SS119 | |
| CN1603 | 1-691-960-11 | PIN, CONNECTOR (PC BOARD) 3P | | D815 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| CN1604 | *1-580-689-11 | PIN, CONNECTOR (PC BOARD) 4P | | D816 | 8-719-911-19 | DIODE 1SS119 | |
| <DIODE> | | | | D817 | 8-719-109-85 | DIODE RD5.1ESB2 | |
| D401 | 8-719-901-83 | DIODE 1SS83 | | D819 | 8-719-911-19 | DIODE 1SS119 | |
| D404 | 8-719-911-19 | DIODE 1SS119 | | D820 | 8-719-911-19 | DIODE 1SS119 | |
| D405 | 8-719-911-19 | DIODE 1SS119 | | D821 | 8-719-911-19 | DIODE 1SS119 | |
| D406 | 8-719-911-19 | DIODE 1SS119 | | D823 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| D407 | 8-719-028-72 | DIODE RGP02-17EL-6433 | | D824 | 8-719-911-19 | DIODE 1SS119 | |
| D408 | 8-719-979-85 | DIODE EGP20G | | D825 | 8-719-200-02 | DIODE 10E-2 | |
| D409 | 8-719-110-36 | DIODE RD13ESB2 | | D826 | 8-719-109-51 | DIODE RD2.0ESB2 | |
| D410 | 8-719-908-03 | DIODE GP08D | | D827 | 8-719-109-89 | DIODE RD5.6ESB2 | |
| D411 | 8-719-028-72 | DIODE RGP02-17EL-6433 | | D828 | 8-719-911-19 | DIODE 1SS119 | |
| D412 | 8-719-908-03 | DIODE GP08D | | D829 | 8-719-911-19 | DIODE 1SS119 | |
| D413 | 8-719-911-19 | DIODE 1SS119 | | D1501 | 8-719-109-81 | DIODE RD4.7ESB2 | |
| D414 | 8-719-908-03 | DIODE GP08D | | D1502 | 8-719-109-81 | DIODE RD4.7ESB2 | |
| D415 | 8-719-911-19 | DIODE 1SS119 | | D1503 | 8-719-109-81 | DIODE RD4.7ESB2 | |
| D416 | 8-719-110-49 | DIODE RD18ESB2 | | D1504 | 8-719-109-81 | DIODE RD4.7ESB2 | |
| D417 | 8-719-911-19 | DIODE 1SS119 | | D1505 | 8-719-109-81 | DIODE RD4.7ESB2 | |
| D418 | 8-719-911-19 | DIODE 1SS119 | | D1506 | 8-719-911-19 | DIODE 1SS119 | |
| D419 | 8-719-110-46 | DIODE RD16ESB3 | | D1624 | 8-719-911-19 | DIODE 1SS119 | |
| D420 | 8-719-911-19 | DIODE 1SS119 | | D1629 | 8-719-911-19 | DIODE 1SS119 | |
| D421 | 8-719-911-19 | DIODE 1SS119 | | <FERRITE BEAD> | | | |
| D422 | 8-719-109-81 | DIODE RD4.7ESB2 | | FB401 | 1-410-396-41 | FERRITE BEAD INDUCTOR 0.45UH | |
| D425 | 8-719-920-34 | DIODE ERA15-01TP1 | | FB501 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| D501 | 8-719-109-89 | DIODE RD5.6ESB2 | | FB502 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| D502 | 8-719-951-30 | DIODE ERA91-02 | | FB503 | 1-410-397-21 | FERRITE BEAD INDUCTOR 1.1UH | |
| D503 | 8-719-048-73 | DIODE ERC90M-03 | | <IC> | | | |
| D504 | 8-719-110-36 | DIODE RD13ESB2 | | IC401 | 8-759-822-38 | IC LA6510 | |
| D505 | 8-719-048-73 | DIODE ERC90M-03 | | IC404 | 8-759-503-91 | IC TL082ACP | |
| D506 | 8-719-048-73 | DIODE ERC90M-03 | | IC406 | 8-759-908-15 | IC TL431CLP | |
| D507 | 8-719-920-67 | DIODE ERC91-02 | | IC407 | 8-759-980-58 | IC TDA8172 | |
| D508 | 8-719-920-67 | DIODE ERC91-02 | | IC408 | 8-759-013-06 | IC MC7805CT | |
| D509 | 8-719-109-69 | DIODE RD3.6ESB2 | | IC409 | 8-759-143-11 | IC UPC24M12HF | |

