Toshiba 60TH Series Manual

Analog copiers - the middle class

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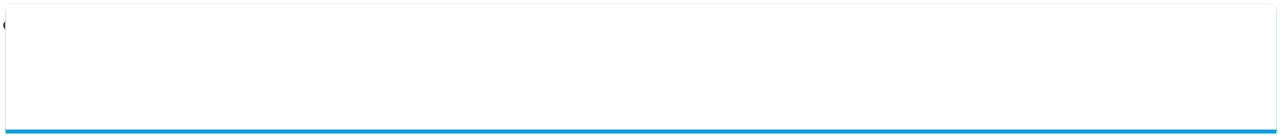

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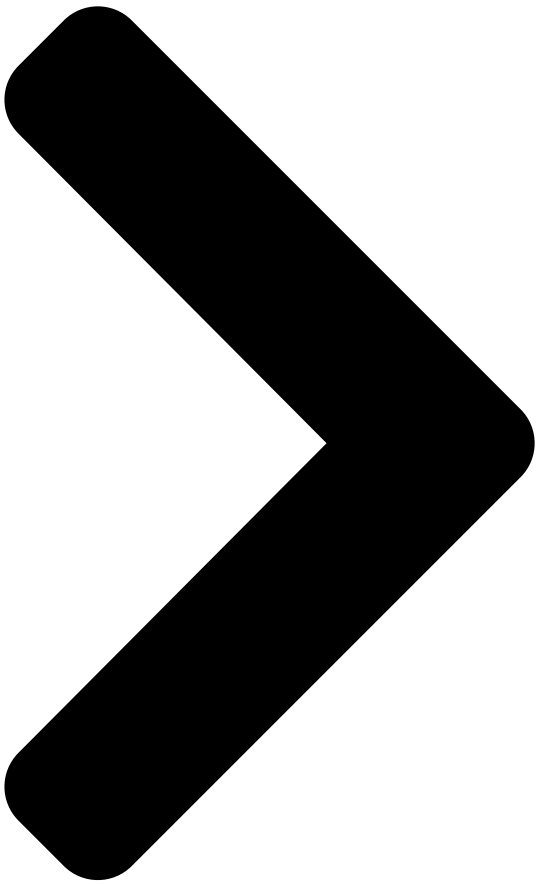
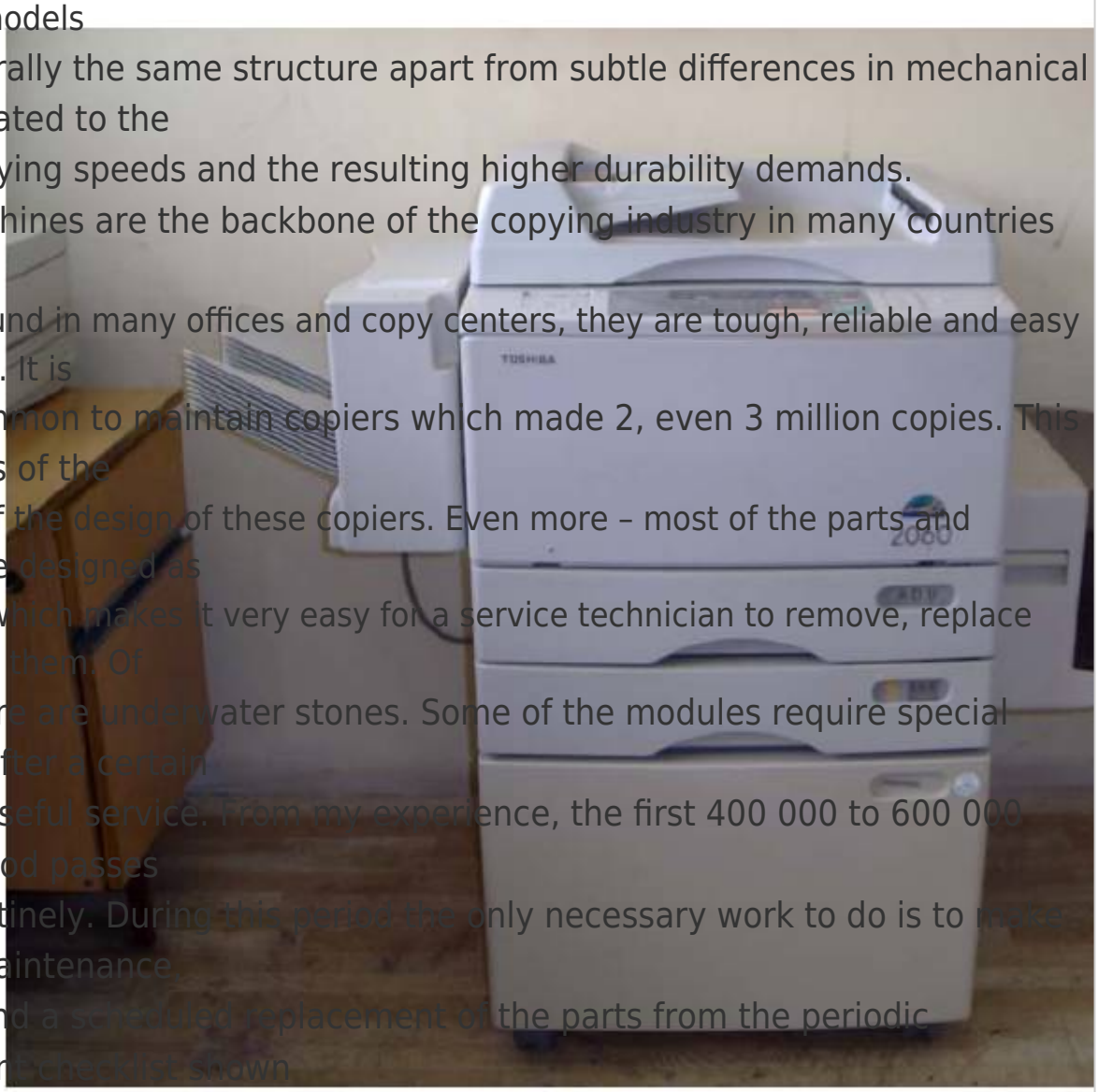


