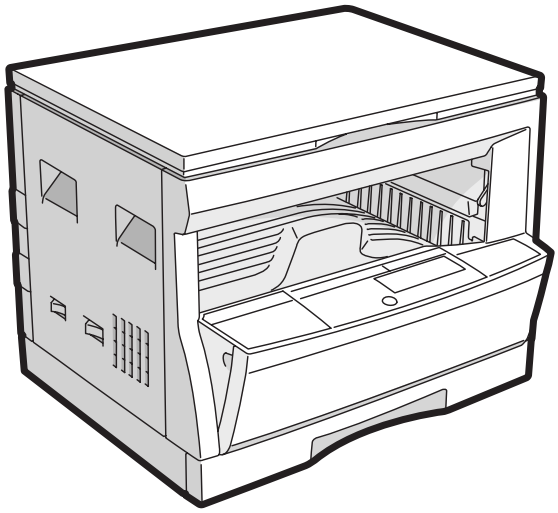
SHARP SERVICE MANUAL

CODE : 00ZAR5015/A1E



DIGITAL COPIER

MODEL AR-5015

CONTENTS

[1] GENERAL ..... Refer to AR-163
[2] SPECIFICATIONS AR-5015
[3] CONSUMABLE PARTS AR-5015
[4] EXTERNAL VIEWS AND INTERNAL STRUCTURES AR-5015
[5] UNPACKING AND INSTALLATION ..... Refer to AR-163
[6] ADJUSTMENTS ..... Refer to AR-163
[7] SIMULATIONS AR-5015
[8] USER PROGRAMS ..... Refer to AR-163
[9] TROUBLE CODE LIST ..... Refer to AR-163
[10] MAINTENANCE AR-5015
[11] DISASSEMBLY AND ASSEMBLY AR-5015
[12] FLASH ROM VERSION UP PROCEDURE ..... Refer to AR-163
[13] ELECTRICAL SECTION AR-5015
PARTS GUIDE

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

Note for this Service Manual

This Service Manual describes only the items related to the AR-5015. For the other items common with the AR-163, please refer to the AR-162/163 Service Manual (Document code: 00ZAR162//A1E). The table below shows which document(s) should be referred to for each section. (Refer to the document marked with ○.)

Section	AR-163	AR-5015	Changed item
[1] NOTE FOR SERVICING	○		
[2] SPECIFICATIONS	○	○	Some specifications and option setup
[3] COSUMABLE PARTS		○	
[4] EXTERNAL VIEW AND INTERNAL STRUCTURE	○	○	Operation panel
[5] UNPACKING AND INSTALLATION	○		
[6] ADJUSTMENTS	○		The AR-5015 does not support installation of an option unit. (Note 1)
[7] SIMULATION	○	○	The AR-5015 does not support installation of an option unit. (Note 1)
[8] USER PROGRAM	○		The AR-5015 does not support installation of an option unit. (Note 1)
[9] TROUBLE CODE LIST	○		The AR-5015 does not support installation of an option unit. (Note 1)
[10] MAINTENANCE	○	○	The AR-5015 does not support installation of an option unit. (Note 1)
[11] DISASSEMBLLY AND ASSEMBLY	○	○	
[12] FLASH ROM VERSION UP PROCEDURE	○		
[13] ELECTRICAL CIRCUIT	○	○	The AR-5015 does not support installation of an option unit. (Note 1)

Note 1: The AR-5015 does not support installation of an option unit such as SPF, paper feed unit, job separator, electronic sort unit, printer expansion unit, and FAX expansion unit. Therefore, the descriptions on option units in each section of the reference document (AR-162/163 S/M) should be disregarded.

[2] SPECIFICATIONS

The table below shows the specifications of this model and the contents of changes from the AR-163.

Item		AR-163	AR-5015
Copy speed		16 PPM	15 PPM
Multi-purpose tray		100 sheets	100 sheets
Standard tray		1 cassette (250 sheets)	1 cassette (250 sheets)
SOPM		Yes (Depends on the destination)	No
Option tray	1 tray	Option	No
	2 tray	Option	No
Original detection		No	No
Original cover		Yes	Yes
SPF		Option	No
Electronic sort		Option	No
Job separator		Option	No
FAX expansion unit		Option	No
Printer expansion unit		Option	No
FAX expansion memory		Option	No
LCD panel		Option	No
Dust cover		No	No
APS		Yes	No