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

D

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------|--------------|---------------|--------------|-------------|---------------|
| R468 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R598 | 1-215-459-00 | METAL | 39K 1% 1/4W |
| R469 | 1-249-441-11 | CARBON | 100K 5% 1/4W | R599 | 1-249-437-11 | CARBON | 47K 5% 1/4W |
| R470 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R801 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R471 | 1-249-409-11 | CARBON | 220 5% 1/4W | R802 | 1-249-393-11 | CARBON | 10 5% 1/4W |
| R472 | 1-249-409-11 | CARBON | 220 5% 1/4W | R803 | 1-249-402-11 | CARBON | 56 5% 1/4W |
| R479 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | R804 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| R481 | 1-249-413-11 | CARBON | 470 5% 1/4W | R805 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R482 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W | R806 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W |
| R483 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R807 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R484 | 1-214-798-21 | METAL | 1.8 1% 1/2W | R808 | 1-247-807-31 | CARBON | 100 5% 1/4W |
| R502 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R809 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R503 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R810 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R504 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R811 | 1-249-393-11 | CARBON | 10 5% 1/4W |
| R505 | 1-249-405-11 | CARBON | 100 5% 1/4W | R812 | 1-249-428-11 | CARBON | 8.2K 5% 1/4W |
| R506 | 1-215-459-00 | METAL | 39K 1% 1/4W | R813 | 1-249-397-11 | CARBON | 22 5% 1/4W |
| R507 | 1-260-288-11 | CARBON | 0.47 5% 1/2W | R814 | 1-249-427-11 | CARBON | 6.8K 5% 1/4W |
| R508 | 1-260-288-11 | CARBON | 0.47 5% 1/2W | R815 | 1-215-889-00 | METAL OXIDE | 330 5% 2W |
| R509 | 1-216-393-00 | METAL OXIDE | 2.2 5% 3W | R816 | 1-216-432-00 | METAL OXIDE | 820 5% 1W |
| R510 | 1-215-445-00 | METAL | 10K 1% 1/4W | R817 | 1-216-432-00 | METAL OXIDE | 820 5% 1W |
| R511 | 1-215-883-11 | METAL OXIDE | 33 5% 2W | R818 | 1-215-418-00 | METAL | 750 1% 1/4W |
| R512 | 1-215-861-00 | METAL OXIDE | 47 5% 1W | R819 | 1-215-418-00 | METAL | 750 1% 1/4W |
| R513 | 1-216-393-00 | METAL OXIDE | 2.2 5% 3W | R821 | 1-215-889-00 | METAL OXIDE | 330 5% 2W |
| R514 | 1-216-447-00 | METAL OXIDE | 27 5% 2W | R822 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W |
| R515 | 1-208-964-11 | METAL OXIDE | 4.7 10% 5W | R823 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W |
| R516 | 1-208-964-11 | METAL OXIDE | 4.7 10% 5W | R824 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R517 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R826 Δ | 1-215-431-91 | METAL | 2.7K 1% 1/4W |
| R518 | 1-215-860-11 | METAL OXIDE | 33 5% 1W | R827 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R519 | 1-249-434-11 | CARBON | 27K 5% 1/4W | R828 | 1-247-887-00 | CARBON | 220K 5% 1/4W |
| R520 | 1-260-296-11 | CARBON | 2.2 5% 1/2W | R829 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R521 | 1-249-437-11 | CARBON | 47K 5% 1/4W | R830 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| R522 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R831 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W |
