

Toshiba MJ-1104 Service Manual

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# SERVICE MANUAL TC

FINISHER

MJ-1103/1104

Model: MJ-1103/1104 Publish Date: August 2008 File No. SME070020C0 R070921E5300-TTEC

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Finishers Toshiba MJ-1027 Service Manual

(235 pages)

# Summary of Contents for Toshiba MJ-1104

Page 1 SERVICE MANUAL FINISHER MJ-1103/1104 Model: MJ-1103/1104 Publish Date: August 2008 File No. SME070020C0 R070921E5300-TTEC Ver03\_2009-06...

<u>Page 2</u> © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved Under the copyright laws, this manual cannot be reproduced in any form without prior written permission of TOSHIBA TEC CORPORATION. No patent liability is assumed, however, with respect to the use of the information contained herein.

Page 3 Set-Up Procedure for the MJ-1103/1104". 2. The MJ-1103/1104 should be installed by an authorized/qualified person. 3. The Finisher is quite heavy; MJ-1103 weighs approximately 40 kg (88.19 lb.) and MJ-1104 weighs approximately 70 kg (154.32 lb.), therefore pay full attention when handling it.

Page 4 17.For the recovery and disposal of used MJ-1103/1104, consumable parts and packing materials, fol- low the relevant local regulations/rules. 18.After completing installation, servicing and maintenance of the MJ-1103/1104, return the MJ-1103/ 1104 to its original state, and check operation. 19.When the equipment is used after the option is removed, be sure to install the parts or the covers which have been taken off so that the inside of the equipment is not exposed.

# Page 5: Table Of Contents

# Page 7: Specifications, Accessory And Consumables

MJ-1104: Console Saddle Stitch Finisher (3 trays) • Paper Stacking Device Stationary Tray or Movable Tray, Saddle Tray (MJ-1104) • Paper Size A3, A4, A4-R, A5, A5-R, A6-R, B4, B5, B5-R, FOLIO, A3 wide, LD, LG, LT, LT-R, ST, ST-R, COMPUTER, 13"LG, 8.5"SQ, 8K, 16K, 16K-R •...

# Page 8: Finisher Section (Common For Mj-1103/1104)

50 or when stacks reaches 75 or when the number of sheets reaches the number of sheets reaches 1,000. 1,000. MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved SPECIFICATIONS, ACCESSORY AND CONSUMABLES 1 - 2...

Page 9 A3, A4, A4-R, B4, B5, FOLIO, LD, LG, LT, LT-R, COMPUTER, A4-TAB, LT-TAB Stapling is not available for paper in sizes other than the above. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 SPECIFICATIONS, ACCESSORY AND CONSUMABLES 1 - 3...

Page 10 A3, A4-R, B4, FOLIO, LD, LG, LT-R, COMP, 13"LG, 8K - 30 sheets \* Two sheets of cover sheet (200-256 g/m2) can be included. • Staple Loading exclusive cartridge (5,000 staples) • Manual Stapling available MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION

#### Page 11: Saddle Stitch Section (Mj-1104)

A paper-full status is detected when the number of stacks reaches the values shown below. Paper Size No thick paper cover included Thick paper cover included Under 5 sheets/books Under 10 sheets/books Under 155 sheets/books © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 SPECIFICATIONS, ACCESSORY AND CONSUMABLES 1 - 5...

## Page 12: Accessory

Staple cartridge for the Finisher section exclusive cartridge (STAPLE-2400: 5,000staples X 3 cartridges /box) • Staple cartridge for the saddle stitch section (MJ-1104) exclusive cartridge (STAPLE-3100: 2,000staples X 4 cartridges /box) MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved...

#### Page 13: General Description

PC board access cover Front cover Grate-shaped guide Saddle access cover MJ-1104 Front upper cover Saddle unit Leveling arm Saddle Tray Slide Tray Front lower cover Fig. 2-1 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 1...

#### Page 14: Sectional View

Movable tray shift motor unit Switchback unit Stacker unit (MJ-1104) Paper holding unit (MJ-1104) Side alignment unit (MJ-1104) Saddle stapler unit (MJ-1104) Folding drive unit (MJ-1104) EFS unit (MJ-1104) MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 2...

Page 15 Stack transport roller-1 Gate flap Entrance roller Exit roller Entrance motor Buffer roller drive motor Stack transport motor CLT2 Paper exit guide clutch SOL2 Gate solenoid © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 3...

**Page 16** Junction roller Shutter Paddle Buffer tray guide motor Paddle motor Transport motor Exit motor Movable tray shift motor CLT1 Shutter clutch SOL5 Transport path switching solenoid MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 4...

Page 17 Additional folding carrier Folding roller Saddle exit roller Folding blade cam Folding blade Assisting roller Ejecting roller Side alignment motor Additional folding motor SOL6 Assisting roller solenoid © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 5...

Page 18 Transport roller Paper holding damper Paper holding cam Stacker carrier Stacker motor saddle transport motor Folding motor CLT3 Folding blade clutch CLT4 Paper holding clutch MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 6...

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Electric Parts Layout S33 S30 Fig. 2-7  $\ensuremath{\mathbb C}$  2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 7...

Page 20 SOL2 M10 CLT2 SOL3 CLT1 SOL5 SOL1 SOL4 CLT3 CLT4 SOL6 Fig. 2-8 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 8...

# Page 21: Symbols And Functions Of Various Components

Rear stapler motor Operates the rear stapler. P22-I5 P.2-8 "Fig. 2-8" Additional folding motor Adds another fold on paper already P24-I4 P.2-8 "Fig. 2-8" folded. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 9...

Page 22 P.2-8 "Fig. 2-8" noid to be transported (Finisher section or saddle stitch section). SOL6 Assisting roller solenoid Operates the assisting roller. P27-I14 P.2-8 "Fig. 2-8" MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 10...

Page 23 Connection switch Cuts off drive current (24V) when it P13-I3 P.2-7 "Fig. 2-7" detects that the Finisher is released from the main unit. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 11...

Page 24 PC board. 10.PC board (Saddle section: MJ-1104) Symbol Name Function Remarks Saddle control PC board Controls the Saddle Stitch Finisher. P18-I58 P.2-7 "Fig. 2-7" (SDL board) MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 12...

# Page 25: Diagram Of Signal Blocks

Front cover switch (SW1) Power Stationary tray opening/closing switch (SW2) control Stapler Interference switch (SW3) circuit DC 24V Connection switch (SW4) Fig. 2-9 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 13...

Page 26 Rear saddle staple top position sensor (S48) Front saddle staple cartridge sensor (S49) Rear saddle staple cartridge sensor (S50) Power control Cover open sensor (S37) DC 24V circuit Fig. 2-10 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved GENERAL DESCRIPTION 2 - 14...

