

SALORA 'K' Series Chassis, Models 20K30, 20K37, 21K70, 21K77, 22K30, 22K37, 24K70, 24K77, 26K30, 26K37, 26K70, 28K70, 28K77

General Description: A colour television receiver chassis with optional Teletext, P.A.L./S.E.C.A.M. transcoder, F.M. radio, videotext, satellite tuner and direct signal connection via a SCART socket. The circuit is capable of driving 90° or 110° cathode ray tubes and is powered from a switch-mode power supply which is 'live' on the primary side of the switched transformer irrespective of mains connections. This section is located on the lower part of the 'mother' board.

Mains Supply: 240 volts, 50Hz.

Module codes (See Fig. T112):

STB — Mother board

STC — Voltage synthesizer module STH — Picture tube base panel

STD — Video and sound IF module SCS — Control unit

STE — Sound module

STUL — Remote control transmitter

In addition, components on the mother board STB — are grouped according to their function as follows:

100 — Mother board interface comp's

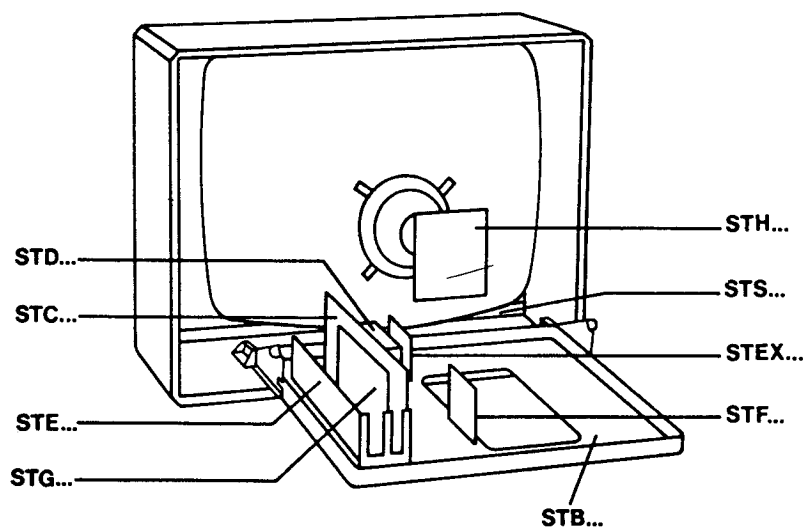
200 — Colour section

500 — Deflection section

600 — Power section, mains isolated

700 — Power section, mains non-isolated

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(T112) LOCATION OF PANELS — 'K' SERIES CHASSIS

Voltage Checks

Operating Point (24kV E.H.T.): Operating point is set by the factory to the following values (test point B4 on hybrid HB600 pins 5 and 6); in receivers with 110° deflection to 140V \pm 3V; in receivers with 90° deflection to 120V \pm 3V.

12.5V Supply: Connect the voltmeter to test point B5 (ICB601 pin 3). Check that the voltage is 12.5V \pm 0.6V.

Adjustments

Line Oscillator Frequency (Hor. Freq.): Connect pin 5 of line oscillator circuit ICB500 to ground potential (connector B14). Set picture upright with RTB541 (Hor. Freq.). Remove the short.

Horizontal Linearity (Hor. Lin.): Adjust the picture to its widest position with coil LB503 (Hor. Lin.) then turn the same coil anti-clockwise to set horizontal linearity to optimum. Make sure that both the right and left side squares are similar in width and that there is no dark shadow on the left hand side of the picture.

Horizontal Centering (line oscillator phase): Centre the picture horizontally with trimmer RTB542.

Alignment of Diode Modulator

This adjustment does not exist in 90° sets: Adjust picture width to minimum using trimmer RTB501.

Adjust picture as narrow as possible using coil LB502.

Re-adjust trimmer RTB501 to set the correct picture width.

Picture Width: Set Brightness, Contrast and Colour saturation for normal picture. Adjust picture width using trimmer RTB501 (in receivers with 90° deflection using coil LB502).

Vertical Centering: Set Brightness and Contrast for normal picture. Adjust vertical centering with trimmer RTB571.

Picture Height (Vert. Ampl.): Set Brightness and Contrast so that the picture height is reduced to its minimum.

Adjust picture height with trimmer RTB543 (Vert. Ampl.).

East-West Raster Correction (E-W Ampl.): This adjustment is not possible in 90° sets.

Check picture width adjustment. Straighten the vertical lines with trimmer RTB502 (E-W Ampl.).

Focus: Set Contrast close to maximum and Brightness for a well balanced greyscale.

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Adjust focus to optimum using Focus potentiometer of the trimming unit RTH1 on the picture tube base panel.

Screen Grid Voltage (G2): Connect a test picture to the receiver set Brightness, Contrast and Colour saturation to minimum.

Check, using a voltmeter, which of the output voltages of test points TP1 (R), TP2 (G) and TP3 (B) is the highest.

Connect the voltmeter to the output of the highest voltage and adjust trimmer G2 on the trimmer unit RTH1 for a black level of 160V.

Highlight Greyscale Tracking: Connect the oscilloscope to testpoint TP2 (G).

Adjust Contrast control for a voltage of 60V from black level to peak on the green cathode.

Disconnect the oscilloscope from TP2.

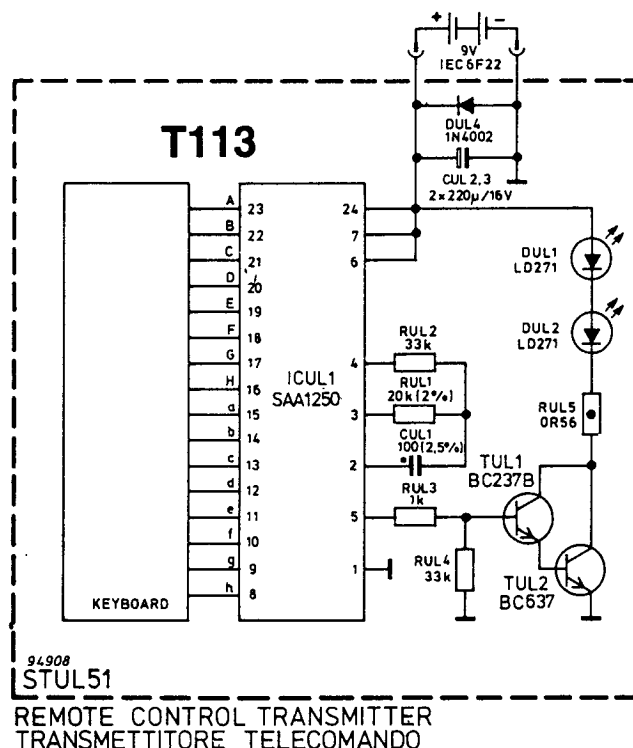
Adjust Brightness for normal picture. Adjust, using trimmers RTH10 (R-Ampl.) and RTH30 (B-Ampl.), the white parts of the test picture to obtain white.

