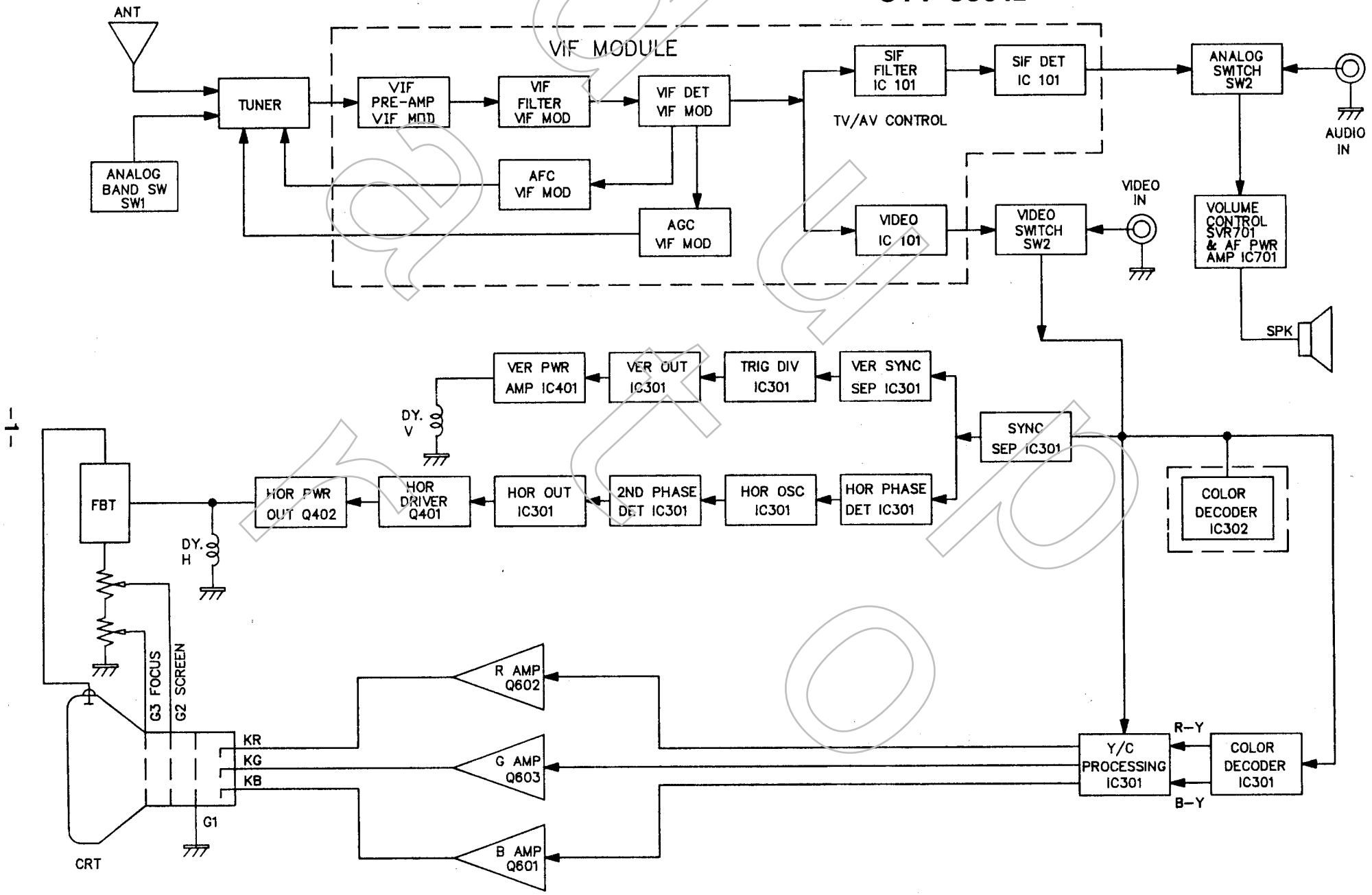
Roadstar®

CTV-5501

Service Manual - CTV-5501

BLOCK DIAGRAM OF CTV 5501
CTV 5501I



ALIGNMENT PROCEDURE

CTV 5501
CTV 5501I

REGULATOR ADJUSTMENT

1. CONNECT TV TO AC 220V.(AC ONLY)

2. ADJUST VERTICAL AND HORIZONTAL OSCILLATOR CONTROLS UNTIL DISPLAY IS SYHCHRO.

3. CONNECT A DC DIGITAL VOLTMENTER OR OTHER PRECISION ACCURACY VOLTMETER TO THE COLLECTOR OF THE REQULATOR OUTPUT TRANSISTOR Q205.