[3] CONSUMABLE PARTS

1. SUPPLY SYSTEM TABLE

A. Latin America

NO	Name	Content	Life	Model name	Remark
1	Toner cartridge (Black) <With IC>	Toner ×10 (Toner: Net Weight 475g) Bag ×10	180K	AR-015LT	Life setting by A4 (8.5"x11") 6% coverage
2	Developer	Developer ×10 (Developer: Net Weight 400g)	500K	AR-015CD	
3	Drum kit	Drum ×1 Drum fixing plate ×1	50k	AR-015DR	

∗ For USA goverrnment

B. Middle East/Africa

NO	Name	Content	Life	Model name	Remark
1	Toner cartridge (Black) <With IC>	Toner ×10 (Toner: Net Weight 475g) Bag ×10	180K	AR-015ET	Life setting by A4 6% coverage
2	Developer	Developer ×10 (Developer: Net Weight 400g)	500K	AR-015CD	
3	Drum kit	Drum ×1 Drum fixing plate ×1	50k	AR-015DR	

C. Europe

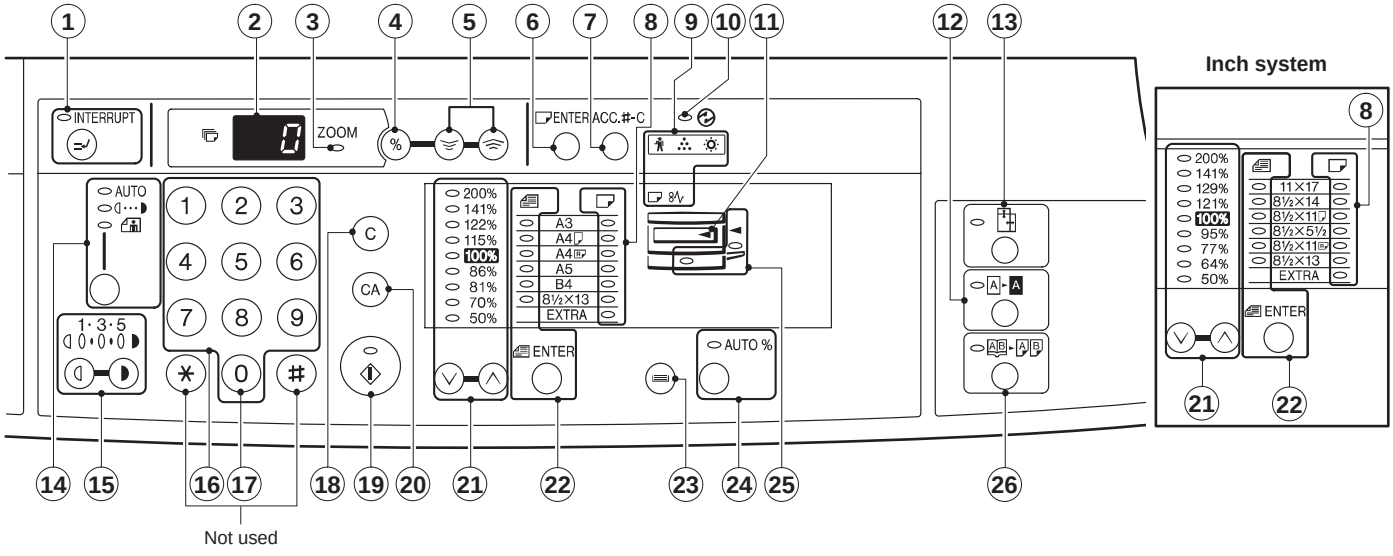
NO	Name	Content	Life	Model name	Remark
1	Toner cartridge (Black) <With IC>	Toner ×10 (Toner: Net Weight 475g) Bag ×10	180K	AR-015LT	Life setting by A4 (8.5"x11") 6% coverage
2	Developer	Developer ×10 (Developer: Net Weight 400g)	500K	AR-015CD	
3	Drum kit	Drum ×1 Drum fixing plate ×1	50k	AR-015DR	

D. Asia

NO	Name	Content	Life	Model name	Remark
1	Toner cartridge (Black) <With IC>	Toner ×10 (Toner: Net Weight 475g) Bag ×10	180K	AR-015CT	Life setting by A4 6% coverage
2	Developer	Developer ×10 (Developer: Net Weight 400g)	500K	AR-015CD	
3	Drum kit	Drum ×1 Drum fixing plate ×1	50k	AR-015DR	

