

**STEREO CHASSIS
MONO PLUS**

25

TV

1994

Service manual

Ⓒ
GB

Service-Manual

Ⓒ
D

Serviceanvisning

Ⓒ
S

Manuel de service

Ⓒ
F

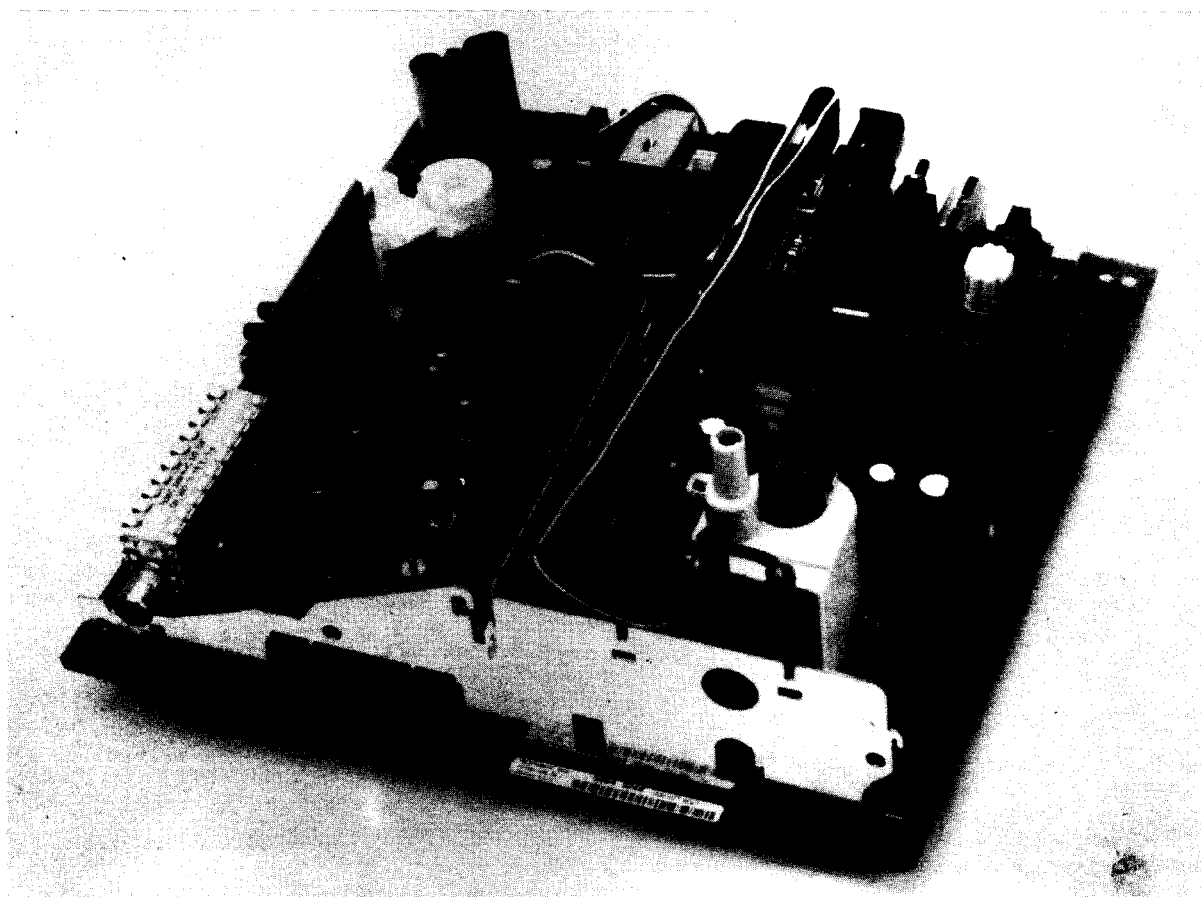
Manuale di servizio

Ⓒ
I

NOKIA

**3755 VT
3755 NICAM
3755 UK**

**5155 VT
5155 NICAM**



NOKIA 
CONNECTING PEOPLE

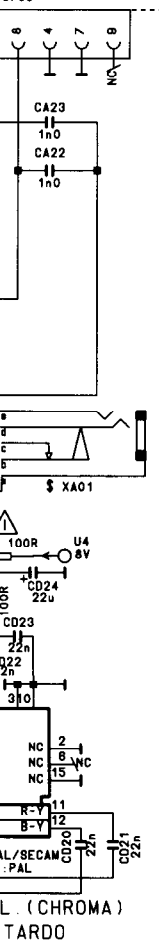
5864 30 02 (BG,PAL,Scart,VT,14°,90°,NN)
5864 30 03 (BG,PAL,Scart,VT,NICAM,14°,90°,NN)
5864 30 22 (BG,PAL,Scart,VT,20°,90°,NN)
5864 30 23 (BG,PAL,Scart,VT,NICAM,20°,90°,NN)
5864 33 43 (I,PAL,Scart,NICAM,14°,90°,NN)