The lowlight greyscale will be adjusted automatically by the receiver.

Adjustment of Tuner A.G.C. (Tuner A.G.C.)

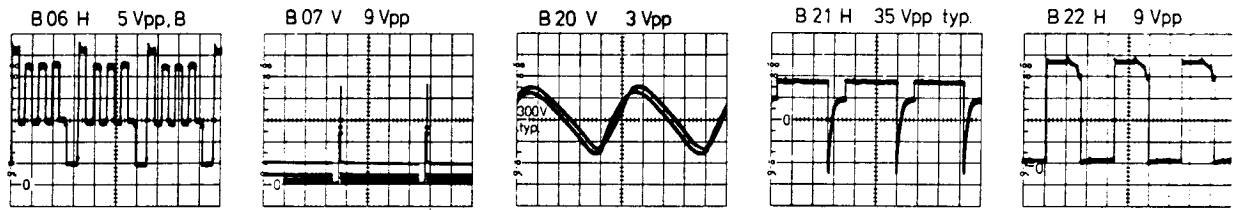
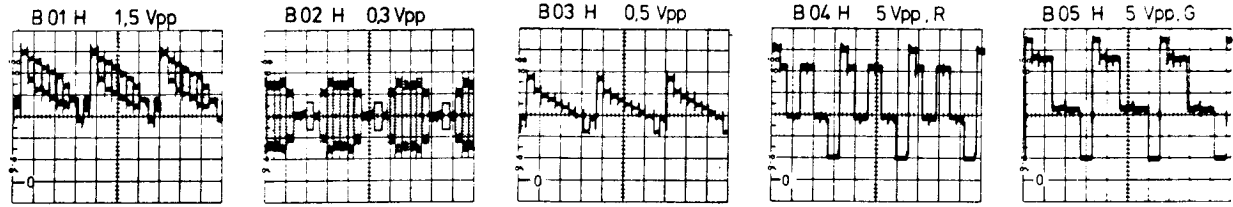
Using a Colour Test Transmission: Adjust RTD1 according to receiving conditions so that no picture noise is visible and no overloading takes place.

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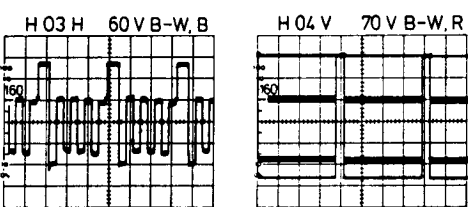
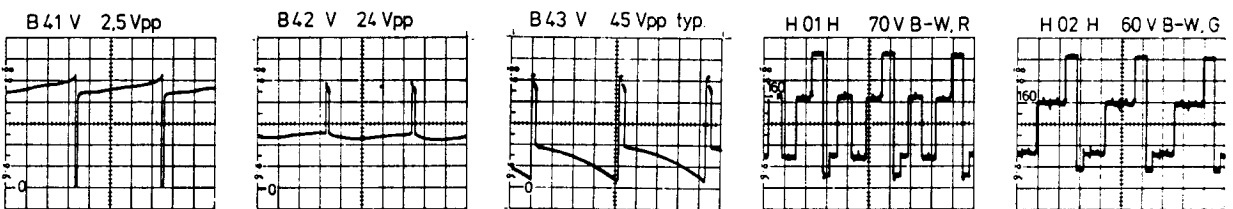
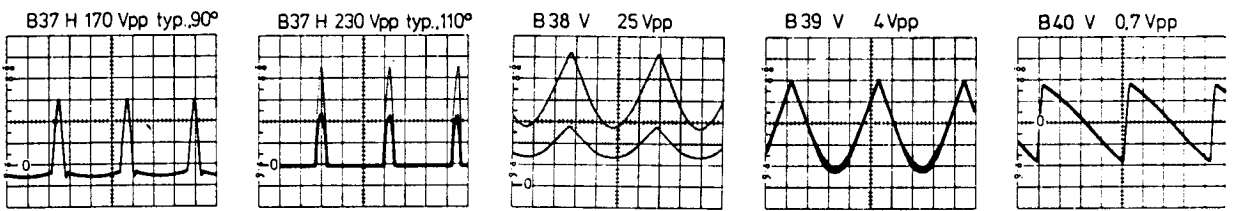
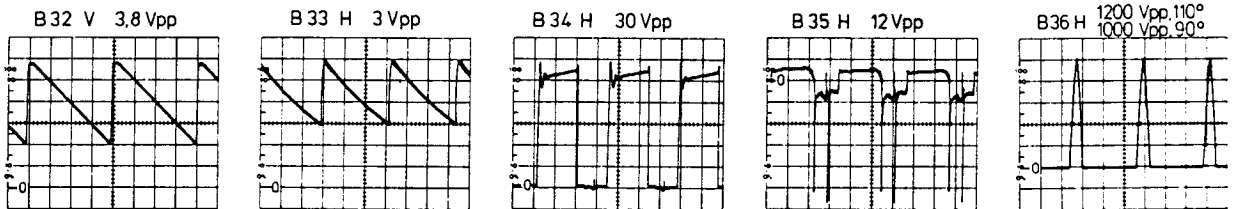
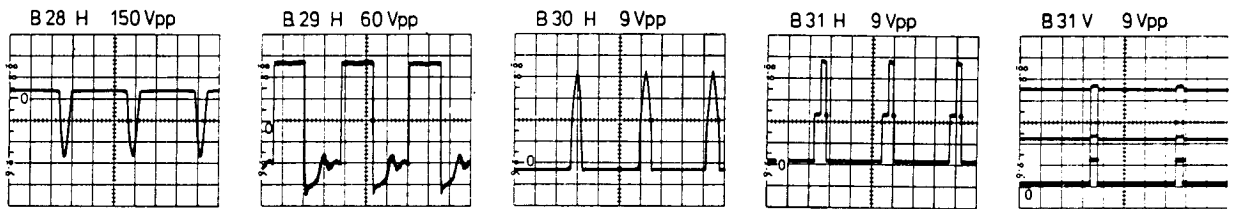
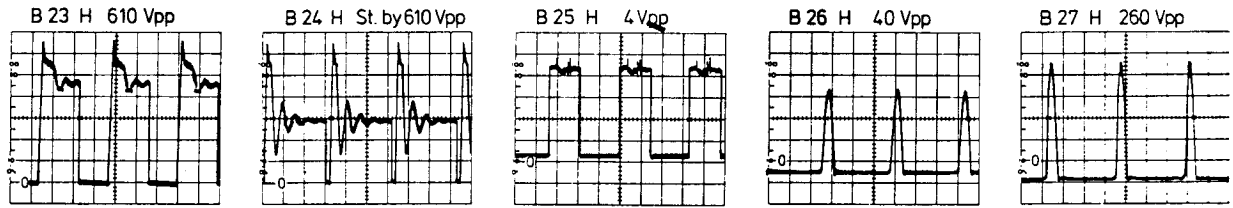