| R523 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W | R832 Δ | 1-215-455-91 | METAL | 27K 1% 1/4W |
| R524 | 1-249-433-11 | CARBON | 22K 5% 1/4W | R833 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R525 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W | R834 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W |
| R526 | 1-215-859-00 | METAL OXIDE | 22 5% 1W | R835 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W |
| R527 | 1-249-397-11 | CARBON | 22 5% 1/4W | R836 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R529 | 1-215-455-00 | METAL | 27K 1% 1/4W | R837 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| R530 | 1-215-451-00 | METAL | 18K 1% 1/4W | R839 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R531 | 1-249-423-11 | CARBON | 3.3K 5% 1/4W | R840 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R532 | 1-215-445-00 | METAL | 10K 1% 1/4W | R841 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R533 | 1-215-445-00 | METAL | 10K 1% 1/4W | R842 Δ | 1-215-453-91 | METAL | 22K 1% 1/4W |
| R534 | 1-215-452-00 | METAL | 20K 1% 1/4W | R843 Δ | 1-215-448-91 | METAL | 13K 1% 1/4W |
| R535 | 1-215-452-00 | METAL | 20K 1% 1/4W | R844 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R536 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R845 | 1-216-341-11 | METAL OXIDE | 0.22 5% 1W |
| R539 | 1-249-417-11 | CARBON | 1K 5% 1/4W | R846 | 1-216-344-00 | METAL OXIDE | 0.39 5% 1W |
| R540 | 1-247-895-00 | CARBON | 470K 5% 1/4W | R847 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R541 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R848 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R575 | 1-215-453-00 | METAL | 22K 1% 1/4W | R849 | 1-247-887-00 | CARBON | 220K 5% 1/4W |
| R576 | 1-215-439-00 | METAL | 5.6K 1% 1/4W | R850 | 1-202-826-00 | SOLID | 4.7K 20% 1/2W |
| R578 | 1-215-891-11 | METAL OXIDE | 680 5% 2W | R851 | 1-202-822-00 | SOLID | 2.2K 20% 1/2W |
| R581 | 1-249-414-11 | CARBON | 560 5% 1/4W | R852 | 1-215-889-00 | METAL OXIDE | 330 5% 2W |
| R582 | 1-249-429-11 | CARBON | 10K 5% 1/4W | R853 | 1-249-441-11 | CARBON | 100K 5% 1/4W |
| R583 | 1-249-414-11 | CARBON | 560 5% 1/4W | R854 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R584 | 1-249-415-11 | CARBON | 680 5% 1/4W | R855 | 1-249-433-11 | CARBON | 22K 5% 1/4W |
| R585 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R856 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R586 | 1-247-807-31 | CARBON | 100 5% 1/4W | R857 | 1-215-913-11 | METAL OXIDE | 220 5% 3W |
| R587 | 1-249-421-11 | CARBON | 2.2K 5% 1/4W | R868 | 1-202-822-00 | SOLID | 2.2K 20% 1/2W |
| R588 | 1-249-393-11 | CARBON | 10 5% 1/4W | R1500 | 1-249-425-11 | CARBON | 4.7K 5% 1/4W |
| R591 | 1-215-424-00 | METAL | 1.3K 1% 1/4W | R1501 | 1-249-429-11 | CARBON | 10K 5% 1/4W |
| R592 | 1-215-428-00 | METAL | 2K 1% 1/4W | R1502 | 1-215-445-00 | METAL | 10K 1% 1/4W |
| R593 | 1-249-426-11 | CARBON | 5.6K 5% 1/4W | R1503 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R595 | 1-215-451-00 | METAL | 18K 1% 1/4W | R1504 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R596 | 1-215-459-00 | METAL | 39K 1% 1/4W | R1505 | 1-249-417-11 | CARBON | 1K 5% 1/4W |
| R597 | 1-215-445-00 | METAL | 10K 1% 1/4W | | | | |

