TOSHIBA

Toshiba 32A32 Service Manual

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- 5 Circuit Block Diagram

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FILE NO. 020-200201

SERVICE TO SHABA COLOR TELEVISION

N2ES Chassis

32A6\$AIBA

(TAC0245)
PUBLISHED IN JAPAN, Apr. 2002 So

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Related Manuals for Toshiba 32A32

CRT TV Toshiba 32A32 Owner's Manual

Colorstream color television (36 pages)

TV Toshiba 32A32 Owner's Manual

Colorstream color television (35 pages)

Color television Toshiba 30HFX84 Service Manual

(50 pages)

Color television Toshiba MV13P2 Service Manual

Color television/ video cassette recorder (65 pages)

Summary of Contents for Toshiba 32A32

<u>Page 1</u> FILE NO. 020-200201 SERVICE MANUAL COLOR TELEVISION N2ES Chassis 32A32 (TAC0245) PUBLISHED IN JAPAN, Apr. 2002 So...

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Page 3: Chapter 1 General Adjustments

CHAPTER 1 GENERAL ADJUSTMENTS SAFETY INSTRUCTIONS WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAU-TION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW. X-RAY RADIATION PRECAUTION 1. Excessive high voltage can produce potentially hazardous 2. This receiver is equipped with a Fail Safe (FS) circuit which X-RAY RADIATION.

Page 4: Set-Up Adjustment

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAU- TION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL. SET-UP ADJUSTMENT (FOR 13", 14", 19", 20") The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows: 1.

<u>Page 5</u> CONVERGENCE ADJUSTMENTS CIRCUMFERENCE CONVERGENCE ADJUSTMENT NOTE: Before attempting any convergence adjustments, the 1. Loosen the clamping screw of deflection yoke slightly to receiver should be operated for at least fifteen min- allow the yoke to tilt. utes. 2. Temporarily put a wedge as shown in figure 1. (Do not remove cover paper on adhesive part of the wedge.) CENTER CONVERGENCE ADJUSTMENT 3.

Page 6 WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAU-TION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL. (FOR 35", 36") The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows: 1.

<u>Page 7</u> CONVERGENCE ADJUSTMENTS 4-POLE NOTE: Before attempting any convergence adjustments, MAGNETS the receiver should be operated for at least fifteen 6-POLE minutes. MAGNETS CENTER CONVERGENCE ADJUSTMENT 1. Display built-in cross-dot pattern using the TEST SIG- NAL SELECTION function. 2. Adjust the BRIGHTNESS and CONTRAST Controls for well defined pattern.

Page 8: Service Mode

SERVICE MODE 1. ENTERING TO SERVICE MODE 1) Press MUTE button once 2) Press MUTE button 3) While pressing the MUTE button, on Remote Control. again to keep pressing. press MENU button on TV set. MUTE (Service mode display) 2. DISPLAYING THE ADJUSTMENT MENU 1) Press MENU button on TV.

<u>Page 9</u> 4. SELECTING THE ADJUSTING ITEMS 1) Every pressing of CHANNEL s button in the service mode changes the adjustment items in the order of table-2. (t button for reverse order) Refer to table-2 for preset data of adjustment mode. (See SETTING & ADJUSTING DATA on page 16) 5.

<u>Page 10</u> 8. SELF DIAGNOSTIC FUNCTION 1) Press "9" button on Remote Control during display of adjustment menu in the service mode. The diagnosis will begin to check if interface among IC's are executed properly. 2) During diagnosis, the following displays are shown. SELF CHECK NO.

Page 11: Design Mode

DESIGN MODE 1. ENTERING TO DESIGN MODE 1) Select the Service mode. 2) While pressing RECALL button on 3) Press MENU button on TV. Remote and press MENU button on TV. ITEM Press DATA Press (Design mode) (Adjustment mode) When QA02 is initialized, items "OPT0" and "OPT1" of DESIGN MODE are set to the data of the representative model of this chassis family.

Page 12: Electrical Adjustment

ELECTRICAL ADJUSTMENT ITEM ADJUSTMENT PROCEDURE FOCUS VR ADJ 1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern ap- pears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.

<u>Page 13</u> ITEM ADJUSTMENT PROCEDURE E-W PARABOLA 1. Call up the adjustment mode display, then select the item DPC. (DPC) 2. Press the TV/VIDEO button on Remote until the cross-hatch pattern appears on the screen. 3. Press the VOLUME s or t button to make vertical lines straight as shown below.

Page 14 MTS ADJUSTMENT (FOR N2N, N2F, N2ES CHASSIS) ITEM INPUT SIGNAL ADJUSTMENT PROCEDURE • 1kHz 30% mod. → ANT ATTENUATOR 1. Connect rms meter to pin 34 of QG01. (ATT) terminal 2. Display item ATT on screen. 3. Change data by VOLUME s/t buttons so that the reading of meter becomes value as close as 137mVrms.