# Page 27: Description Of Interface Signals

Equipment Converter Finisher PC board Fig. 2-11 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 GENERAL DESCRIPTION 2 - 15...

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# Page 29: Description Of Operations

Paper stucked on the finishing tray is aligned and stapled, and then the bundled paper is output to the movable tray. Movable tray Buffer tray Junction box Finishing tray Stapler unit Fig. 3-2  $\[mathbb{C}$ 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 1...

Page 30 The paper is exited to the saddle tray. Junction box Side alignment Unit Stapler unit Fold unit Stacker EFS unit Saddle tray Fig. 3-3 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 2...

# Page 31: Junction Box

The feeding roller and the junction roller are driven by the entrance motor (M1) of the Finisher section. Transport path switching solenoid Flapper Entrance roller Entrance motor Feeding roller Feeding sensor Junction roller Junction box paper detection sensor Fig. 3-4 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 3...

# Page 32: Simple Stack Mode

The paper transport is detected by the entrance sensor (S1). Gate flap Entrance roller Entrance sens Gate solenoid Entrance motor Fig. 3-5 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 4...

Page 33 The stationary tray paper-full sensor (S18) detects the overload of paper on the stationary tray. Stationary tray paper-full sensor Stationary tray roller Entrance sensor Exit motor Fig. 3-6 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 5...

Page 34 The opening and closing statuses of the shutter is detected by the shutter opening/closing sensor (S4). Buffer tray Shutter Buffer roller Transport motor Buffer roller drive motor Shutter clutch Buffer tray Shutter opening/ closing sensor Fig. 3-8 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 6...

<u>Page 35</u> \* ON: The sensor signal is interrupted by the rib of the sensor rail. OFF: The sensor signal is not interrupted by the rib of the sensor rail. © 2008, 2009 TOSHIBA TEC CORPORATION

All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS...

Page 36 Movable tray paper-full sensor Movable tray shift motor Movable tray position-A sensor Movable tray Movable tray position-B sensor position-C sensor Fig. 3-9 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 8...

#### Page 37: Job Offset Stack Mode / Staple Stack Mode

The home position of the buffer tray is detected by the buffer tray home position sensor (S5). Buffer tray guide motor Buffer tray home position sensor Buffer roller lift solenoid Buffer roller Buffer tray Fig. 3-10 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 9...

Page 38 Paper pusher home position sensor Paper holder cam Paper pushing arm motor Paper pushing plate Catching pad Catching solenoid Paddle guide Fig. 3-11 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 10...

**Page 39** The home position of the paddles is detected by the paddle home position sensor (S3). Stack transport roller-2 Paddle motor Finishing tray Paddle home position sensor paper detection sensor Stack transport roller-1 Transport motor Fig. 3-13 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 11...

<u>Page 40</u> ON to prevent the stapler from interfering with other mechanical sections in the equipment. Stapler interference switch Stapler interference sensor Stapler unit shift motor Stapler unit home position sensor Fig. 3-15 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 12...

Page 41 Paper exit belt Paper exit guide clutch Stack exit belt home position sen Transport motor Stack transport roller-1 Paper exit guide Stack transport motor Fig. 3-16 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 13...

#### Page 42: Operation In The Saddle Stitch Section

Transport path-3 sensor Assisting roller Assisting roller Ejecting roller solenoid Ejecting roller sensor Ejecting roller sensor Assisting roller Assisting roller solenoid Ejecting roller Fig. 3-17 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 14...

Page 43 The home position of the jog is detected by the side alignment home position sensor (S36). Side alignment home position sensor Side alignment motor Fig. 3-19 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 15...

Page 44 [E] Stapling Stacks of paper aligned and fixed at the stapling position are stapled with two stapler units on the front and rear sides. MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 16...

Page 45 Folding motor encoder sensor Folding motor Folding blade clutch Folding blade cam Folding blade Folding blade cam Folding blade home position sensor Fig. 3-21 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 17...

<u>Page 46</u> After this, the stack of paper is folded as it passes the folding roller driven by the folding motor (M17). Folding motor encoder sensor Folding motor Folding blade clutch Exit transport sensor Folding roller Fig. 3-22 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 18...

<u>Page 47</u> The presence of paper on the saddle tray is detected by the stack tray paper detection sensor (S32). Folding motor Exit sensor Saddle exit roller Folding roller Stack tray paper Saddle tray detection sensor Fig. 3-24 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 19...

#### Page 48: Flow Chart

Movable tray position sensor ON Movable tray upper position sensor ON Movable tray lower position sensor ON Buffer roller drive motor ON Fig. 3-25 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 20...

Page 49 Movable tray shift motor ON (Reverse) Patting solenoid ON Movable tray position sensor ON Movable tray upper position sensor ON Movable tray lower position sensor ON Fig. 3-26 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 21...

Page 50 Side alignment motor ON Additional folding motor ON Paper holding clutch ON Folding motor ON Saddle transport motor ON Exit sensor OFF Paper jam Fig. 3-27 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 22...

#### Page 51: Description Of Circuit

MT4-OUT1A P-RESET P-RESET MT4-OUT2A IC21 IC47 Buffer roller TIOCA4 drive motor MT4-OUT1B Motor driver (M4) MOT4-DIR MOT4-CUR0 Current MT4-OUT2B control MOT4-CUR1 circuit Fig. 3-28 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 23...

Page 52 MT10-OUT1A P-RESET P-RESET MT10-OUT2A IC21 IC49 Paper pushing TIOCC0 arm motor MT10-OUT1B Motor driver (M10) MOT10-DIR MOT10-CUR0 Current MT10-OUT2B control MOT10-CUR1 circuit Fig. 3-29 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 24...

Page 53 MOT2-OUT1A P-RESET P-RESET MOT2-OUT2A IC21 IC48 Buffer tray TIOCA5 guide motor MOT2-OUT1B Motor driver (M2) MOT2-DIR MOT2-CUR0 Current MOT2-OUT2B control MOT2-CUR1 circuit Fig. 3-30 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 25...

Page 54 IC45 / IC41 Front / rear TMO2 / 3 alignment motor MOT5/6-OUT1B Motor driver (M5 / M6) MOT5/6-DIR MOT5/6-CUR0 Current MOT5/6-OUT2B control MOT5/6-CUR1 circuit Fig. 3-31 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 26...

Page 55 3.3V MOT8-OUT1A P-RESET P-RESET MOT8-OUT2A IC21 IC38 Stack TIOCA3 transport motor MOT8-OUT1B (M8) Motor driver MOT8-DIR MOT8-CUR0 Current MOT8-OUT2B MOT8-CUR1 control circuit Fig. 3-32 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 27...