HORIZONTAL OSCILLATOR ADJUSTMENT

ADJUSTMENT

1. POWER ADJUSTMENT
   ADJUST THE AC SWITCHING MODE POWER REGUIATOR, ENABLE VOLTMETER TO DC 12V.

2..VERTICAL HIGHTNESS ALIGNMENT
   ADJUST THE VERTICAL HIGHTNESS SVR401 & SVR403, ENABLE THE CIRCLE OF PICTURE APPROACH TO CIRCLE.

3. HORIZONTAL POSITION ALIGNMENT
   ADJUST HORIZONTAL POSITION SVR301, LET THE SQUARE SIGNAL IN THE CENTER OF THE SCREEN.

4. RF AGC ALIGNMENT
   ADJUST RF AGC SVR201 AT INPUT SIGNAL INTENSITY 50dB, THE SCREEN COULD LOOKING CLEAR AND 80dB THE SCREEN DON'T INFLECT.

5. WHITE BALANCE ALIGNMENT
   ADJUST THE SVR601, SVR603, AT CENTER POSITION. ADJUST SCREEN VR LET THE SCREEN WILL BE LITTLE BRIGHTNESS. ADJUST SVR603 LET THE SCREEN TO BE YELLOW, AND THEN ADJUST SVR601 LET THE SCREEN APPROACH TO WHITE.

6. FOCUS ADJUSTMENT
   ADJUST FOCUS VR LET THE STRIP IN THE SCREEN TO BE CLEAR.

7. SCREEN ADJUSTMENT
   ADJUST SCREEN VR LET THE BRIGHTNESS SUIT AS DESIRED.

CANCEL VENETIAN BLIND ALIGNMENT

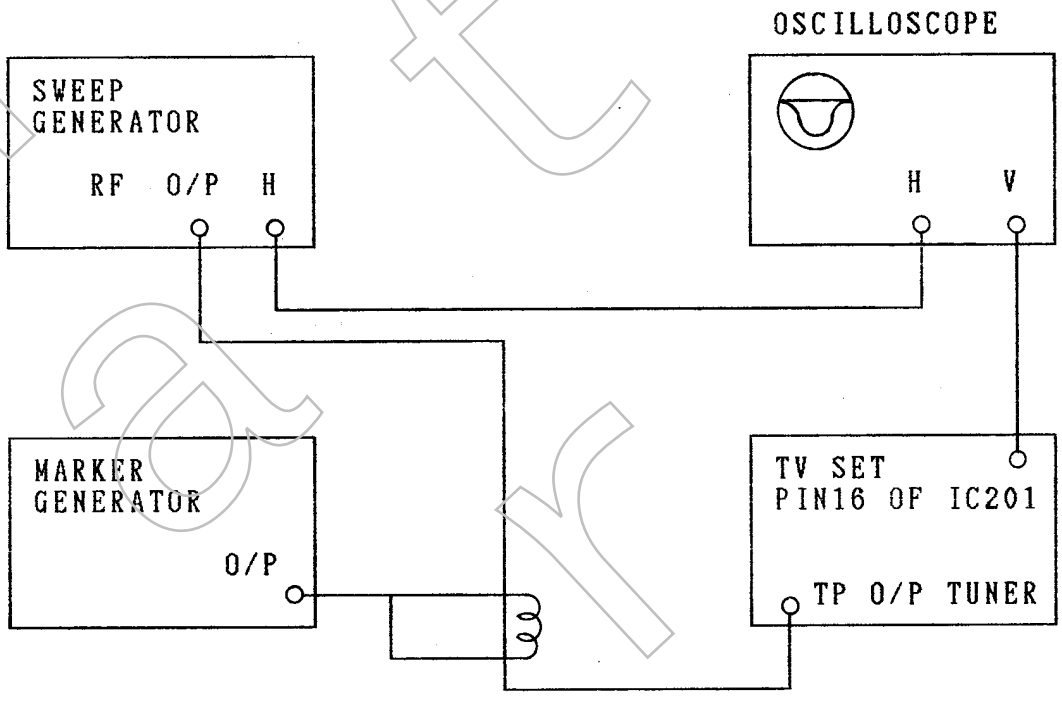
*SET TV/VIDEO SWITCH AT VIDEO.