TOSHIBA THE 60

As a logical progression to our series of articles, about Toshiba analog copiers, comes the
current and last addition. By "last" I mean that there is not particular interest in discussing the high
end copiers over 50 copies per minute, because they are relatively rare and not many technicians get
a chance to work on them. The next addition to the series of articles will cover the most common
and distinct defects, found in the previously discussed models, but not before we familiarize

ourselves with the middle class analog copiers of the 60
These machines are namely 2060/2860 3560 and 4560 (the 2860 model has and automatic
duplexing unit as standard, opposed to 2060, where it is an option). There is a variety of ad-on
options the user can choose to attach such as: 10 and 20 bin sorters with staplers, large capacity
feeders LCF, automatic and reversing document feeders ADF and RADF and automatic duplexing
unit ADU. The maintenance and troubleshooting of these options will be discussed in a separate
article to come. In the current article the 2060 model is used as a basis, because the other models
have generally the same structure apart from subtle differences in mechanical design, related to the
higher copying speeds and the resulting higher durability demands.
These machines are the backbone of the copying industry in many countries in Eastern
Europe. Found in many offices and copy centers, they are tough, reliable and easy to maintain. It is
now uncommon to maintain copiers which made 2, even 3 million copies. This fact speaks of the
reliability of the design of these copiers. Even more – most of the parts and systems are designed as
a module, which makes it very easy for a service technician to remove, replace and service them. Of
course there are underwater stones. Some of the modules require special attention after a certain
period of useful service. From my experience, the first 400 000 to 600 000 copies period passes
almost routinely. During this period the only necessary work to do is to make periodic maintenance,
cleaning and a scheduled replacement of the parts from the periodic replacement checklist shown



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SERIES ANALOG COPIERS – THE MIDDLE CLASS:
2060 3560 AND 4560 MODELS

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series. See figure 1.

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Related Manuals for Toshiba 60TH Series

Copier Toshiba 60th Series Manual

Analog copiers - detachable options (32 pages)

Copier Toshiba 60th Series Manual

Analog copiers, the disputable (6 pages)

Copier Toshiba 4560 Service Manual

Plain paper copier (369 pages)

Copier Toshiba 3560 Operator's Manual

Digital plain paper copier (181 pages)

Copier Toshiba 4560 Operator's Manual

(180 pages)

Copier Toshiba 2060 Operator's Manual

Plain paper copier (151 pages)

Copier Toshiba 3560 Service Manual

Plain paper copier (122 pages)

Copier Toshiba 3560 Service Handbook

Plain paper copier (61 pages)

Copier Toshiba 2060 Service Handbook

Plain paper copier (61 pages)