Page 56 Finisher control PC board 3.3V TIOCA1 MOT1-A MOT1-DIR MOT1-C IC21 P-RESET Entrance motor (M1) P-RESET MOT1-B Motor driver Current MOT1-CUR0 control MOT1-CUR1 circuit MOT1-D Fig. 3-33 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 28...

Page 57 Finisher control PC board 3.3V TIOCA2 MT11-A MOT11-DIR MT11-C IC21 P-RESET IC44 Exit motor (M11) P-RESET Motor driver MT11-B Current MOT11-CUR0 control MOT11-CUR1 circuit MT11-D Fig. 3-34 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 29...

Page 58 TIOCA3 MOT9-A MOT9-DIR MOT9-C IC21 P-RESET IC42 Stapler unit shift motor P-RESET MOT9-B Motor driver (M9) Current MOT9-CUR0 control MOT9-CUR1 circuit MOT9-D Fig. 3-35 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 30...

Page 59 Finisher control PC board 3.3V MOT7-OUT1A P-RESET P-RESET MOT7-OUT2A IC21 IC43 Transport motor TIOCA0 (M7) MOT7-OUT1B Motor driver MOT7-DIR MOT7-CUR0 Current MOT7-OUT2B MOT7-CUR1 control circuit Fig. 3-36 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 31...

Page 60 Finisher control PC board 3.3V MOT3-OUT1A P-RESET P-RESET MOT3-OUT2A IC21 Paddle motor TIOCC3 (M3) MOT3-OUT1B Motor driver MOT3-DIR MOT3-CUR0 Current MOT3-

OUT2B MOT3-CUR1 control circuit Fig. 3-37 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 32...

Page 61 Stop Finisher control PC board 5VPA DM1-CNT0 DM1-F Movable tray DM1-CNT1 Motor drive circuit shift motor IC21 (M12) DM1-R Overcurrent protection circuit Fig. 3-38 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 33...

Page 62 When 5VPA voltage is 4.25V or lower, the reset IC (IC22) resets the CPU (IC21) and Flash ROM (IC4) by determining that the output of pin 1 is at a low level. 5VPA IC22 RESET Fig. 3-40 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 34...

# Page 63: Saddle Section

Stop Saddle control PC board 3.3V MOT3-OUT1A P-RESET P-RESET MOT3-OUT2A IC31 IC17 TMO2 Stacker motor (M14) Motor driver MOT3-OUT1B MOT3-CUR0 MOT3-DIR MOT3-OUT2B Fig. 3-41 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 35...

Page 64 Saddle control PC board 3.3V MOT4-OUT1A P-RESET P-RESET MOT4-OUT2A IC31 IC11 Side TMO3 alignment motor Motor driver MOT4-OUT1B (M15) MOT4-CUR0 MOT4-DIR MOT4-OUT2B Fig. 3-42 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 36...

Page 65 5VPA DM2/3-F Front saddle DM2/3-CNT0 stapler motor (M18) DM2/3-CNT1 Motor drive circuit IC31 Rear saddle DM2/3-R stapler motor (M19) Overcurrent protection circuit Fig. 3-43 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 37...

Page 66 Saddle control PC board 3.3V TIOCA0 MOT2-A MOT2-DIR MOT2-C IC31 P-RESET Saddle transport motor P-RESET MOT2-B Motor driver (M16) Current MOT2-CUR0 control MOT2-CUR1 circuit MOT2-D Fig. 3-44 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 38...

Page 67 For the case when an overcurrent status is detected, a protection circuit is mounted to turn the folding motor off. Saddle control PC board 5VPA DM1-F DM1-CNT0 Folding motor DM1-CNT1 Motor drive circuit (M17) IC31 DM1-R Overcurrent protection circuit Fig. 3-45 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DESCRIPTION OF OPERATIONS 3 - 39...

Page 68 Saddle control PC board 5VPA DM4-F DM4-CNT0 Additional DM4-CNT1 Motor drive circuit IC31 folding DM4-R (M20) Overcurrent protection circuit Fig. 3-46 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DESCRIPTION OF OPERATIONS 3 - 40...

#### Page 69: Disassembly And Installation

• Before installing the stationary tray, adjust the installing positions of the 4 pins of the buffer unit-1 to the center position. Fig. 4-2  $\odot$  2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 1...

Page 70 Remove the slide tray. Note: When installing, hang 1 hook of the sliding tray on the hole of the saddle tray. Sliding tray Fig. 4-5 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 2...

Page 71 (MJ-1104). Connector Remove 2 screws, and then disconnect the connector to take off the control panel unit. Control panel unit Fig. 4-8 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 3...

Page 72 Remove 1 screw, and then separate the front upper cover and the front lower cover of the front cover assembly. Front upper cover Front lower cover Fig. 4-11 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 4...

Page 73 Open the front upper cover and then pull out the saddle unit. Remove 4 screws, and

then take off the front lower cover. Front lower cover Fig. 4-14  $\odot$  2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 5...

Page 74 Note: When installing, hang 5 hooks of the board access cover on the holes of rear cover. Board access cover Fig. 4-17 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 6...

Page 75 [] P.4-6 "[H] Access cover" Feeding discharge Loosen 3 screws, and then take off the relay brush guide and feeding discharge brush. Relay guide Fig. 4-20 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 7...

Page 76 Right cover Fig. 4-22 [L] Left upper cover Remove 3 screws, and then take off the left upper cover. Left upper cover Fig. 4-23 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 8...

Page 77 [] P.4-124 "4.12 Procedure for lowering the movable tray" © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 9...

Page 78 When installing the grate-shaped guide, hang the 2 hooks of the cover on the hooks of the frame. Hook Hook Grate-shaped guide Fig. 4-28 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 10...

Page 79 [] P.4-9 "[M] Front rail cover / Rear rail cover" Remove 4 screws, and take off the left lower cover. Left lower cover Fig. 4-31 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 11...

<u>Page 80</u> Remove 1 screw, and then take off the rear foot cover by sliding it in the direction of the arrow. Rear foot cover Fig. 4-34 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 12...

#### Page 81: Units (Finisher Section)

Remove 1 screw, and then take off the sen- sor bracet of the connection switch. Release the harness out of 2 clamps. Clamp Spring Sensor bracet Fig. 4-37 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 13...

Page 82 When installing the junction box unit, hang the 2 hooks of the cover on the hooks of the frame. Junction box unit Hook Fig. 4-40 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 14...

Page 83 Fig. 4-42 Release the harness out of 2 clamps, and then disconnect the connector of the Entrance motor entrance motor. Clamp Connector Fig. 4-43 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 15...

Page 84 Buffer guide Fig. 4-46 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 16...

**Page 85** Disconnect the connector of the buffer tray Connector guide motor. Buffer tray guide motor Fig. 4-48 Release the harness leading from other units from 3 clamps. Clamp Clamp Fig. 4-49 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 17...