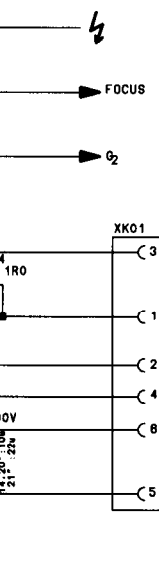
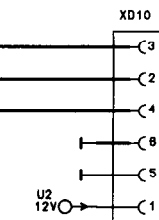
NETZVERBUNDEN/MAINS-CONNECTED/COLEGATO ALLA RETE NETZGETRENNT/MAINS-UNCONNECTED



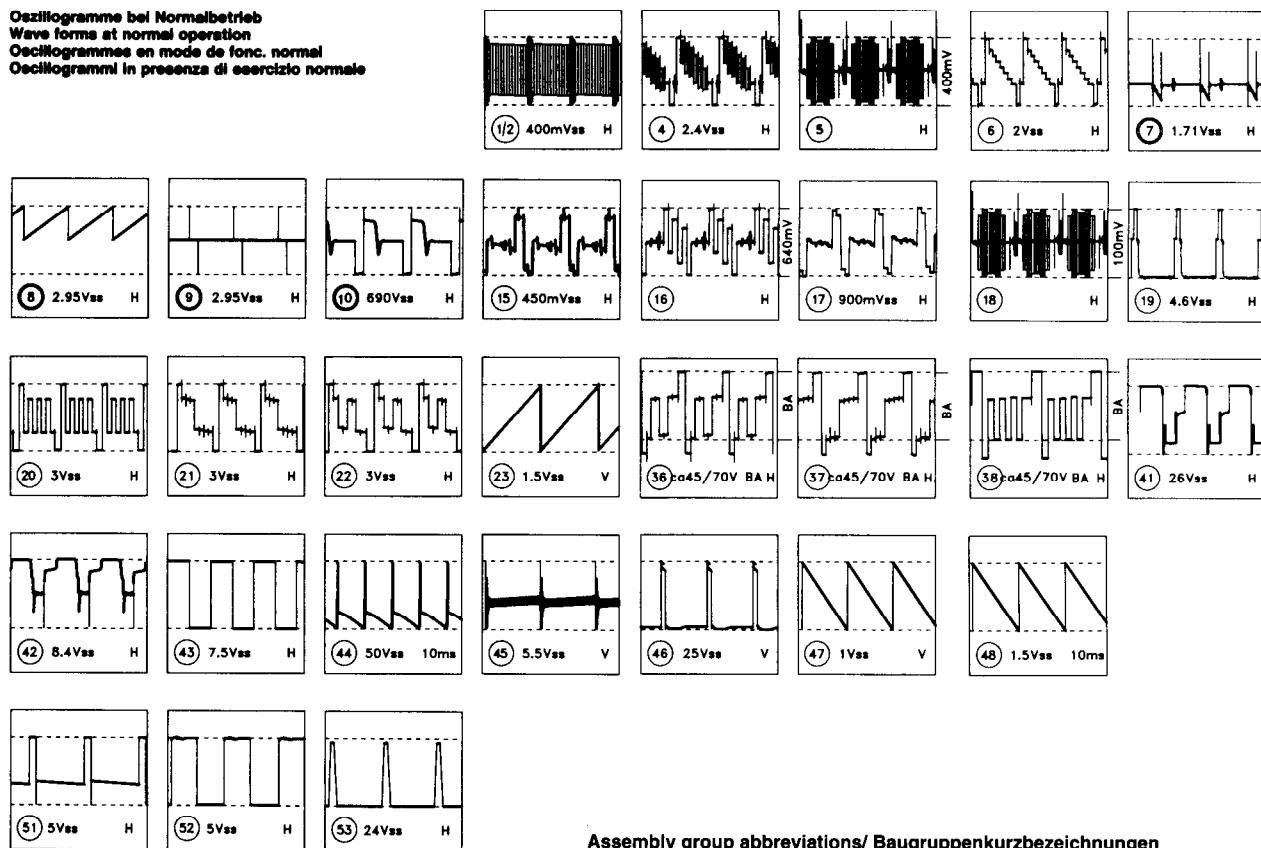
\$ Diese Bauteile können je nach Chassisversion bestückt/ nicht bestückt sein.
Depending on the chassis version, these components can either be fitted or not
Suivant la version du chassis, ces composants sont montés/ pas montés.
La possibilità di montaggio di questi componenti dipende dalla versione dello chassis



