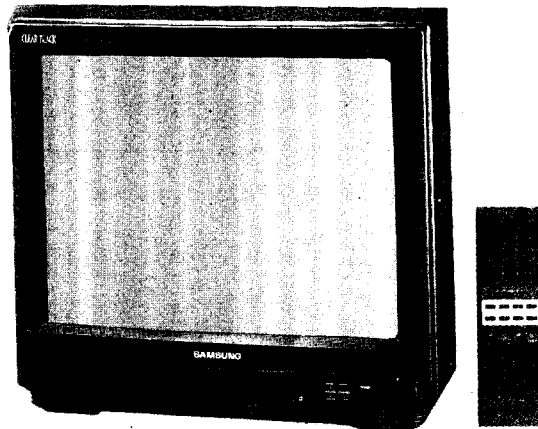




SERVICE MANUAL

MODEL : CB3312Z/EUROX
CHASSIS : P58SC(N) & RM109

COLOUR TELEVISION RECEIVER



SPECIFICATIONS

Television System : PAL-B/G, REMOTE CONTROL SYSTEM

Receiving Channel :

System Band	PAL - B/G
VHF	2 - 12
UHF	21 - 69

Intermediate Frequency :

System I-F Carrier Frequency	PAL - B/G
Picture I-F Carrier	38.90
Sound I-F Carrier	33.40
Colour Sub Carrier	34.47

(Units:MHz)

Picture Tube : 14" A34KQX41X/3720B22 diagonal measured, Quick-start, In-line-gun, Black stripe, 90° degrees deflection

Power Requirements : AC 220 V , 50 Hz , 77 WATT

Antenna Input Impedance : VHF,UHF : 75 Ohm Unbalanced type

Speaker : Impedance : 8 Ohm , 2W

Features : Voltage synthesized tuning System, On-screen Display, Auto-fine Tuning, Dark Tube, Auto Brightness Control, 29-Key Transmitter.

SAFETY CAUTION :

Before servicing this chassis, it is important that a service technician reads and follows the "Safety Precaution" and "Product Safety Notice" in this Service Manual.

- * For continued X-radiation, replace the picture tube with original type.
- * Design and specifications are subject to change without prior notice.
- * WARNING-SHOCK HAZARDS - Use an isolation transformer when servicing.

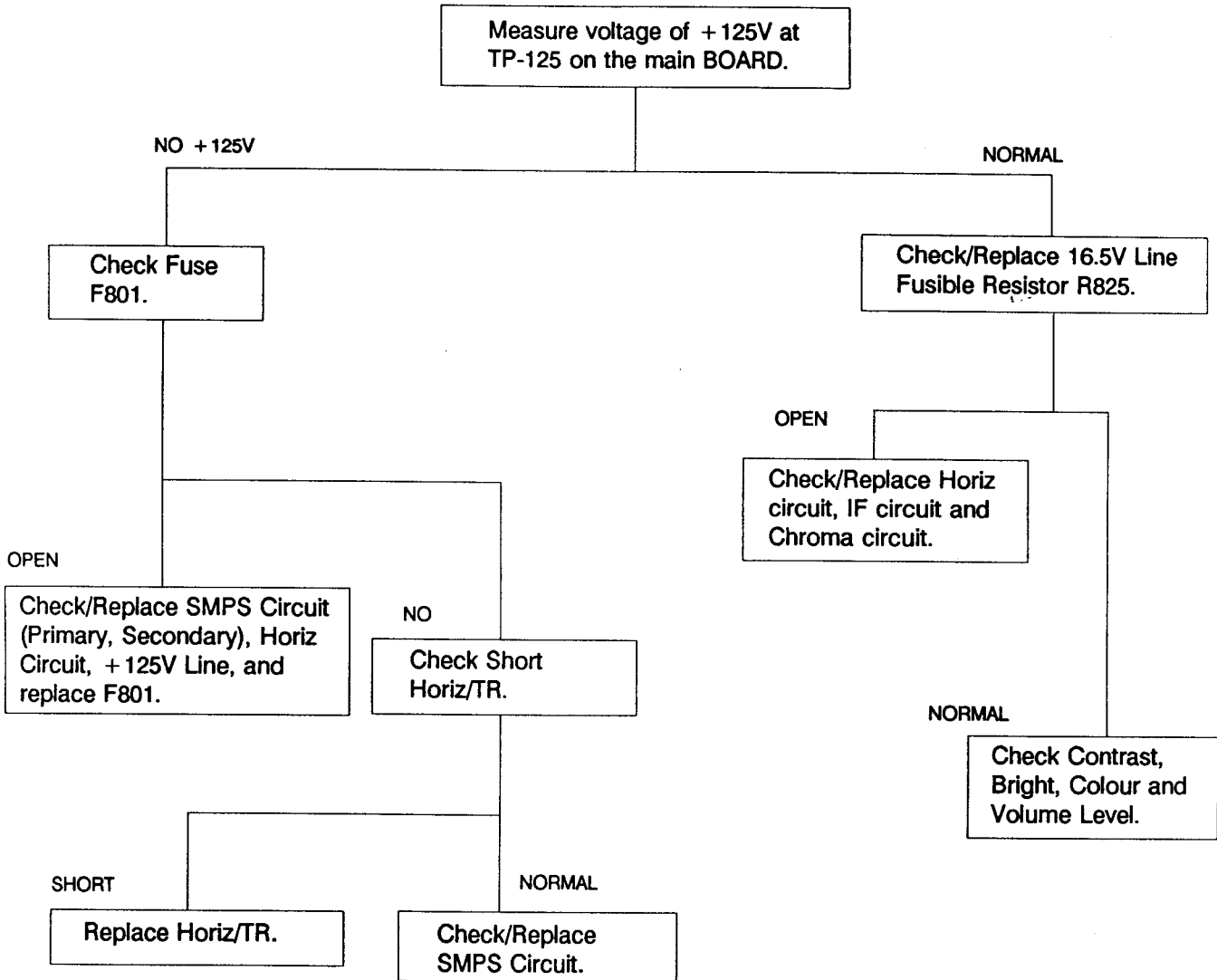
8. TROUBLESHOOTING CHARTS

The following charts are devoted to the troubleshooting which, if followed carefully, will assist you in tracking down a fault to the correct stage.

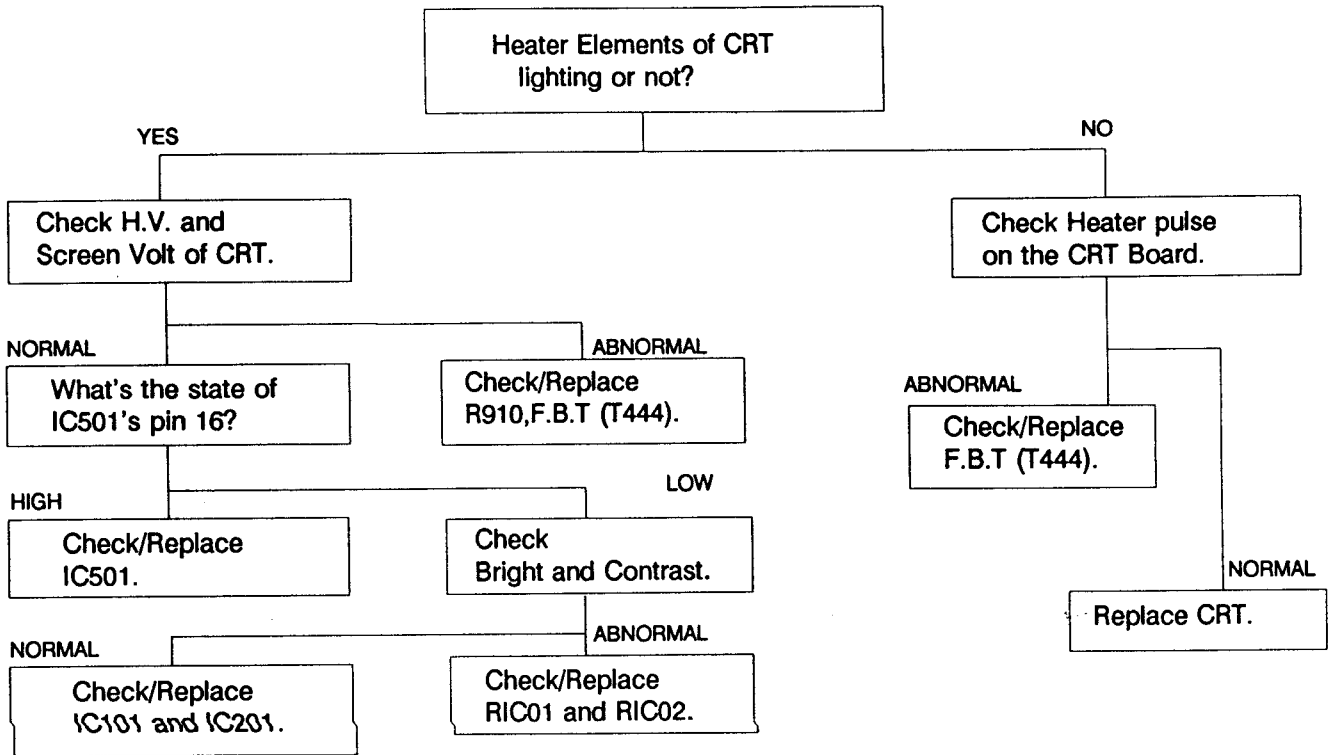
In order to utilize the charts (fault trees), first establish the complains, i.e.-No Raster, No Sound.

