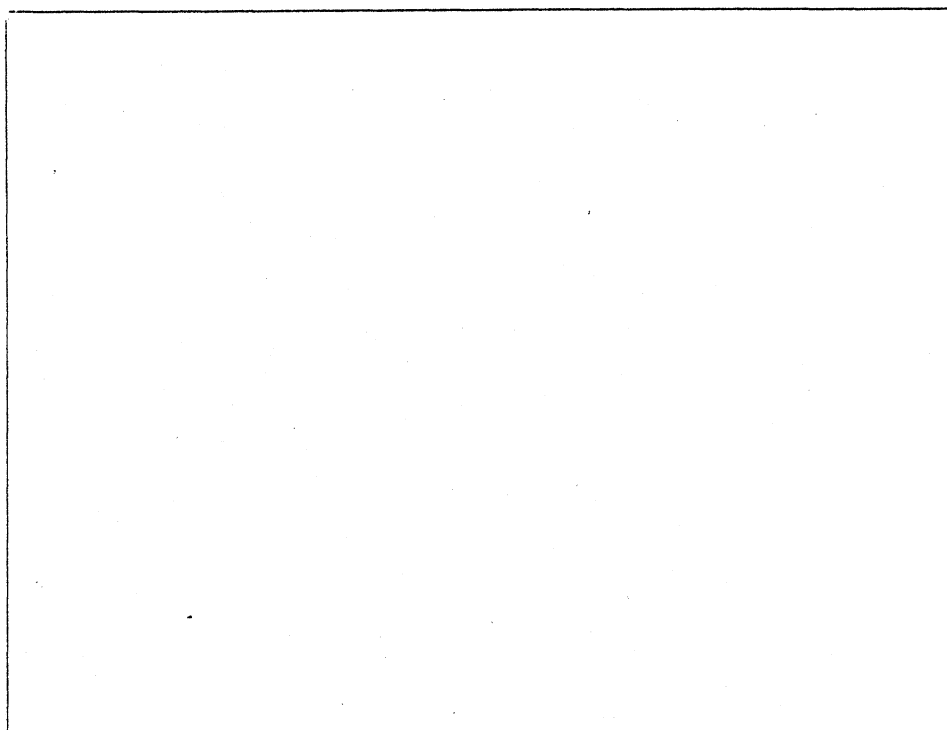


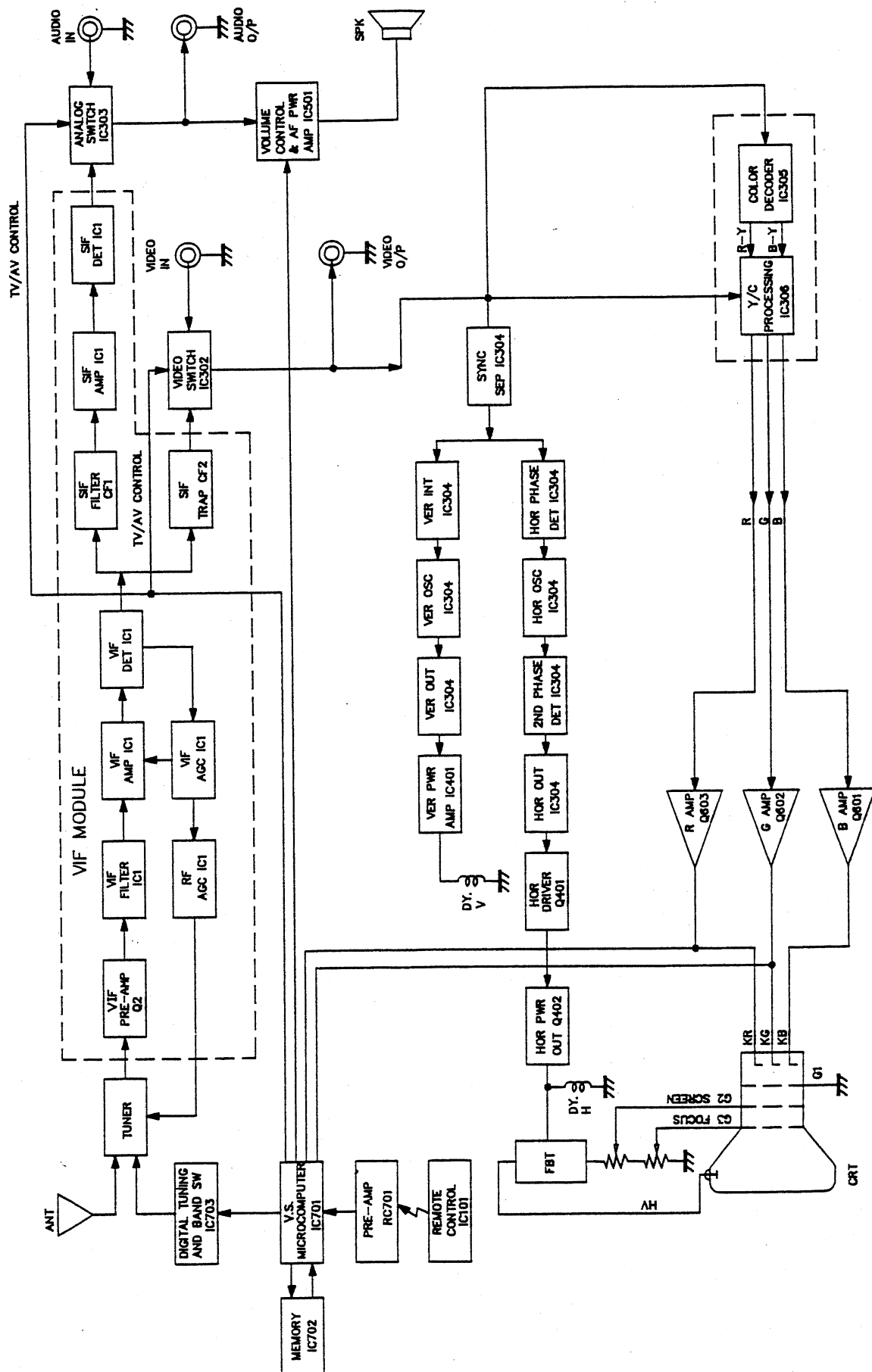


SERVICE MANUAL

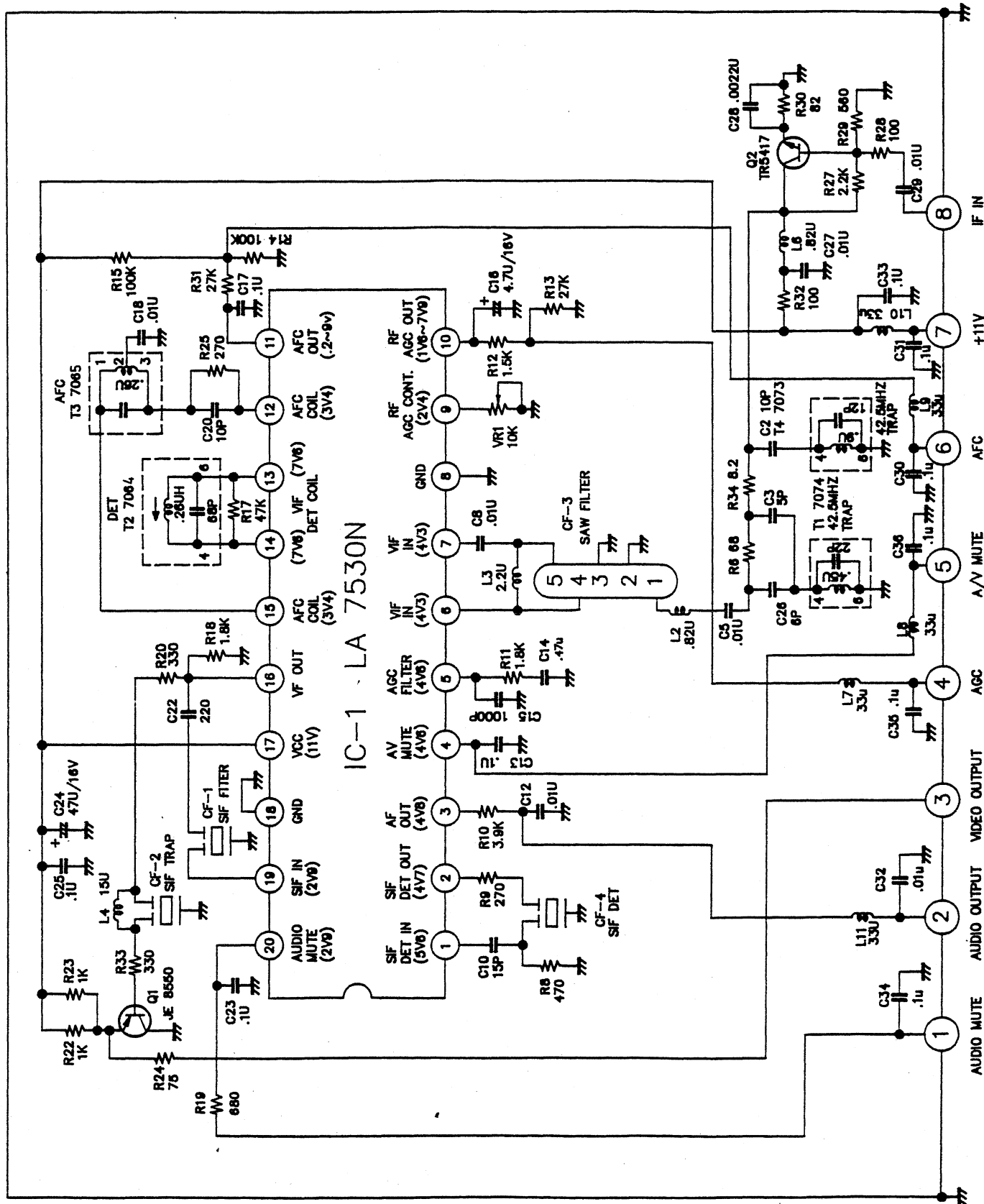
MODEL : CTV2610-L



BLOCK DIAGRAM



VIF DET. MODULE



CTV-2610

DESCRIPTION	UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
SOUND									
MAX. OUTPUT	mW	700	1000						
THD. OUTPUT 10 %	mW	500	700						
REF. THD	%	5	3						
S / N	dB	30	35						
AM SUPP.	dB	25	30						
MIN. HUM	mV	30	15						
RESPONSE FH 6 KHZ	dB	-3±6	-3±3						
FL 125 HZ	dB	-3±6	-3±3						
SIF. FREQ. ERROR	KHZ	±100	0						
LIMIT SENS.	dB	80	70						
PICTURE									
HOR. FREQ.	HZ	±500	15625						
HOR. PULL-IN +	HZ	300	600						
	HZ	300	600						
LINEARITY VERT.	%	15	10						
	HOR.	%	25	15					
PINCUSHION DIST.	%	2	1						
BARREL DIST.	%	2	1						
KEYSTANE DIST.	%	2	1						
V / H RATIO	%	100±5	100%						