(T113) CIRCUIT DIAGRAM (REMOTE CONTROL UNIT)
— 'K' SERIES CHASSIS

SALORA

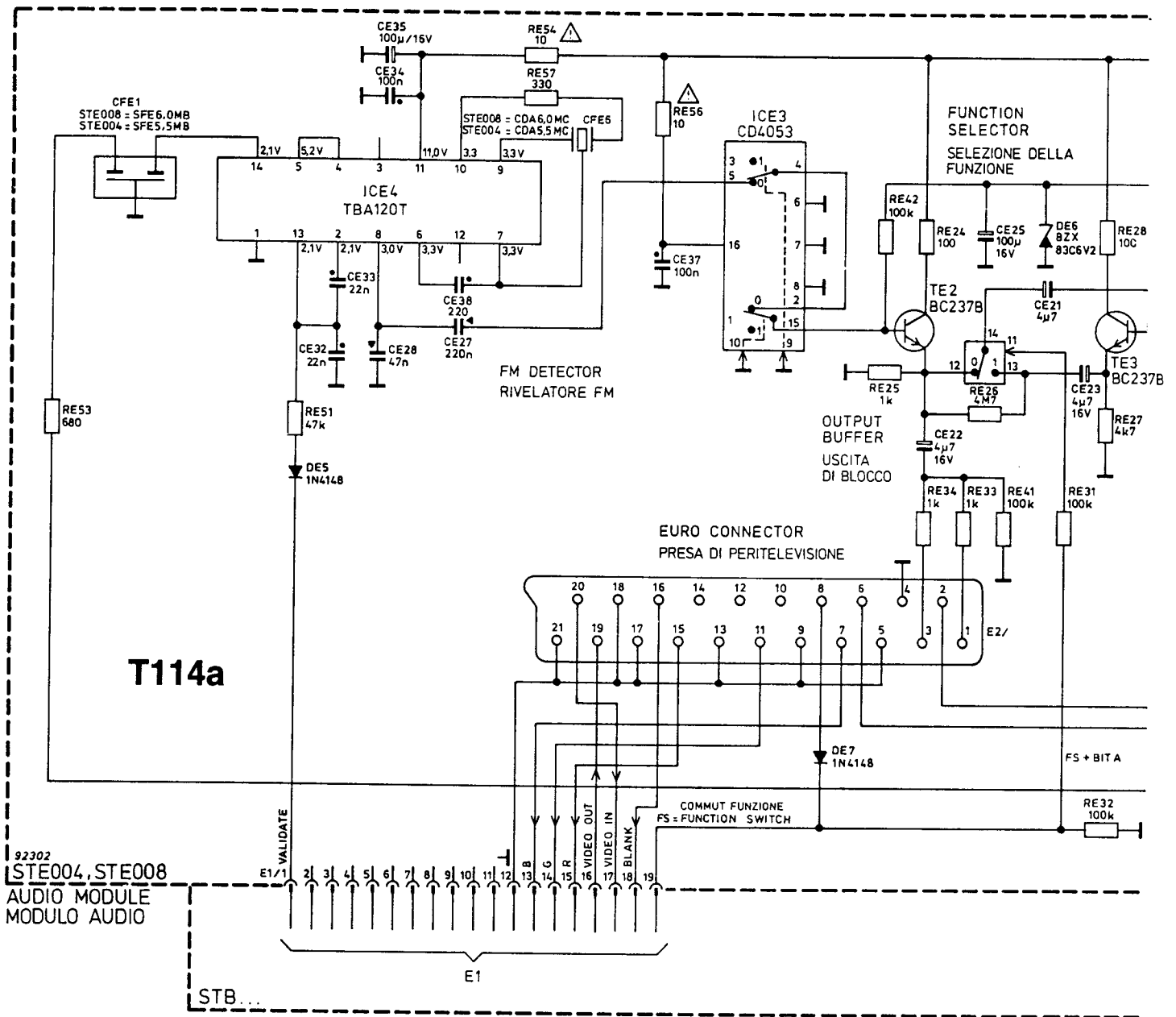


T67



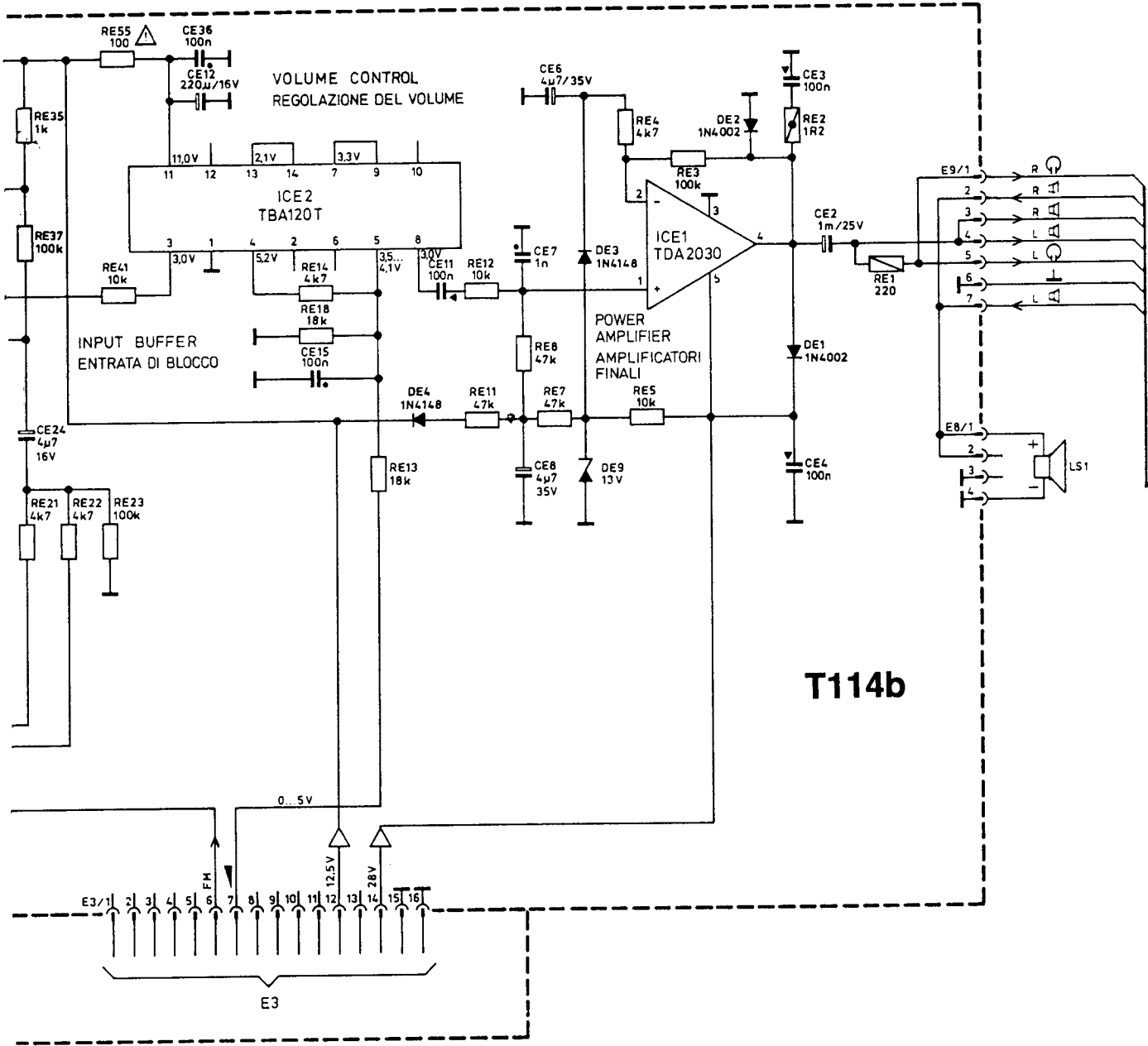
(T67) CIRCUIT WAVEFORMS — 'K' SERIES CHASSIS

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(T114a) CIRCUIT