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

D **H**

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-----------------|--------------|---------------------------------------|--------------|----------|---------------|--------------------------|---------|
| R1506 | 1-249-417-11 | CARBON | 1K 5% 1/4W | C201 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| R1507 | 1-249-437-11 | CARBON | 47K 5% 1/4W | C202 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| R1508 | 1-249-437-11 | CARBON | 47K 5% 1/4W | C203 | 1-124-584-00 | ELECT 100MF | 20% 10V |
| R1509 | 1-249-437-11 | CARBON | 47K 5% 1/4W | C204 | 1-124-584-00 | ELECT 100MF | 20% 10V |
| R1510 | 1-249-437-11 | CARBON | 47K 5% 1/4W | C205 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1511 | 1-215-449-00 | METAL | 15K 1% 1/4W | C206 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1512 | 1-247-807-31 | CARBON | 100 5% 1/4W | C207 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1513 | 1-249-428-11 | CARBON | 8.2K 5% 1/4W | C208 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1514 | 1-249-417-11 | CARBON | 1K 5% 1/4W | C209 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1515 | 1-249-419-11 | CARBON | 1.5K 5% 1/4W | C210 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1516 | 1-249-417-11 | CARBON | 1K 5% 1/4W | C211 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1518 | 1-214-846-00 | METAL | 180 1% 1/2W | C212 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1519 | 1-214-846-00 | METAL | 180 1% 1/2W | C213 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1520 | 1-249-417-11 | CARBON | 1K 5% 1/4W | C214 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1521 | 1-249-437-11 | CARBON | 47K 5% 1/4W | C215 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1522 | 1-214-846-00 | METAL | 180 1% 1/2W | C216 | 1-163-125-00 | CERAMIC CHIP 220PF | 5% 50V |
| R1600 | 1-249-429-11 | CARBON | 10K 5% 1/4W | | | <CONNECTOR> | |
| R1603 | 1-249-429-11 | CARBON | 10K 5% 1/4W | CN201 | *1-564-521-11 | PLUG, CONNECTOR 6P | |
| R1604 | 1-249-429-11 | CARBON | 10K 5% 1/4W | | | <DIODE> | |
| R1605 | 1-249-417-11 | CARBON | 1K 5% 1/4W | D201 | 8-719-311-15 | DIODE SEL1422G-C,D | |
| R1639 | 1-249-429-11 | CARBON | 10K 5% 1/4W | D202 | 8-719-311-90 | DIODE SEL1922D-C | |
| R1646 | 1-249-435-11 | CARBON | 33K 5% 1/4W | D203 | 8-719-311-90 | DIODE SEL1922D-C | |
| R1647 | 1-249-429-11 | CARBON | 10K 5% 1/4W | D204 | 8-719-311-90 | DIODE SEL1922D-C | |
| | | <RELAY> | | D205 | 8-719-311-90 | DIODE SEL1922D-C | |
| RY501A | 1-515-805-11 | RELAY, POWER | | D206 | 8-719-311-90 | DIODE SEL1922D-C | |
| Δ RY1601 | 1-515-849-11 | RELAY | | D207 | 8-719-045-19 | DIODE SPB-26MVWF | |
| Δ RY1602 | 1-515-669-21 | RELAY | | D209 | 8-719-977-03 | DIODE DT25.6B | |
| | | <SPARK GAP> | | | | <IC> | |
| SG400 | 1-519-422-11 | GAP, SPARK | | IC201 | 8-759-032-59 | IC MC74HC595AF | |
| SG800 | 1-519-422-11 | GAP, SPARK | | IC202 | 8-759-173-48 | IC MC74HC597F-T2 | |
| | | <TRANSFORMER> | | | | <TRANSISTOR> | |
| T400 | 1-423-854-11 | TRANSFORMER, FERRITE (DFT) | | Q201 | 8-729-901-00 | TRANSISTOR DTC124EK | |
| T401 | 1-423-405-11 | TRANSFORMER, FERRITE (FRT) | | Q202 | 8-729-901-00 | TRANSISTOR DTC124EK | |
| T500 | 1-423-853-11 | TRANSFORMER, FERRITE (HDT) | | | | <RESISTOR> | |
| T501 | 1-423-888-11 | TRANSFORMER, FERRITE (HOT) | | R201 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| T502 | 1-423-856-11 | TRANSFORMER, FERRITE (HST) | | R202 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| T800A | 1-453-162-11 | TRANSFORMER ASSY, FLYBACK (NX-2780A1) | | R203 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| T801 | 1-423-855-11 | TRANSFORMER, FERRITE (HRT) | | R204 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| T1601A | 1-426-643-11 | TRANSFORMER, LINE FILTER (LFT) | | R205 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| | | <THERMISTOR> | | R206 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| TH1501 | 1-807-796-11 | THERMISTOR | | R207 | 1-216-037-00 | METAL GLAZE 330 5% 1/10W | |
| Δ THP601 | 1-809-260-11 | THERMISTOR, POWER | | R208 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| Δ THP602 | 1-809-827-11 | THERMISTOR, POSITIVE | | R210 | 1-216-041-00 | METAL GLAZE 470 5% 1/10W | |
| | | <VARISTOR> | | R226 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| VDR601 | 1-809-201-21 | VARISTOR | | R227 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| | | ***** | | R228 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| 8-934-705-00 | | CONTROL BLOCK ASSY (H BOARD) | | R229 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| | | ***** | | R230 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| 4-041-624-01 | | HOLDER (H1), LED | | R231 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| 4-041-657-01 | | HOLDER (H2), LED | | R232 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| | | <CAPACITOR> | | R233 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| | | | | R234 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |
| | | | | R235 | 1-216-073-00 | METAL GLAZE 10K 5% 1/10W | |



| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|--------------|---------------------|-----------------------|---------|
| R236 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R237 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R238 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R239 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R240 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R241 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R242 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R243 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| <SWITCH> | | | |
| S201 | 1-571-532-21 | SWITCH, TACTIL | |
| S202 | 1-571-532-21 | SWITCH, TACTIL | |
| S203 | 1-571-532-21 | SWITCH, TACTIL | |
| S204 | 1-571-532-21 | SWITCH, TACTIL | |
| S205 | 1-571-532-21 | SWITCH, TACTIL | |
| S206 | 1-571-532-21 | SWITCH, TACTIL | |
| S207 | 1-571-532-21 | SWITCH, TACTIL | |
| S208 | 1-571-532-21 | SWITCH, TACTIL | |
| ***** | | | |
| 8-934-823-00 | MICDN MCB (N BOARD) | ***** | |
| <CAPACITOR> | | | |
| C901 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C903 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C904 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C905 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C906 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C907 | 1-124-903-11 | ELECT 1MF | 20% 50V |
| C908 | 1-163-235-11 | CERAMIC CHIP 22PF | 5% 50V |
| C909 | 1-104-547-11 | FILM CHIP 0.0047MF | 5% 16V |
| C910 | 1-163-235-11 | CERAMIC CHIP 22PF | 5% 50V |
| C911 | 1-163-235-11 | CERAMIC CHIP 22PF | 5% 50V |
| C912 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C913 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C914 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C915 | 1-163-101-00 | CERAMIC CHIP 22PF | 5% 50V |
| C916 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C917 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C918 | 1-104-664-11 | ELECT 47MF | 20% 25V |
| C919 | 1-104-664-11 | ELECT 47MF | 20% 25V |
| C920 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C921 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C922 | 1-163-019-00 | CERAMIC CHIP 0.0068MF | 10% 50V |
| C930 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C932 | 1-104-555-11 | FILM CHIP 0.022MF | 5% 16V |
| C933 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% 50V |
| C934 | 1-104-561-11 | FILM CHIP 0.068MF | 5% 16V |
| C935 | 1-124-126-00 | ELECT 47MF | 20% 16V |
| C936 | 1-124-126-00 | ELECT 47MF | 20% 16V |
| C953 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C954 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C958 | 1-104-664-11 | ELECT 47MF | 20% 25V |
| C959 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C960 | 1-164-005-11 | CERAMIC CHIP 0.47MF | 25V |
| C963 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C964 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C965 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C966 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|-------------|---------------|------------------------|---------|
| C967 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C968 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C969 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C970 | 1-164-182-11 | CERAMIC CHIP 0.0033MF | 10% 50V |
| C971 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C972 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C973 | 1-126-966-11 | ELECT 33MF | 20% 16V |
| C974 | 1-164-004-11 | CERAMIC CHIP 0.1MF | 10% 25V |
| C976 | 1-163-117-00 | CERAMIC CHIP 100PF | 5% 50V |
| C977 | 1-104-539-11 | FILM CHIP 0.001MF | 5% 50V |
| C978 | 1-124-925-11 | ELECT 2.2MF | 20% 50V |
| C979 | 1-104-547-11 | FILM CHIP 0.0047MF | 5% 16V |
| C980 | 1-163-113-00 | CERAMIC CHIP 68PF | 5% 50V |
| C981 | 1-164-222-11 | CERAMIC CHIP 0.22MF | 25V |
| C982 | 1-104-551-11 | FILM CHIP 0.01MF | 5% 16V |
| C983 | 1-124-126-00 | ELECT 47MF | 20% 16V |
| C984 | 1-104-664-11 | ELECT 47MF | 20% 25V |
| C985 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C986 | 1-104-563-11 | FILM CHIP 0.1MF | 5% 16V |
| C987 | 1-164-232-11 | CERAMIC CHIP 0.01MF | 10% 50V |
| C988 | 1-124-126-00 | ELECT 47MF | 20% 16V |
| C989 | 1-104-563-11 | FILM CHIP 0.1MF | 5% 16V |
| C990 | 1-163-989-11 | CERAMIC CHIP 0.033MF | 10% 25V |
| C991 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| C992 | 1-163-038-00 | CERAMIC CHIP 0.1MF | 25V |
| <CONNECTOR> | | | |
| CN901 | *1-564-514-11 | PLUG, CONNECTOR 11P | |
| CN902 | *1-564-510-11 | PLUG, CONNECTOR 7P | |
| CN907 | *1-564-509-11 | PLUG, CONNECTOR 6P | |
| CN908 | *1-564-508-11 | PLUG, CONNECTOR 5P | |
| CN909 | *1-564-507-11 | PLUG, CONNECTOR 4P | |
| CN910 | 1-764-027-11 | SOCKET, CONNECTOR 20P | |
| CN911 | 1-764-027-11 | SOCKET, CONNECTOR 20P | |
| <DIODE> | | | |
| D901 | 8-719-404-46 | DIODE MA110 | |
| D902 | 8-719-404-46 | DIODE MA110 | |
| D903 | 8-719-800-76 | DIODE 1SS226 | |
| D904 | 8-719-800-76 | DIODE 1SS226 | |
| D905 | 8-719-404-46 | DIODE MA110 | |
| D906 | 8-719-404-46 | DIODE MA110 | |
| D907 | 8-719-404-46 | DIODE MA110 | |
| D908 | 8-719-404-46 | DIODE MA110 | |
| D909 | 8-719-404-46 | DIODE MA110 | |
| D910 | 8-719-404-46 | DIODE MA110 | |
| D911 | 8-719-800-76 | DIODE 1SS226 | |
| D912 | 8-719-800-76 | DIODE 1SS226 | |
| D913 | 8-719-800-76 | DIODE 1SS226 | |
| D914 | 8-719-800-76 | DIODE 1SS226 | |
| D915 | 8-719-800-76 | DIODE 1SS226 | |
| D917 | 8-719-404-46 | DIODE MA110 | |
| D920 | 8-719-404-46 | DIODE MA110 | |
| <FILTER> | | | |
| FL951 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL956 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| FL957 | 1-236-071-11 | ENCAPSULATED COMPONENT | |
| <IC> | | | |