Page 86 (10) Disconnect the connector of the buffer roller Buffer roller drive motor drive motor and release the harness out of the clamp. Cramp Connector Fig. 4-52 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 18...

Page 87 [] P.4-15 "[B] Buffer unit" Release the harness out of 2 clamps, and then disconnect each connector of CN16 and CN17 on the FIN board. Cramp Fig. 4-55 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 19...

<u>Page 88</u> Then remove the bushing. Bushing Clip Fig. 4-56 Remove the spring, and then loosen 2 screws to free the belt tension. Belt Spring Fig. 4-57 MJ-1103/1104 © 2008, 2009

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Page 89 -3, pin and bushing. Note: Be sure not to lose the fixing pins for the pul- leys. Bushing Clips Transport roller pulley-3 Fig. 4-60 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 21...

Page 90 Fig. 4-62 Remove 1 screw, and then take off the staple carrier. Staple carrier Fig. 4-63 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 22...

Page 91 (Be sure to hold the movable tray gear frame with your hands because it may fall when the gear is pushed.) Movable tray Fig. 4-65 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 23...

Page 92 CN15 on the FIN board. FIN board Disconnect the connector of the movable tray shift motor. Cramp Fig. 4-68 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 24...

Page 93 Bracket Bushing Fig. 4-69 Remove 2 screws, and then take off the movable tray shift motor unit. Movable tray shift motor unit Fig. 4-70 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 25...

# Page 94: Units (Saddle Section: Mj-1104)

Store (flip up) the saddle unit support before placing a table beneath the unit. Table beneath Remove 8 screws and store the right and left rails. Saddle unit support Fig. 4-73 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 26...

Page 95 When the saddle unit was taken off, place the unit on a flat place with its support stored (flipped up). Saddle unit support Fig. 4-75 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 27...

Page 96 Take off the saddle unit. [] P.4-26 "[A] Saddle unit" Upper safty cover Remove 4 screws, and then take off the upper safety cover. Fig. 4-78 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 28...

<u>Page 97</u> • When installing, engage the clutch shaft bushing with the frame of the paper holding unit securely. Bushing Paper holding unit Fig. 4-81 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 29...

Page 98 Then release the harness from 3 clamps. Connector Fig. 4-84 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 30...

Page 99 Gear Clinch remove the jig. 6. Adjust the position of the rear saddle sta- Fig. 4-87 pler clinch unit following the same proce- dure. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 31...

Page 100 (10) Remove the fold plate. Note: Fold plate When replacing the fold plate (ASYS-PLT- FOLD-RLR-SDL), be careful not to damage the mylar. Mylar Fig. 4-90 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 32...

Page 101 4 positions and release the harness from 10 clamps of the folding drive unit. Clamp Connector Fig. 4-92 Remove one clip and then remove the bush- ing. Bushing Clip Fig. 4-93 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 33...

<u>Page 102</u> Gear bracket Fig. 4-96 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 34...

Page 103 Disconnect the relay connector of the stacker motor. Disconnect the relay connector of the saddle tray paper connctor detection sensor. relay connector Fig. 4-99 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND

INSTALLATION 4 - 35...

Page 104 Rear bracket Spring Fig. 4-100 Take off the EFS unit while pulling the jam access lever. EFS jam access lever EFS unit Fig. 4-101 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 36...

Page 105 When installing, hang the 2 hooks of the Hook stacker unit on the holes of frame. Fig. 4-102 Hook Lower folding roller Stacker unit Fig. 4-103 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 37...

# Page 106: Rollers (Finisher Section)

Remove 2 screws, and then take off the rear transport guide Rear bracket bracket. Remove 2 screws, and then take off the junc- tion box upper transport guide. Fig. 4-106 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 38...

<u>Page 107</u> (13) Push the jam access lever of the junction box to the right side, and then open the transport guide. Jam access lever Fig. 4-109 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 39...

Page 108 Remove one E-ring, and then take off the gear and pin. Remove one clip, and then take off the bush- Clip ing. Bushing Gear Fig. 4-112 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 40...

Page 109 Close the buffer unit-1 halfway and leave it. Then remove 1 screw. Screw Fig. 4-114 Remove 3 screws, and then take off the transport guide. Transport guide Fig. 4-115 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 41...

Page 110 Move each of the buffer guides to each side. Note: If the shutter is raised, move the frame down- ward. Buffer guide Buffer guide Shutter Fig. 4-118 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 42...

Page 111 Rear alignment plate Front alignment plate Fig. 4-119 Remove 4 screws of the front and rear pull-in Front pull-in guide Rear pull-in guide guides. Fig. 4-120 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 43...

Page 112 A and less than C. 4. Adjust the front pull-in guide in the same Fig. 4-122 manner. Rear pull-in guide Measuring point Fig. 4-123 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 44...

Page 113 Fig. 4-124 (10) Take off the paddle shaft, and the front and rear pull-in guides. Rear pull-in guide Front pull-in guide Paddle shaft Fig. 4-125 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 45...

Page 114 Take off the Junction box unit. Buffer unit-1 [] P.4-13 "[A] Junction box unit" Close the buffer unit-1 halfway and leave it. Then remove 1 screw. Screw Fig. 4-128 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 46...

Page 115 Remove 1 clip, and then take off the rear transport roller by sliding the bushing. Rear transport roller Note: Belt Be sure not to lose the belt. Clip Bushing Fig. 4-131 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 47...

**Page 116** Close the buffer unit-1 halfway and leave it. Then remove 1 screw. Screw Fig. 4-133 Remove 3 screws, and then take off the transport guide. Transport guide Fig. 4-134 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 48...

Page 117 Entrance roller Bushing Fig. 4-136 Remove 1 E-ring. Then remove 1 pulley, 1 bushing and 1 pin from the entrance roller. Bushing Pulley Fig. 4-137 © 2008, 2009 TOSHIBA

TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 49...

Page 118 Fig. 4-139 Remove 2 E-rings, and then take off the pin and the stack transport roller-1. Stack transport roller-1 Stack transport roller-1 Fig. 4-140 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 50...

Page 119 Fig. 4-142 Remove 4 E-rings and 4 pins, and then take off 4 stack transport rollers-2. Stack transport roller-2 Stack transport roller-2 Fig. 4-143 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 51...

Page 120 Connector Buffer tray guide motor Fig. 4-145 Take off the belt of the buffer roller drive motor. Buffer roller drive motor Belt Fig. 4-146 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 52...

Page 121 Clamp Fig. 4-148 Remove 2 screws, and then take off the rear side frame. Rear side frame Fig. 4-149 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 53...