DIAGRAM (AUDIO MODULE) — 'K' SERIES CHASSIS (PART)

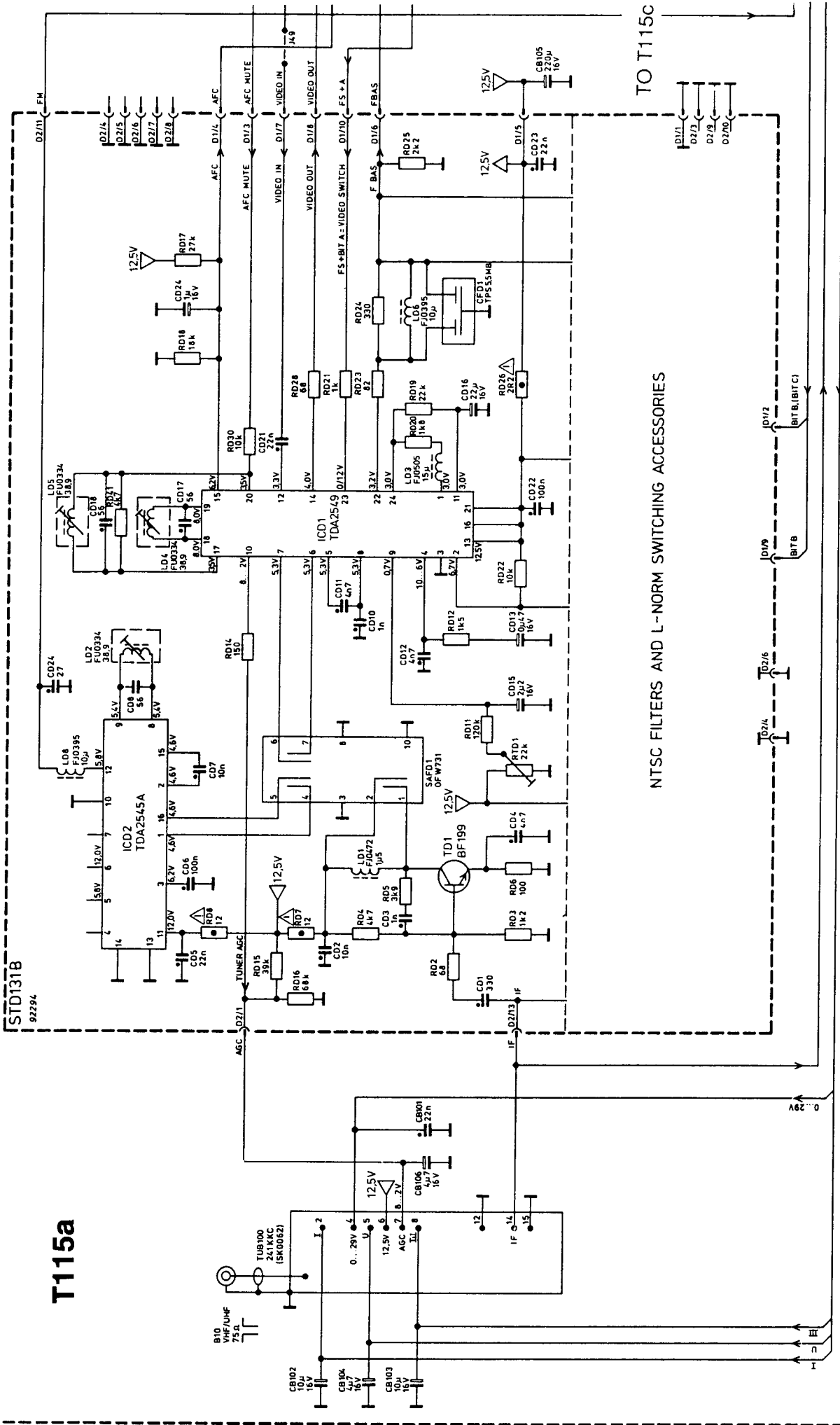
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(T114b) CIRCUIT DIAGRAM (AUDIO MODULE) — 'K' SERIES CHASSIS (CONTINUED)

