Service
Manual

DC-5090

MITA EUROPE B.V.

Hoeksteen 40, 2132 MS Hoofddorp,
The Netherlands
Phone: (020) 6540000
Home page: http://www.mita.nl, Email: info@mita.nl

MITA NEDERLAND B.V.
Gyroscoopweg 122, 1042 AZ Amsterdam,
The Netherlands
Phone: (020) 5877200

MITA COPYSTAR (U.K.) LTD.
Mita House, Hamm Moor Lane,
Addlestone, Weybridge,
Surrey KT15 2SB, U.K.
Phone: (01932) 858266

MITA ITALIA S.P.A.
Via Marconi 8, 20041 Agrate Brianza,
Milano, Italy
Phone: (039) 65641

S.A. MITA BELGIUM N.V.
Kouterveldstraat 15, 1831 Diegem, Belgium
Phone: (02) 7209270

MITA FRANCE S.A.R.L.
1 Rue Pelloutier,
77183 Croissy Beaubourg, France
Phone: (1) 60175152

MITA ESPAÑA S.A.
Edificio Mita, Avda. De Manacor Nº 2,
Urb. Parque Rozas, Apartado De Correos 76,
28230 Las Rozas, Madrid, Spain
Phone: (91) 631-8392

MITA FINLAND OY
Kirvesmiehenkatu 4, 00810 Helsinki,
Finland
Phone: (09) 478 05200

MITA (SCHWEIZ) AG
Hölzliwisen Industriestrasse 28,
8604 Volketswil, Switzerland
Phone: (01) 9461600

MITA DEUTSCHLAND GMBH
Industriestrasse 17, D-61449 Steinbach/TS,
Germany
Phone: (06171) 7005-0

MITA GMBH AUSTRIA
Altmannsdorfer Straße 144-146,
1232 Wien, Austria
Phone: (01) 80188

MITA SVENSKA AB
Siktgatan 2
162 26 Vällingby, Sweden
Phone: (08) 4719999

MITA DANMARK A/S
Industrivej 11, DK-4632 Bjæverskov,
Denmark
Phone: 53671100

MITA PORTUGAL LDA.
CASCAISTOCK-Armazem nº8,
Rua das Fisgas, Alcoitão,
2765 Estoril, Portugal
Phone: 1-4602221

MITA COPYSTAR AMERICA, INC.

Headquarters:
225 Sand Road, P.O. Box 40008
Fairfield, New Jersey 07004-0008
U.S.A.
Phone: (201) 808-8444

MITA ASIA PACIFIC

Head office:
2-28, 1-chome, Tamatsukuri, Chuo-ku,
Osaka 540, Japan
Phone: (06) 764-3555

MITA COPIERS AUSTRALIA PTY. LTD.
25 Sirius Road, Lane Cove, N.S.W. 2066,
Australia
Phone: (02) 418-7611

MITA NEW ZEALAND LTD.
5 Howe Street, Newton, Auckland 1,
P.O. Box 68343,
Auckland, New Zealand
Phone: (09) 377-2088

MITA (THAILAND) CORPORATION LTD.
9/209 Ratchada-Prachacheun Road,
Bang Sue, Bangkok 10800, Thailand
Phone: (02) 586-0333

MITA COPYSTAR SINGAPORE PTE LTD.
121 Genting Lane, 3rd. Level,
Singapore 349572
Phone: 65-7418733

MITA COPYSTAR HONG KONG LIMITED.
11/F., Mita Centre,
552-566 Castle Peak Road,
Tsuen Wan, New Territories,
Hong Kong
Phone: 852-2423-2163

MITA INDUSTRIAL CO., LTD.

2-28, 1-chome, Tamatsukuri, Chuo-ku,
Osaka 540, Japan
Phone: (06) 764-3555
Fax: (06) 764-3981

©1997 MITA INDUSTRIAL CO., LTD.
MITA and *mita* are registered trademarks of MITA INDUSTRIAL CO., LTD.

