

COMPLETE MACHINE GENERAL ADJUSTMENT

Complete machine general adjustment adjusts the machine, which has the chassis after adjusting every part of chassis well. Because the each part has been adjusted well, general adjustment just adjusts the display quality of tube, scanning size and the picture center position.

1. Screen voltage adjustment.

- a. Set the TV set to AV-mode and STD1 status using the "PP" button on the remote control.
- b. Connect Digital Voltage meter to CRT red gun and GND. Adjust SCREEN VOLTAGE knob to obtain 150VDC \pm 2V reading.

2. SET TV TO FACTORY MODE

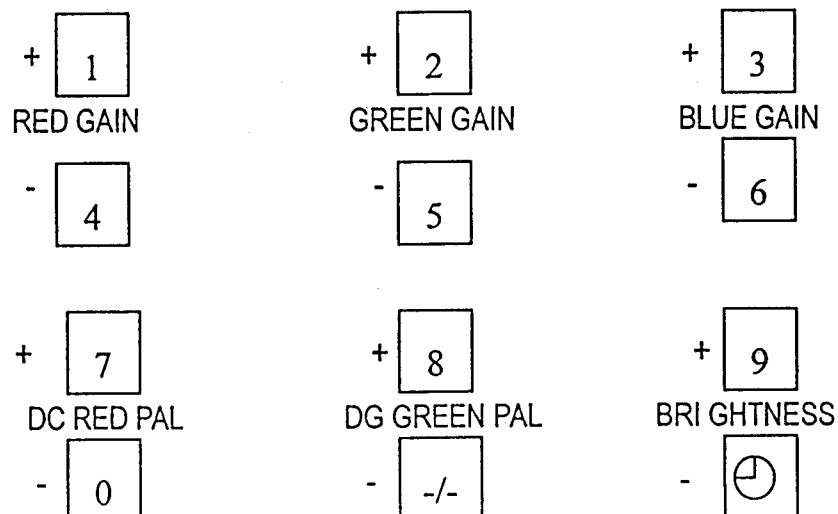
- a. Set TV set to factory mode before sending TV set to warm up line.
- b. Press "SKIP" key, "VOL-" key and "AFT" key one by one, TV set will go to factory mode.
- c. Press "PIC" key to release to normal from factory mode.

3. Focus adjustment.

- a. TV set receives monoscope pattern with 86dB output level.
- b. Set the TV set to STD2 status using the "PP" button on the remote control.
- c. Adjust the "FOCUS" knob of FBT to get a most clear picture.

4. White balance adjustment.

- a. Receive black & white pattern (PAL SYSTEM)
- b. Store P.P mode at STD1 level, Adjust pattern Generator to get 2cd/m² at low brightness and 85cd/m² at high brightness part of black-white pattern reading from CRT color analyzer.
- c. Turn TV set to factory mode following step 2.
- d. Press remote hand set keys to control the white balance to meet factory equipment. Key's function refers to the following table.(Fig.2)



(Fig.2)

5. Horizontal Central Adjustment

- a. Receive PHILIPS PATTERN or MONOSCOPE PATTERN with 86dBuV RF level.
- b. Set TV set to factory mode following step 2. Press PROG +/- keys to select H PHASE SHIFT mode. Use VOL +/- keys to set horizontal center of the picture to meet factory equipment.

6. Vertical Amplitude Adjustment

A. 50Hz Vertical Amplitude adjustment

- a. Receive 50Hz monoscope pattern with 86dBuV RF level.
- b. Set the TV set to factory mode following step 2. Press PROG +/- keys to select V AMPL 50Hz mode. Use VOL +/- keys to adjust the 50Hz Vertical Amplitude to meet factory equipment.

B. 60Hz Vertical Amplitude adjustment

- a. Receive NTSC 60Hz monoscope pattern with 86dBuV RF level.
- b. Set the TV set to factory mode following step 2. Press PROG +/- keys to select V AMPL 60 mode. Use VOL +/- keys to adjust the 60Hz Vertical Amplitude to meet factory equipment.

7. SUB-Brightness Adjustment

- a. Receive GREY SCALE/COLOR BAR pattern with 86dBuV RF level.
- b. Set the TV set to factory mode following step 2. Press PROG +/- keys to select BRIGHTNESS Adjustment mode and then press "MUTE" key.
- c. Press VOL +/- keys to make the second darkness bar of GREY SCALE part to about 2cd/m² luminance.
- d. Press "PIC" key to exit factory mode and become the normal picture.

Note: All of the Color and Brightness control will turn to "00" when press "MUTE" key.

8. RF AGC Adjustment

- a. Receive COLOR BAR pattern with 60dBuV RF level.
- b. Adjust the RF AGC control (VR101) to the point where picture noise is disappeared.