Locate the chart applicable and then, progress through the various alternatives until a final block indicates the defective components or stages.

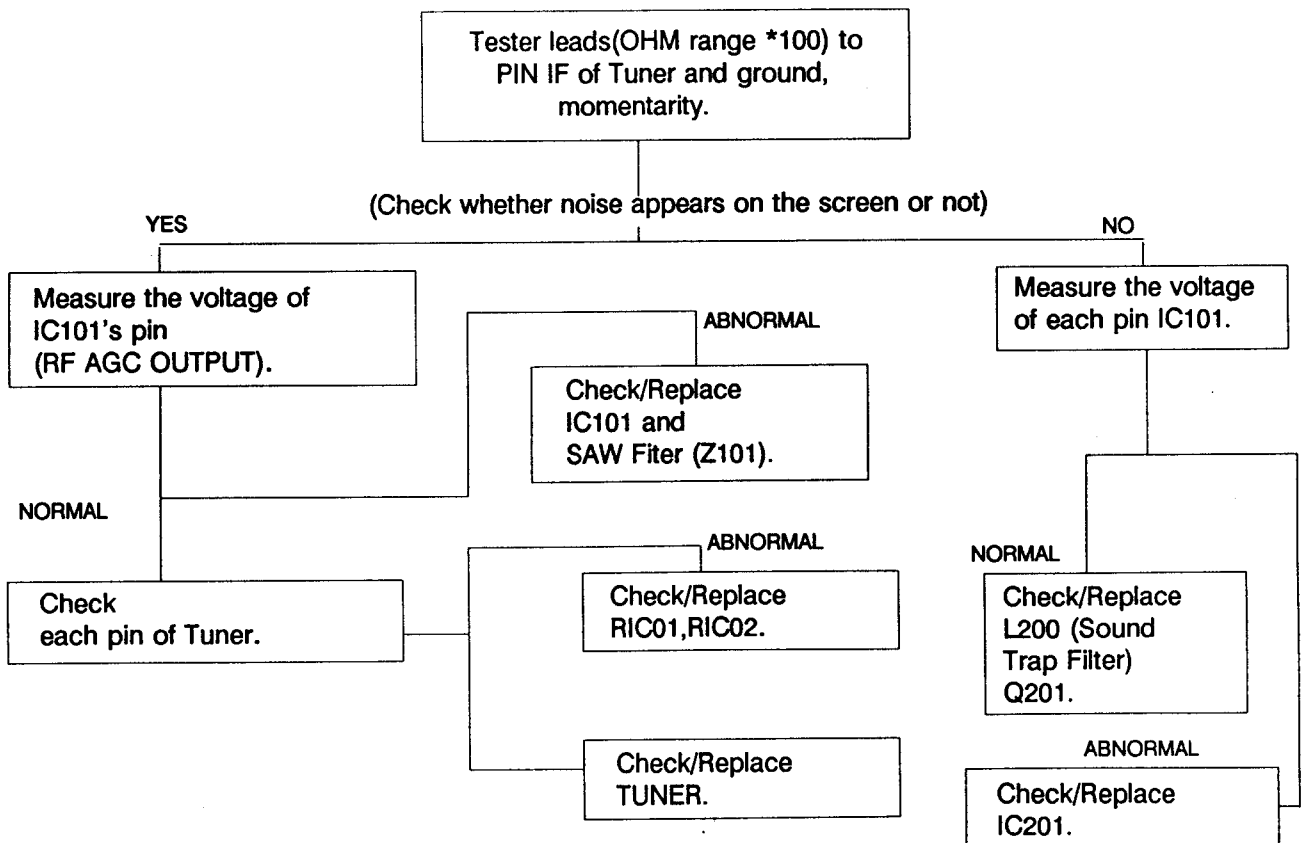
NO RASTER AND NO SOUND



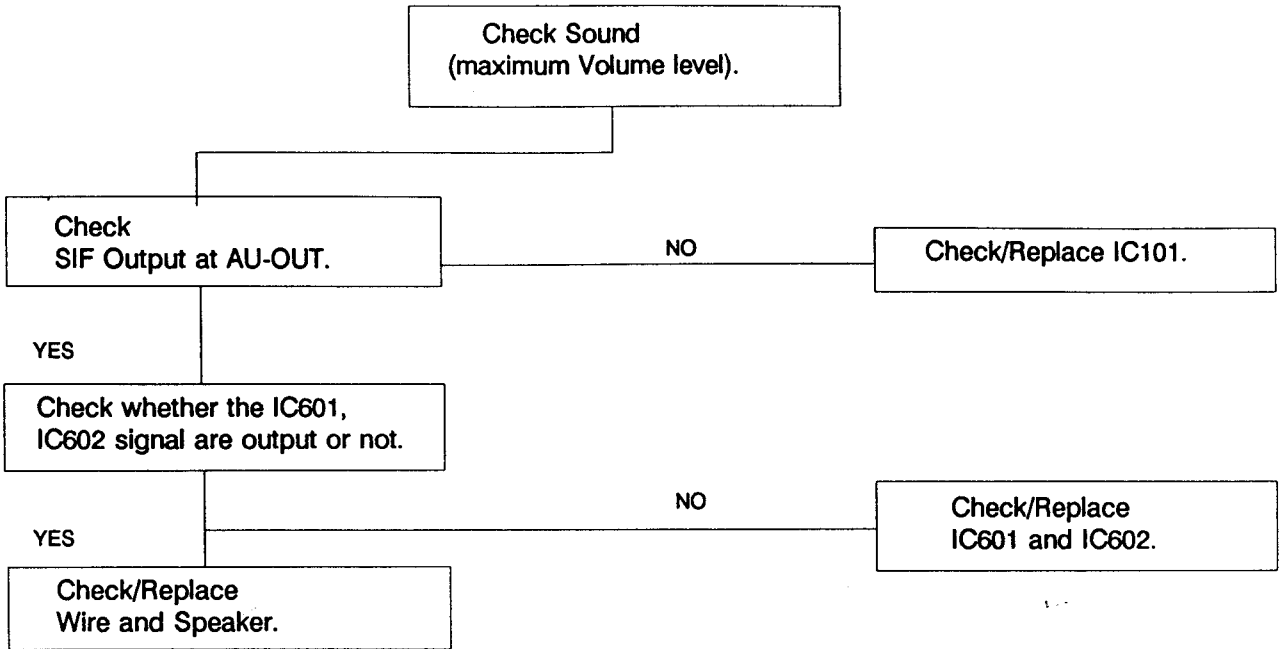
NO RASTER (SOUND OK)