Printed in Holland

CONTENTS

I THEORY AND CONSTRUCTION SECTION

1-1 Specifications
- 1-1-1 Specifications 1-1-1

1-2 Handling Precautions
- 1-2-1 Drum 1-2-1
- 1-2-2 Developer and toner 1-2-1
- 1-2-3 Dehumidifier 1-2-1
- 1-2-4 Copy paper 1-2-1

1-3 Mechanical Construction
- 1-3-1 Part names and their functions 1-3-1
- 1-3-2 Machine cross sections 1-3-4
- 1-3-3 Drive system 1-3-5
- 1-3-4 Mechanical construction 1-3-16

II ELECTRICAL SECTION

2-1 Electrical Parts Layout
- 2-1-1 Electrical parts layout 2-1-1

2-2 Detection of Paper Misfeeds
- 2-2-1 Paper misfeed detection 2-2-1
- 2-2-2 Paper misfeed detection conditions 2-2-2

2-3 Operation of the PCB
- 2-3-1 Consists of electric circuit 2-3-1
- 2-3-2 Composition PCB 2-3-2
- 2-3-3 Main PCB 2-3-3
- 2-3-4 Scanner control PCB 2-3-5
- 2-3-5 Operation unit main, left and right PCB 2-3-6
- 2-3-6 RDH main PCB 2-3-7

III SET UP AND ADJUSTMENT SECTION

3-1 Installation
- 3-1-1 Unpacking and installation 3-1-1
- 3-1-2 Setting initial copy modes 3-1-23
- 3-1-3 Installing the key counter (option) 3-1-25
- *3-1-4 Installing the cassette heater (option) 3-1-28*
- *3-1-5 Installing the MMD (option) 3-1-32*

3-2 Simulation
- 3-2-1 Simulations 3-2-1

3-3 Assembly and Disassembly
- 3-3-1 Precautions for assembly and disassembly 3-3-1
- 3-3-2 Paper feed section 3-3-3
- 3-3-3 Main charging section 3-3-37
- 3-3-4 Exposure section 3-3-43
- 3-3-5 Drum section 3-3-81
- 3-3-6 Developing section 3-3-88
- 3-3-7 Transfer section 3-3-94
- 3-3-8 Cleaning section 3-3-100
- 3-3-9 Fixing section 3-3-106
- 3-3-10 Duplex section 3-3-122
- 3-3-11 RDH 3-3-140
- 3-3-12 Others 3-3-169

3-4 PCB Initial Setting
3-4-1 Replacing the main PCB 3-4-1
3-4-2 Adjustment-free variable resistors (VR) 3-4-4
3-5 Self-diagnostics
3-5-1 Self diagnostic function 3-5-1
3-6 Troubleshooting
3-6-1 Image formation problems 3-6-1
3-6-2 Paper misfeeds 3-6-15
3-6-3 PCB terminal voltages 3-6-25
3-6-4 Electrical problems 3-6-44
3-6-5 Mechanical problems 3-3-66
3-7 Appendixes
Timing chart No. 1 1
Timing chart No. 2 2
Timing chart No. 3 3
Timing chart No. 4 4
Timing chart No. 5 5
Timing chart No. 6 6
Timing chart No. 7 7
Timing chart No. 8 8
Timing chart No. 9 9
Timing chart No. 10 10
Timing chart No. 11 11
Composition PCB 1/3 12
Composition PCB 2/3 13
Composition PCB 3/3 14
Main PCB 1/3 15
Main PCB 2/3 16
Main PCB 3/3 17
Operation unit main PCB 1/2 18
Operation unit main PCB 2/2 19
Operation unit right PCB 20
Operation unit left PCB 21
Scanner control PCB 22
RDH main PCB 1/2 23
RDH main PCB 2/2 24
RDH PLL control PCB 25
RDH connection diagram 26
Large paper deck interface PCB 27
Connection diagram 28
Large paper deck connection/wiring diagram 29
RDH wiring diagram 30
Wiring diagram 1/4 31
Wiring diagram 2/4 32
Wiring diagram 3/4 33
Wiring diagram 4/4 34

1-1 Specifications

1-1-1 Specifications 1-1-1

1-2 Handling Precautions

1-2-1 Drum 1-2-1
1-2-2 Developer and toner 1-2-1
1-2-3 Dehumidifier 1-2-1
1-2-4 Copy paper 1-2-1

