

General Information

1994

Also Covers:

Toshiba 1440 RB

Chassis: C4E

CRT: A34EAC01X65 (14")

Remote Control:

1440 TB - 23120324 (CT 9689)

1440 RB - 23120954 (CT 9736)

Main Power Button:

23443832

Specifications

Input Power Rating 56 W, AC240V, 50Hz
Aerial Input Impedance 75 ohm unbalanced
type for UHF

Receiving Channels
PAL-I Standard UHF 21 - 69
Intermediate Frequencies:
Picture IF 39.5 MHz
Sound IF 33.5 MHz
Colour Sub-Carrier 35.07 MHz
Picture Tube 90 degree deflection
Sound Output 1.5W (at 10% harmonic
distortion) x 1
Speakers 77mm round 1pc
Aux Terminals Earphone Jack, 21 pin socket
(FULL), A/V Input socket

Recommended Safety Parts

Item	Part No.	Description
C440	24082347	PF, 6700pF, $\pm 3\%$, 1500V
C463	24212222	CD, 2200pF, $\pm 10\%$
C801	24082363	PF, 0.22 μ F, m20%, AC250V
C802, C803	24094656	CD, 2200pF, $\pm 20\%$, AC400V
F801	23144898	Fuse, 3.15A
F803	23144876	Fuse, 0.5A
IC835	23318299	IC, L78MR05
L462		DY, Supplied with V901
L901	23200691	Coil, Degaussing, TSB-2229AT
P801	23176934	Power Cord
Q404	A6871242	Transistor, 2SD1554
Q801	23314146	IC(STR), STR58041
Q826	A8643108	IC, Photo Coupler, TLP621(GR-LF)
R327	24339569	OMF, 5.6 ohm, 2W
R444	24338398	OMF, 0.39 ohm, 1W
R448	24338338	OMF, 0.33 ohm, 1W
R801	24009954	Metal-Glazed Resistor, 2.2M ohm, 1/2W
R844	24005007	Metal-Glazed Resistor, 8.2M ohm, 1W
R890	24000918	PTC Thermistor, 18 ohm, $\pm 20\%$, 290V
R920	24000884	FR, 3 ohm, 1W
S801	23145434	Switch, Power, 2C2P
T401	23224983	Transformer, Horiz. Drive, TLN 1039
T461	23236465	Transformer, Flyback, TTFB4124AP
T801	23211929	Line Filter, TRF3130
T803	23217240	Transformer, Converter, TPW3301AR
V901	23312582	Picture Tube, A34EAC01X65
V901A	23902021	Socket, CRT, 8P

Combination Use of Parts

IMPORTANT:

In servicing, always keep the combination use of parts tabled below.

Combination use by difference of Picture Tube.

R1			R2	
Loc No.	Part No.	Description	Part No.	Description
V901	23312582	A34EAC01X65 (Philips)	23312576	A34JLL90X50
C440	24082347	PF, 6700pF, 1500V	24082348	PF, 6800pF, 1500V
R302	24366474	CF, 470k ohm	24366564	CF, 560k ohm
R321	24366133	CF, 13k ohm	24366203	CF, 20k ohm
R332	24366104	CF, 100k ohm	24366114	CF, 110k ohm
R325	24366183	CF, 18k ohm	24366113	CF, 11k ohm
R564	24366621	CF, 620 ohm	24366561	CF, 560 ohm
R565	24366471	CF, 470 ohm	24366471	CF, 470 ohm

Service Adjustments

Safety Instructions

X-Ray Radiation Precaution

- The E.H.T. must be checked every time the receiver is serviced to ensure that the C.R.T. does not emit X-Ray radiation as result of excessive E.H.T. voltage. The nominal E.H.T. for this

receiver is 24.0 kV at zero beam current (minimum brightness) operating at 240v a.c. The maximum E.H.T. voltage permissible in any operating circumstances must not exceed 26.0 kV. When checking the E.H.T. use the 'High Voltage Check' procedure in this manual using an accurate E.H.T. voltmeter.

- The only source of X-Ray radiation in this receiver is the C.R.T. To prevent X-Ray radiation, the replacement C.R.T. must be identical to the original fitted as specified in the Parts List.
- Some components used in this receiver have safety related characteristics preventing the C.R.T. from emitting X-Ray radiation.

Installation and Service Adjustments

Horizontal Centre Adjustment

- Receive the WG PHILIPS pattern.
- Set the contrast and colour to minimum and the brightness to centre.
- Adjust H. CENTRE SUB control (R451) so the pattern can be located for d-c to be +4.0 mm, as shown in Fig 1.

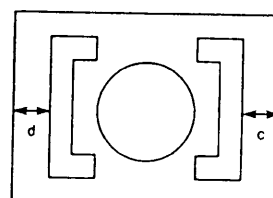


Fig 1.