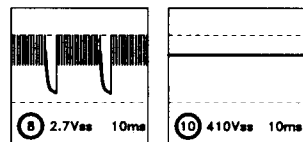
L. (CHROMA)
TARDO



Oscillogramme bei Normalbetrieb
Wave forms at normal operation
Oscillogrammes en mode de fonc. normal
Oscillogrammi in presenza di esercizio normale



Oscillogramme bei Stand-by-Betrieb
Waveforms at stand-by mode
Oscillogrammes pour fonctionnement en stand-by
Oscillogrammi in modo «stand-by»

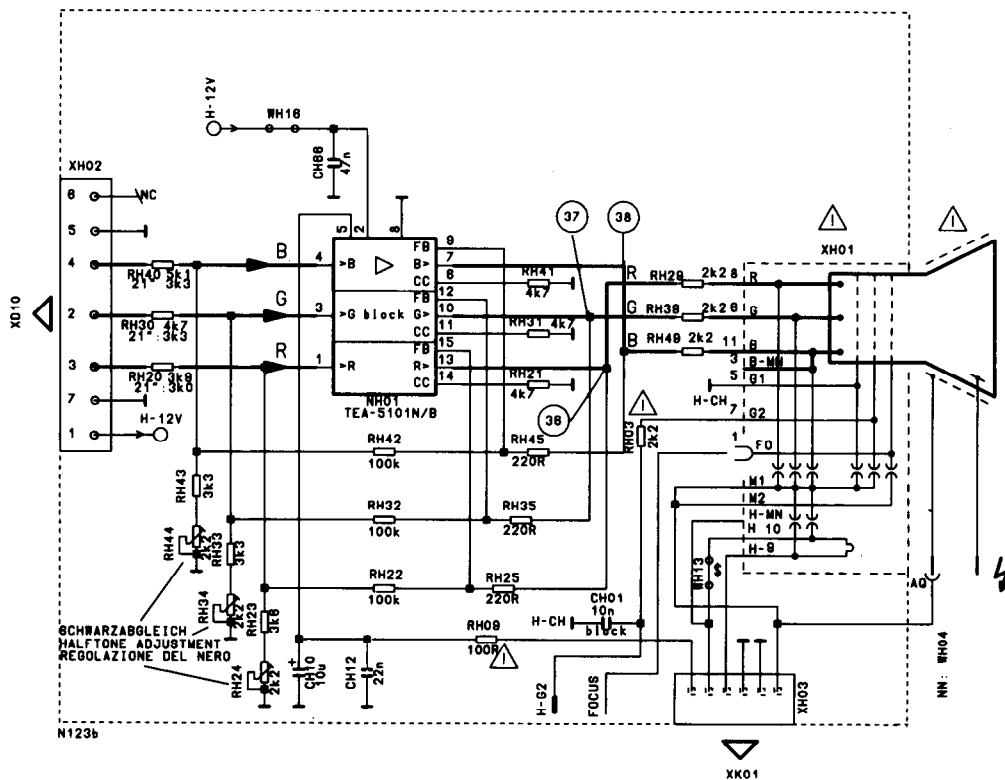


Assembly group abbreviations/ Baugruppenkurzbezeichnungen
Codifica dei moduli/ Désignations abrégées des sous-ensembles
Blockförkortningar

- D = Color decoder/ Decodificatore colore/ Färgdekoder
- K = Deflectione orizzontale/ Hor. deflection/ Horizontal avlänkning
- S = Verticale/ Vertical
- I = AF/ ZF/ HF
- L = IF/ MF/
- F = Control unit/ Unità di comando/ Kontrollenhet
- A = Audio
- O = Power supply/ Schaltnetzteil/ Circuito aliment. rete/ Nätdel
- H = C.R.T. board/ Bildröhrenanschluß/ Colleg. cinescopio/ Bildrörsplattan
- R = Videotext/ Teletext/ Televideo/ Text- TV

C.R.T. base board / Bildröhrenanschlußplatte/ Connexion tube image / Collegamento cinescopio

5858 20 51 (minineck)
5858 20 50 (narrowneck)







Instructions for repair work

N.B.: (cc. switch-mode)

Please use only original component 3422 06 37 for CO06. If standard size electrolyt capacitor CO06 is used, parallel 0,47 μ F MKT must be installed additionally.

1. With the horizontal output stage disconnected (e.g. pin 8 at TK02 open) and a "dummy" load at the cathode of VO31 (e.g. 100 W lamp) the power supply must supply approx. 100% of the setpoint voltage.