1-3 Mechanical Construction

1-3-1 Part names and their functions 1-3-1
1-3-2 Machine cross sections 1-3-4
1-3-3 Drive system 1-3-5
1-3-4 Mechanical construction 1-3-16
(1) Paper feed section 1-3-16
(1-1) Paper feed from the cassettes 1-3-16
(1-2) Paper feed from the large paper deck 1-3-22
(1-2-1) Right cassette primary paper feed 1-3-23
(1-2-2) Left cassette primary paper feed 1-3-26
(1-2-3) Raising and lowering the lifts 1-3-28
(1-2-4) Detecting the paper level 1-3-29
(1-3) Paper feed from the bypass table 1-3-30
(2) Main charging section 1-3-33
(2-1) Charger wire and charger grid cleaning 1-3-36
(2-2) Drum temperature control 1-3-36
(2-3) Drum surface potential sensor correction 1-3-37
(2-4) Surface potential correction control (dark potential correction control) 1-3-40
(2-4-1) Surface potential correction control flowchart 1-3-41
(3) Exposure section 1-3-42
(3-1) Light potential correction control 1-3-46
(3-2) Exposure control for auto exposure mode 1-3-46
(3-3) Exposure control for manual exposure and photo modes 1-3-48
(3-4) Light intensity correction for enlargement and reduction modes 1-3-50
(4) Developing section 1-3-51
(4-1) Formation of magnetic brush 1-3-53
(4-2) Toner density control 1-3-55
(4-3) Toner feed level absolute humidity correction 1-3-60
(4-4) Toner density correction based on the developing drive time 1-3-60
(5) Transfer and conveying sections 1-3-61
(5-1) Transfer charge (transfer bias current) control 1-3-62
(6) Cleaning section 1-3-64
(7) Charge erasing section 1-3-65
(8) Fixing section 1-3-67
(9) Feedshift and eject sections 1-3-70
(10) Duplex section 1-3-71
(11) RDH 1-3-78
(11-1) Original feed and reversing sections 1-3-78
(11-1-1) Primary original feed 1-3-80
(11-1-2) Secondary original feed in simplex mode 1-3-81
(11-1-3) Secondary original feed and reversing operation in duplex mode 1-3-82
(11-1-4) Multiple small-size (A4/11" × 8$^{1}/_{2}$" or smaller) original feed in continuous copying 1-3-84

(11-2) Original eject section 1-3-88
(11-2-1) Operation of the original eject section 1-3-89
(11-3) Original partition and original moving sections 1-3-91
(11-3-1) Operation of the original partition section 1-3-93
(11-3-2) Operation of the original moving section 1-3-95

2-1 Electrical Parts Layout

2-1-1 Electrical parts layout 2-1-1

2-2 Detection of Paper Misfeeds

2-2-1 Paper misfeed detection 2-2-1
2-2-2 Paper misfeed detection conditions 2-2-2
(1) Paper feed, conveying, fixing and eject sections 2-2-2
(2) Feedshift and duplex sections 2-2-10
(3) RDH paper feed, RDH conveying, and RDH eject sections 2-2-14
(4) Sorter (See the sorter service manual) 2-2-18

2-3 Operation of the PCB

2-3-1 Consists of electric circuit 2-3-1
2-3-2 Composition PCB 2-3-2
2-3-3 Main PCB 2-3-3
2-3-4 Scanner control PCB 2-3-5
2-3-5 Operation unit main, left and right PCB 2-3-6
2-3-6 RDH main PCB 2-3-7

3-1 Installation

3-1-1 Unpacking and installation 3-1-1
(1) Installation environment 3-1-1
(2) Installation procedure 3-1-2
3-1-2 Setting initial copy modes 3-1-23
3-1-3 Installing the key counter (option) 3-1-25
3-1-4 Installing the cassette heater (option) 3-1-28
3-1-5 Installing the MMD (option) 3-1-32

3-2 Simulation

3-2-1 Simulations 3-2-1
(1) Running a simulation 3-2-1
(2) Simulation list 3-2-3
(3) Contents of simulations 3-2-8