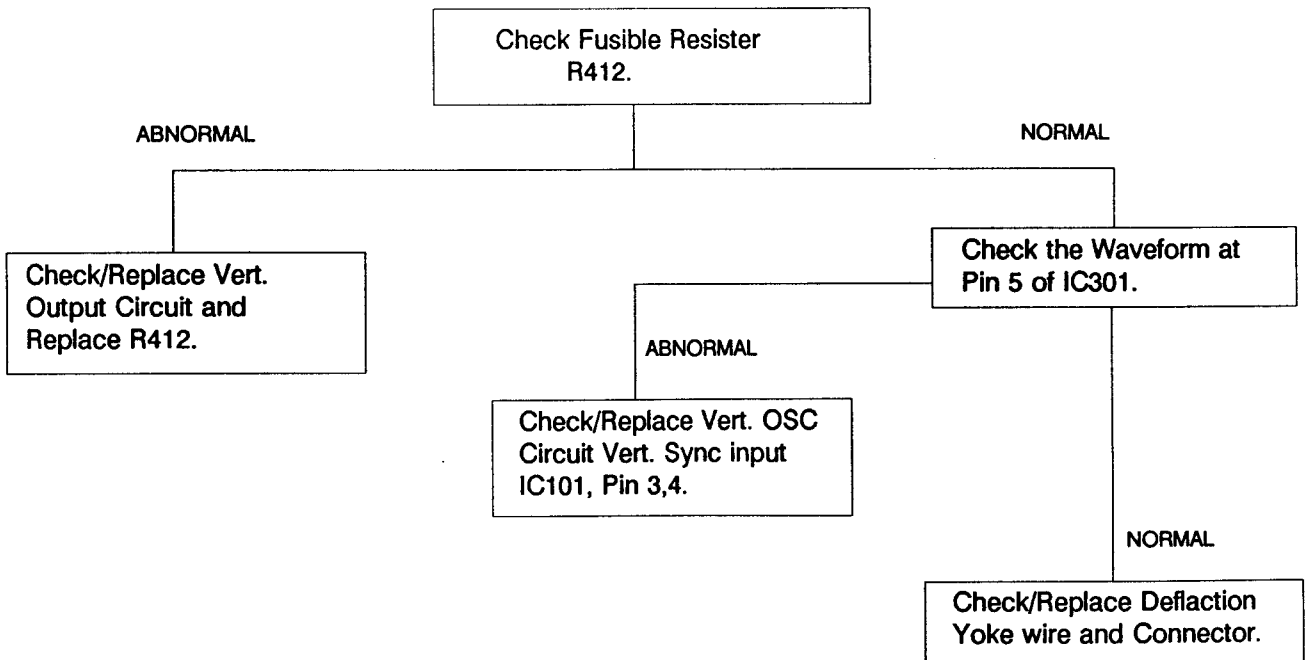
NO PICTURE (RASTER ON) AND NO SOUND



NO SOUND (PICTURE OK)

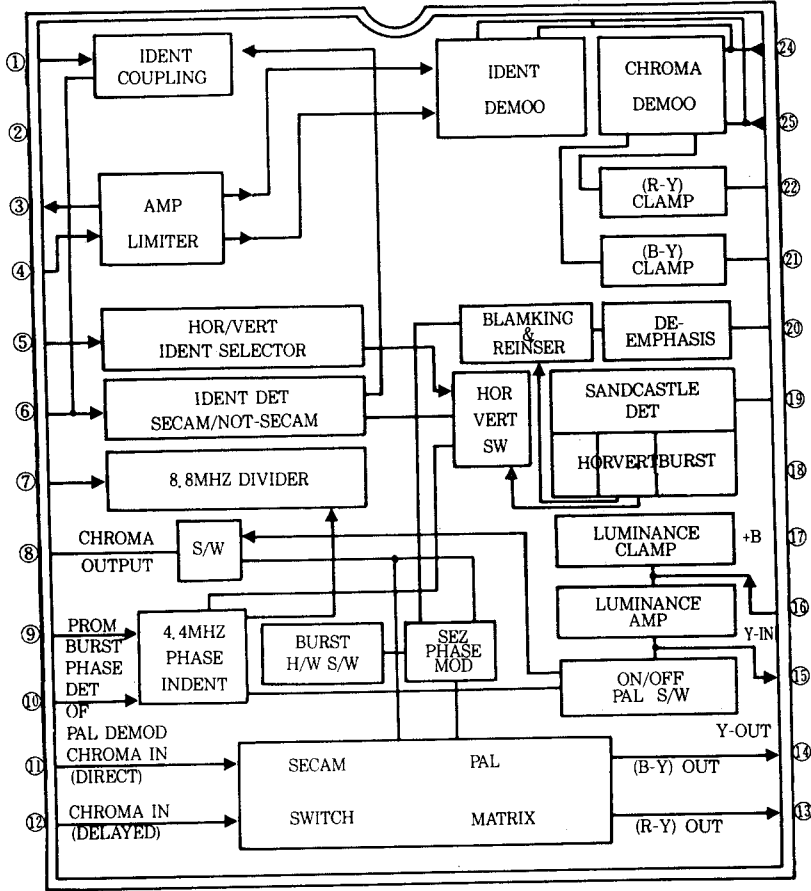


NO VERT SCAN (ONE HORIZ.LINE RASTER)

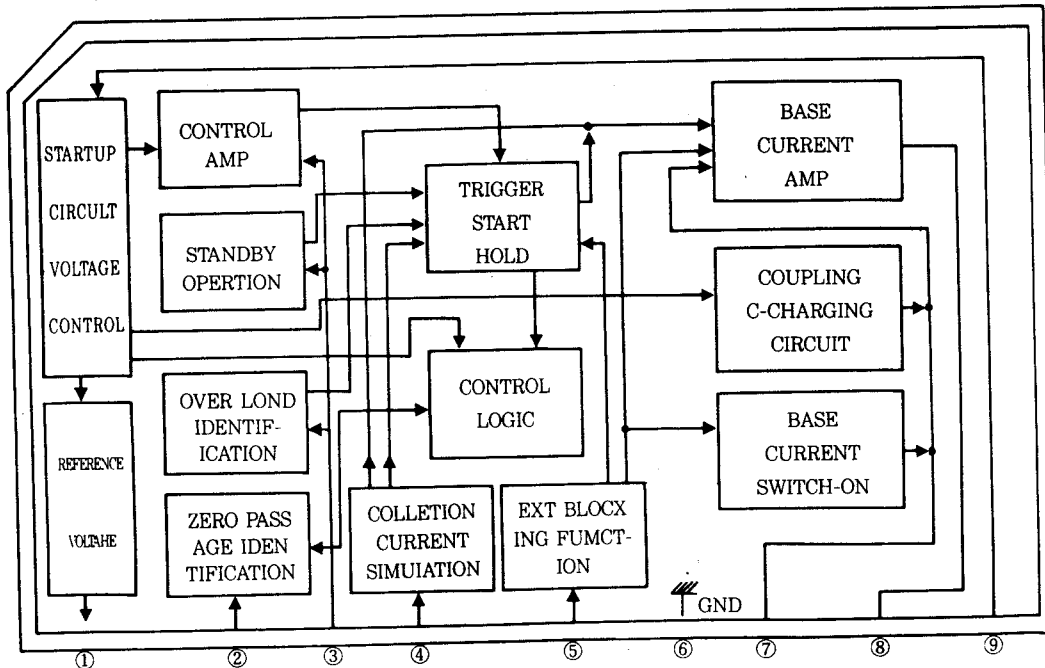


SEMI CONDUCTOR BLOCK DIAGRAM

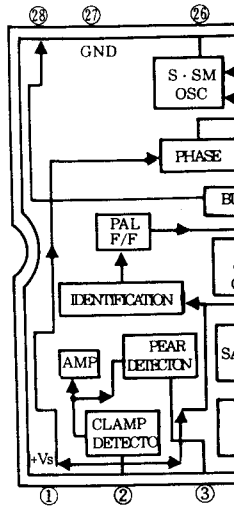
1. PAL/SECAM-TRANSCODER (TDA3590)