LUMINANCE MAX	lux	200	250						
	MIN	lux	50	30					
VA TEST									
H. V. MAX	KV	17.5±0.5	17.5						
H. V. MIN	KV	16.5±0.5	16.5						
REG. VOLTAGE	V	10.8±0.5	10.8						
DELAY AGC. VOLTAGE	V	5±0.5	5						
REG. RIPPLE VOLTAGE	mV	30	15						
DC CONSUMPTION	W	36	33						
AC CONSUMPTION	W	65	59						

TV ELECTRICAL SPECIFICATION

MODEL NO: CTV-310B/BH OUTPUT: 50mV
 SUPPLY VOLTAGE: AC 230V/50HZ LOAD: 16 ohm
 GENERAL INFORMATION: TV 75 OHM INPUT ANT. SIFE VOLTAGE 0 dB =1uV

DATE:

TEST:

PAGE:1

DESCRIPTION	UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6
VL BAND									
TUNING RANGE	HIGH	MHZ	62.25	65.25					
	LOW	MHZ	48.25	45.25					
MAX/USABLE SENS	CH - 2	dB	32/46	26 /40	/	/	/	/	/
	CH - 3	dB	32/46	26 /40	/	/	/	/	/
	CH - 4	dB	32/46	26 /40	/	/	/	/	/
IF REJ.	CH - 3	dB	40	50					
IMAGE REJ.	CH - 3	dB	40	50					