COLOUR PURITY and CONVERGENCE ADJUSTMENT

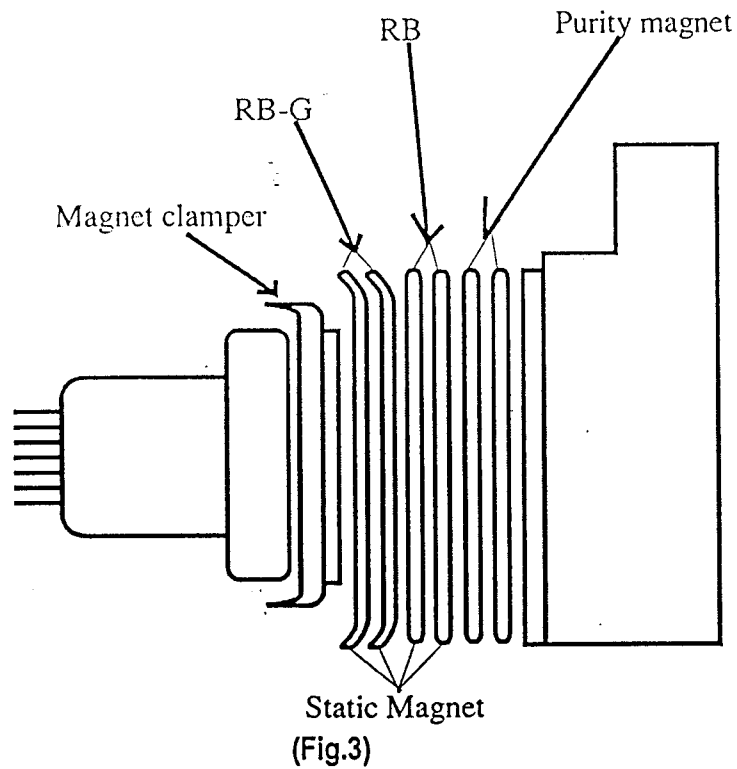
1. COLOUR PURITY ADJUSTMENT (See Fig.3)

BEFORE ANY ADJUSTMENTS DESCRIBED BELOW ARE ATTEMPTED, V-AMPLITUDE, B+ VOLTAGE AND FOCUSING ADJUSTMENT MUST BE COMPLETED.

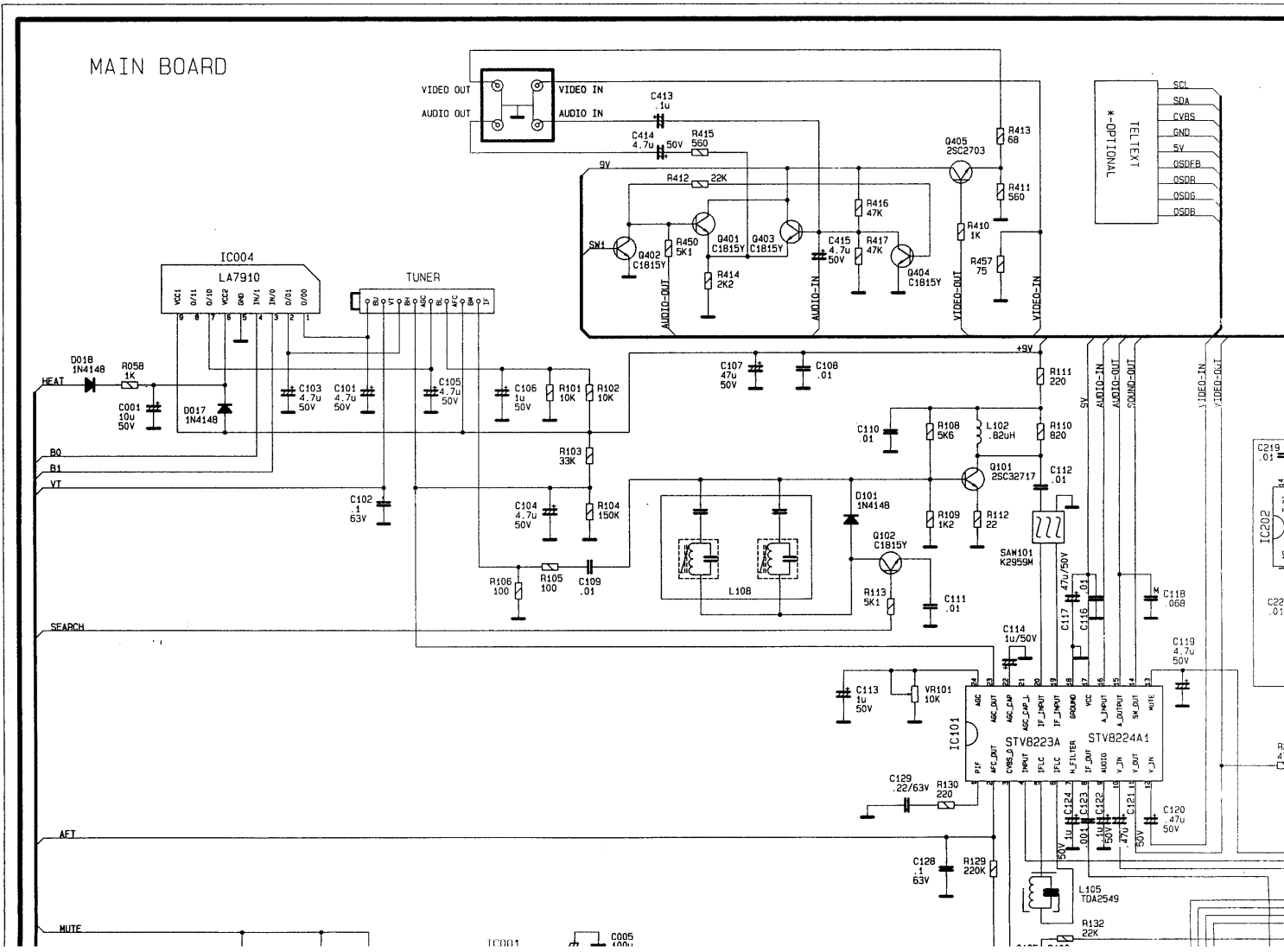
- a. Place the TV receiver facing NORTH or SOUTH.
- b. Plug in TV receiver and turn it on.
- c. Operate the TV receiver over 30 minutes.
- d. Fully degauss the TV receiver by using an external-degaussing coil.
- e. Receive a "Cross-Hatch plug circle" pattern and adjust the static convergence control roughly.
- f. Receive Red Pattern.
- g. Loosen the clamp screw of the deflection yoke and pull the deflection yoke towards you.
- h. Adjust the clamp screw of the deflection yoke and pull the deflection yoke towards you.
- i. Slowly push the deflection yoke toward the bell of CRT and set it where a uniform green field is obtained.
- j. Tighten the clamp screw of the deflection yoke.