*THE VIDEO SIGNAL OF DEMODULATION PATTERN SEND TO VIDEO IN JACK.

*THE DEMONDULATION PATTERN ON SCREEN IS FROM LEFT SIDE TO RIGHT SIDE.

1. VIDEO IF ALIGNMENT
   TEST EQUIPMENT CONNECTION (SEE FIGURE)
   OSCILLOSCOPE: CONNECT TO THE BASE OF IC201 PIN16.
   SWEEP GENERATOR: CONNECT THROUGH A MATCHING PAD TO THE TEST POINT (T.P) OF THE TUNER.
   MARKER GENERATOR: COUPLE LOOSELY TO THE OUTPUT CABLE OF SWEEP GENERATOR.
   DC SUPPLIES: CONNECT A SVR 1M OHM BETWEEN IC201 PIN17 AND GROUND.
   ADD DC +12V AT DC JACK.

ADJUST SWEEP GENERATOR TO LOWEST SIGNAL LEVEL CONSISTENT WITH USABLE			
STEP	SWEEP FREQUENCY	MARKER FREQUENCY	REMARK
1.)ADJUST VIF DETECTOR T104 FOR MARKER POINT MAXIMUM.	25-45 MHZ (45-65MHZ FOR JAPAN). 30-50MHZ FOR CCIR.	SYSTEM B,C,G,H 38.9MHZ SYSTEM I 36.9 MHZ, SYSTEM M,N 44MHZ (58.75MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	IN THE PARENTHESIS FOR EXCEPTION.
2.)ADJUST VIF DETECTOR T103 FOR MARKER POINT MAXIMUM.	25-45 MHZ (45-65 MHZ FOR JAPAN). 30-50MHz FOR CCIR.	SYSTEM B,C,G,H 38.9MHZ SYSTEM I 36.9 MHZ, SYSTEM M,N 44MHZ (58.75MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	IN THE PARENTHESIS FOR AFC CORRECTION.



VIDEO IF ALIGNMENT CONNECTING FIGURE

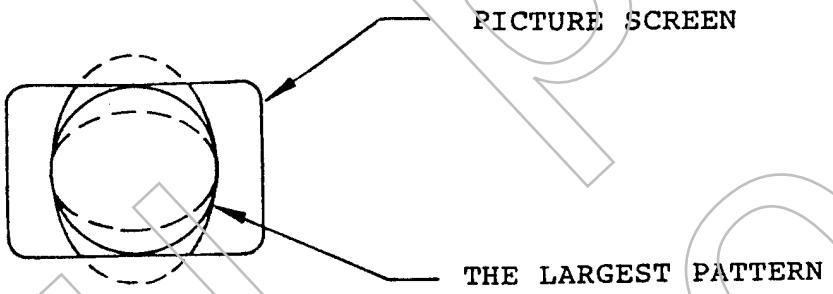
2. SOUND IF ALIGNMENT
   TEST EQUIPMENT CONNECTION
   SIGNAL GENERATOR: CONNECT TO THE TEST POINT(T.P) OF TUNER THROUGH A MATCHING PAD.

2. VERTICAL DEFLECTION ALIGNMENT

(1) TUNE THE RECEIVER IN A TEST PATTERN.

(2) ADJUST V-SIZE CONTROL SVR401.

WHEN THE INSIDE OF THE LARGEST CIRCLE OF TEST PATTERN REACHES THE EDGE OF THE PICTURE SCREEN. (SEE THE FIGURE)



SECAM ALIGNMENT

A. CROMA SIGNAL FILTER ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH SECAM COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC302 PIN9.
3. ADJUST T303, MAKE WAVE FROM FLATNESS.