2. POWER CONTROL (TDA4601)

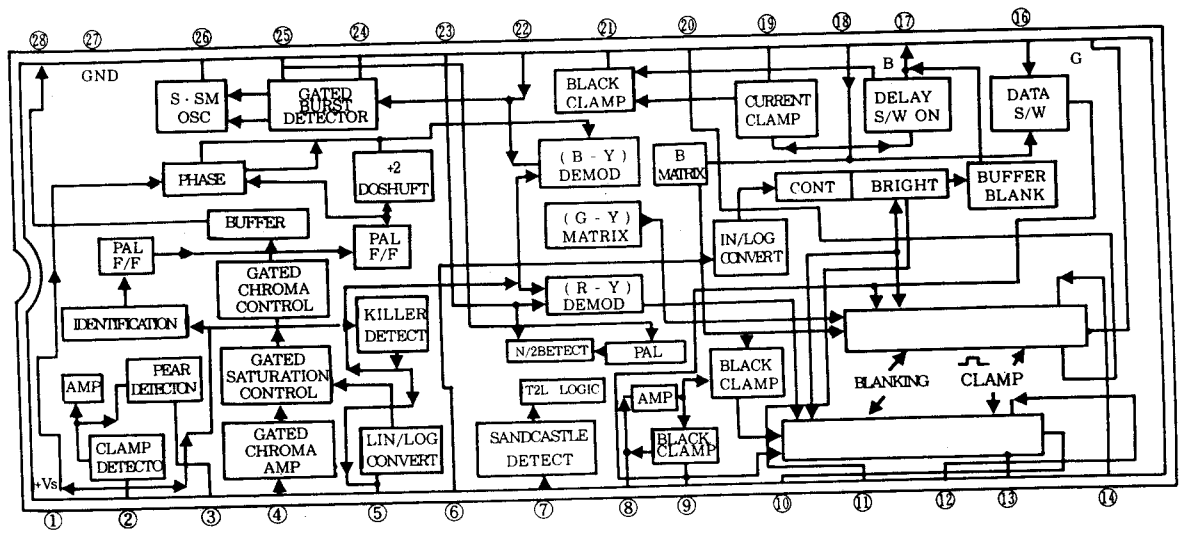


3. CHROMA DECODER

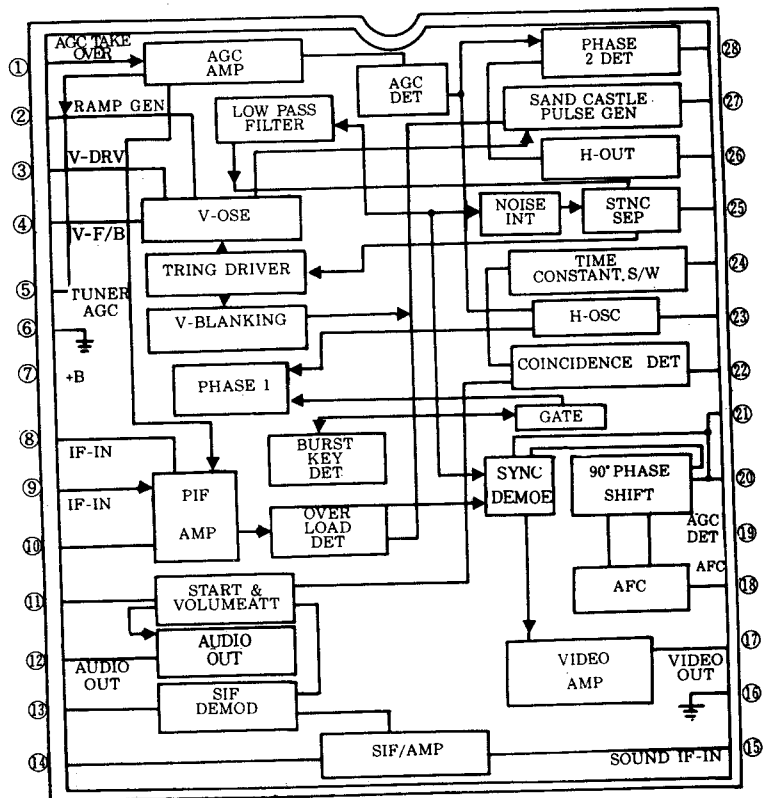


4. PIF, SIF, H-OSC V-F

3. CHROMA DECODER (TDA3562A)