Focus Adjustment

Adjust FOCUS Control on FLYBACK TRANS. (T461) for well defined

Replacement Parts List Differences

1440 RB is the same as 1440 TB except for the following parts. 1140 RB is not equipped with Teletext circuit, and the related parts are changed as well. Components on Text Board are omitted in the following list, because they are obvious.

1440TB (Base Model)			1440RB	
Loc No.	Part No.	Description	Part No.	Description
U903	23702783	Text Board, PB4499	-	Not in use
U902A	23702833	Main Board, PB4506-1	23702991	Main Board, PB4657-1
U902B	23702834	CRT Drive Board, PB 4506-2	23702992	CRT Drive Board, PB 4657-2
R803	24366824	CF, 820k ohm	24366394	CF, 390k ohm
R860	24366681	CF, 680 ohm	-	Not in use
R864	24382560	OMF, 56ohm, 1W	-	Not in use
RAra61	24366301	CF, 300 ohm	-	Not in use
RA62	24366301	CF, 300 ohm	-	Not in use
RA80	24366682	CF, 6800 ohm	-	Not in use
RA82	24366682	CF, 6800 ohm	-	Not in use
RA94	24366101	CF, 100 ohm	-	Not in use
RA95	24366101	CF, 100 ohm	-	Not in use
RX08	24366391	CF, 390 ohm	-	Not in use
RX09	24366391	CF, 390 ohm	-	Not in use
RX10	24366391	CF, 390 ohm	-	Not in use
RX11	24366330	CF, 33 ohm	-	Not in use
RX12	24366330	CF, 33 ohm	-	Not in use
RX13	24366330	CF, 33 ohm	-	Not in use
LV01	23238714	Coil, peaking, TRF4100AJ	-	Not in use
D860	23316311	Diode, Zener, UZ6.2BSA	-	Not in use
D861	23316309	Diode, Zener, UZ5.6BSB	23316306	Diode, Zener, UZ5.1BSB
DA04	23316312	Diode, Zener, UZ6.2BSB	-	Not in use
DA05	23316312	Diode, Zener, UZ6.2BSB	-	Not in use
DX01	23115599	Diode, 1N4148	-	Not in use
DX03	23115599	Diode, 1N4148	-	Not in use
DX04	23115599	Diode, 1N4148	-	Not in use
Q861	A6333346	Transistor, 2SC2655-y(C)	-	Not in use
QV10	23314794	Transistor, 2PC1815Y	-	Not in use
QV11	23314794	Transistor, 2PC1815Y	-	Not in use
QV12	23314794	Transistor, 2PC1815Y	-	Not in use
K902	23120324	Remote Hand Unit, CT-9689	23120954	Remote Hand Unit, Ct-9736
A201	23410259	Front Cover	23410303	Front Cover
A411	23568955	Label, Model No, B/C	23569009	Label, Model No, B/C

scanning lines in the centre area on the screen.

Delayed R-F AGC Adjustment

- Tune the set in the strongest station in your area.
- Turn AGC DELAY Control (R151) on PIF Board to fully counterclockwise position.
- Adjust AGC DELAY Control clockwise

until noise (snow) disappears on the screen.

C.R.T. Grey Scale Adjustment

- Press VIDEO INPUT button on Remote Control unit to turn TV to video input mode. Next press PICTURE SELECT button to select function and set CONTRAST to minimum, BRIGHTNESS to maximum