VHF BAND									
TUNING RANGE	HIGH	MHZ	224.25	228.00					
	LOW	MHZ	175.25	140.00					
MAX/USABLE SENS	CH - 5	dB	32/46	26 /40	/	/	/	/	/
	CH - 9	dB	32/46	26 /40	/	/	/	/	/
	CH - 12	dB	32/46	26 /40	/	/	/	/	/
IF REJ.	CH - 9	dB	50	60					
IMAGE REJ.	CH - 9	dB	40	50					
UHF BAND									
TUNING RANGE	HIGH	MHZ	855.25	860.00					
	LOW	MHZ	471.25	435.00					
MAX/USABLE SENS	CH - 21	dB	36/52	32 /46	/	/	/	/	/
	CH - 30	dB	36/52	32 /46	/	/	/	/	/
	CH - 40	dB	36/52	32 /46	/	/	/	/	/
	CH - 50	dB	36/52	32 /46	/	/	/	/	/
	CH - 60	dB	36/52	32 /46	/	/	/	/	/
IF REJ.	CH - 40	dB	40	50					
IMAGE REJ.	CH - 40	dB	30	40					
CATV TUNER TYPE	1.FORWARD	CH	TERE1	S1->S20	/	/	/	/	/
	2.TELEFUNKEN	CH	2000KHC	S1->S41	/	/	/	/	/
ADJ. PIX. ATT.	dB	20	30						
ADJ. SND. ATT.	dB	20	30						
SELF. SND. ATT.	dB	20±6							
CONTRAST RANGE	dB	4	6						