Page 15: Circuit Checks

CIRCUIT CHECKS HIGH VOLTAGE CHECK Troubleshooting Guide for Fail Safe Circuit CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps Check that the set returns to normal operation when pin 12 below. of Z801(or emitter of Q472) is grounded with jumper wire.

Page 16: Chapter 2 Specific Informations

CHAPTER 2 SPECIFIC INFORMATIONS SETTING & ADJUSTING DATA SAFETY INSTRUCTIONS 32" HIGH VOLTAGE AT ZERO BEAM: 31.2kV MAX HIGH VOLTAGE: 32.6kV Table-1 SERVICE MODE ADJUSTING ITEMS AND DATAS IN THE SERVICE MODE: Item Name of adjustment Preset Item Name of adjustment Preset Data Data...

Page 17: Location Of Controls

LOCATION OF CONTROLS Front Control Back Term. TV/VIDEO VOLUME T/S CHANNEL s/t COLOR VIDEO VIDEO VIDEO STREAM INPUT (POWER IND) MENU TV/VIDEO VOLUME CHANNEL (RED) POWER MONO MONO S-VIDEO AUDIO AUDIO AUDIO POWER VIDEO-1 VIDEO-2 Remote sensor MENU POWER indicator Remote Control MUTE POWER...

Page 18: Programming Channel Memory

PROGRAMMING CHANNEL MEMORY The channel memory is the list of TV channel numbers your TV will stop on when you press the CHANNEL s or t button. First, use the TV/CABLE and CH PROGRAM functions to preset all active channels in your area. If necessary, arrange the preset channels with the ADD/ERASE functions so that you can tune into only desired channels.

Page 19: Chassis And Cabinet Replacement Parts List

• The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description. • The PC board assembly with mark is no longer available after the end of the production. Model: 32A32 Capacitors CD Ceramic Disk: Plastic Film: Electrolytic Resistors

<u>Page 20</u> Location Parts No. Parts No. Parts No. Parts No. Description D

Page 21 Location Parts No. Parts No. Parts No. Parts No. Description Des

Page 22 Location Parts No. Parts No. Parts No. Parts No. Description Des

Page 23 Location Parts No. Parts No. Parts No. Parts No. Description Descri

<u>Page 24</u> Location Parts No. Parts No. Parts No. Parts No. Description D

Page 25 Parts No. Parts No. Parts No. Parts No. Description Description Description Description Description MISCELLANEOUS PC BOARD ASSEMBLIES B110 23929683 BACK TERMINAL BOARD, 32A32 U901 23787442 CRT-D BOARD, PD0629A B205 23974994 BAND, KESSOKU U902 23787441 MAIN BOARD, PD0628A B230 23035312 SCREW, BTB3X12SZN...

Page 26 THIS PAGE IS INTENTIONALLY LEFT BLANK. - 26 -...

Page 27: Pc Boards Bottom View

MAIN BOARD PD0628 BOTTOM (FOIL) SIDE - 27 - - 28 -...

Page 28 CRT / DRIVE BOARD PD0629 BOTTOM (FOIL) SIDE - 29 -...

Page 29: Terminal View Of Transistors

TERMINAL VIEW OF TRANSISTORS 2SD2253 2SC3852 2SC752GTM 2SC752 2SA1788 (old) 2SD1763A 2SA562TM 2SC2482 2SC5243 2SC1569 2SA1015 2SC2655 2SC4544 2SC4721P 2SC1815 2SA1788 2SC2878 2SA1306 2SC1740S 2SA1186A 2SC2120 2SA9335 2SD1554 ON4409 RN2203 RN2201 2SD2253 RN2004 2SD1556 RN1203 2SC5143 RN1204 2SD2553 RN2204 RN1205 RN1202 RN1201 -...

Page 30 SCHEMATIC DIAGRAM MODEL: 32A32 Chassis No. TAC0245 WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL. CAUTION: The international hazard symbols "*" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list.

Page 31 - 32 -...

Page 32: Circuit Block Diagram

SPECIFICATIONS TELEVISION SYSTEM NTSC standard CHANNEL COVERAGE VHF: 2 through 13 UHF: 14 through 69 Cable TV: mid band (A-8 through A-1, A through I) super band (J through W)

hyper band (AA through ZZ, AAA, BBB) ultra band (65 through 94, 100 through 125) POWER SOURCE 120V AC, 60Hz, 94W AUDIO POWER...

 $\underline{\underline{\mathsf{Page 33}}}_{\mathsf{JAPAN}...} \mathsf{TOSHIBA} \ \mathsf{CORPORATION} \ 1\text{-}1, \mathsf{SHIBAURA} \ 1\text{-} \ \mathsf{CHOME}, \ \mathsf{MINATO-KU}, \ \mathsf{TOKYO} \ 105\text{-}8001, \\ \mathsf{JAPAN}...$