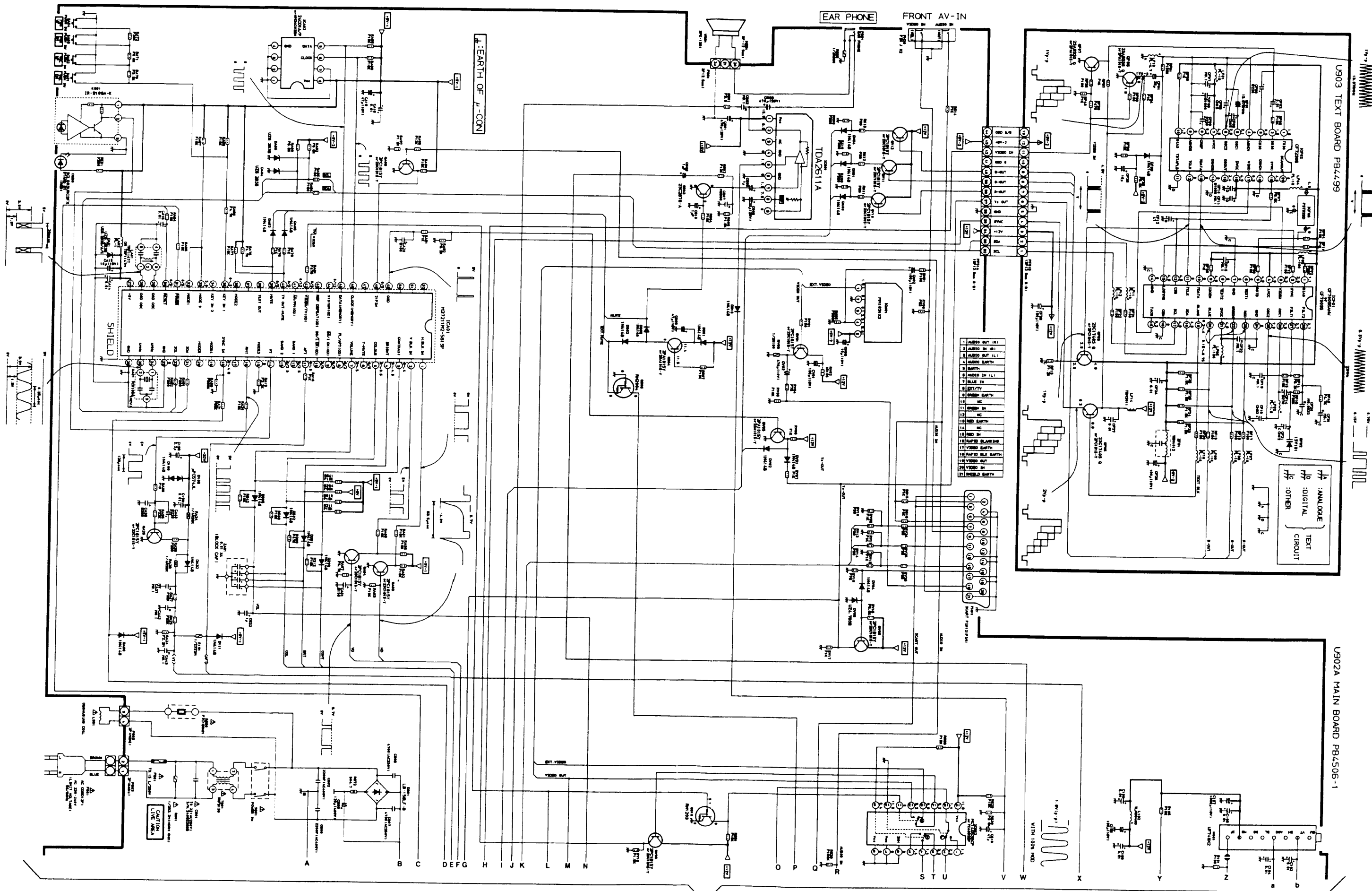
and COLOUR to minimum.

- Turn the SCREEN Control (on T461) fully counterclockwise.
- Set the RED, GREEN and BLUE CUT OFF Controls (R557, R558, R559) counterclockwise in the centre position.
- Set the CUT OFF SW. (S202) in the H. line position.
- Set the SUB BRIGHTNESS Control to minimum.
- Rotate the SCREEN Control gradually clockwise until the first horizontal line of a colour (RED, GREEN or BLUE) appears slightly on the screen. Set the SCREEN Control to this position.
- Adjust the CUT OFF Controls to obtain the slightly lighted horizontal lines in the same levels of three colours (RED, GREEN and BLUE)
- Return the CUT OFF SW (S202) in the receiving position.
- Set the BRIGHTNESS Control to the maximum and COLOUR Control to the centre.
- Set the BRIGHTNESS and CONTRAST Controls to obtain dark grey raster. Then check the white balance in low brightness. If the white balance is not proper, retouch the CUT OFF Controls to obtain a good white balance in both low and high light areas.

Sub-Brightness Adjustment

- Tune in a colour programme of Phillips pattern.
- Set the CONTRAST Control to the minimum and the BRIGHTNESS Control to the centre.
- Set the COLOUR Control to the minimum.
- Set the SUB-BRIGHT. Control (R551) so that the voltage across terminals Y-Z can be 0.2 ± 0.05 v with voltmeter and leave the receiver for five minutes in this state.
- Watching the picture well, adjust the SUB-BRIGHT. Control in the position where the picture does not show evidence of blooming in high bright area and not appear too dark in low bright portion.
- Check the proper picture variation by rotating the CONTRAST and BRIGHTNESS Controls to both extremes.
- If the picture does not appear dark with the CONTRAST and BRIGHTNESS Controls turned to the minimum, or not appear bright with the controls turned to the maximum, adjust the SUB-BRIGHT. Control again for an acceptable picture.

Main Diagram



Main
Diagram
Cont'd.