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VIDEO AND SOUND IF MODULE

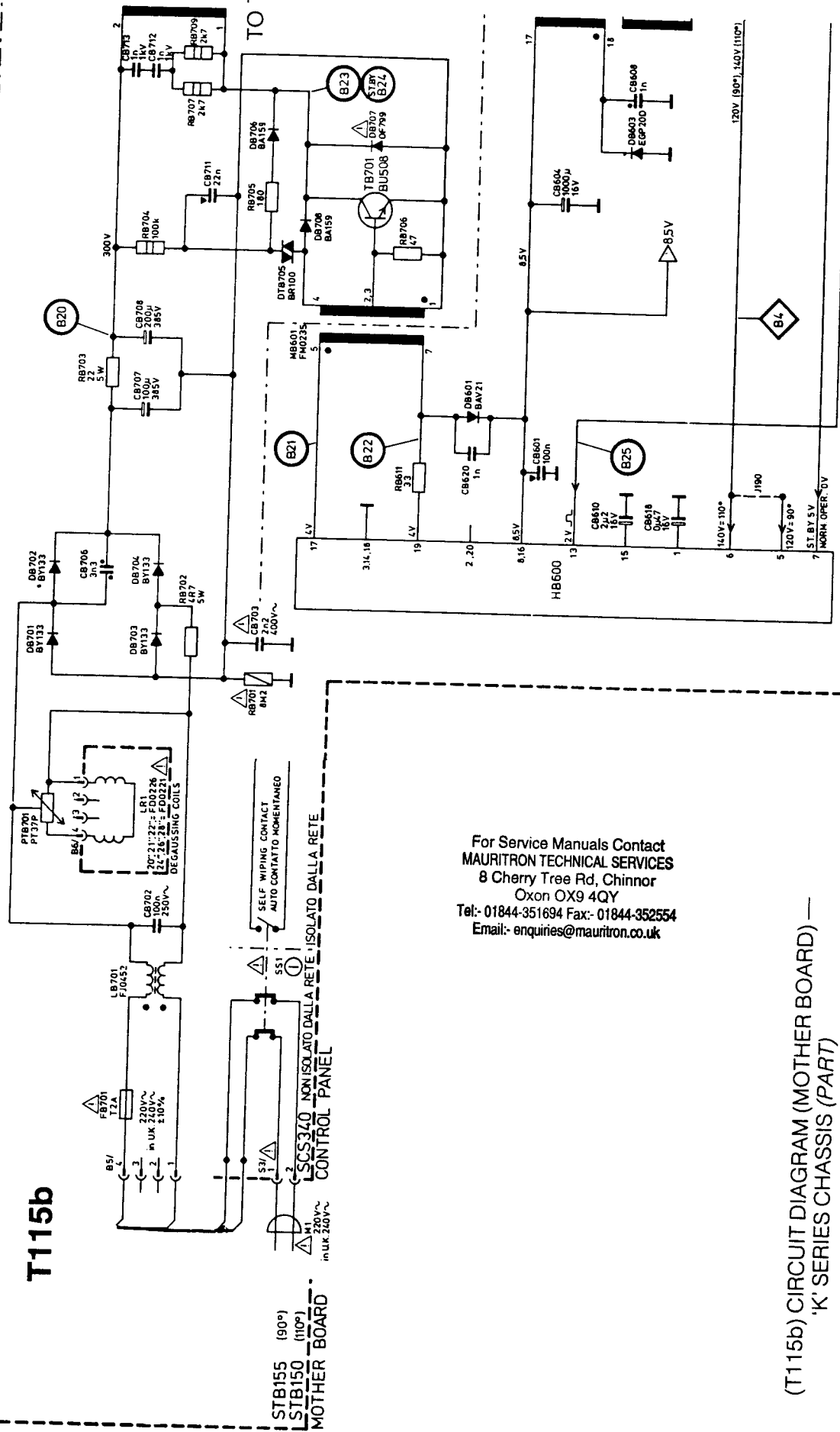


NTSC FILTERS AND L-NORM SWITCHING ACCESSORIES

(T115a) CIRCUIT DIAGRAM (MOTHER BOARD) — 'K' SERIES CHASSIS (PART)