GENERAL ALIGNMENT INSTRUCTIONS

1. VIDEO IF ALIGNMENT

TEST EQUIPMENT CONNECTION (SEE FIGURE)

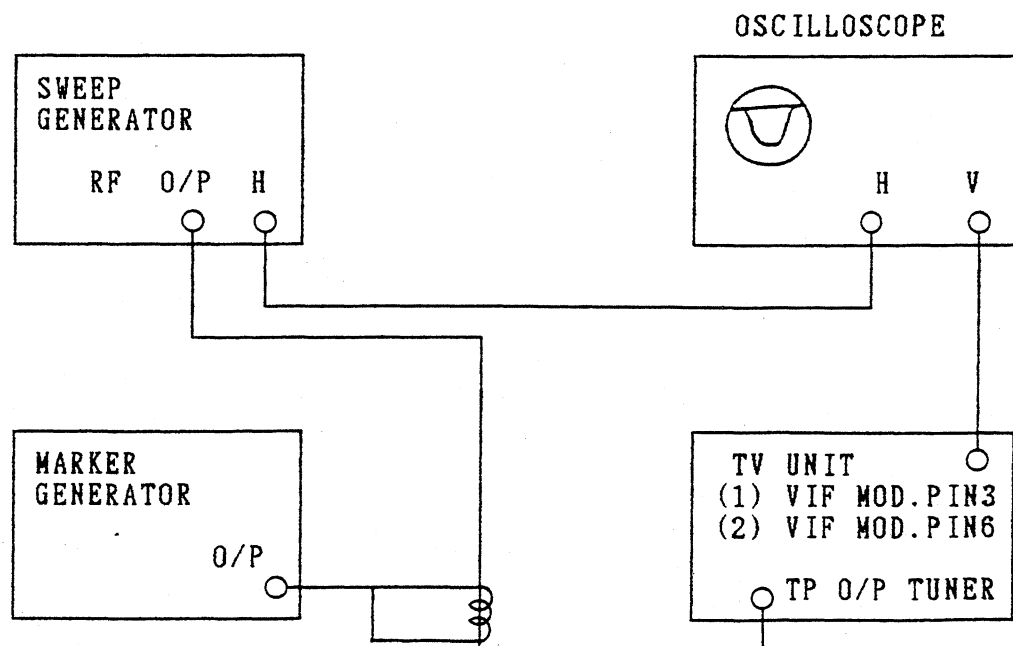
OSCILLOSCOPE: CONNECT TO (1) VIF MOD. PIN3
(2) VIF MOD. PIN6

SWEEP GENERATOR: CONNECT THROUGH A MATCHING PAD TO TEST POINT (T.P)
OF THE TUNER.

MARKER GENERATOR: COUPLE LOOSELY TO THE OUTPUT CABLE OF SWEEP GENERATOR.

DC SUPPLY: 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 MOD. T2 FOR MARKER POINT MAXIMUM.	30-50 MHZ FOR NTSC 65MHZ FOR JAPAN). 25-45MHZ FOR CCIR.	SYSTEM B,G,H, 36.7MHZ SYSTEM I 37.3 MHZ, SYSTEM M,N 44MHZ (57MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	PARENTHESES FOR EXCE- PTION.
(2) ADJUST VIF MOD. T3 FOR MARKER POINT CENTER	30-50 MHZ FOR NTSC 65HZ FOR JAPAN). 25-45MHZ FOR CCIR.	SYSTEM B,C,G,H, 36.7MHZ SYSTEM I 37.3 MHZ, SYSTEM M,N 44MHZ (57MHZ FOR JAPAN) (34.7MHZ FOR AUSTRARIA SYSTEM)	IN THE PARENTHESES FOR AFC CORRECTION