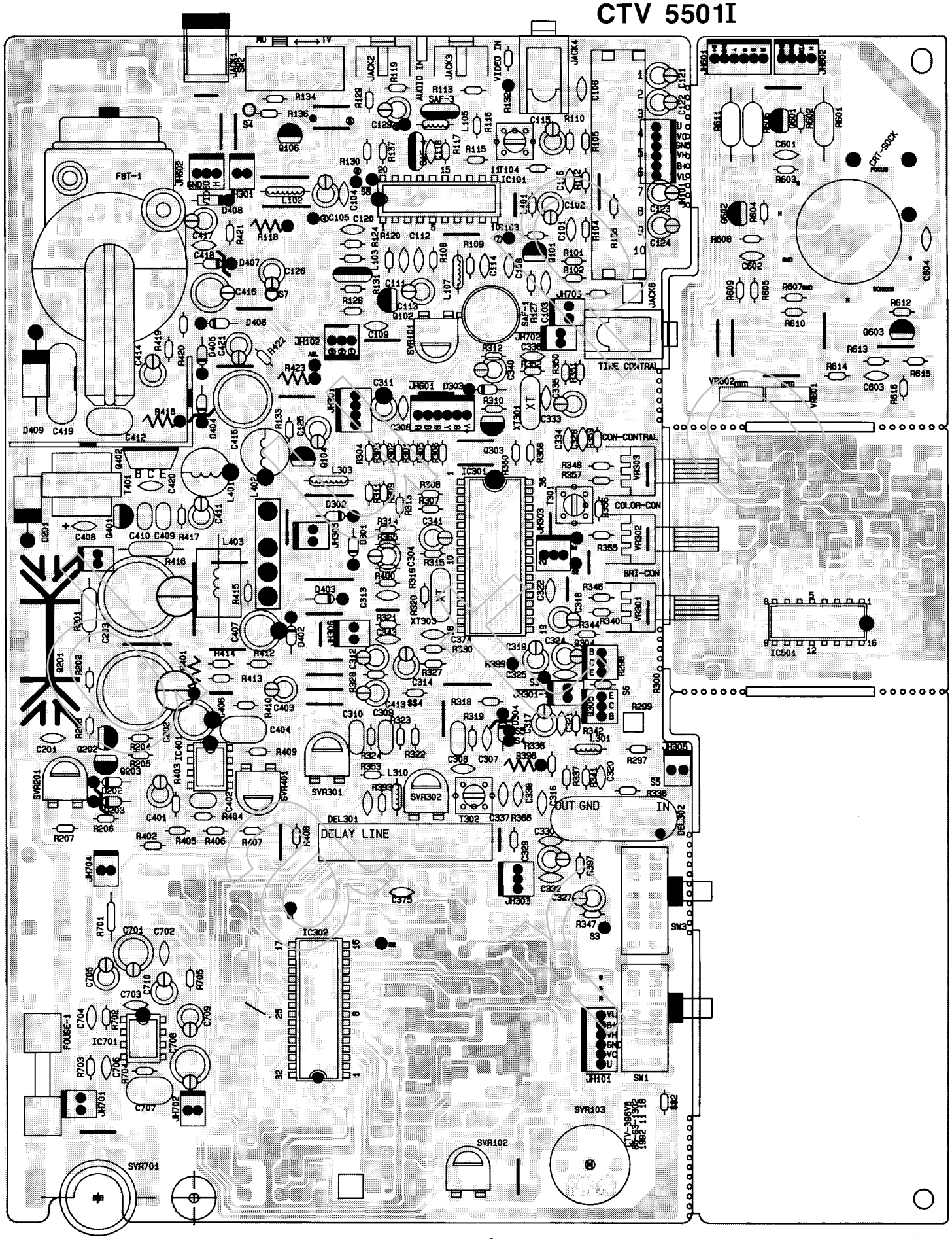
B. SECAM DEMODULATION ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH SECAM COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC302 PIN12.
3. ADJUST T304, SVR306, MAKE WAVE FROM FLATNESS.