3-3 Assembly and Disassembly

3-3-1 Precautions for assembly and disassembly 3-3-1
(1) Precautions 3-3-1
(2) Running a simulation 3-3-2
3-3-2 Paper feed section 3-3-3
(1) Detaching and refitting the forwarding, upper and lower paper feed pulleys 3-3-3
(2) Detaching and refitting the bypass forwarding roller, bypass upper and lower paper feed pulleys 3-3-8
(2-1) Detaching the bypass paper feed unit 3-3-8
(2-2) Detaching the bypass forwarding roller 3-3-10
(2-3) Detaching the bypass upper paper feed pulley 3-3-11
(2-4) Detaching the bypass lower paper feed pulley 3-3-12
(3) Detaching and refitting the deck upper and lower separation pulleys 3-3-13
(4) Detaching and refitting the deck paper feed rollers 1, 2 and deck paper conveying roller 3-3-16
(5) Detaching and refitting the upper and lower paper width switches (For inch models only.) 3-3-18
(6) Detaching and refitting the bypass paper width switch 3-3-21
(7) Adjusting the center registration 3-3-23
(7-1) Adjusting the position of the width adjustment lever 3-3-23
(7-2) Adjusting the position of the upper bypass table 3-3-24
(7-3) Adjusting the position of the center adjuster 3-3-25
(8) Adjustments after installing rollers and clutches 3-3-26
(8-1) Adjusting the leading edge registration 3-3-26
(8-2) Adjusting the leading edge margin 3-3-27
(8-3) Adjusting the trailing edge margin 3-3-29
(8-4) Adjusting the side edge margin 3-3-31
(8-5) Adjusting the book copy margin 3-3-33
(8-6) Adjusting the slack amount before registration 3-3-35
3-3-3 Main charging section 3-3-37
(1) Replacing the charger wire and charger grid assembly 3-3-37
(2) Replacing the grid wire cleaning pad and charger wire cleaning pad 3-3-41
(3) Adjusting the drum surface potential (reference) 3-3-42
3-3-4 Exposure section 3-3-43
(1) Detaching and refitting the halogen lamp 3-3-43
(2) Detaching and refitting the optical section thermostat 3-3-44
(3) Adjusting the positions of the light adjusters 3-3-45
(4) Replacing and refitting the scanner wires 3-3-46
(4-1) Detaching the scanner wires 3-3-46
(4-2) Refitting the scanner wires 3-3-52
(5) Adjusting focus 3-3-57
(5-1) Adjusting position of light source unit 1 3-3-57
(5-2) Setting the lens unit rank 3-3-59
(6) Adjusting longitudinal image squareness (position of light source unit 2) 3-3-65

(7) Adjusting lateral image squareness
(height of light source unit 2) 3-3-66
(8) Adjust lateral magnification 3-3-67
(9) Adjust longitudinal magnification
(scanning speed correction) 3-3-68
(10) Adjusting the position of the original size indicator 3-3-69
(11) Setting exposure amount
(for equal magnification mode) 3-3-70
(11-1) Adjusting the exposure amount for normal mode 3-3-71
(11-2) Adjusting the exposure amount for photo mode 3-3-74
(12) Setting the amount of the exposure for AE
(auto exposure) 3-3-77
(13) Adjusting the amount of the exposure for AE
(auto exposure) 3-3-78
(14) Adjusting the exposure amount
for enlargement/reduction mode 3-3-80
3-3-5 Drum section 3-3-81
(1) Detaching and refitting the drum and drum heater 3-3-81
(2) Detaching and refitting the front and
rear drum electrode wires 3-3-84
(3) Detaching and refitting the drum heater
electrodes A and B 3-3-86
3-3-6 Developing section 3-3-88
(1) Adjusting the position of the magnetic brush
(developing roller) (reference) 3-3-88
(2) Detaching and refitting the lower developing roller lever
and lower developing roller cam 3-3-89
(3) Detaching and refitting the developing blade assembly 3-3-91
(4) Adjusting developing bias voltage 3-3-93
3-3-7 Transfer section 3-3-94
(1) Detaching and refitting the transfer charger belt 3-3-94
(2) Detaching and refitting the transfer roller 3-3-96
(3) Detaching and refitting the belt cleaning brush 3-3-97
(4) Adjusting the transfer timing (reference) 3-3-99
3-3-8 Cleaning section 3-3-100
(1) Detaching and refitting the cleaning blade 3-3-100
(2) Detaching and refitting the cleaning brush 3-3-102
(3) Detaching and refitting the cleaning brush mount 3-3-104
(4) Detaching and refitting the separation claw assembly 3-3-105
3-3-9 Fixing section 3-3-106
(1) Detaching and refitting the fixing unit thermostats 1 and 2 ... 3-3-106
(2) Detaching and refitting the oil roller 3-3-108
(3) Detaching and refitting the upper cleaning roller 3-3-110
(4) Detaching and refitting the fixing heaters M and S 3-3-112
(5) Detaching and refitting the fixing unit thermistor 3-3-115
(6) Detaching and refitting the lower cleaning roller 3-3-116
(7) Detaching and refitting the heat roller and press roller 3-3-117
(8) Detaching and refitting the heat roller separation claw 3-3-119
(9) Detaching and refitting the press roller separation claw 3-3-120