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T115b

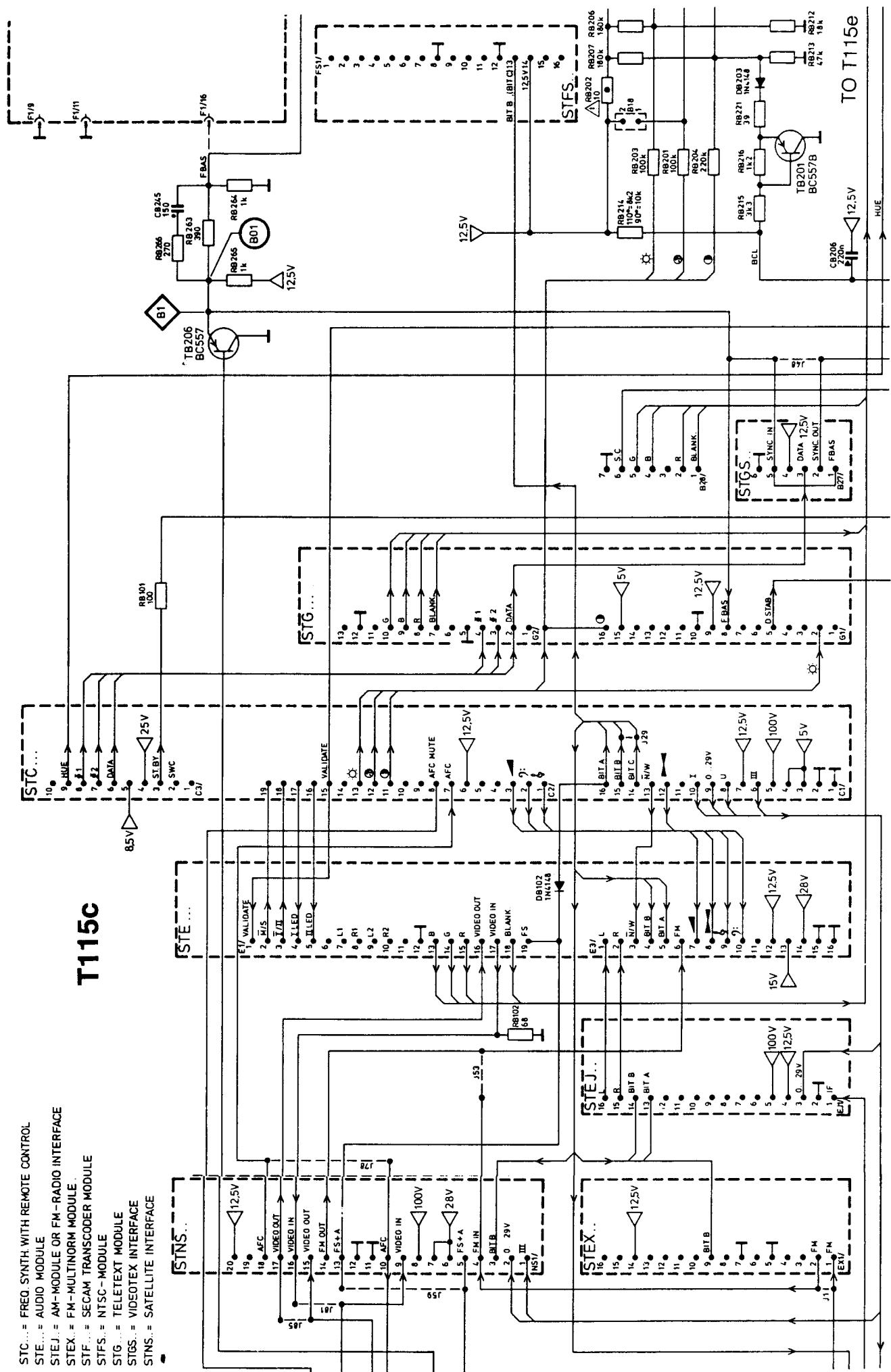


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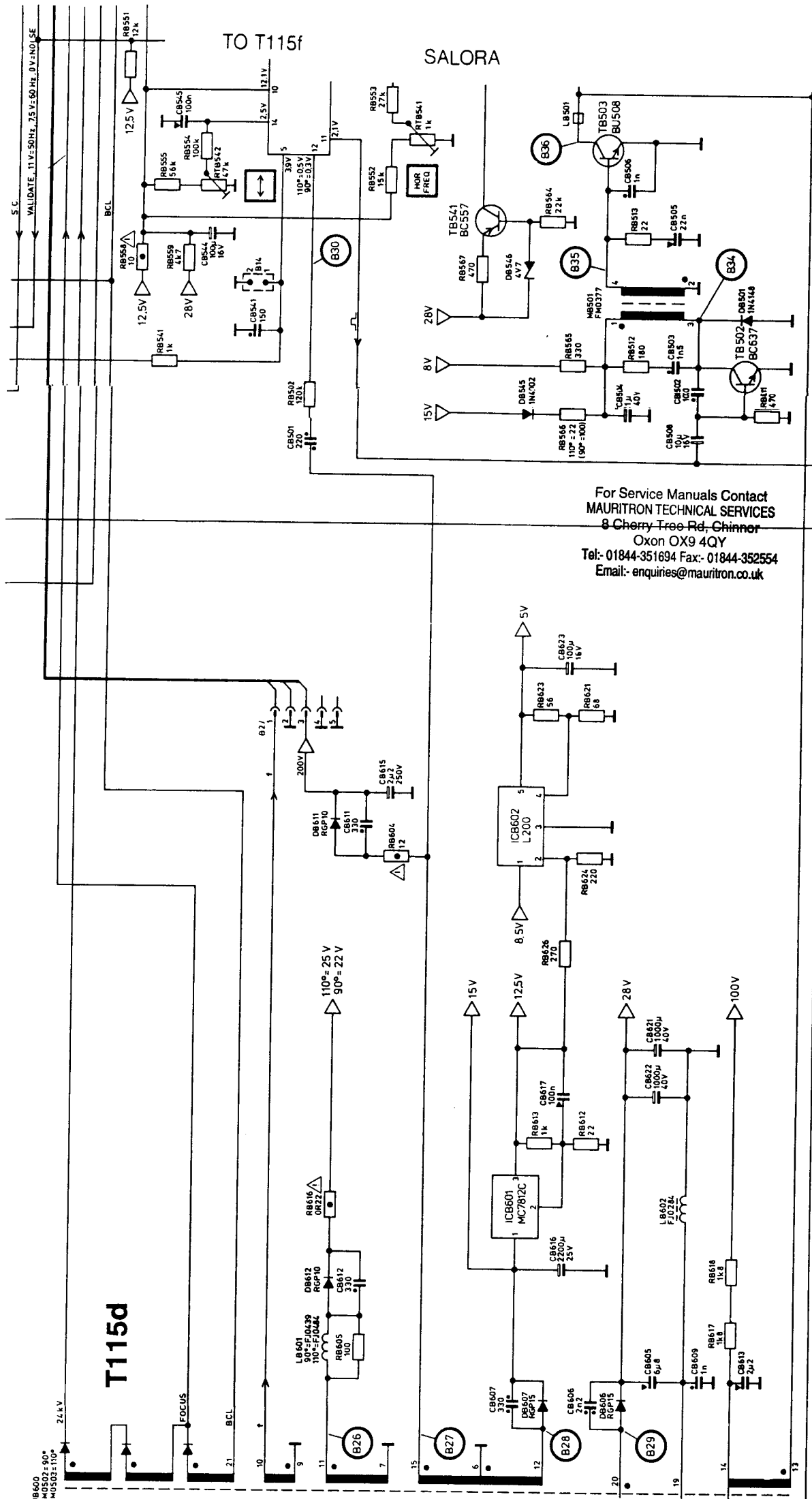
(T115b) CIRCUIT DIAGRAM (MOTHER BOARD) —
'K' SERIES CHASSIS (PART)