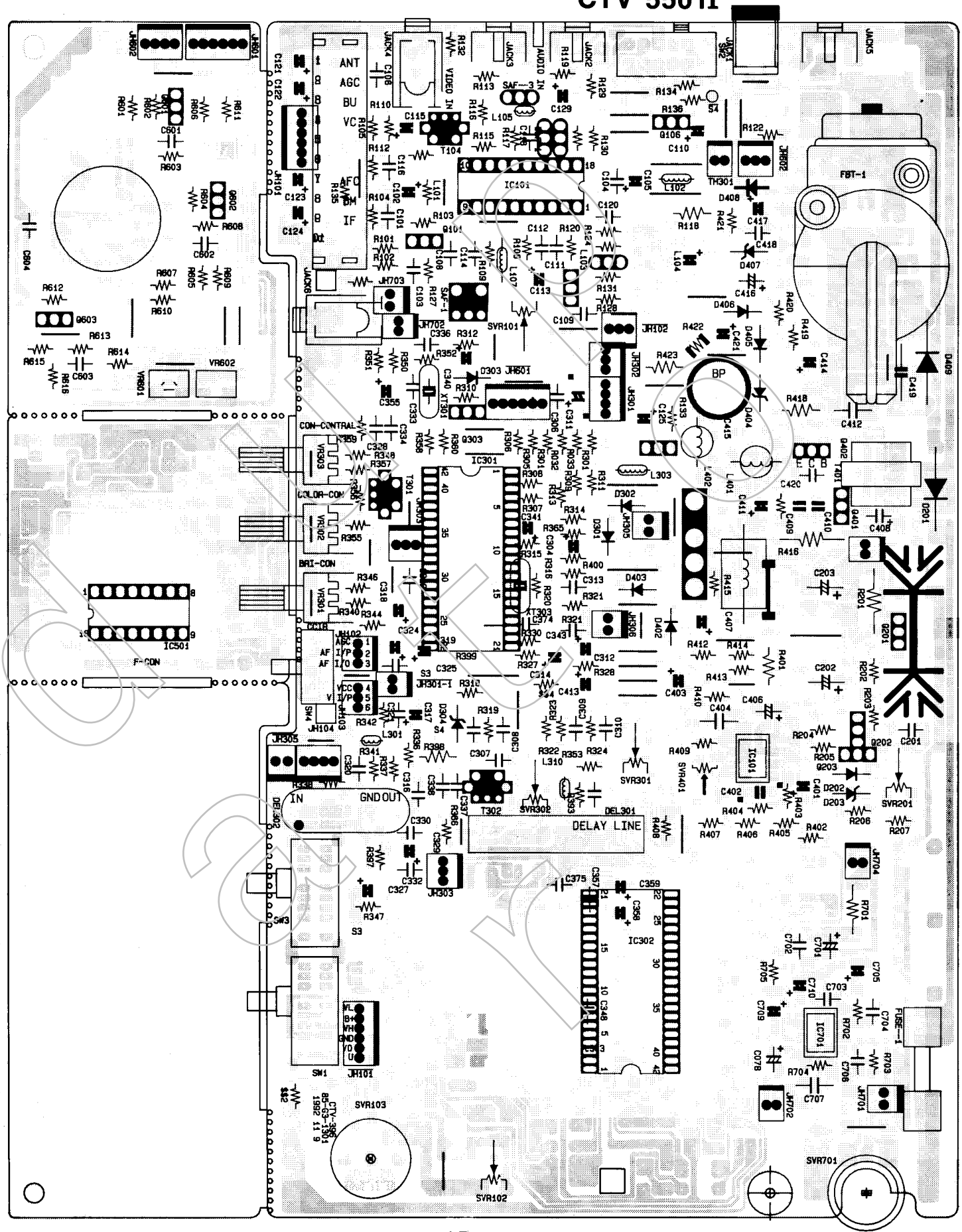
C. PAL MODULATION ALIGNMENT:

1. SIGNAL FROM VIDEO IN WITH PAL COLOR BAR PATTERN.
2. OSCILLOSCOPE WITH LOW CAPACITOR PROBE CONNECT TO IC301 PIN1.
3. ADJUST SVR302, T302, T301, MAKE WAVE FROM FLATNESS.

MAIN P.C.B TOP VIEW OF CTV 5501
CTV 5501I



MAIN P.C.B BOTTOM VIEW OF CTV 5501
CTV 5501I



TV SCHEMATIC DIAGRAM OF CTV 5501
CTV 5501I