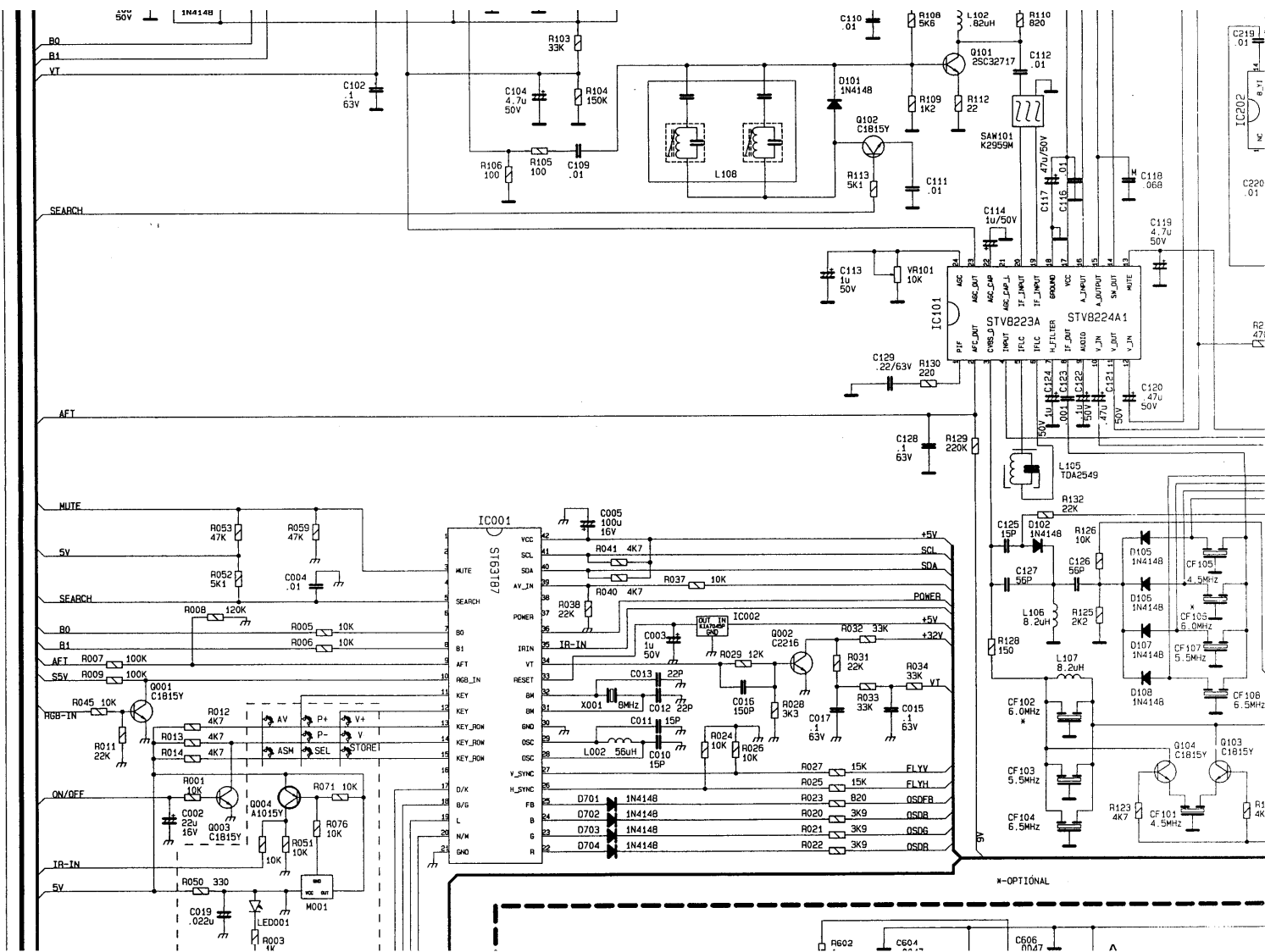
2. CONVERGENCE ADJUSTMENT (See Fig.3)