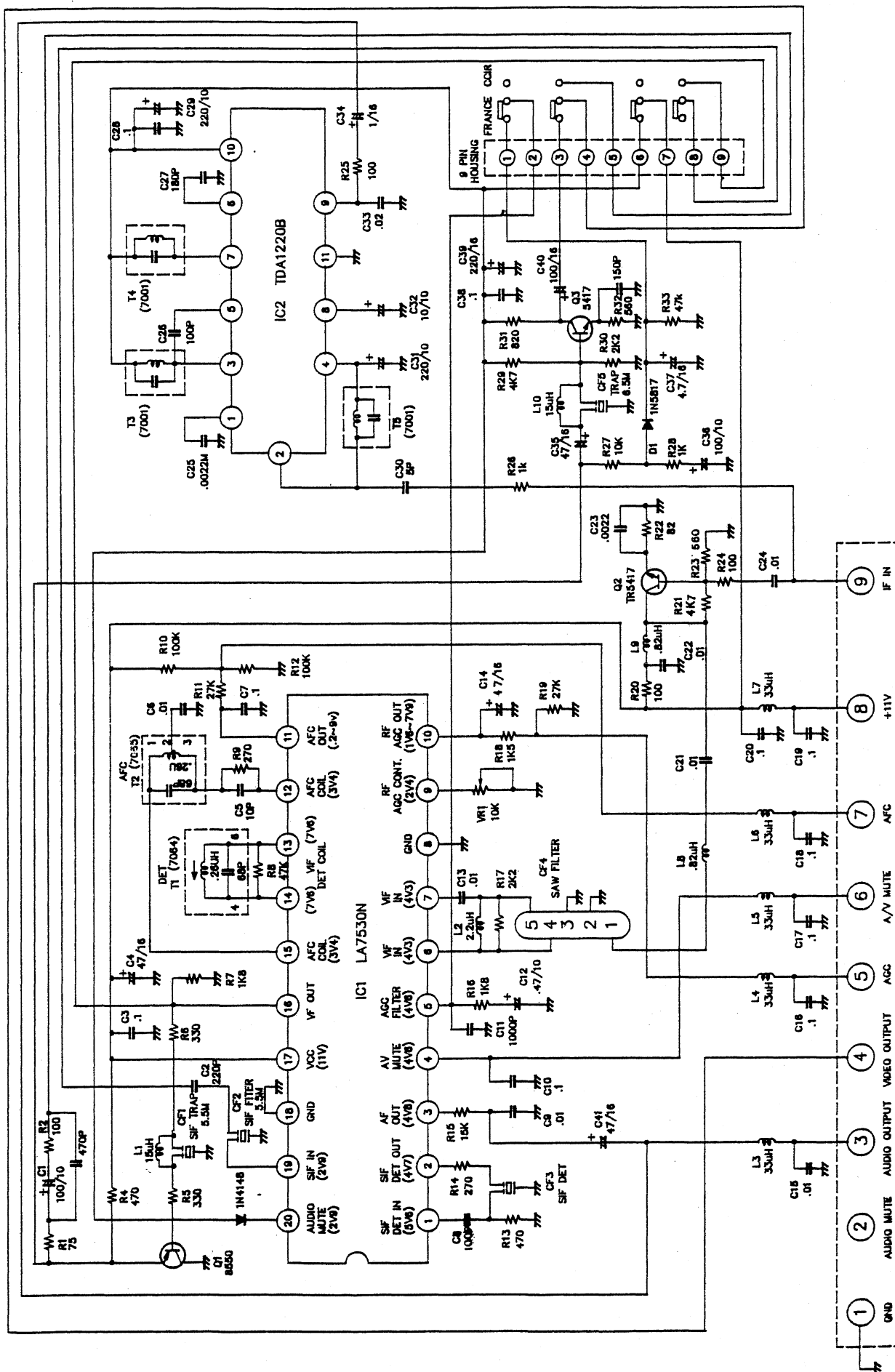


VIDEO IF ALIGNMENT CONNECTING FIGURE

ALIGNMENT PROCEDURE

REGULATOR ADJUSTMENT

1. CONNECT TV UNIT TO DC 12V-14V POWER SUPPLY & TEST PATTERN GENERATOR.
2. CONNECT A DC DIGITAL VOLTMETER OR OTHER PRECISION ACCURARY VOLTMETER TO THE COLLECTOR OF THE REGULATOR OUTPUT TRANSISTOR Q201 (OR ANY 10.8 VOLT POINT OR TP1).
3. ADJUST HORIZONTAL HOLD SVR302 UNTIL THE PICTURE HOLD IN SYNC.
4. VERTICAL HIGHTNESS ALIGNMENT
ADJUST THE VERTICAL HIGHTNESS SVR401 ENABLE THE CIRCLE OF PICTURE APPROACH TO CIRCLE.
5. HORIZONTAL POSITION ALIGNMENT
ADJUST HORIZONTAL POSITION SVR301, LET THE SQUARE SIGNAL IN THE CENTER OF THE SCREEN.
6. RF AGC ALIGNMENT
ADJUST VIF MODULE AGC CONTROL VR1 AT INPUT SIGNAL INTENSITY 50dB, THE SCREEN COULD LOOKING CLEAR AND 80dB THE SCREEN DON'T INFLECT.
7. WHITE BALANCE ALIGNMENT
ADJUST THE SVR602, SVR601, AT CENTER POSITION, ADJUST SCREEN VR402, LET THE SCREEN WILL BE LITTLE BRIGHTNESS. ADJUST SVR602 LET THE SCREEN TO BE YELLOW, AND THEN ADJUST SVR601 LET THE SCREEN APPROACH TO WHITE.
8. FOCUS ADJUSTMENT
ADJUST FOCUS VR401, LET THE STRIP LINE ON THE SCREEN TO BE CLEAR.