Page 122 Fig. 4-151 (10) Remove the spring and 2 E-rings. Then take off the front buffer roller guide. Front buffer roller guide Spring Fig. 4-152 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 54...

Page 123 Lift guide roller. Shaft Fig. 4-154 (13) Take off the lift guide from the buffer roller. Lift guide Buffer roller Fig. 4-155 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 55...

Page 124 1 mm. Check if the flap and the upper exit roller move smoothly after screws are tightened. Fig. 4-158 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 56...

Page 125 Gear Fig. 4-160 Take off the upper exit roller and the upper exit roller guide. Upper exit roller guide Upper exit roller Fig. 4-161 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 57...

#### Page 126: Rollers (Saddle Section: Mj-1104)

Pulley Gear Fig. 4-163 Remove 4 screws and take off the transport guide and switchback transport roller. Switchback transport roller Transport guide Fig. 4-164 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 58...

Page 127 Take off the assisting roller. [] P.4-59 "[B] Assisting roller" Remove the spring, and then loosen 2 screws to free the belt tension. Spring Fig. 4-167 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 59...

Page 128 Pulley Ejecting roller Fig. 4-169 Take off the right and left arms from the eject- ing roller. Ejecting roller Bushing Bushing Bushing Fig. 4-170 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 60...

Page 129 Gear Clip Fig. 4-171 Remove the 1 spring. Spring Fig. 4-172 Remove 2 E-rings and take off the 2 bearing. Bearing Bearing Fig. 4-173 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 61...

Page 130 Fig. 4-175 Remove 2 E-rings and take off the 2 bearing. Remove 1 crip of the rear jam release lever. Bearing Bearing Clip Fig. 4-176 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 62...

Page 131 Lower transport guide Fig. 4-178 Remove 1 clip and take off the bushing and exit roller. Clip Exit roller Bushing Clip Fig. 4-179 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 63...

#### Page 132: Motor (Finisher Section)

Take off the buffer unit-1. [] P.4-17 "[C] Buffer unit-1" Remove 3 screws, and then take off the buffer tray guide motor. Buffer tray guide motor Fig. 4-182 MJ-1103/1104 © 2008, 2009

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Page 133 Remove 2 screws, and then disconnect the connector to take off the buffer roller drive motor. Belt Connector Buffer roller drive motor Fig. 4-185 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 65...

Page 134 Note: When installing the transport motor, loosen the 2 screws of the tension plate after the spring is hooked. Spring Fig. 4-188 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 66...

Page 135 Take off the grate-shaped guide. [] P.4-10 "[N] Grate-shaped guide" Remove 1 clip, and then take off the clip, Clip gear, and shaft. Bushing Shaft Gear Fig. 4-191 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 67...

<u>Page 136</u> Disconnect all the connectors of the FIN board and then release the harness from the clamp. Remove 4 screws from the FIN board bracket. Bracket Fig. 4-194 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 68...

Page 137 Disconnect the relay connector of the paper pusher arm motor and then release the har- ness from the 2 clamps. Relay connector Clamp Clamp Fig. 4-197 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 69...

Page 138 Take off the junction box unit. [] P.4-13 "[A] Junction box unit" Remove 2 screws, and then take off the exit motor. Exit motor Fig. 4-200 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 70...

Page 139 (Be sure to hold the movable tray gear frame with your hands because it may fall when the gear is pushed.) Movable tray Fig. 4-202 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 71...

Page 140 CN15 on the FIN board. FIN board Disconnect the connector of the movable tray shift motor. Cramp Fig. 4-205 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 72...

Page 141 Remove 2 screws, and then take off the movable tray shift motor. Movable tray shift motor Fig. 4-206 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 73...

#### Page 142: Motor (Saddle Section: Mj-1104)

Remove 3 screws, and then take off the motor bracket. Motor bracket Note: Do not lose the removed gear of the motor bracket. Gear Fig. 4-209 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 74...

Page 143 Fig. 4-211 Remove 2 screws, and then disconnect the relay connector to take off the side alignment Relay connector motor. Side alignment motor Fig. 4-212 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 75...

Page 144 3 screw dampers, earth plate, Saddle transport motor motor damper and saddle transport motor. Earth plate Screw damper Spacer Motor damper Motor bracket Screw damper Spacer Fig. 4-215 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 76...

Page 145 Fig. 4-216 Take off the belt of folding motor. Belt Fig. 4-217 Remove 2 screws and take off the folding motor. Folding motor Fig. 4-218 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 77...

Page 146 Pulley Gear bracket Fig. 4-220 Remove 2 screws and take off the belt and additional folding motor. Belt Additional folding motor Fig. 4-221 MJ-1103/1104 © 2008, 2009

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#### Page 147: Solenoid

Remove 4 E-rings, and then slide the bush- ing. Bushing Fig. 4-223 Take off the belt of the stack transport motor. Stack transport motor Belt Fig. 4-224 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 79...

Page 148 [C] Folding blade clutch (CLT3) Take off the folding drive unit. [] P.4-33 "[F] Folding drive unit" Remove 7 screws and 1 clip. Fig. 4-227 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 80...

Page 149 [] P.4-13 "[A] Junction box unit" Disconnect the connector of the CN23 on the FIN board, and then release the harness out of 4 clamps. Clamp Fig. 4-230 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 81...

Page 150 3 spacers, 3 screw Solenoid sensor unit dampers, 2 solenoid dampers and solenoid sensor unit. Spacer Screw damper Solenoid damper Fig. 4-233 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 82...

Page 151 Remove 2 screws, and then take off the rear bracket. Remove 2 screws, and then take off the junc- tion box upper transport guide. Fig. 4-236 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 83...

Page 152 Buffer unit-1 Screw Fig. 4-237 Remove 3 screws, and then take off the . Transport guide Fig. 4-238 Remove the spring. Spring Fig. 4-239 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 84...

Page 153 2 screws. Fig. 4-241 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 85...

Page 154 [] P.4-7 "[K] Relay guide / Feeding dis- charge brush / Right cover" FIN board Remove 4 screws of the FIN board bracket. bracket Fig. 4-244 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 86...

Page 155 Open the stationary tray. (10) Remove the spring, and then loosen 2 screws to free the belt tension. (11) Take off the belt. Spring Belt Fig. 4-247 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 87...

Page 156 (12) Break binding wire at one position and dis- connect the relay connector. Binding wire Relay connector Fig. 4-248 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 88...

Page 157 2.3 mm to 2.9 mm. Fix the solenoid with 2 screws. 2.3mm to 2.9mm Surface of the transport guide Fig. 4-251 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 89...

Page 158 Fig. 4-253 Take off the spring. Remove 2 screws, and then take off the Spring assisting roller solenoid. Assisting roller solenoid Fig. 4-254 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 90...