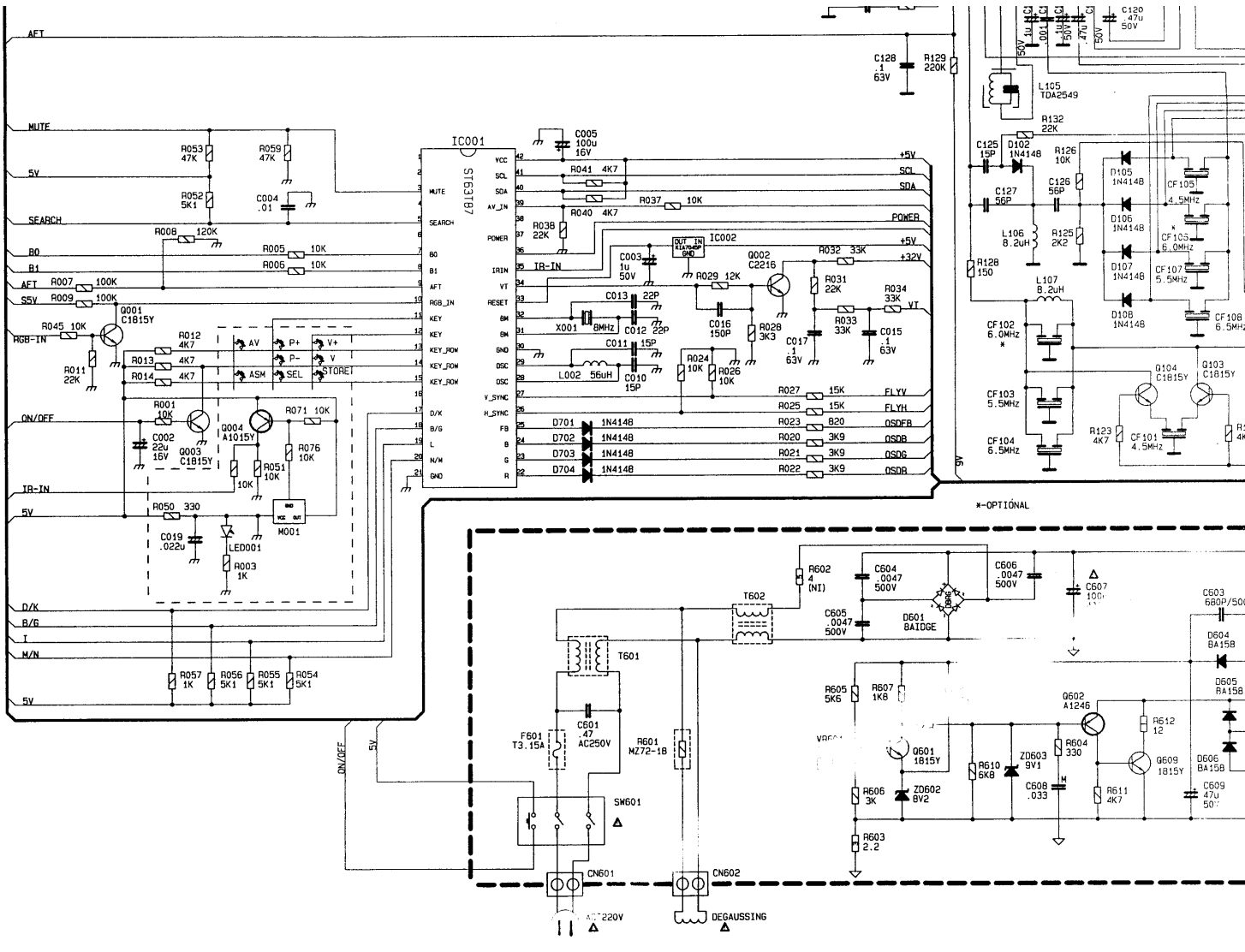
- a. Receive a dotted pattern.
- b. Unfix the convergence magnet clamber and align red with blue dots at the center of the screen by rotating (R, B) static convergence magnets.
- c. Align Red/Blue with green dots at the center of the screen by rotating (RB-G) static convergence magnet.
- d. Fix the convergence magnets by turning the clamber.
- e. Remove the DY wedges and slightly tilt the deflection yoke horizontally and vertically to obtain the good overall convergence.
- f. Fix the deflection yoke by wedges.
- g. If purity error is found, follow "PURITY ADJUSTMENT" instructions.