N

| REF. NO. | PART NO. | DESCRIPTION | REMARK | REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-------------------------|--------|----------|--------------|-----------------------|--------|
| IC901 | 8-759-182-62 | IC CXD8478Q | | R906 | 1-216-682-11 | METAL CHIP 20K 0.50% | 1/10W |
| IC902 | 8-759-156-55 | IC CD74HC4046AM | | R907 | 1-216-121-00 | METAL GLAZE 1M 5% | 1/10W |
| IC903 | 8-759-074-40 | IC PST572DMT-T1 | | R908 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| IC904 | 8-759-273-76 | IC SC400649FU | | R909 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| IC905 | 8-759-189-89 | IC SN751701PS-ELL2000 | | R910 | 1-216-693-11 | METAL CHIP 56K 0.50% | 1/10W |
| IC908 | 8-759-008-67 | IC MC14066BF | | R911 | 1-216-627-11 | METAL CHIP 100 0.50% | 1/10W |
| IC909 | 8-759-981-48 | IC TL082M | | R912 | 1-216-659-11 | METAL CHIP 2.2K 0.50% | 1/10W |
| IC911 | 8-759-925-90 | IC SN74HC74ANS | | R913 | 1-216-639-11 | METAL CHIP 330 0.50% | 1/10W |
| IC912 | 8-759-925-72 | IC SN74HC02ANS | | R914 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W |
| IC913 | 8-759-191-50 | IC TDA9102C | | R915 | 1-216-037-00 | METAL GLAZE 330 5% | 1/10W |
| IC914 | 8-759-981-48 | IC TL082M | | R916 | 1-216-069-00 | METAL GLAZE 6.8K 5% | 1/10W |
| | | <COIL> | | R917 | 1-216-061-00 | METAL GLAZE 3.3K 5% | 1/10W |
| L905 | 1-412-537-31 | INDUCTOR 100UH | | R918 | 1-216-687-11 | METAL CHIP 33K 0.50% | 1/10W |
| L906 | 1-408-421-00 | INDUCTOR 100UH | | R919 | 1-216-065-00 | METAL GLAZE 4.7K 5% | 1/10W |
| L907 | 1-408-421-00 | INDUCTOR 100UH | | R920 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| | | <TRANSISTOR> | | R921 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| Q903 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R922 | 1-216-129-00 | METAL GLAZE 2.2M 5% | 1/10W |
| Q905 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R923 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| Q906 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R924 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| Q907 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R925 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| Q909 | 8-729-901-00 | TRANSISTOR DTC124EK | | R926 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| Q910 | 8-729-232-13 | TRANSISTOR 2SK1078 | | R927 | 1-216-657-11 | METAL CHIP 1.8K 0.50% | 1/10W |
| Q912 | 8-729-120-28 | TRANSISTOR 2SC1623-L5L6 | | R928 | 1-216-695-11 | METAL CHIP 68K 0.50% | 1/10W |
| | | <RESISTOR> | | R929 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R260 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R930 | 1-216-640-11 | METAL CHIP 360 0.50% | 1/10W |
| R261 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R931 | 1-216-682-11 | METAL CHIP 20K 0.50% | 1/10W |
| R262 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R933 | 1-216-097-00 | METAL GLAZE 100K 5% | 1/10W |
| R265 | 1-216-669-11 | METAL CHIP 5.6K 0.50% | 1/10W | R934 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W |
| R266 | 1-216-659-11 | METAL CHIP 2.2K 0.50% | 1/10W | R935 | 1-216-067-00 | METAL GLAZE 5.6K 5% | 1/10W |
| R269 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W | R936 | 1-216-097-00 | METAL GLAZE 100K 5% | 1/10W |
| R270 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R937 | 1-216-657-11 | METAL CHIP 1.8K 0.50% | 1/10W |