2. SOUND IF ALIGNMENT

TEST EQUIPMENT CONNECTION

SIGNAL GENERATOR: CONNECT TO TEST POINT (T.P) OF THE TUNER THROUGH A MATCHING PAD.

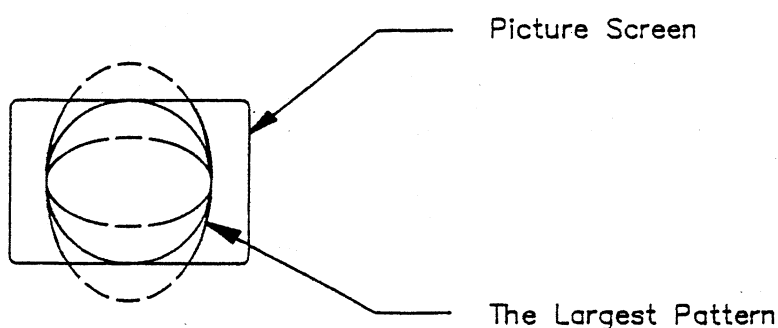
OSCILLOSCOPE: CONNECT TO THE VIF MOD. PIN2.

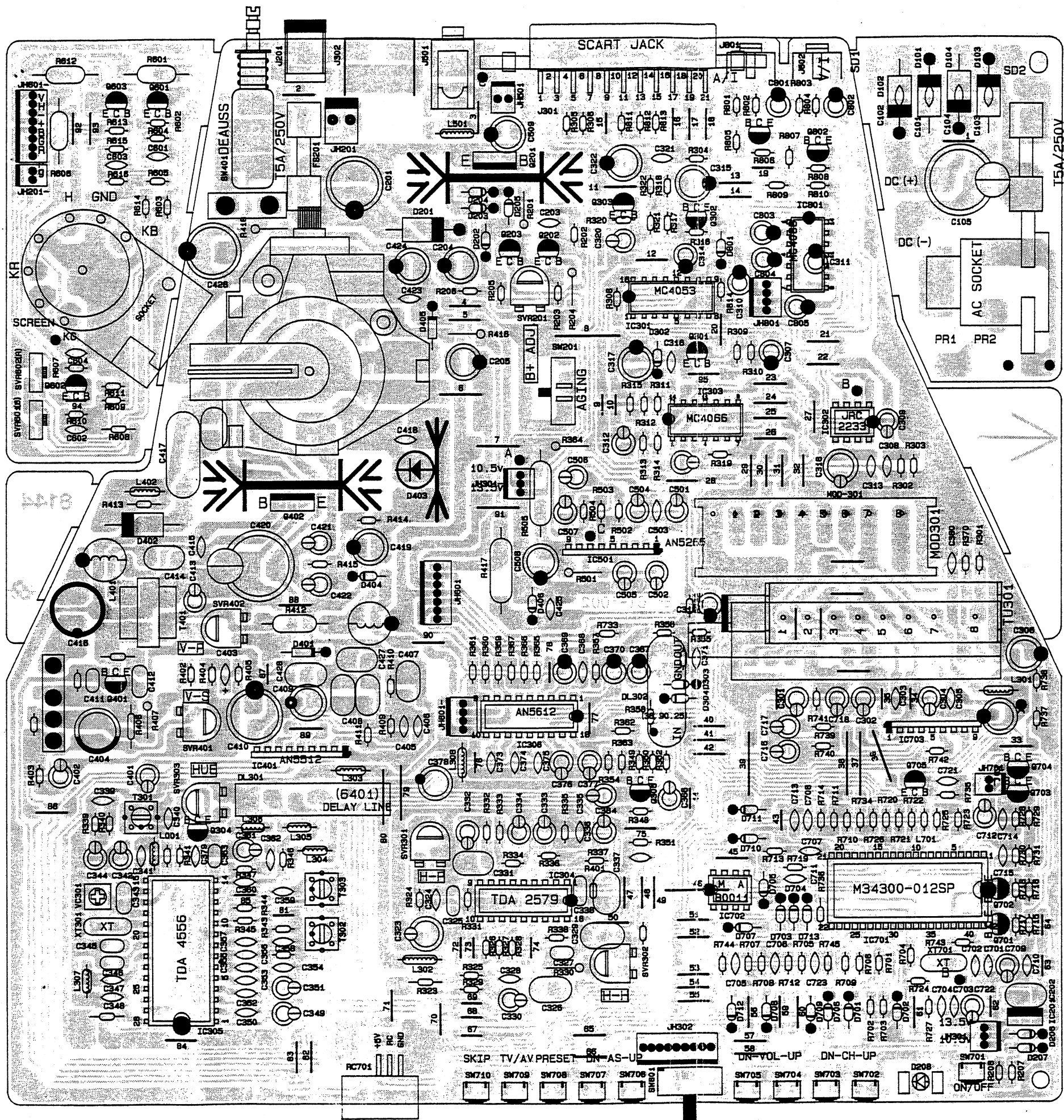
ALIGNMENT PROCEDURE