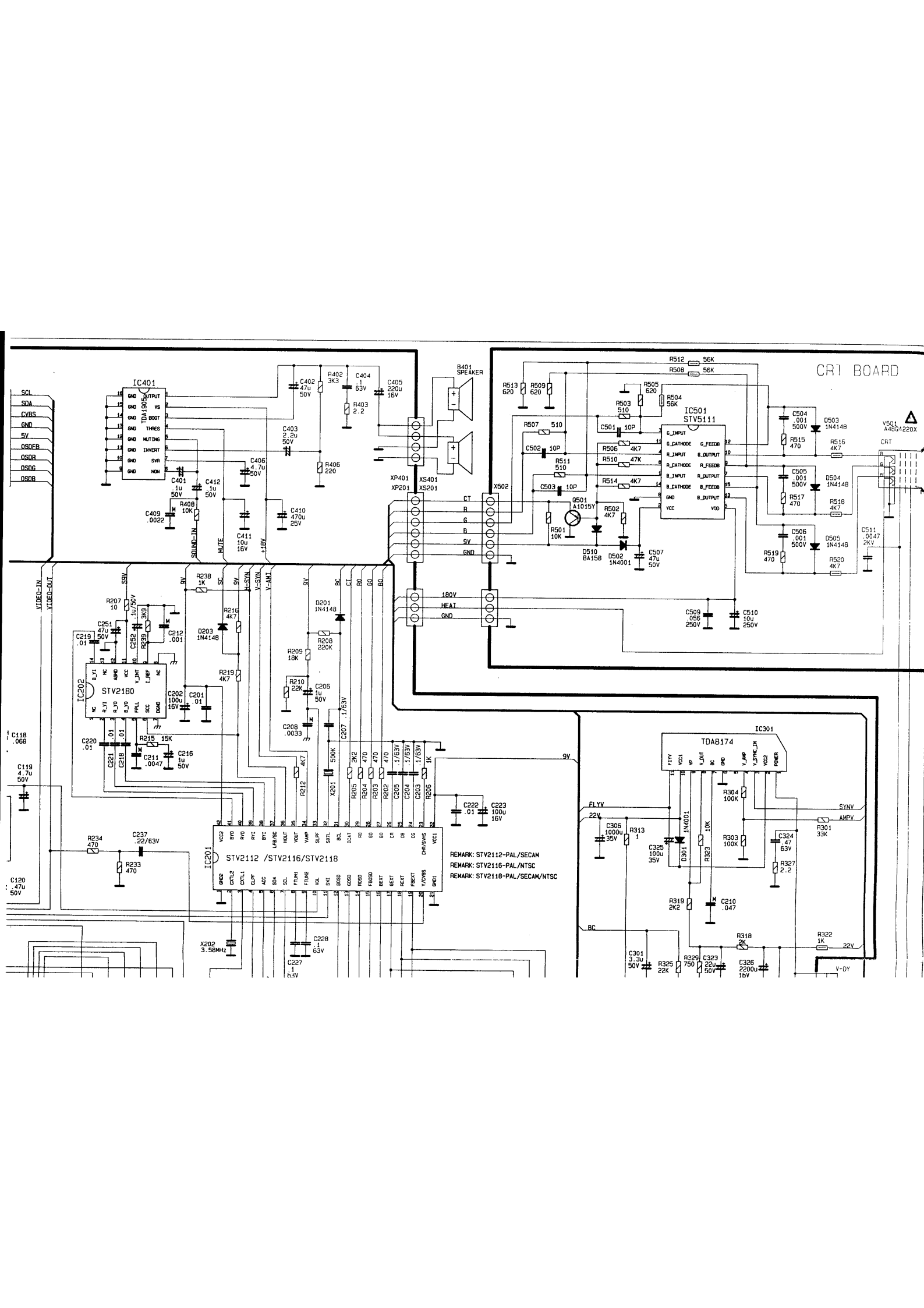


MAIN BOARD

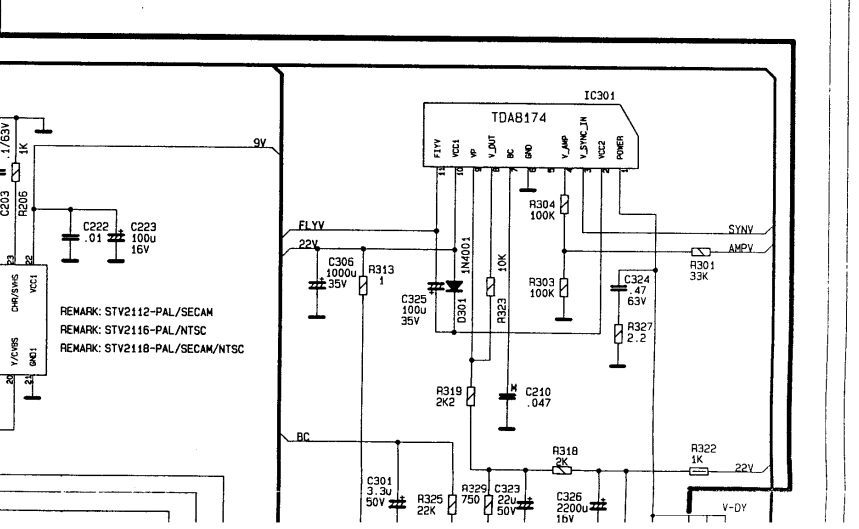