3-3-10 Duplex section 3-3-122
(1) Detaching and refitting the duplex forwarding pulley 3-3-122
(2) Detaching and refitting the switchback separation belts 3-3-123
(3) Detaching and refitting the switchback roller, duplex upper registration roller and refeed roller 3-3-126
(3-1) Detaching the switchback roller 3-3-126
(3-2) Detaching the duplex upper registration roller 3-3-128
(3-3) Detaching the refeed roller 3-3-131
(4) Adjusting the position of the refeed solenoid 3-3-132
(5) Adjusting the position of the duplex paper tapping solenoid 3-3-133
(6) Adjusting the side registration amount 3-3-134
(7) Adjusting the duplex forwarding amount 3-3-136
(8) Adjusting the trailing edge margin 3-3-137
(9) Adjusting the position of the side registration section 3-3-139
3-3-11 RDH 3-3-140
(1) Detaching and refitting the original feed pulley 3-3-140
(2) Detaching and refitting the original separation pulley 3-3-142
(3) Detaching and refitting the original separation belt 3-3-143
(4) Detaching and refitting the original conveying belt 3-3-145
(5) Applying the grease to the original partition shaft 3-3-146
(6) Adjusting the position of the original conveying drive assembly 3-3-147
(7) Adjusting the position of the original eject motor 3-3-148
(8) Replacing the original partition wire 3-3-149
(9) Replacing the original moving wire 3-3-153
(10) Adjusting the position of the original feed solenoid 3-3-158
(11) Adjusting the position of the original strike solenoid 3-3-159
(12) Adjusting the position of the original eject solenoid 3-3-160
(13) Adjusting the position of the original partition lever solenoid 3-3-161
(14) Adjusting the gap between the original partition plate and the original feed cover 3-3-162
(15) Adjusting the skewed paper feed 3-3-163
(16) Adjusting the original axis 3-3-164
(17) Adjusting the leading edge registration (RDH) 3-3-165
(18) Adjusting the 2 in 1 mode timing 3-3-166
(18-1) 2 in 1 mode timing adjustment 1 3-3-166
(18-2) 2 in 1 mode timing adjustment 2 3-3-168
3-3-12 Others 3-3-169
(1) Adjusting tension of the scanner drive belt 3-3-169
(2) Adjusting tension of the drum drive belt 3-3-170
(3) Adjusting tension of the conveying drive belt 3-3-171
(4) Adjusting tension of the paper feed drive belt 3-3-172

3-4 PCB Initial Setting

3-4-1 Replacing the main PCB 3-4-1
3-4-2 Adjustment-free variable resistors (VR) 3-4-4

3-5 Self-diagnostics

3-5-1 Self diagnostic function 3-5-1
(1) Self diagnostic display 3-5-1
(2) Partial operation control 3-5-1

3-6 Troubleshooting

3-6-1 Image formation problems 3-6-1
(1) No image (entirely white) 3-6-3
(2) No image (entirely black) 3-6-4
(3) Image too light 3-6-5
(4) Background is visible 3-6-5
(5) A white line appears longitudinally 3-6-6
(6) A black line appears longitudinally 3-6-6
(7) A black line appears laterally 3-6-7
(8) One side of the copy image is darker than the other 3-6-8
(9) Black dots appear on the image 3-6-8
(10) Image is blurred 3-6-9
(11) The leading edge of the image is consistently misaligned with the original 3-6-9
(12) The leading edge of the image is sporadically with the original 3-6-10
(13) Paper creases 3-6-10
(14) Offset occurs 3-6-11
(15) Black lines appear on both sides of the image in reduction copies 3-6-12
(16) Image is party missing 3-6-12
(17) Fixing is poor 3-6-13
(18) Image is out of focus 3-6-13
(19) Image is not squarelongitudinally 3-6-13
(20) Image is not square laterally 3-6-14
(21) Lateral bands of the image are missing 3-6-14
3-6-2 Paper misfeeds 3-6-15
• Copier
(1) The misfeed indicator for the paper feed, paper conveying or fixing section lights as soon as the main switch is turned on 3-6-15
(2) The misfeed indicator for the paper feed section lights during copying.(Large paper deck) 3-6-16
(3) The misfeed indicator for the paper feed section lights during copying.(upper cassette) 3-6-17
(4) The misfeed indicator for the paper feed section lights during copying.(lower cassette) 3-6-18
(5) The misfeed indicator for the bypass lights during copying 3-6-18
(6) The misfeed indicator for the paper feed or conveying section lights during copying 3-6-19
(7) The misfeed indicator for the paper conveying section lights during copying 3-6-20
(8) The misfeed indicator for the fixing section lights during copying 3-6-21
(9) The misfeed indicator for the eject section lights during copying 3-6-21