| R272 | 1-216-295-91 | METAL GLAZE 0 5% | 1/10W | R938 | 1-216-672-11 | METAL CHIP 7.5K 0.50% | 1/10W |
| R280 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W | R939 | 1-216-693-11 | METAL CHIP 56K 0.50% | 1/10W |
| R281 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R940 | 1-216-655-11 | METAL CHIP 1.5K 0.50% | 1/10W |
| R282 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R941 | 1-216-671-11 | METAL CHIP 6.8K 0.50% | 1/10W |
| R283 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W | R942 | 1-216-067-00 | METAL GLAZE 5.6K 5% | 1/10W |
| R284 | 1-216-675-11 | METAL CHIP 10K 0.50% | 1/10W | R943 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R285 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W | R944 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R286 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W | R945 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R287 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R946 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R288 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W | R947 | 1-216-695-11 | METAL CHIP 68K 0.50% | 1/10W |
| R289 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W | R948 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W |
| R290 | 1-216-667-11 | METAL CHIP 4.7K 0.50% | 1/10W | R949 | 1-216-659-11 | METAL CHIP 2.2K 0.50% | 1/10W |
| R291 | 1-216-651-11 | METAL CHIP 1K 0.50% | 1/10W | R950 | 1-216-694-11 | METAL CHIP 62K 0.50% | 1/10W |
| R292 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R951 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R293 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R952 | 1-216-057-00 | METAL GLAZE 2.2K 5% | 1/10W |
| R294 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R953 | 1-216-659-11 | METAL CHIP 2.2K 0.50% | 1/10W |
| R295 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R954 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R296 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R955 | 1-216-033-00 | METAL GLAZE 220 5% | 1/10W |
| R297 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R956 | 1-216-697-91 | METAL CHIP 82K 0.50% | 1/10W |
| R298 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R957 | 1-216-117-00 | METAL GLAZE 680K 5% | 1/10W |
| R299 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R958 | 1-216-105-00 | METAL GLAZE 220K 5% | 1/10W |
| R900 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R960 | 1-216-067-00 | METAL GLAZE 5.6K 5% | 1/10W |
| R902 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W | R961 | 1-216-075-00 | METAL GLAZE 12K 5% | 1/10W |
| R903 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W | R962 | 1-216-073-00 | METAL GLAZE 10K 5% | 1/10W |
| R904 | 1-216-669-11 | METAL CHIP 5.6K 0.50% | 1/10W | R963 | 1-216-025-00 | METAL GLAZE 100 5% | 1/10W |
| R905 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W | R964 | 1-216-640-11 | METAL CHIP 360 0.50% | 1/10W |
| | | | | R965 | 1-216-075-00 | METAL GLAZE 12K 5% | 1/10W |
| | | | | R966 | 1-216-117-00 | METAL GLAZE 680K 5% | 1/10W |
| | | | | R967 | 1-216-689-11 | METAL CHIP 39K 0.50% | 1/10W |
| | | | | R968 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| | | | | R969 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| | | | | R970 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |

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

N

| REF. NO. | PART NO. | DESCRIPTION | REMARK |
|----------|--------------|-----------------------|--------|
| R971 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R972 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R973 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R974 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R975 | 1-216-673-11 | METAL CHIP 8.2K 0.50% | 1/10W |
| R976 | 1-216-669-11 | METAL CHIP 5.6K 0.50% | 1/10W |
| R977 | 1-216-663-11 | METAL CHIP 3.3K 0.50% | 1/10W |
| R978 | 1-216-659-11 | METAL CHIP 2.2K 0.50% | 1/10W |
| R979 | 1-216-037-00 | METAL GLAZE 330 5% | 1/10W |
| R980 | 1-216-041-00 | METAL GLAZE 470 5% | 1/10W |
| R981 | 1-216-121-00 | METAL GLAZE 1M 5% | 1/10W |
| R982 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R983 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R984 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R985 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R986 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R987 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R988 | 1-216-081-00 | METAL GLAZE 22K 5% | 1/10W |
| R990 | 1-216-075-00 | METAL GLAZE 12K 5% | 1/10W |
| R991 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R992 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R993 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R994 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R995 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R996 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R997 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R998 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R999 | 1-216-049-00 | METAL GLAZE 1K 5% | 1/10W |
| R1000 | 1-216-295-91 | METAL GLAZE 0 5% | 1/10W |

<CRYSTAL>

X901 1-567-890-11 VIBRATOR, CRYSTAL

MISCELLANEOUS

| | |
|----------------------------|--|
| Δ 1-223-417-11 | FOCUS VR PACK |
| Δ 1-251-141-11 | INLET, AC (3P) |
| Δ 1-406-790-31 | COIL, DEMAGNETIZATION |
| Δ 1-452-729-11 | NECK ASSEMBLY, PICTURE TUBE (NA3011) |
| 1-537-583-11 | TERMINAL BOARD ASSY, I/O |
| 1-900-048-40 | CONNECTOR ASSY, MICRO 8P (SUB HARNESS) |
| 1-900-076-10 | CONNECTOR ASSY (MAIN HARNESS) |
| Y901 Δ 8-736-048-90 | ITC ASSY (CRT, DY, NA) |