- STC... = FREQ. SYNTH. WITH REMOTE CONTROL
- STE... = AUDIO MODULE
- STEJ... = AM-MODULE OR FM-RADIO INTERFACE
- STEX... = FM-MULTINORM MODULE
- STF... = SECAM TRANSCODER MODULE
- STFS... = NTSC-MODULE
- STG... = TELETEXT MODULE
- STGS... = VIDEOTEX INTERFACE
- STNS... = SATELLITE INTERFACE

T115c



(T115c) CIRCUIT DIAGRAM (MOTHER BOARD) — 'K' SERIES CHASSIS (PART)



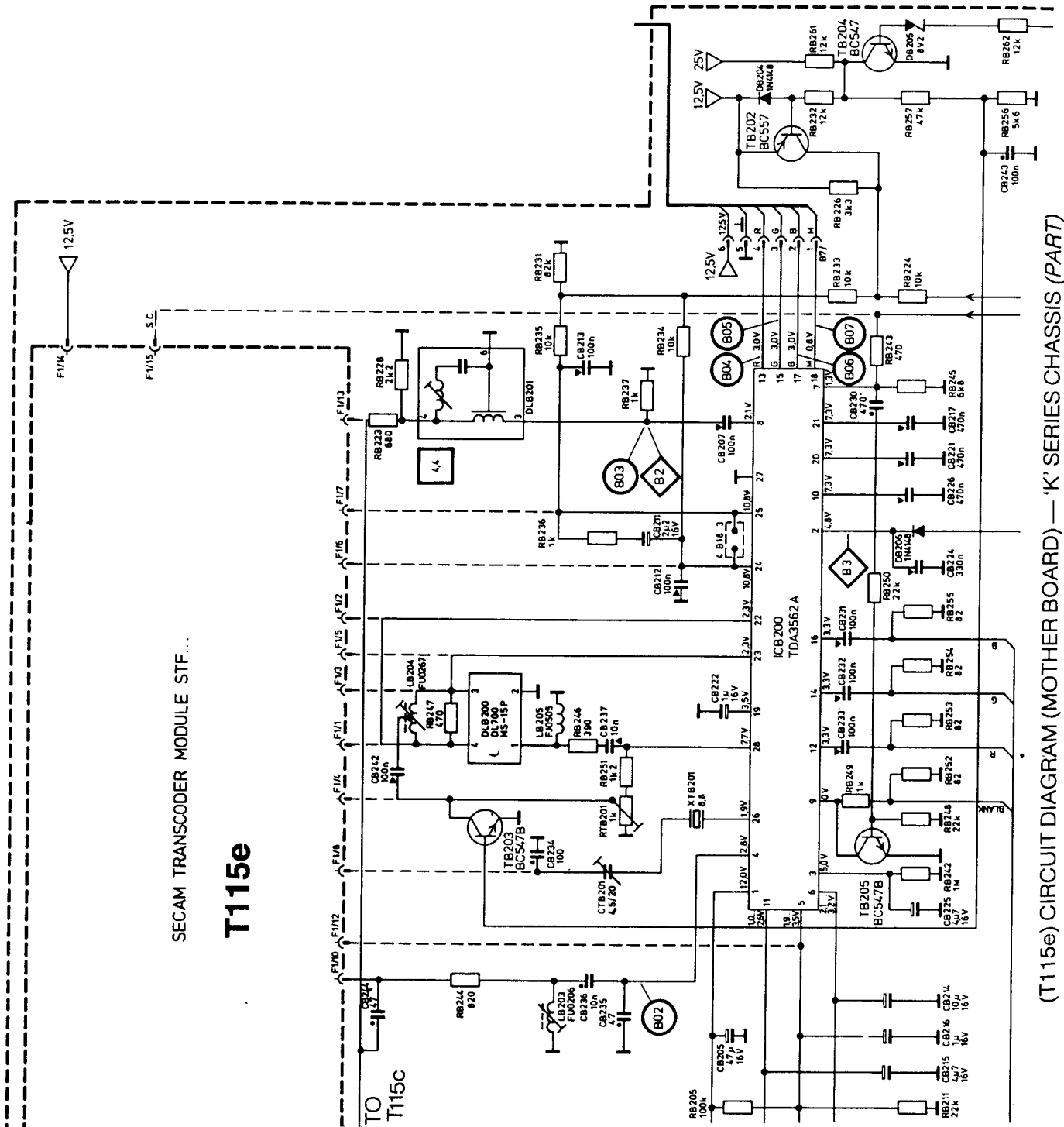
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(T115d) CIRCUIT DIAGRAM (MOTHER BOARD) — 'K' SERIES CHASSIS (PART)