2. For fault finding the elect. fuse can be disconnected with a shunt connection across CO07. IF the electronic fuse cuts out due to a momentary overload, the TV set can be re-started by using the mains switch.
3. Make sure there is hum-free d. c. voltage available. For example: the ripple voltage of U1 is approx. 4 V and should, due to capacitance loss of CO33, not increase much more. The ripple voltages of the other d.c. voltages should be less than 1 V. The ripple voltages of U2, U3, U5 are in the mV range.

Service adjustments

Note! Before other adjustments U1 voltage must be adjusted.

Service mode *RCN610* *NOTE - M - TV*

Select the service mode by pressing successively the i, M and PROG buttons on the remote control unit. You can use the yellow button to call up Service Menu 2 or 3 (or Service Menu 1 again).

Use the cursor button ▲ or ▼ to select required adjustment and adjust it by using the cursor buttons ◀ and ▶.

Store into the memory by pressing the red M button.

Return to normal TV mode by pressing the TV button.

Service adjustment which are made in service mode

Adjustment	OSD	Note!
Service menu 1		
U1 operating voltage	U1	See adjustment "U1 voltage"
AGC	AGC	See adjustment "AGC"
Hor.position	H-SHIFT	Adjust centre of the test picture to a centred position.
Service menu 2		
Teletext.hor.position	TXT H-SHIFT	Adjust teletext picture to centre on the screen.
Teletext.character sets	TXT:	WEST/EAST/WEST TURKEY
SCART	SCART	(yes/no)
TV standard	NORM:	Set to appropriate TV standard
Service menu 3		
	NICAM	(on/off)
	LOUDNESS	(off=linear frequency response)
	C4 BIT CHECK	(on)
	CAR.MUTE	(on/off)