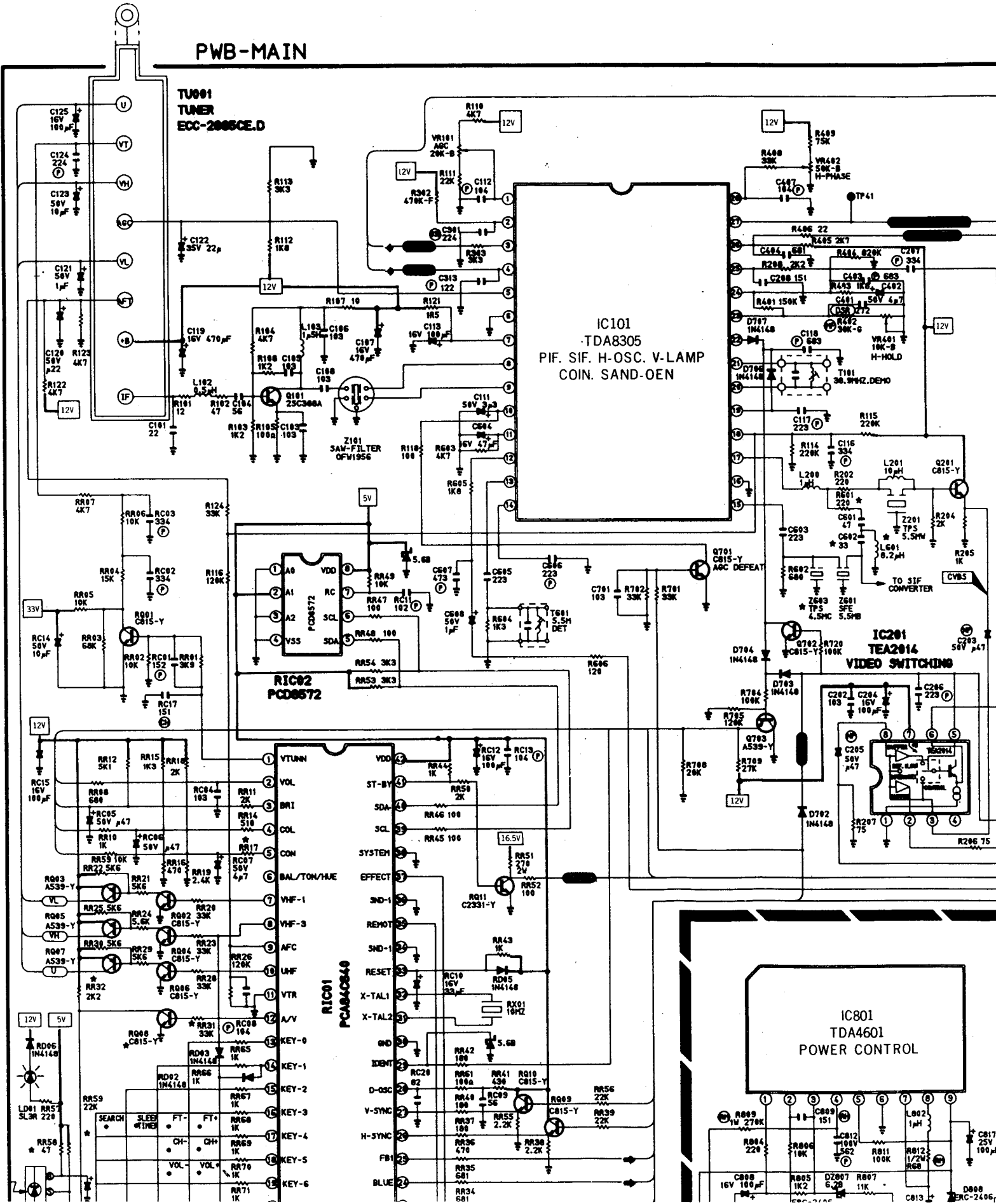


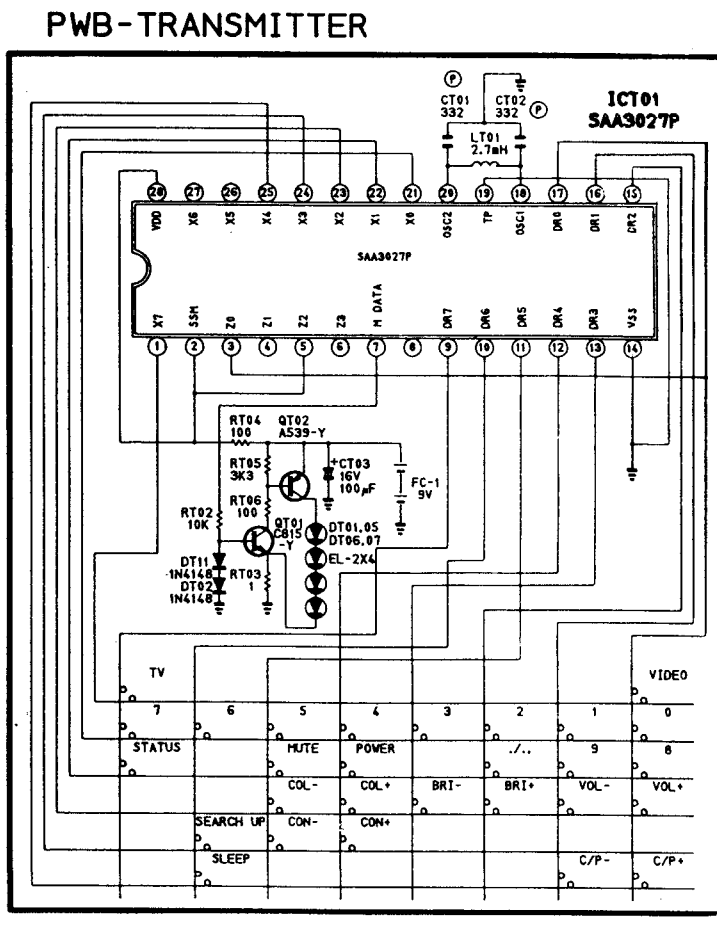
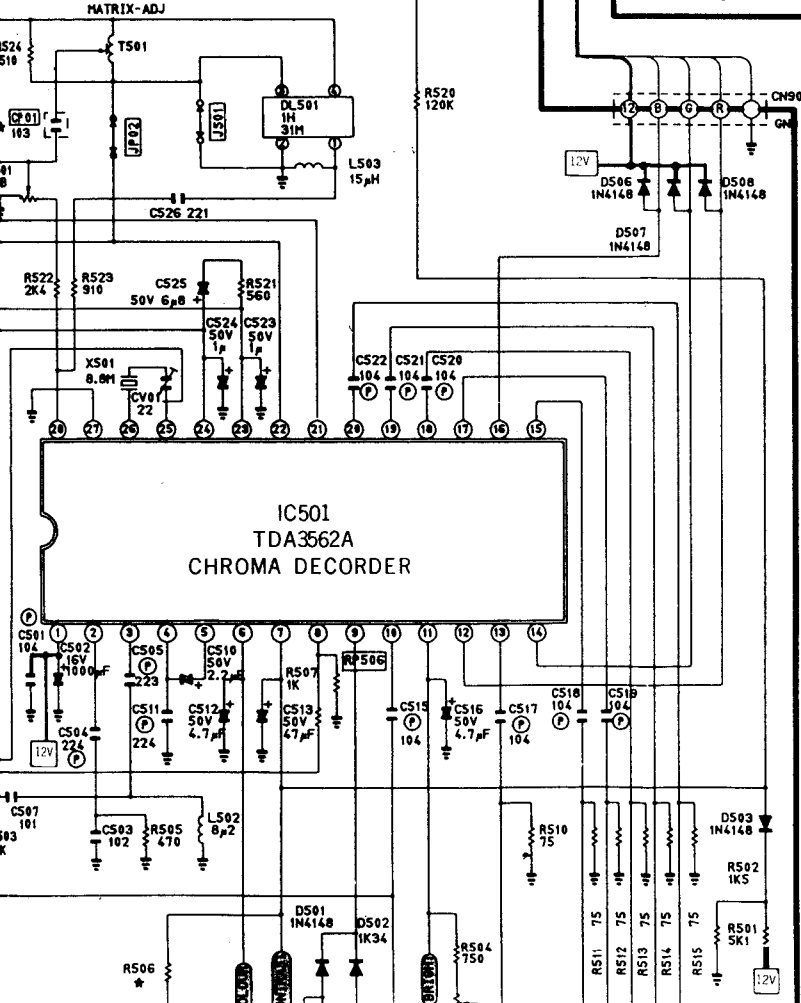
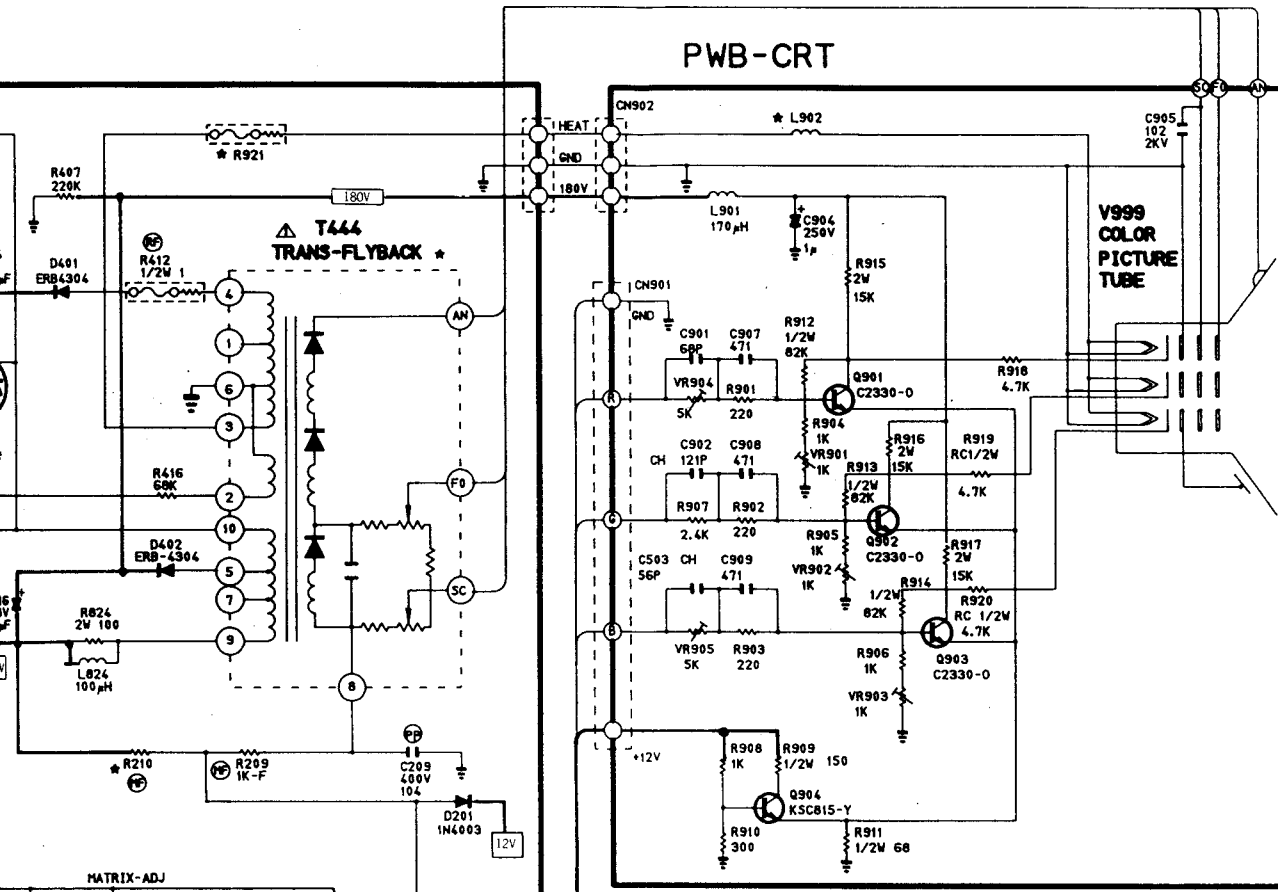
4. PIF, SIF, H-OSC, V-RAMP, COIN, SAND-GEN (TDA8305)