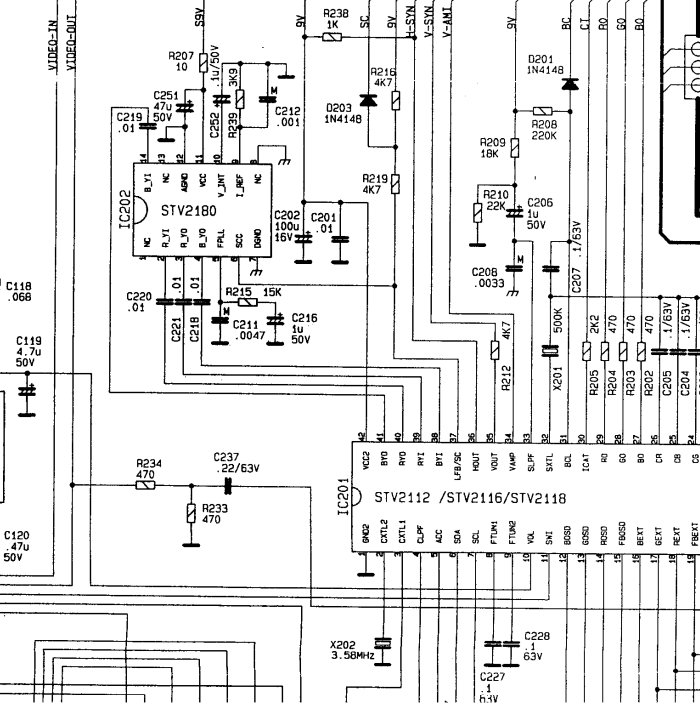
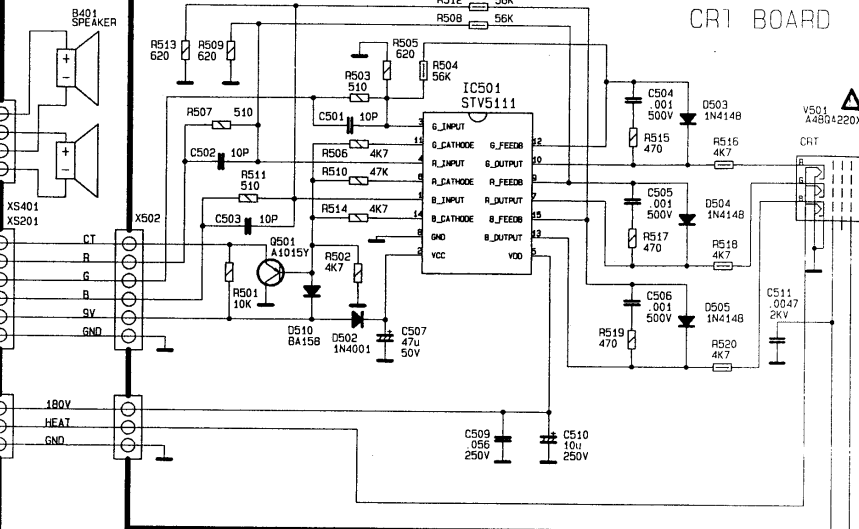
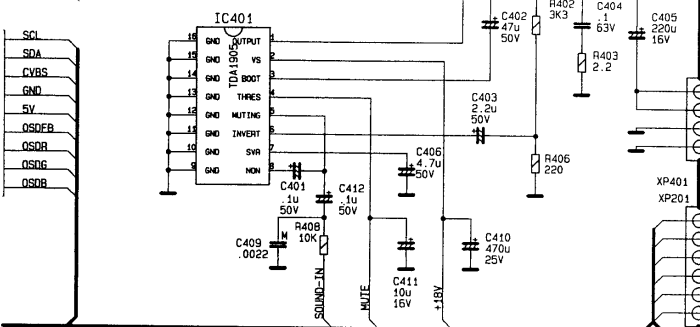




