

SAMSUNG

Service Manual

Service Manual



Mono Laser MFP

SCX-4600/SCX-4623 series
SCX-4600/4623F/4623FN

1. Print / Copy Speed
• 22 ppm in letter

2. Processor
• Jupiter5 375 Mhz

3. Printer Language Emulations
• SPL

4. Memory
• 64 MB (4600/4623F)
• 128 MB (4623FN)

5. Interfaces
• One USB port
• One 10/100 Base TX network connector (4623FN)

6. Toner cartridge
• Initial : 0.7K / 1K
• Sales : 1.5K / 2.5K two types

7. ADF (4623 series)



Service Manual

GSPN (Global Service Partner Network)

North America : service.samsungportal.com

Latin America : latin.samsungportal.com

CIS : cis.samsungportal.com

Europe : europe.samsungportal.com

China : china.samsungportal.com

Asia : asia.samsungportal.com

Mideast & Africa : mea.samsungportal.com

© Samsung Electronics Co.,Ltd. August. 2009

Printed in Korea.

VERSION NO. : 1.00 CODE : 4600-00000E

Contents

chapter 1 Precautions

1.1 Safety Warning	1-1
1.2 Caution for safety	1-2
1.2.1 Toxic material	1-2
1.2.2 Electric Shock and Fire Safety Precautions	1-2
1.2.3 Handling Precautions	1-3
1.2.4 Assembly / Disassembly Precautions	1-3
1.2.5 Disregarding this warning may cause bodily injury	1-4
1.3 ESD Precautions	1-5

chapter 2 Product Overview

2.1 Product Specifications	2-1
2.1.1 Product Overview	2-1
2.1.2 Specifications.....	2-2
2.1.3 Model Comparison Table	2-9
2.2 System Overview	2-10
2.2.1 Front View	2-10
2.2.2 Rear View	2-11
2.2.3 System Layout	2-12
2.2.4 Engine H/W Specifications	2-19
2.2.5 Engine F/W Contol Algorithm	2-27
2.2.6 S/W Descriptions	2-29

chapter 3 Maintenance and Disassembly

3.1 Precautions when replacing parts	3-1
3.1.1 Precautions when assembling and disassembling	3-1
3.1.2 Preautions when handling PBA	3-1
3.1.3 Releasing Plastic Latches	3-1

Contents

3.2 Screws used in the printer	3-2
3.3 Cover	3-4
3.3.1 Front Cover	3-4
3.3.2 Rear Cover.....	3-4
3.3.3 Right/Left Cover	3-5
3.4 Scanner and ADF	3-6
3.4.1 ADF unit	3-6
3.4.2 ADF roller	3-7
3.4.3 OPE Unit.....	3-8
3.4.4 Platen unit	3-8
3.4.5 CIS unit	3-9
3.5 Middle Cover	3-10
3.6 Fuser Unit	3-12
3.6.1 Whole Fuser Unit	3-12
3.6.2 Main Service parts of Fuser Unit	3-13
3.6.3 Replacing the Main Service part of Fuser Unit.....	3-15
3.7 LSU	3-22
3.8 Main PBA	3-24
3.9 Drive unit	3-25
3.10 Solenoid	3-26
3.11 FAN	3-26
3.12 Transfer Roller	3-27
3.13 SMPS/HVPS board	3-28
3.14 Pick up roller	3-30
3.15 Cassette holder pad	3-30

chapter 4 Alignment and Troubleshooting

4.1 Alignment and Adjustments.....	4-1
4.1.1 Control Panel.....	4-1
4.1.2 Understanding the Status LED	4-4
4.1.3 JAM Removal	4-4
4.1.4 Paper Path	4-10

Contents

4.1.5 Menu Map	4-11
4.1.6 Tech Mode	4-12
4.1.7 EDC Mode	4-19
4.1.8 Firmware Upgrade	4-22
4.1.9 Periodic Defective Image.....	4-23
4.1.10 Error Message.....	4-24
4.2 Troubleshooting.....	4-28
4.2.1 Procedure of Checking the Symptoms	4-28
4.2.2 The cause and solution of Bad image	4-29
4.2.3 The cause and solution of the bad discharge	4-45
4.2.4 The cause and solution of the malfunction	4-52
4.2.5 The cause and solutions of bad environment of the software	4-61
4.2.6 Fax & Phone Problems	4-64
4.2.7 Copy Problems	4-73
4.2.8 Scanning Problems	4-77
4.2.9 Fuser Problems and solutions	4-80

chapter 5 System Diagram

5.1 Block Diagram	5-1
5.2 Connection Diagram.....	5-2

chapter 6 Reference Information

6.1 Tool for Troubleshooting	6-1
6.2 Acronyms and Abbreviations	6-2
6.2.1 Acronyms	6-2
6.2.2 Service Parts	6-4
6.3 The Sample Pattern for the Test.....	6-8
6.3.1 A4 ISO 19752 Standard Pattern	6-8
6.4 Selecting a location	6-9

Contents

attached Exploded Views & Parts List-OK

* Please see the attached.

Power Cord	4
Thumbnail	5
1. MAIN	7
2. COVER	9
3. COVER-MIDDLE ASSY	11
4. COVER FRONT	13
5. COVER REAR	15
6. FRAME BASE-LOWER	17
7. DRIVE MAIN-BRACKET.....	21
8. FRAME BASE-PICK UP	23
9. FUSER	25
10. CASSETTE.....	27
11. SCANNER_4 in 1	29
12. SCANNER_3 in 1	31
13. COVER-PLATEN	33
14. OPE_4 in 1	35
15. OPE_3 in 1	37
16. PLATEN-LOW END	39
17. PLATEN-LOWER_4 in 1	41
18. PLATEN-LOWER_3 in 1	43
19. PLATEN-UPPER_4 in 1	45
20. PLATEN-UPPER_3 in 1	47
21. PLATEN-SHEET	49
22. ASSY_ADF_BASE	51
23. ASSY-INPUT-TRAY	53
24. ASSY_ADF_COVER.....	55
25. ASSY_PAPER-PATH.....	57
26. ASSY_DRIVING_MODULE	59