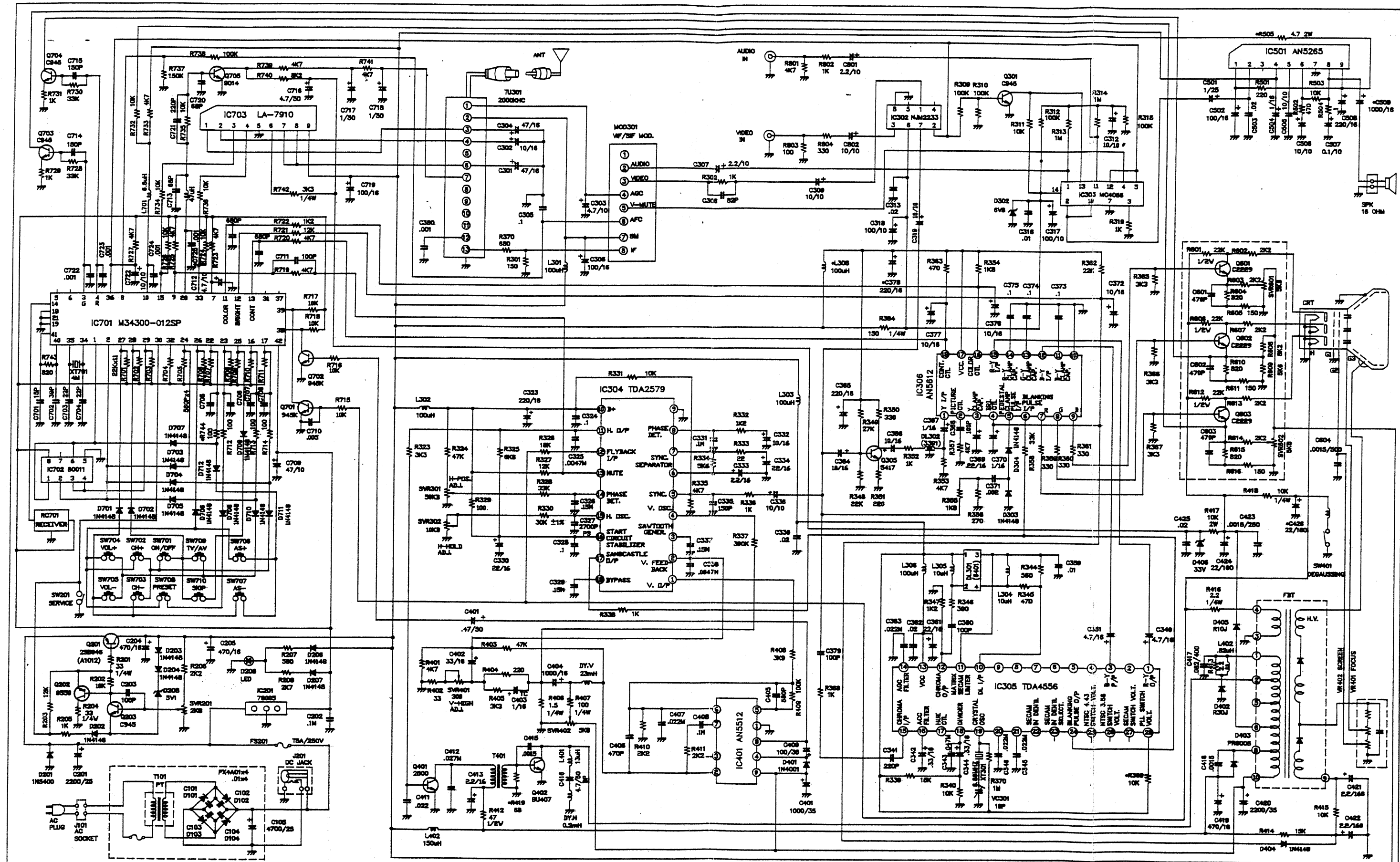
STEP	GENERATOR	SCOPE	ADJUST	REMARKS
ADJUST VIF MOD. T1	SYSTEM B,G,H 33.4MHZ,SYSTEM M,N 41.25MHZ, SYSTEM I 33.5MHZ SYSTEM D,K, 32.4MHZ @1KHZ FM MOD DEVIATION 25KHZ 80DB OUTPUT.	CONNECT TO THE VIF MOD. PIN2	T1	ADJUST T1 SO THE SIGNAL OF 1 KHZ ON SCOPE TO BE MAX.