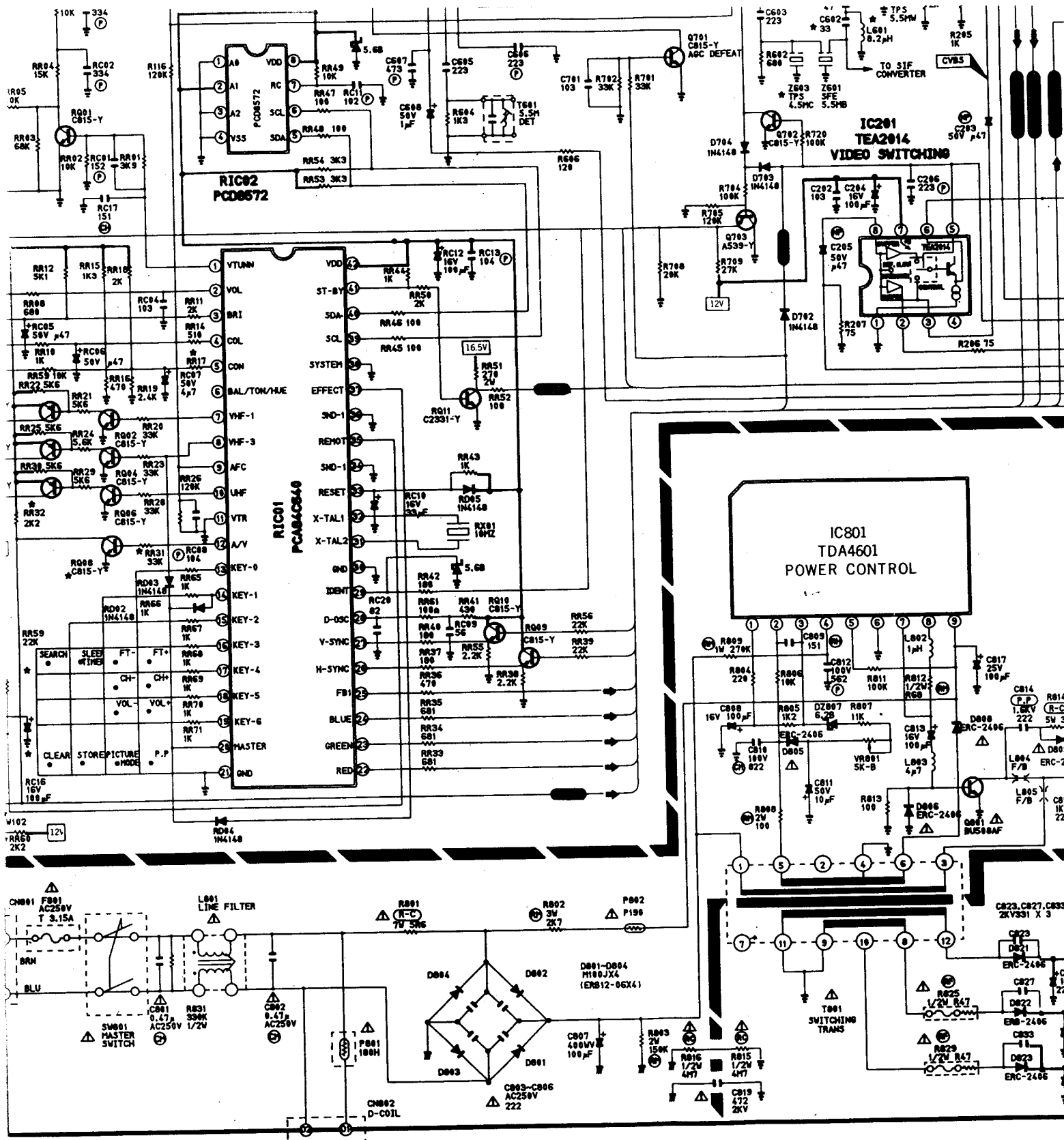


SCHEMATIC DIAGRAM P58SC(N)

PWB-MAIN







DIFFERENT PARTS FOR 20 INCH AND 14 INCHS

LOCATION	14 INCH		20 INCH
	NORMAL	MINI-NECK	
RR002	1/2W 1K5		1/2W 1K5
NC001	25V 330µF		25V 330µF
NC002	16V 68µF		16V 68µF
RR14	3K3	3K3	4K3
R210	133K-F11/2W	133K-F11/2W	127K-F11/2 W
C419	200V 364		200V 434
L401		200mH/480mH	
L404	DS48-157µH	K18/195µH	DS48-157µH
T402	K-20-14		K-20-14
Q402	23D1650	23D1650	23D1651
T444	FDH1415AL	FDH-14A004	FDH-2015AL
Y999	3720022	A34EAC00X	5100001X
RR17	3K	3K	1K
RR19	2K4	2K4	3K
R506	8K2	8K2	10K
L902	12µH	43µH	25µH
R921	RF1P (0.47)	RF1P (1)	RF1P (1)

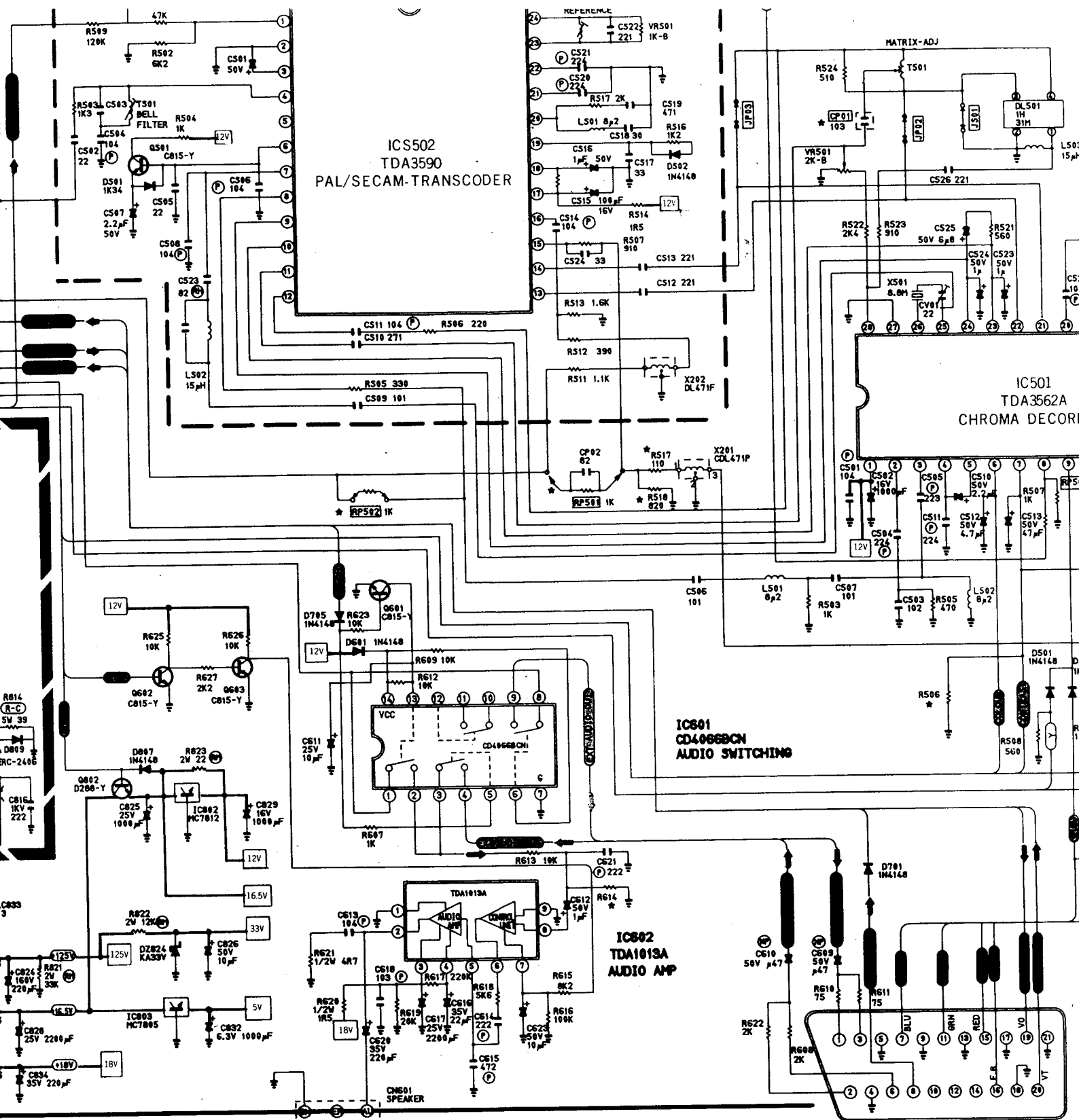
DIFFERENT PART FOR SOFT-TOUCH AND REMOCON MODEL