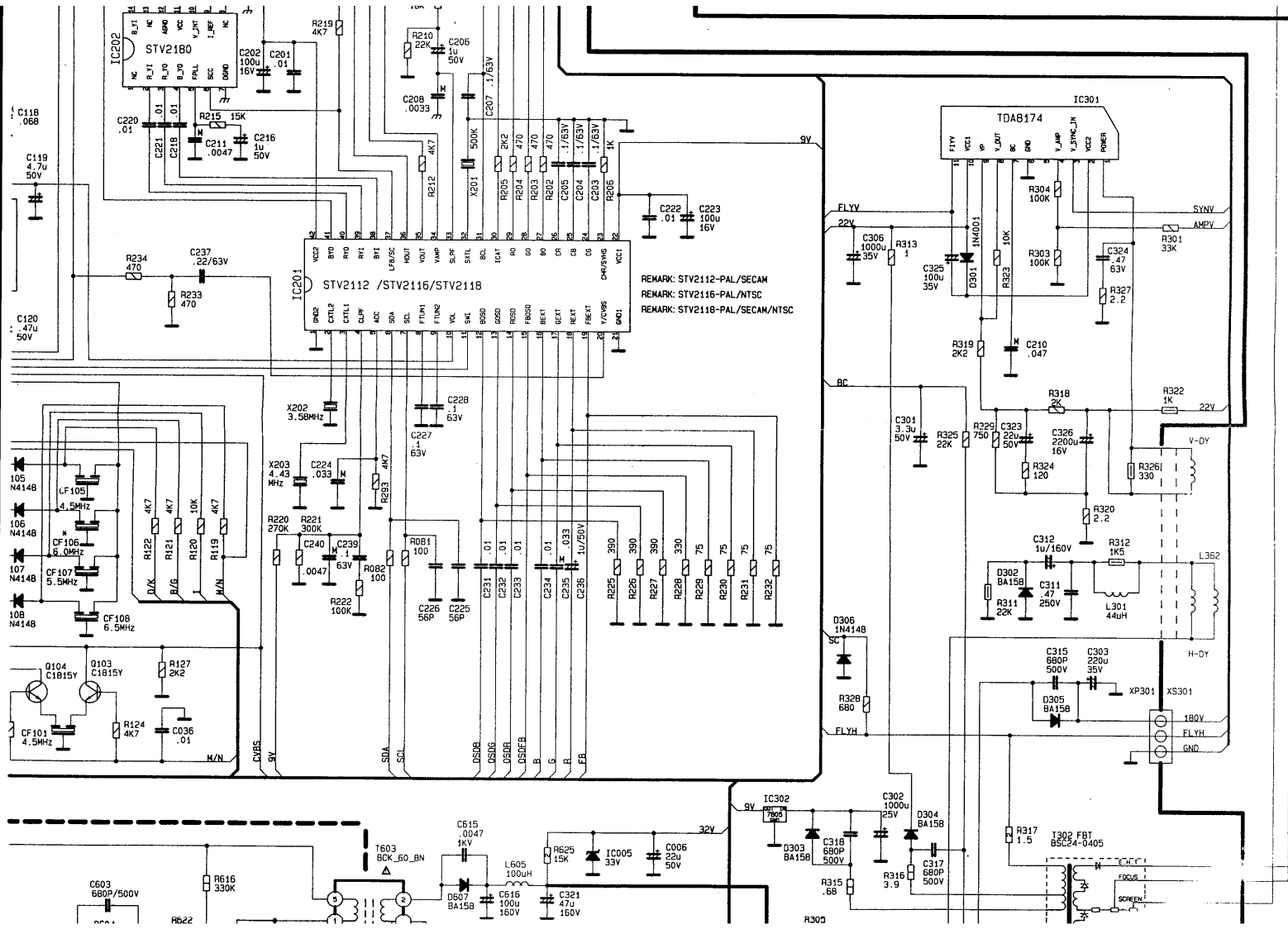


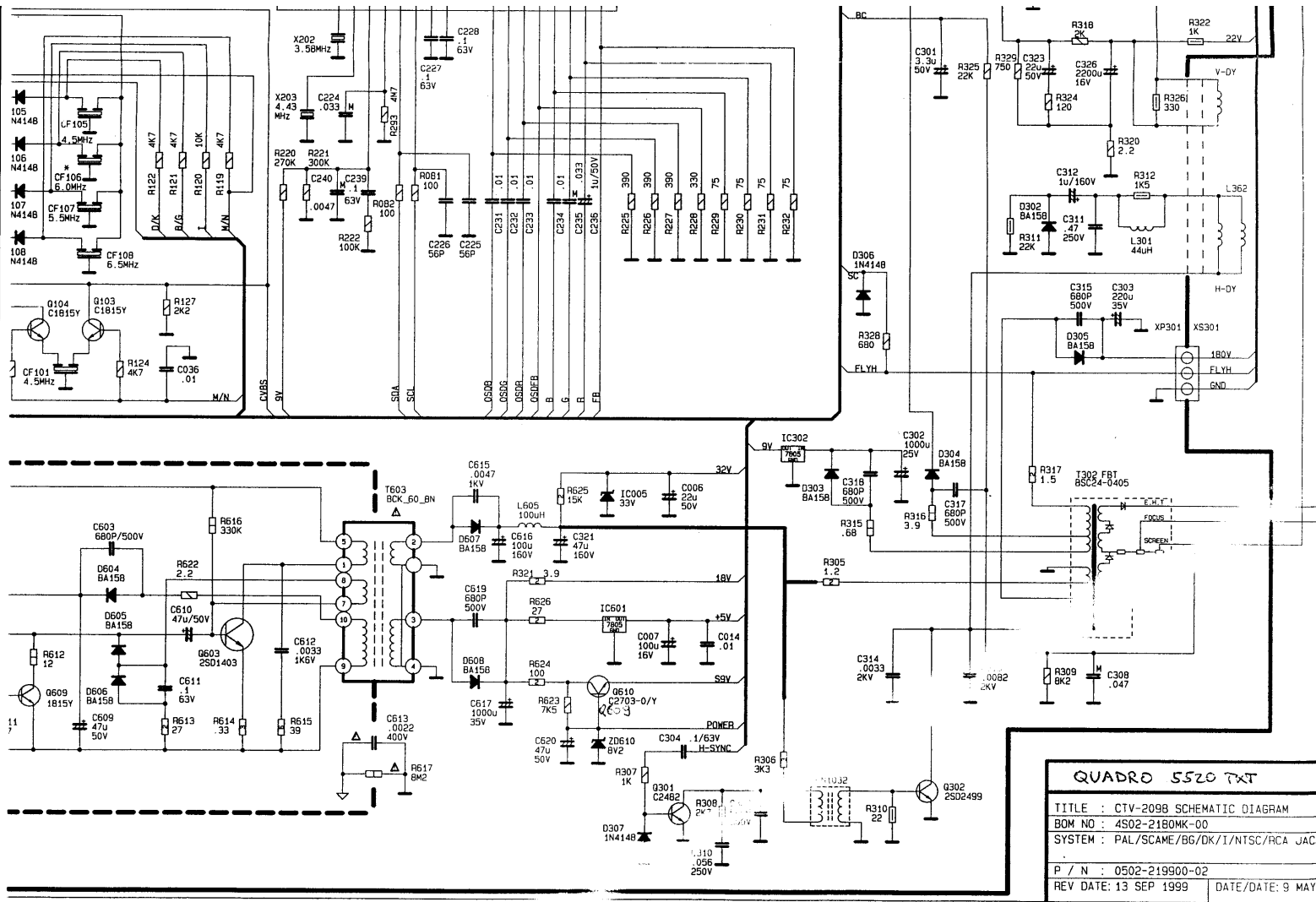


CRI BOARD



REMARK: STV2112-PAL/SECAM
REMARK: STV2116-PAL/NTSC
REMARK: STV2118-PAL/SECAM/NTSC





QUADRO 5520 TWT	
TITLE : CTV-2098 SCHEMATIC DIAGRAM	
BOM NO : 4S02-21B0MK-00	
SYSTEM : PAL/SCAME/BG/DK/I/NTSC/RCA JACK	
P / N : 0502-219900-02	
REV DATE: 13 SEP 1999	DATE/DATE: 9 MAY