Copier Toshiba e-studio 550 Operator's Manual

Operator's manual for printer function (36 pages)

Copier toshiba e-studio550 Service Manual

Digital plain paper copier (346 pages)

Copier Toshiba 8070 Service Manual

Digital plain paper copier (379 pages)

Copier Toshiba e-studio 55 Operator's Manual For Copying Functions

Digital plain paper copier (179 pages)

Copier Toshiba 5560 Operator's Manual

Plain paper copier (150 pages)

Copier Toshiba 65/5560 Service Handbook

Plain paper copier (75 pages)

Copier Toshiba e-STUDIO 2010AC Operator's Manual

Multifunctional digital color systems /multifunctional digital systems (72 pages)

Summary of Contents for Toshiba 60TH Series

Page 1 2060 3560 AND 4560 MODELS OVERVIEW As a logical progression to our series of articles, about Toshiba analog copiers, comes the current and last addition. By “last” I mean that there is not particular interest in discussing the high end copiers over 50 copies per minute, because they are relatively rare and not many technicians get a chance to work on them.

Page 2 As I always mention: most of the defects in copiers that are still under 400 000 copies are due to poor maintenance and cleaning. 1. PERIODICAL MAINTENANCE – USEFUL PRACTICES (TOSHIBA 2060/2860) Inspection every 80,000 Copies (1) Preparation 1 Ask the key operator about the present machine conditions and note them down.

Page 3 Symbols used in the Periodic Inspection Check List:...

Page 5 Figure 2 – Positions of item numbers in front sectional view...

Page 6 Figure 3 – Positions of item numbers in rear side view Explanation of items in the “REMARKS” column of the Periodic Inspection Check List: *1 Main blade Clean the main blade with a cloth which should be soaked in water and then squeezed tightly. If poor cleaning occurs due to the adhesion of paper dust, etc., the edge of the blade has been damaged.

Page 7 make sure to remove bits of lint from the claw. In addition, be sure to apply patting powder (lubricant) to the separation claw after cleaning the claw and when replacing the claw or drum. *4 Drum Refer to section “3.2 Inspection and Cleaning OPC Drum” in the service handbook *5 Air filter If the air filter is dirty, replace it.

Page 8 In that way the only thing you have to do in order to determine the proper maintenance for a 3560 or 4560 model is to replace the corresponding interval in the tables above. For Toshiba 3560 this interval is 120 000 copies ad for 4560 – 160 000 copies.

Page 9 Replacement Schedule of Disposable Parts and Supplies – Toshiba 2060/2860 Replacement Schedule of Disposable Parts and Supplies – Toshiba 3560 Replacement Schedule of Disposable Parts and Supplies – Toshiba 4560...

Page 10 3. A SEP-BY-STEP GUIDE TO PERIODICAL MAINTENANCE AND CLEANING Optical section:...

Page 11 1. Remove screws A and the original glass retaining plate. Remove the original glass and clean it both sides with window cleaner. Note – do not remove screws B. They are used for correction of image skew and registration of the copy image. 2.

Page 12 3. Clean with dry lint free cloth mirrors 1, 2, 3, 4 and 5 as well as the expo-lamp reflector A. 4. Clean with isopropyl alcohol the sliders B and C of the carriage 1 and 2. Note – be careful not to bend carriage 3, because it is mounted only to the rear side of the copier.

Page 13 1. Open the front cover of the machine. Push the blue knob in direction A and split the copier in two halves. Remove and clean the waste toner container. Remove the toner container. Remove screw B and unplug terminal C. Gently pull out the developer/image formation module. Place it on a flat, clean surface and cover it with a newspaper so as no light comes in contact with the OPC drum.

Page 14 Remove the mirror 6 slit window cover by inserting a finger in place A, pushing a tab in direction B and pulling the cover out in direction C. Clean the glass with window cleaner both sides. See figure 8.

Page 15 Clean mirror 6 with window cleaner. Clean the LED eraser array A and discharge lamps array B with a cloth, soaked with window cleaner. This should remove the tar deposited on them due to the static electricity. This is an important step in improving the image quality. See figure 9.

Page 16 4. Unscrew partially screw A until the transfer/separation corotron can be lifted. Lift it partially and unplug terminal B. Remove the assembly paying attention to the way the corotron is attached in the rear end C. 5. Remove screws D and the registration roller cleaning felt E. Clean the felt with vacuum cleaner from the paper dust.