LOCATION	SOFT-TOUCH	REMOCON
SM02	KSA-2272	
RR60	2K2	
PA01		UTMP034 or SC 5C P
RC16		16V 100µF
RR50		1/8W 47
RR59		1/8W 22K
RR32		1/2 W 2K2
RR31		1/8W 33K
RR00		CB15-Y

DIFFERENT PARTS FOR PAL-B/G AND SECAM-B/G/D/X

LOCATION	PAL-B/G	PAL-B/G SECAM-B/G	PAL-B/G SECAM-B/G SECAM-D/X
RS17	1K	110	110
RS18	620	820	820
RP501	820		
RP502	1K		
CP01	103		
RP01	220a	220a	75a
CB02	47	47	33P
L001	12µH	12µH	0.2µH
CP02	02		
Z603			TP54, 5MC

A
 T
 Carbon
 Oxide
 Metal
 Varistor
 Position
 C
 T
 C
 P
 T
 Metal
 Polyp
 Polyp
 Ceramic
 Choc



RESISTOR	
TYPE	MARK
Carbon Composition	C
Oxide Metal Film	M
Metal Film	RH
Coaxial	R-C
Variable Resistor	
Positive Resistor	

CAPACITOR	
TYPE	MARK
Ceramic	No Mark
Polyester	P
Tantalum	T
Metal Polyester	MP
Polypropylene	P.P
Polyester Polypro	DSR
Chemical Electrolytic	
Chemical Non-Polar	

OBSERVATION OF VOLTAGES AND WAVEFORMS

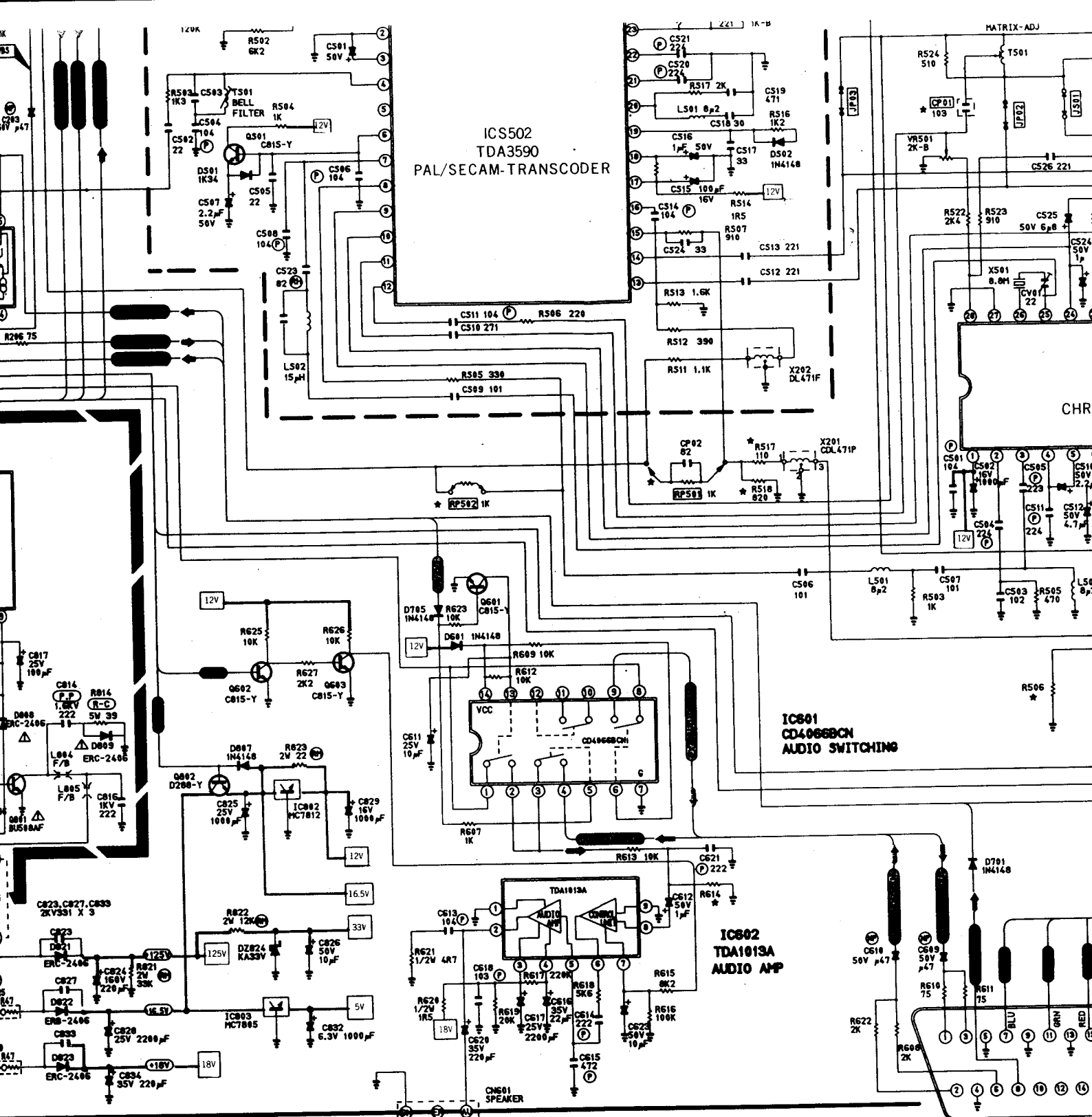
- 1 Voltages read with "VTVM" from point shown to chassis ground, line voltage 220/240V colour bar signal.
- 2 Voltages reading may vary $\pm 20\%$.
- 3 The schematic shown is representative only.
- 4 All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 5 Check FINE TUNING, AGC, BRIGHTNESS, CONTRAST, and COLOUR controls for best picture.
- 6 Waveforms are taken using a standard colour bar signal.

EXPRESSION

1. Resistance is shown ohm K=1,000 M=1,000,000.
2. Unless otherwise noted in schematic all cap in mfd, the values more than 1 in pF.
3. Unless otherwise noted in schematic all inductance values less than 1 in mH.
4. According to the Model's name, it may be marked on Schematic Diagram.

NOTE

The circuits are subject to change without notice.