Adjustment U1 voltage

1. Set the contrast and brightness to minimum.
2. Connect the test point XF01 (chassis board) to the ground.
3. Select the service mode (see Service mode).
4. Use the cursor button ▲ or ▼ to select U1 adjustment.
5. Adjust the U1 voltage to $109,5 \text{ V} \pm 0,5 \text{ V}$ (14", 17", 20") / $134,5 \text{ V} \pm 0,5 \text{ V}$ (21") with the cursor button ◀ and ▶ at test point XO03.
6. Use the M button to store the value in the memory.
7. Disconnect the test point XF01/ground again.
8. Return to normal TV mode by pressing the TV button.

AGC

1. Connect the test point XF01 to the ground.
2. Feed in a RF signal (70 dBμV) without sound carrier and tuned on a mid range UHF channel via the aerial input.
3. Select the service mode (see Service mode).
4. Use the cursor button ▲ or ▼ to select AGC adjustment.
5. Connect an oscilloscope (bandwidth >50 MHz) to the tuner's IF output, test point XL03 or XL04 and to ground XL02.
6. Use cursor button ◀ or ▶ to adjust to 400 mVpp \pm 50 mV with reference to the signal's synchronizing peaks.
7. Use the M button to store the value in the memory.
8. Disconnect the test point XF01/ground again.
9. Return to normal TV mode by pressing the TV button.

Other service adjustments

Horizontal amplitude

Adjust horizontal amplitude with the coil LK12 (only 14" minineck and 21" picture tubes).

Vertical amplitude

Adjust vertical amplitude by severing the resistor RS20.

Vertical position

Adjust vertical position by severing the resistor RS24 and/or RS14.

Focus

Use the focus adjuster TK02 (at the horizontal transformer) to set the focus to optimum sharpness.

G2- and colour temperature

1. Turn the potentiometers RH24, RH34 and RH44 (CRT module) to anticlockwise stop.
2. Switch the TV set to AV, or select a black test picture.
3. Connect an oscilloscope at the green input of the CRT module (XH02/2).
4. Select the brightness adjustment and adjust the black value to 1,7 V DC.
5. Short-circuit the test points XS03/XS04 (vert. deflection).
6. Turn the UG2 adjuster (at the horizontal transformer) until a colour just appears as a bar.
7. Turn the potentiometer RH24, RH34 or RH44 until the bar just appears in white. At least one of the adjusters should remain at its anticlockwise stop.
8. Disconnect the test points XS03/XS04.

AFC

1. Feed in a symmetrical IF signal by means of 4:1 transmitter at test points XL03/XL04 (the BG/DK standard 38.9 MHz or the I standard 39.5 MHz; approx. 0.8 Vpp).
2. At test point XL01 (XL02 = ground), set to 3.5 V DC \leq 0.5 V with the coil ZL01 (AFC reference).

AFC check

Retune the IF signal to approx. 39 MHz (39.7 MHz); when you do this, the voltage must drop to approx. 1 V.

Sound

The BG or I standards are independent of the STANDARD setting. With the BG/DK standard: STANDARD 2 = DK and STANDARD 3 = BG.

To select the STANDARD, proceed as follows:

1. Press the PROG button (under the lid).
2. Activate the STANDARD setting with the cursor button ▲ or ▼.
3. Use the cursor button ◀ or ▶ to switch to STANDARD 3 or 2.
4. Use the M button to store the setting in the memory.
5. Return to normal TV mode by pressing the TV button.

Audio IF calibration

1. Feed in a test picture
2. Connect an oscilloscope at Pin 12 of TDA2545A (Stereo module).
3. Use coil ZA61 to adjust for minimum picture content.

Teletext decoder 5854 40 37

Adjust IC NR02 to 2,5 V \pm 0,1 V with the coil LR1 at Pin 28.