• Feed shift and duplex section
(1) The misfeed indicator for the duplex section lights as soon as the main switch is turned on 3-6-22
(2) The misfeed indicator for the duplex section lights during duplex copying 3-6-22
(3) The misfeed indicator for the paper feed with refeed from the duplex section lights during duplex copying 3-6-23
• RDH
(1) The original jam is indicated as soon as the print key is pressed 3-6-24
(2) Original misfeed occurs during coping 3-6-24
3-6-3 PCB terminal voltages 3-6-25
(1) Composition PCB 3-6-25
(2) Main PCB 3-6-27
(3) Scanner control PCB 3-6-34
(4) Operation unit main PCB 3-6-36
(5) Operation unit left and right PCBs 3-6-39
(6) RDH main PCB 3-6-41
3-6-4 Electrical problems 3-6-44
• Copier
(1) The machine does not operate when the main switch turn on 3-6-44
(2) *The drive motor does not operate.(C230)* 3-6-44
(3) The paper feed motor does not operate.(C240) 3-6-44
(4) *The image forming motor does not operate.(C210)* 3-6-45
(5) The scanner motor does not operate.(C310) 3-6-45
(6) The mirror motor does not operate.(C430) 3-6-45
(7) The lens carriage motor does not operate.(C410) 3-6-46
(8) The toner feed motor does not operate 3-6-46
(9) The toner agitation motor does not operate 3-6-46
(10) The cooling fan motor 1 does not operate 3-6-46
(11) The cooling fan motor 2 does not operate 3-6-47
(12) The developing fan motor does not operate 3-6-47
(13) The optical section fan motor does not operate 3-6-47
(14) The main charger fan motor does not operate 3-6-47
(15) The fixing unit fan motor does not operate 3-6-48
(16) The large paper deck left or right lift motor does not operate.(C255) 3-6-48
(17) The upper paper cassette lift motor does not operate.(C253) ... 3-6-48
(18) The lower paper cassette lift motor does not operate.(C254) ... 3-6-48
(19) The main charger cleaning motor does not operate 3-6-49
(20) The feed clutch 1 does not operate 3-6-49
(21) The feed clutch 2 does not operate 3-6-49
(22) The feed clutch 3 does not operate 3-6-49
(23) The feed clutch 4 does not operate 3-6-49
(24) The feed clutch 5 does not operate 3-6-50
(25) The feed clutch 6 does not operate 3-6-50
(26) The registration clutch does not operate 3-6-50
(27) The bypass paper feed clutch does not operate 3-6-50