RESISTOR	
TYPE	MARK
Carbon Composition	C
Oxide Metal Film	M
Metal Film	RM
Concent	R-C
Variable Resistor	
Positive Resistor	

CAPACITOR	
TYPE	MARK
Ceramic	No Mark
Polyester	P
Tantalum	T
Metal Polyester	MP
Polypropylene	P.P
Polyester Polypro	DSR
Chemical Electrolytic	
Chemical Non-Polar	

OBSERVATION OF VOLTAGES AND WAVEFORMS

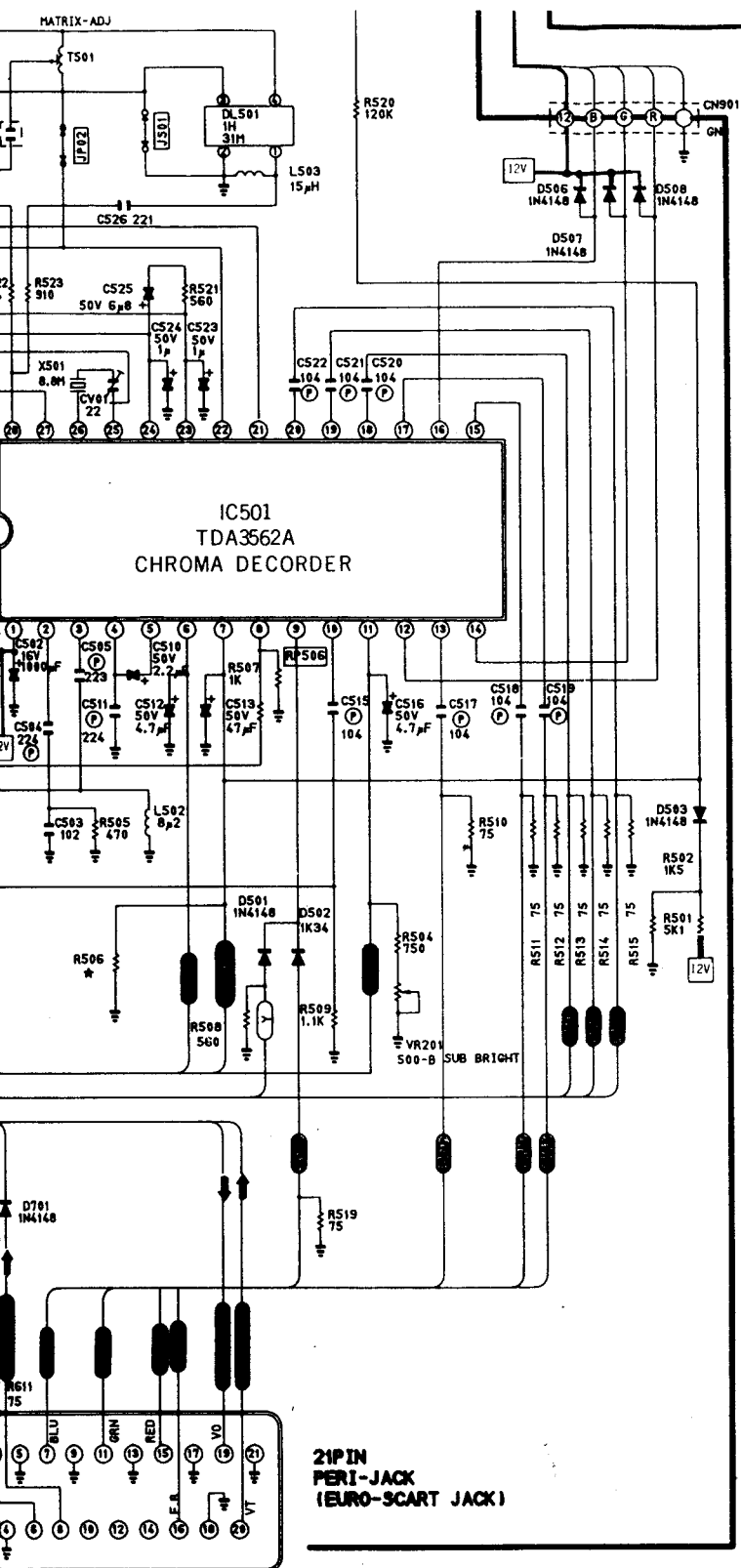
- 1 Voltages read with "VTVM" from point shown to chassis ground. Line voltage 220/240V colour bar signal.
- 2 Voltages reading may vary $\pm 20\%$.
- 3 The schematic shown is representative only.
- 4 All waveforms are taken using a wide band oscilloscope and a low capacity probe.
- 5 Check FINE TUNING, AGC, BRIGHTNESS, CONTRAST, and COLOUR controls for best picture.
- 6 Waveforms are taken using a standard colour bar signal.

EXPRESSION

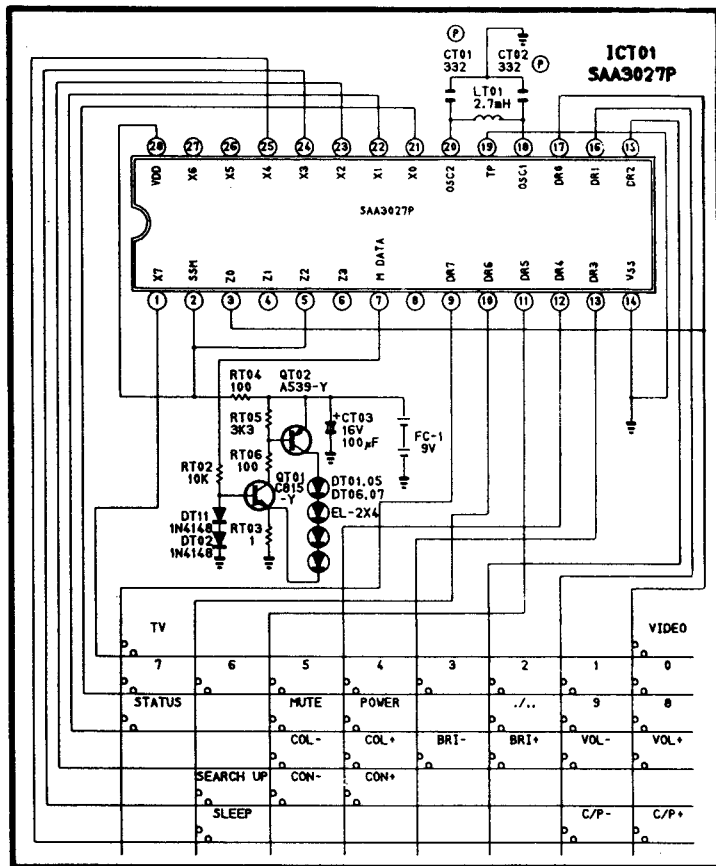
1. Resistance is shown ohms
2. Unless otherwise noted in mfd, the values more
3. Unless otherwise noted values less than 1 in m
4. According to the Model's Marking on Schematic D

NOTE

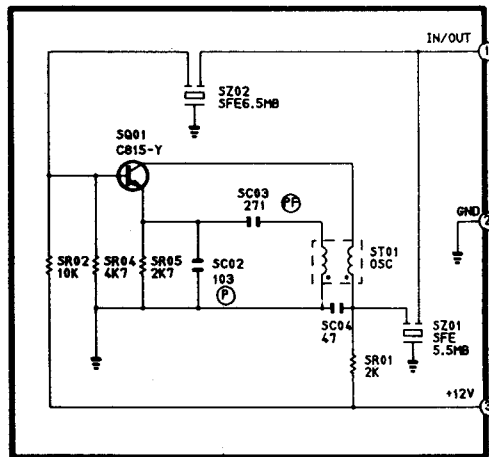
The circuits are subject



PWB - TRANSMITTER



SECAM-D/K SIF CONVERTER



EXPRESSION

Resistance is shown ohm K=1,000 M=1,000,000

Unless otherwise noted in schematic all capacitor values less than 1 are expressed in mfd, the values more than 1 in pF.

Unless otherwise noted in schematic all inductor values are expressed in uH, and the values less than 1 in mH.

According to the Model's name, It may be impossible to apply and to change the "*" Marking on Schematic Diagram.

NOTE

The circuits are subject to change without notice to improve the picture quality.