Page 17 6. Remove screws A and the front fuser cover. Using a short screwdriver remove screws B and the red fuser cover in direction C. Pay attention to the two teeth holding the cover to the unit. Also when you insert your hand be careful not to bend or break the exit sensor D. See figure 11.

Page 18 7. Unplug the three connectors at the rear end of the fuser unit. Remove screw A and pay attention to the hole it is screwed in. The right one is the circular, not the prolonged. Carefully pull out the fuser unit in direction B. Pay attention the fuser lamp ends, the paper exit sensor and the power supply front switch.

Page 19 Remove two screws A and the ozone filter cover. Remove the ozone filter B and clean it both sides with vacuum cleaner. Remove screw C, unplug the two terminals under the transport belt assembly D and remove it in direction E. Clean the area behind the filter with the vacuum cleaner as well as the inside of the machine.

Page 20 Turn the machine to 180 degrees. Remove the upper rear cover, by removing the 5 screws that hold it. Located on the cover is a optical fan filter. Clean it carefully with a vacuum cleaner. Clean the whole back side of the machine. See figure 14. Paper feeding section: 10.

Page 21 11. Open the LCF unit A. Pull out and lift up all the paper trays the copier has. In case of a presence of a paper feed pedestal, there will be 4 or 5 trays (if ADU is not installed). The procedure described here is valid for removing the paper feed units of all 5 slots.

Page 22 12. Remove screws A and unplug connector B. Carefully remove the feeder unit in direction C. See figure 17.

Page 23 CLEANING THE MODULES OF THE MACHINE Feeder unit: 1. Clean with rubber cleaning fluid and a cloth, the pick up A, feed B and separation C rollers. See figure 18.

Page 24 Transfer/separation corotron assembly: Remove the protective grid A by pushing the 4 tabs. Remove the terminals protective covers B. Using a vacuum cleaner and a soft brush clean the inside of the assembly, especially the terminals. Be careful not to tear the corotron wires. After you have removed the toner and developer deposits clean thoroughly usin cotton swabs dipped in window cleaner fluid.

Page 25 Image formation/developer module: Squeeze the bracket A and remove it in direction B. Lift the main corotron assembly in direction C and remove it, careful not to scratch the OPC drum. Lift the bracket D and push down bracket E. Carefully separate the imaging unit from the developer unit. Put the imaging unit on a flat clean surface and shade it with a piece of paper.

Page 26 Main charger: Push the grid A in direction B and detach it from the hooks at the rear end. Spray the grid with a window cleaner and brush it both sides. Dry it with a lint free cloth. If there are any fibers left brush them off.

Page 27 Developer unit: Clean the unit with vacuum cleaner (of course the developer layer on the developer roller shouldn’t be vacuumed). Don’t turn the unit up side down as the developer material will spill out. Clean underneath the developer roller. If there is too much toner, that is an indicator the developer material is worn and needs to be replaced.

Page 28 Fusing unit: Remove screws A and the silicone roller cover B. Remove the springs underneath. Pay attention to the place of the springs. They are not the same type – the one on the geared side of the silicone roller is stiffer than the other. Remove the roller itself. Remove screws C and remove the upper separation fingers assembly.

Page 29 Remove screws A and the upper fuser roller cleaning blade B. Remove screws C and the thermo fuse D. Clean it with acetone. Remove screws E and the plate F. Remove screws G and the two thermistors. Clean them with acetone. See figure 24.

Page 30 Remove the clip A and the hand-cranking shaft B. Remove 3 screws C and the lower separation fingers assembly. Clean them with acetone too. See figure 25.

Page 31 4. Remove screws A and the upper paper guide B. Clean the flat surface guides C with acetone. This is important because uneven layers of fused toner can cause image defects, paper jams and wrinkling. See figure 26.

Page 32 5. Clean the silicone roller A it with vacuum cleaner, rubbing carefully its surface. If the dirt doesn’t come off, use a cloth soaked with acetone. After that, soak moderately the roller with silicone oil. Clean the upper B and lower C separation fingers with acetone. Clean the upper fuser roller blade D with acetone.

Page 33 4. Adjust the density of darkest and lightest mode using the same procedure as in 2. The codes are respectively 10 and 9. 5. Adjust the density of the photo exposure – code 14. 6.

Exit the AJ mode by pressing the o and 9 buttons or turn off the machine.

This manual is also suitable for:

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