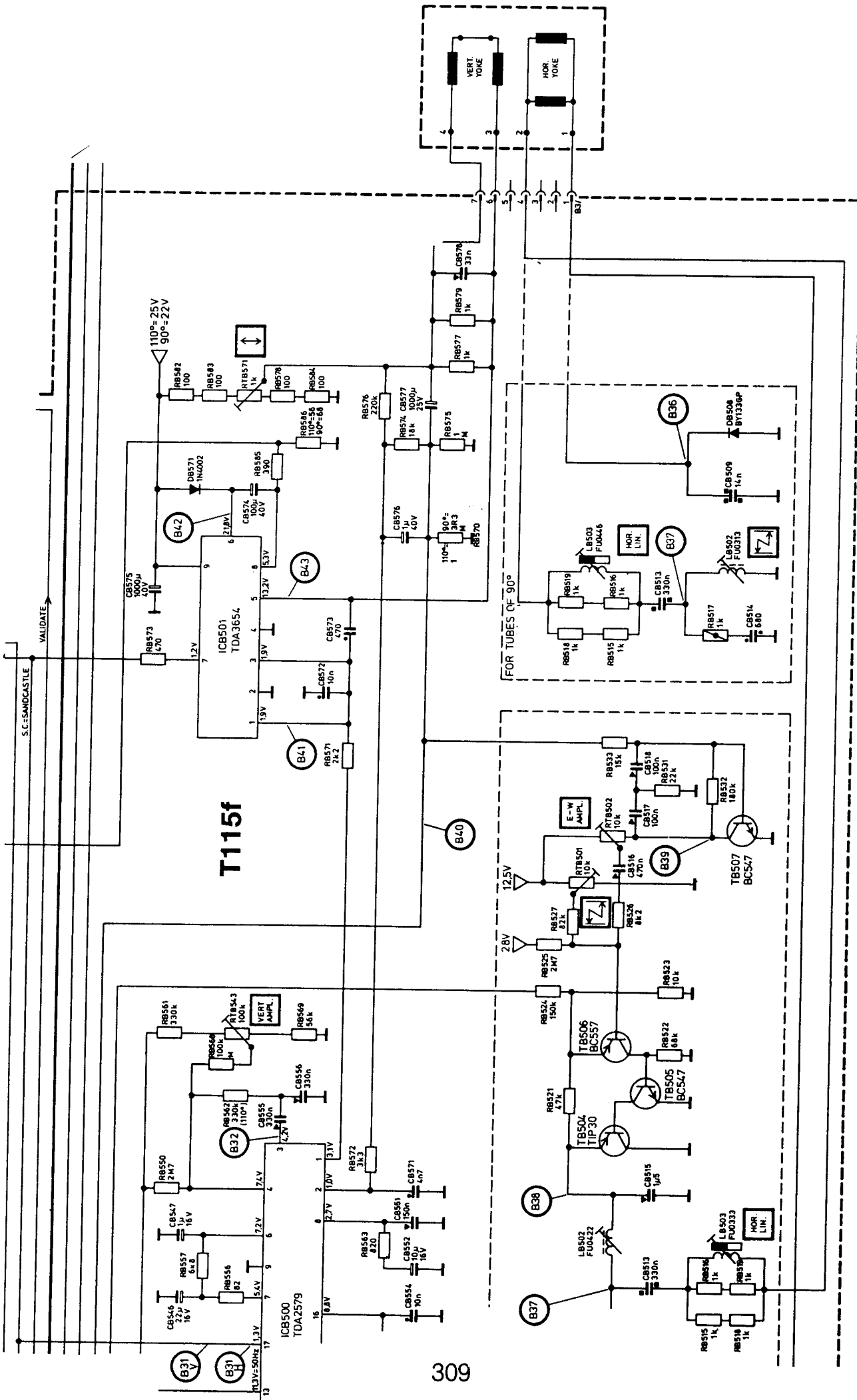
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SECAM TRANSCODER MODULE STF...

T115e

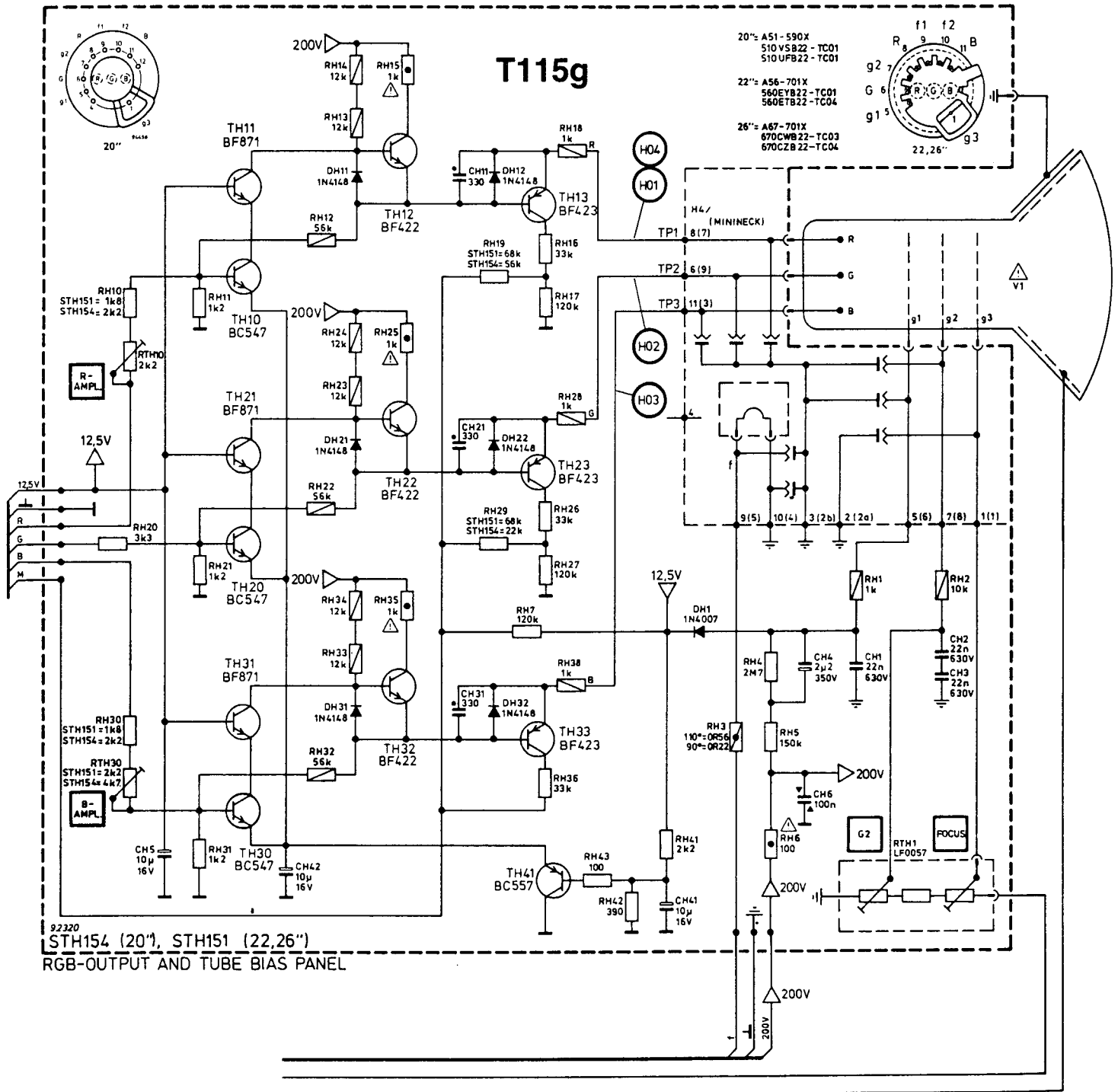


(T115e) CIRCUIT DIAGRAM (MOTHER BOARD) — 'K' SERIES CHASSIS (PART)



(T115f) CIRCUIT DIAGRAM (MOTHER BOARD) — 'K' SERIES CHASSIS (CONTINUED)

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(T115g) CIRCUIT DIAGRAM (C.R.T. BASE) — 'K' SERIES CHASSIS

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