# Page 159: Sensors / Switches (Finisher Section)

Close the buffer unit-1. Release the latch while lifting up the actua- tor, and then disconnect the connector to take off the transport sensor. Fig. 4-257 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 91...

Page 160 FIN board bracket. bracket Fig. 4-259 Remove 1 screw, and then disconnect the connector and take off the sensor bracket. Sensor bracket Fig. 4-260 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 92...

Page 161 Take off the buffer unit. [] P.4-15 "[B] Buffer unit" Remove 2 screws to take off the rear side frame. Rear side frame Fig. 4-263 © 2008, 2009 TOSHIBA TEC CORPORATION All rights

reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 93...

Page 162 Disconnect the connector, and then release the latch to take off the buffer tray home posi- Buffer tray home position sensor tion sensor. Fig. 4-266 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 94...

Page 163 Release the latch, and then disconnect the connector to take off the front alignment plate home position sensor. Front alignment plate home position sensor Fig. 4-269 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 95...

Page 164 Remove 3 screws, and then take off the front finishing tray cover. Fig. 4-271 Remove 3 screws, and then take off the rear finishing tray cover. Rear finishing tray cover Fig. 4-272 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 96...

Page 165 When taking off the sensor bracket, the actu- ator and the spring are also taken off. Be sure not to lose the actuator and the spring. Sensor bracket Fig. 4-275 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 97...

**Page 166**  $\Box$  P.4-22 "[E] Stapler" Release the latch, and then disconnect the connector to take off the stapler interference sensor. Stapler interference sensor Fig. 4-278 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 98...

Page 167 [] P.4-19 "[D] Finishing tray unit" Front finishing tray cover Remove 3 screws, and then take off the front finishing tray cover. Fig. 4-281 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 99...

Page 168 (Be sure to hold the movable tray gear frame with your hands because it may fall when the gear is pushed.) Movable tray Fig. 4-283 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 100...

Page 169 Movable tray sor and movable tray position-c sensor. position-A sensor Movable tray position-B sensor Movable tray position-C sensor Fig. 4-286 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 101...

Page 170 Hold up the jam access lever. Then remove 1 screw and disconnect the connector to take off the bracket. Jam access lever Fig. 4-289 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 102...

Page 171 [] P.4-7 "[K] Relay guide / Feeding dis- charge brush / Right cover" Remove 1 screw, and then disconnect the connector and take off the sensor bracket. Sensor bracket Fig. 4-292 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 103...

Page 172 Sensor bracket Fig. 4-294 Release the latch, and then take off the mov- able tray shift motor sensor. Movable tray shift motor sensor Fig. 4-295 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 104...

Page 173 Switch bracket Fig. 4-297 Remove 2 screws, and then take off the front cover switch. Front cover switch Fig. 4-298 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 105...

Page 174 FIN board Fig. 4-300 Remove 2 screws, and then take off the belt Spring tension arm, spring and belt. Belt tension arm Belt Fig. 4-301 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 106...

Page 175 [] P.4-10 "[N] Grate-shaped guide" Release the harness out of 3 clamps, and then disconnect the connector of CN19 on the FIN board. Clamp Fig. 4-304 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 107...

Page 176 Remove 4 screws, and then take off the upper saddle cover. Remark: In the case of

MJ-1104, open the front upper cover and pull out the saddle unit before starting the operation. Upper saddle cover Fig. 4-305 Remove 2 screws, and then take off the sta- pler interference switch.

<u>Page 177</u> Release the harness out of 2 clamps. Clamp Spring Sensor bracket Fig. 4-309 Remove 2 screws, and then take off the con- nection switch. Connection switch Fig. 4-310 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 109...

#### Page 178: Sensors / Switches (Saddle Section: Mj-1104)

Open the front upper cover and then pull out the saddle unit. Upper safety cover Remove 4 screws, and then take off the upper safety cover. Fig. 4-313 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 110...

Page 179 Open the transport guide of right side. Remove 1 screw, and then disconnect the Sensor bracket connector and take off the sensor bracket. Fig. 4-316 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 111...

Page 180 Sensor bracket Fig. 4-318 Release the latch, and then take off the ejecting roller sensor. Ejecting roller sensor Fig. 4-319 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 112...

Page 181 Clamp bracket. Sensor bracket Fig. 4-321 Release the latch, and then take off the stacker paper detection sensor. Stacker paper detection sensor Fig. 4-322 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 113...

Page 182 When the sensor was installed, be sure to adjust the position of the sensor bracket. P.4-26 "[A] Saddle unit" Sensor bracket Fig. 4-325 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 114...

Page 183 [] P.4-26 "[A] Saddle unit" Remove 1 screw, and then disconnect the connector and take off the folding motor encoder sensor. Folding motor encoder sensor Fig. 4-328 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 115...

<u>Page 184</u> Disconnect the connector, and release the Side alignment home position sensor latch, and then take off the side alignment Alignment plates home position sensor. Fig. 4-331 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 116...

Page 185 Disconnect the connector, and release the latch, and then take off the additional folding home position sensor. Additional folding home position sensor Pulley Fig. 4-334 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 117...

Page 186 Fig. 4-336 Release the latch, and then take off the addi- tional folding motor encoder sensor. Additional folding motor encoder sensor Fig. 4-337 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 118...

Page 187 Sensor bracket Fig. 4-338 Remove 2 screws, and then take off the sad- dle unit opening/closing switch. Saddle unit opening/closing switch Fig. 4-339 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 119...

# Page 188: 4.11 Pc Boards / Discharge Brush

Disconnect all connectors connecting to the FIN board FIN board. Fig. 4-340 Remove 4 screws, and then take off the FIN board. FIN board Fig. 4-341 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 120...

Page 189 Disconnect all connectors connecting to the I/F board. I/F board Fig. 4-342 Remove 4 screws, and then take off the I/F board. I/F board Fig. 4-343 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 121...

Page 190 Disconnect all connectors connecting to the SDL board. SDL board Fig. 4-345 Remove 4 screws, and then take off the FIN board. SDL board Fig. 4-346 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 122...

Page 191 Note: When installing the brush, fix the Mylar form securely. Mylar Fig. 4-348 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 DISASSEMBLY AND INSTALLATION 4 - 123...

# Page 192: 4.12 Procedure For Lowering The Movable Tray

ON, "Movable tray paper-full detection error" (CB31) will occur. The movable tray must be moved lower than the sensor. Movable tray Fig. 4-351 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved DISASSEMBLY AND INSTALLATION 4 - 124...

# Page 193: Adjustments

The alignment plate moves to the A4 or LT size position and stops. (It stops at the position of -5 steps from the center value of the adjustment range.) © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS...