VERTICAL DEFLECTION ALIGNMENT

- (1) TUNE THE RECEIVER IN A TEST PATTERN.
- (2) ADJUST V-SIZE CONTROL SV401 TO MAKE THE INSIDE OF THE LARGEST CIRCLE OF TEST PATTERN REACHES NEAR ROUND PATTERN. (SEE THE FIGURE)







SUBFIX	MOD	RECD
AA	1993/10/11	
AB		
AC		
AD		
AE		

DESIGN

CHECK

APPROVED

DRAWING NO.

REV

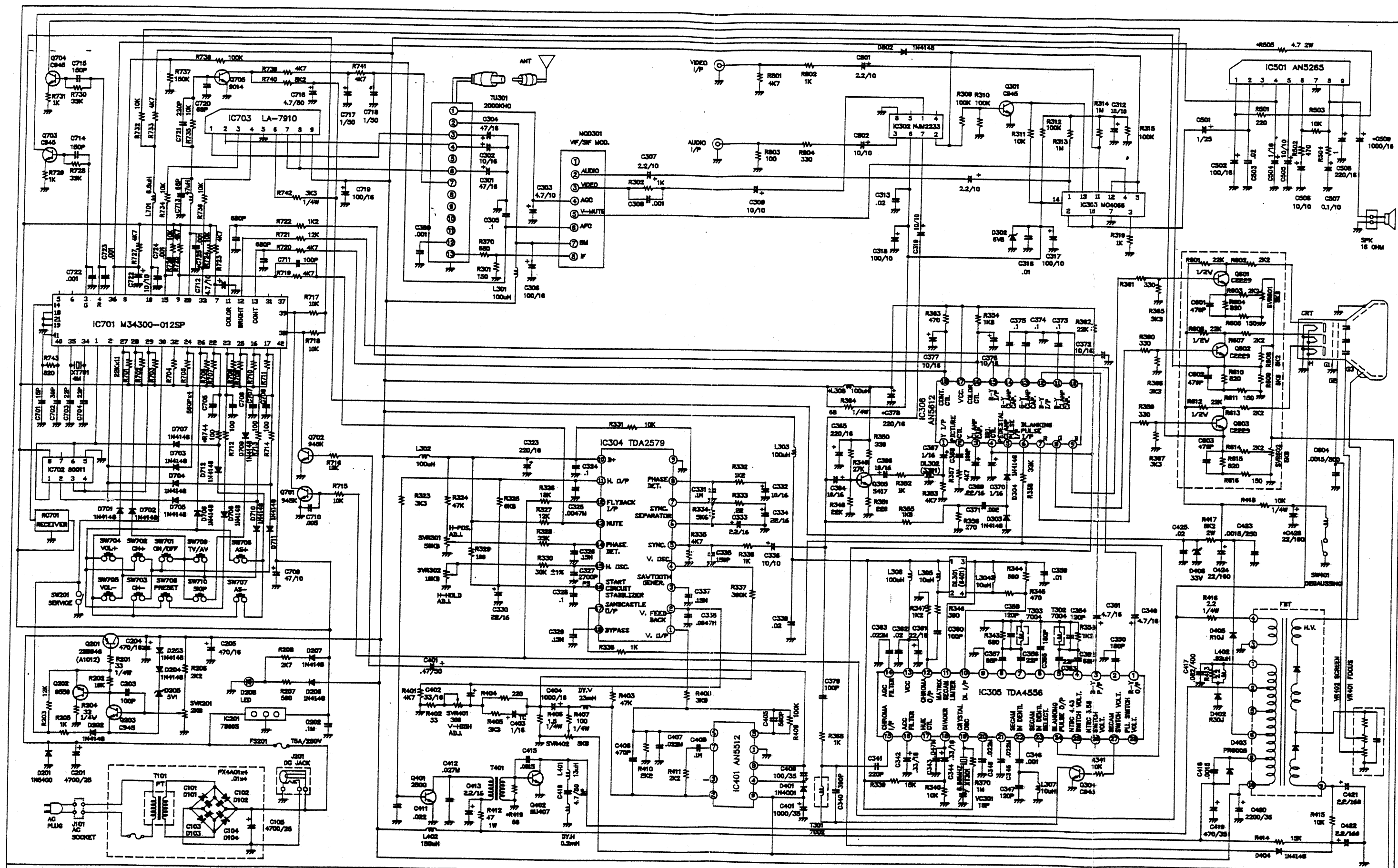
P. L. Liu

文王

05-G1-1321

0

CTV-2610



SUBFIX	MOD	RECD
AA	1993/11/2	
AB		
AC		
AD		
AE		

DESIGN	CHKD	APPROVED	DRAWING NO.	REW
P. L. Lau		文王	05-G1-1721	0

CTV-2610L