(28) The large paper deck paper feed clutch 1 or 2 does not operate 3-6-50
(29) The large paper deck conveying clutch does not operate 3-6-51
(30) The upper paper feed clutch does not operate 3-6-51
(31) The lower paper feed clutch does not operate 3-6-51
(32) The transfer charger belt release clutch does not operate 3-6-51
(33) The bypass solenoid does not operate 3-6-51
(34) The cleaning lamp does not light 3-6-52
(35) The halogen lamp does not light.(C100) 3-6-52
(36) The halogen lamp does not turn off. 3-6-52
(37) Fixing heater M or S does not turn on.(C610, C630, C650) 3-6-52
(38) Fixing heater M or S does not turn off.(C640) 3-6-53
(39) *Main charger is not performed(C510)* 3-6-53
(40) Transfer charging is not performed.(C520) 3-6-53
(41) No developing bias is output 3-6-53
(42) The touch panel keys do not work 3-6-54
(43) *The message requesting paper to be loaded is shown when paper is present in the large paper deck.* 3-6-54
(44) The message requesting paper to be loaded is shown when paper is present in the upper cassette 3-6-54
(45) The message requesting paper to be loaded is shown when paper is present in the lower cassette 3-6-54
(46) The message requesting paper to be loaded is shown when paper is present in the bypass table 3-6-55
(47) The size of paper in the upper cassette is not displayed correctly 3-6-55
(48) The size of paper in the lower cassette is not displayed correctly 3-6-55
(49) A paper jam in the paper feed, paper conveying or fixing section is indicated on the touch screen immediately after the main switch is turned on, or cannot be reset 3-6-56
(50) The message requesting covers to be closed is displayed when the front, paper feed, eject covers are closed 3-6-57
(51) Others 3-6-57
• Feedshift and duplex sections
(1) The side registration motor does not rotate.(C220) 3-6-58
(2) The duplex registration clutch does not rotate 3-6-58
(3) The duplex paper conveying clutch does not rotate 3-6-58
(4) The refeed clutch does not rotate 3-6-58
(5) The feedshift solenoid does not operate 3-6-59
(6) The duplex forward solenoid does not operate 3-6-59
(7) The duplex paper press solenoid does not operate 3-6-59
(8) The duplex paper tapping solenoid does not operate 3-6-59
(9) The message requesting covers to be closed displayed when the eject cover is closed 3-6-59
(10) Others 3-6-60
• RDH
(1) The RDH does not operate when the main switch turn on 3-6-61

(2) The original feed motor does not operate 3-6-61
(3) The original conveying motor does not operate 3-6-62
(4) The original moving motor does not operate 3-6-62
(5) The original eject motor does not operate 3-6-62
(6) The original feed solenoid does not operate 3-6-63
(7) The original stopper solenoid does not operate 3-6-63
(8) The original strike solenoid does not operate 3-6-63
(9) The original partition lever solenoid does not operate 3-6-63
(10) The original eject solenoid does not operate 3-6-63
(11) The original moving solenoid does not operate 3-6-64
(12) The original partition solenoid does not operate 3-6-64
(13) An original jam is indicated immediately after the copier print key is pressed 3-6-64
(14) The RDH does not enter ready mode when originals are placed on the RDH 3-6-65
3-6-5 Mechanical problems 3-3-66
• Copier
(1) No primary paper feed 3-6-66
(2) No secondary paper feed 3-6-66
(3) Skewed paper feed 3-6-66
(4) The scanner does not travel 3-6-67
(5) Multiple sheets of paper are fed at one time 3-6-67
(6) Paper misfeed 3-6-67
(7) Toner drops on the paper conveying path 3-6-67
(8) Abnormal noise is heard 3-6-68
• Feedshift and duplex sections
(1) No refeed 3-6-69
(2) paper is refed askew 3-6-69
(3) Multiple sheets of paper are fed at one time 3-6-69
(4) Paper jam 3-6-69
(5) Abnormal noise is heard 3-6-69
• RDH
(1) No original feed from RDH 3-6-70
(2) Multiple sheets opf original are fed from RDH at one time 3-6-70
(3) Skewed original feed from RDH 3-6-70
(4) Original misfeed 3-6-71
(5) Abnormal noise is heard 3-6-71

3-7 Appendixes

Timing chart No. 1 1
Timing chart No. 2 2
Timing chart No. 3 3
Timing chart No. 4 4
Timing chart No. 5 5
Timing chart No. 6 6
Timing chart No. 7 7
Timing chart No. 8 8
Timing chart No. 9 9
Timing chart No. 10 10
Timing chart No. 11 11
Composition PCB 1/3 12
Composition PCB 2/3 13
Composition PCB 3/3 14
Main PCB 1/3 15
Main PCB 2/3 16
Main PCB 3/3 17
Operation unit main PCB 1/2 18
Operation unit main PCB 2/2 19
Operation unit right PCB 20
Operation unit left PCB 21
Scanner control PCB 22
RDH main PCB 1/2 23
RDH main PCB 2/2 24
RDH PLL control PCB 25
RDH connection diagram 26
Large paper deck interface PCB 27
Connection diagram 28
Large paper deck connection/wiring diagram 29
RDH wiring diagram 30
Wiring diagram 1/4 31
Wiring diagram 2/4 32
Wiring diagram 3/4 33
Wiring diagram 4/4 34