Page 194 Confirm the gap between paper and the alignment plate by moving the adjustment sheet for- ward and backward to reduce affect by backrush of the gear of the side alignment plate. MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ADJUSTMENTS 5 - 2...

Page 195 Adjustment Value Turn OFF the power of the equipment. Turn OFF all bits of the SW1 on the Finisher control board. (10) Install the board access cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS 5 - 3...

# Page 196: Adjusting The Stapling Position

The alignment plate moves to the rear or front side stapling position and stops. (It stops at the position of -20 steps from the center value of the adjustment range.) MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ADJUSTMENTS 5 - 4...

<u>Page 197</u> Adjustment value Turn OFF the power of the equipment. Turn OFF all bits of the SW1 on the Finisher control board. Install the board access cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS 5 - 5...

# Page 198: Stapling/Folding Position Adjustment In Saddle Unit

When the staples are bent Staple Staple Do not include the width of the staples -0.5mm + 0.5mm -0.5mm - +0.5mm Folding line Folding line Fig. 5-7 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ADJUSTMENTS 5 - 6...

Page 199 (the position of the stapling hooks) of the stacker upward. Stapling position P.5-10 "5.3.2 Stapling position adjustment" Stacker hook Fig. 5-11 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS 5 - 7...

# Page 200: Folding Position Adjustment

Press [Button 1] on the touch panel 10 times and then press [Button 2] once. Then press [Button 1] again 2 times, and [Button 2] once again. (Adjustment of LD and A3 paper starts.) LED3 LED2 LED1 Button1 Button2 Fig. 5-13 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ADJUSTMENTS 5 - 8...

Page 201 (10) Turn OFF the power of the equipment. (11) Turn OFF all bits of the SW1 on the Finisher control board. (12) Install the board access cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS 5 - 9...

# Page 202: Stapling Position Adjustment

Press [Button 1] on the touch panel 10 times and then press [Button 2] once. Then press [Button 1] once again, and [Button 2] once again. (Adjustment of LD and A3 paper starts.) LED3 LED2 LED1 Button1 Button2 Fig. 5-15 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION

All rights reserved ADJUSTMENTS 5 - 10...

Page 203 (10) Turn OFF the power of the equipment. (11) Turn OFF all bits of the SW1 on the Finisher control board. (12) Install the board access cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ADJUSTMENTS 5 - 11...

#### Page 204: Saddle Stitch Skew Adjustment

Open the cover, pull out the saddle stitch section, and then loosen the 2 screws. Fig. 5-16 Rotate the adjustment screw slightly. Tighten the 2 screws, return the saddle stitch section, and then close the cover. MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ADJUSTMENTS 5 - 12...

#### Page 205: Troubleshooting

1. Replace the interface control PC board (I/F). 2. Replace the finisher control PC board (FIN). [EA26] Paper transport jam in Finisher (Stop signal received from equipment) © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 1...

Page 206 Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the entrance motor (M1). 2. Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 2...

#### Page 207: Paper Jam In Buffer Unit-1

Reconnect the connector securely if there is any disconnection. • Reinstall the sensor correctly if there is any incorrect installation. [] • Replace the sensor if there is any breakage. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 3...

**Page 208** []YES • Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 4...

# Page 209: Paper Jam In Buffer Unit-2

□YES • Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. □ Replace the finisher control PC board (FIN). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 5...

<u>Page 210</u> Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the buffer tray guide motor (M2). 2. Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 6...

# Page 211: Paper Jam In Finishing Tray Section

• Reconnect the connector securely if there is any disconnection. []YES • Replace the harness if open circuited. [] Replace the finisher control PC board (FIN). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 7...

Page 212 [YES • Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 8...

Page 213 [YES • Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [Replace the finisher control PC board (FIN). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 9...

Page 214 Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the stack transport motor (M8). 2. Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 10...

Page 215 • Reconnect the connector securely if there is any disconnection. []YES • Replace the harness if open circuited. [] Replace the finisher control PC board (FIN). © 2008, 2009

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# Page 216: Paper Jam In Movable Tray Section

Reconnect the connector securely if there is any disconnection. • Reinstall the sensor correctly if there is any incorrect installation. [] • Replace the sensor if there is any breakage. MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 12...

# Page 217: Cover Open Jam

Replace the finisher control PC board (FIN). 6.1.6 Cover open jam [EA40] Cover open error Is the front cover (MJ-1103), upper front cover (MJ-1104) or stationary tray opened? []YES • Close the front cover (MJ-1103 ) or upper front cover (MJ-1104). •...

Page 218 Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the finisher control PC board (FIN). 2. Replace the interface PC board (I/F). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 14...

# Page 219: Paper Transport Jam In Saddle Stitch Section (Mj-1104)

Paper Transport Jam in Saddle Stitch Section (MJ-1104) 6.2.1 Paper jam in Saddle Stitch Finisher transport section [EAA0] Paper remaining in Saddle Stitch Finisher Is there any paper remaining in the paper transport path in the equipment or the saddle stitch section of the Finisher? []YES...

Page 220 Replace the harness if open circuited. [] 1. Replace the interface PC board (I/F). 2. Replace the saddle control PC board (SDL). 3. Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 16...

Page 221 • Reconnect the connector securely if there is any disconnection. []YES • Replace the harness if open circuited. [] Replace the saddle control PC board (SDL). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 17...

Page 222 Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the saddle transport motor (M16). 2. Replace the saddle control PC board (SDL). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 18...

# Page 223: Paper Jam In Side Alignment Section

Reconnect the connector securely if there is any disconnection. • Reinstall the sensor correctly if there is any incorrect installation.  $\Box$  • Replace the sensor if there is any breakage. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 19...

Page 224 [YES • Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] Replace the saddle control PC board (SDL). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 20...

# Page 225: Paper Jam In Folding Section

Reconnect the connector securely if there is any disconnection. • Reinstall the sensor correctly if there is any incorrect installation. [] • Replace the sensor if there is any breakage. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 21...

# Page 226: Paper Jam In Additional Folding Section

Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the additional folding motor (M20). 2. Replace the saddle control PC board (SDL). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 22...

# Page 227: Other Errors

Is any of the harnesses in the stapler disconnected or open circuited? []YES • Reconnect the

connector securely if there is any disconnection. • Replace the harness if open circuited. Replace the finisher control PC board. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 23...

Page 228 Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the stapler unit shift motor (M9). 2. Replace the finisher control PC board (FIN). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 24...

#### Page 229: Saddle Stitch Finisher Stapler Related Error (Mj-1104)

Reconnect the connector securely if there is any disconnection. • Replace the harness if open circuited. [] 1. Replace the front saddle stapler clinch unit. 2. Replace the saddle control PC board (SDL). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 25...

# Page 230: Communication Related Error

1. Is the error recovered when the power of the equipment is turned OFF and then back ON? 2. Check if the MJ-1103 or the MJ-1104 is set as the specified finisher on the equipment. 3. Check if the harness between the converter PC board of the equipment and the finisher control PC board (FIN) is disconnected or open circuited.

# Page 231: Memory Error

Is the error recovered when the power of the equipment is turned OFF and then back ON? []YES End. [] Replace the Saddle control PC board (SDL). © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 TROUBLESHOOTING 6 - 27...

Page 232 1. Check if the conductor pattern on the saddle controller PC board (SDL) is open circuited or short circuited. 2. Replace the saddle control PC board (SDL). MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved TROUBLESHOOTING 6 - 28...

# Page 233: Preventive Maintenance (Pm) / Firmware Update

\* Perform preventive maintenance for the Finisher at the same interval as for the main equipment to which the Finisher is connected. [Front side] [Rear side] Fig. 7-1  $\odot$  2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 1...

Page 234 \*a. Paper pusher cam Apply an adequate amount of white grease (Molykote EM-30L) all around the paper pusher cam. Paper pusher cam Fig. 7-2 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 2...

Page 235 \*c. Stapler carrier shaft Apply an adequate amount of white grease (Molykote EM-30L) to the entire stapler carrier shaft. Stapler carrier shaft Fig. 7-4 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 3...

Page 236 Apply an adequate amount of white grease (Molykote HP-300) to the gear teeth of the movable tray drive gear. Movable tray drive gear Fig. 7-6 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 4...

<u>Page 237</u> \* Do not apply coating material (Molykote PD-910) to the rubber section of the grate-shaped tray. \* When coating material adheres to the skin, rinse it well with water. Grate-shaped guide Fig. 7-8 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 5...

# Page 238: Firmware Update

Turn OFF the power of the equipment. Remove 2 screw and take off the board access cover. Board access cover Fig. 7-10 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 6...

Page 239 Turn the power OFF and remove the download jig. Turn OFF all bits of the SW1 on

the Finisher control board. (10) Install the board access cover. @ 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE...

# Page 240: Update Of Fin Board

Fig. 7-14 Turn ON the power while pressing [0] and [8] simultaneously. Updating starts and the LED on the download jig lights MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 8...

Page 241 Is the download jig or the equipment damaged? Turn the power OFF and remove the download jig. Install the board access cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 9...

#### Page 242: Update Of Sdl Board

Saddle control PC board access cover Fig. 7-16 Connect the download jig with the jig connector (CN16) on the Saddle control board. Download jig Fig. 7-17 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE 7 - 10...

Page 243 Install the saddle control PC board access cover. (10) Set the saddle unit back to the main unit and then close the upper front cover. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 PREVENTIVE MAINTENANCE (PM) / FIRMWARE UPDATE...

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#### Page 245: Electric Circuit

MTR5 \_ A# MTR5 \_ B# Front alignment motor MTR5 \_ B CL1 \_ IN Paper exit guide clutch CLT2 CL1 \_ OUT Fig. 8-1 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 1...

Page 246 I/F board P24V MG6ON CN27 MFP-SELECT EXIT-INLET FIN24V FIN24V CN24 CN23 MG1-IN Catching solenoid SOL1 MG1-OUT CN22 MOT3-A MOT3-A# Paddle motor MOT3-B# MOT3-B Fig. 8-2 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 2...

Page 247 PEDGE TXD4 PEDGE MFP-SELECT EXIT-IMLET TRMT-STEP TRMT-CUR PNC board FIN24V TRMT-DIR FIN24V P24V P24V #JIGCON CL1-IN Transport path SOL5 CL1-OUT switching solenoid Fig. 8-3 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 3...

Page 248 P24V-1 P24V CN10 MG-1-1 CN11 5VPB TIOCA1 Folding motor encoder sensor I/F board CL1-IN Folding blade clutch CLT3 INLET CL1-OUT 24V-SEN RXD2 TXD2 Fig. 8-4 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 4...

#### Page 249: Circuit Diagram

Circuit Diagram [A] Finisher control PC board 1. Circuit Diagram (1) Fig. 8-5 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 5...

<u>Page 250</u> 2. Circuit Diagram (2) Fig. 8-6 MJ-1103/1104  $\Circuit$  2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 6...

Page 251 3. Circuit Diagram (3) Fig. 8-7 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 7...

Page 252 4. Circuit Diagram (4) Fig. 8-8 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 8...

Page 253 5. Circuit Diagram (5) Fig. 8-9 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 9...

Page 254 6. Circuit Diagram (6) Fig. 8-10 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 10...

Page 255 7. Circuit Diagram (7) Fig. 8-11 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 11...

Page 256 8. Circuit Diagram (8) Fig. 8-12 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 12...

Page 257 9. Circuit Diagram (9) Fig. 8-13 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 13...

<u>Page 258</u> 10.Circuit Diagram (10) Fig. 8-14 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 14...

Page 259 11. Circuit Diagram (11) Fig. 8-15 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 15...

<u>Page 260</u> 12.Circuit Diagram (12) Fig. 8-16 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 16...

Page 261 [B] Interface PC board 1. Circuit Diagram (1) Fig. 8-17 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 17...

Page 262 2. Circuit Diagram (2) Fig. 8-18 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 18...

Page 263 [C] Saddle control PC board 1. Circuit Diagram (1) Fig. 8-19 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 19...

Page 264 2. Circuit Diagram (2) Fig. 8-20 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 20...

Page 265 3. Circuit Diagram (3) Fig. 8-21 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 21...

Page 266 4. Circuit Diagram (4) Fig. 8-22 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 22...

Page 267 5. Circuit Diagram (5) Fig. 8-23 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 23...

Page 268 6. Circuit Diagram (6) Fig. 8-24 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 24...

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Page 270 8. Circuit Diagram (8) Fig. 8-26 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 26...

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Page 272 10.Circuit Diagram (10) Fig. 8-28 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 28...

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Page 274 12.Circuit Diagram (12) Fig. 8-30 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 30...

Page 275 13.Circuit Diagram (13) Fig. 8-31 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 ELECTRIC CIRCUIT 8 - 31...

# Page 276: Pc Board

PC board [A] Finisher controller PC board Fig. 8-32 [B] Interface PC board Fig. 8-33 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 32...

Page 277 [C] Saddle control PC board Fig. 8-34...

Page 278 MJ-1103/1104 © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved ELECTRIC CIRCUIT 8 - 34...

Page 279 The title for "7.2.1" has been changed. (Error Correction) The illustration in Fig. 7-11 has been changed. 8-1 to 8-29 The illustrations in Fig. 8-1 to Fig. 8-30 have been changed. © 2008, 2009 TOSHIBA TEC CORPORATION All rights reserved MJ-1103/1104 REVISION RECORD...

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