[4] EXTERNAL VIEWS AND INTERNAL STRUCTURES

3. OPERATION SECTION



1	INTERRUPT key and indicator	2	Copy quantity display	3	ZOOM indicator
4	Copy ratio display key	5	Zoom keys	6	PAPER SIZE ENTER key
7	AUDIT CLEAR key	8	PAPER SIZE indicators	9	Alarm indicators
10	POWER SAVE indicator	11	Output tray full indicator	12	B/W REVERSE key and indicator
13	XY-ZOOM key and indicator	14	AUTO/MANUAL/PHOTO key and indicators	15	Light and dark keys and indicators
16	Numeric keys	17	Zero key	18	CLEAR key
19	START key and indicator	20	CLEAR ALL key	21	PRESET RATIO selector keys and indicators
22	ORIGINAL SIZE ENTER key and indicators	23	TRAY SELECT key	24	AUTO IMAGE key and indicator
25	Paper feed location/misfeed location indicators	26	DUAL PAGE COPY key and indicator		

[7] SIMULATIONS

The table below shows the changed points in simulations. (Items marked with* are changed.)

Main code	Sub code	Contents	Details of operation	Initial value	Set range
21	1	Maintenance cycle setting	Used to display the currently set maintenance cycle at the numbers shown at right. When the set value is entered and the start key is pressed, the set value is stored. Key operation/Display 0: 2500 sheets 1: 5000 sheets 2: 25000 sheets* 3: 50000 sheets* 4: 150000 sheets 5: FREE (999999 sheets) 6: 10000 sheets 7: 7500 sheets	2*	0~7*
21	2	Mini maintenance cycle setting	Used to display the currently set mini maintenance cycle at the numbers shown at right. When the set value is entered and the start key is pressed, the set value is stored. Key operation/Display 0: 2500 sheets 1: 5000 sheets 2: 10000 sheets 3: FREE (999999 sheets) 4: 50000 sheets	4	0~4*
26	6	Destination setting	Used to display the current destination setting with the numbers at right. After entering the set value, press the start key, and the set value is stored. Key operation/Display 0: Japan 1: USA (Inch series) 2: Canada (Inch series) 3: Germany 1 (AB series) 4: UK (AB series) 5: Not used 6: France (AB series) 7: EX inch series 8: EX AB series 9: EX inch series (FC conformity) 10: EX AB series (FC conformity) (Australia, Newzealand) 11: China (AB series) 12: Taiwan (AB series) 13: Germany 2 (AB series)	7	0~13
26	10	Model name input*	Used to display and register the model name. Key operation/Display 0: ARS140 1: AR5015	1	0~1
30	1	Machine sensor operation check	Used to check the sensor in the machine transport system with LED on the operation panel. Display <Lighting at sensor ON> Paper entry sensor : Machine position JAM LED Duplex sensor : Manual feed tray position LED Paper exit sensor : JAM LED		

[10] MAINTENANCE

1. MAINTENANCE TABLE

×: Check (Clean, adjust, or replace when required.) ○: Clean ▲: Replace △: Adjust ☆: Lubricate

Unit name	Part name		When calling	25K	50K	75K	100K	125K	150K
Drum peripheral	OPC drum		–	–	▲	–	▲	–	▲
	Cleaning blade		–	–	▲	–	▲	–	▲
	Side seal		×	×	×	×	×	×	▲
	MC unit		×	○	▲	○	▲	○	▲
	(MC charging electrode)		–	(○)	(▲)	(○)	(▲)	(○)	(▲)
	(MC grid)		–	(○)	(▲)	(○)	(▲)	(○)	(▲)
	(MC case)		–	(○)	(▲)	(○)	(▲)	(○)	(▲)
	Transfer wire		○	○	×	○	×	○	▲
	Transfer paper guide		○	○	×	○	×	○	▲
Developing section	Developer		–	–	▲	–	▲	–	▲
	DV seal		–	×	×	×	×	×	▲
	DV side seal		–	○	–	○	–	○	▲
	Side Mylar		–	–	–	–	–	–	▲
Optical section	Lamp unit	Reflector	○	×	○	×	○	×	○
		Mirror	○	×	○	×	○	×	○
	No. 2/3 mirror unit	Mirror	○	×	○	×	○	×	○
		Pulley	×	×	×	×	×	×	×
	CCD peripheral	Lens	○	×	○	×	○	×	○
	Glass	Table glass	○	×	○	×	○	×	○
		White Plate	○	×	○	×	○	×	○
	Other	Drive wire	×	×	×	×	×	×	×
		Rail	×☆	×	×☆	×	×☆	×	×☆
		Document cover	○	×	○	×	○	×	○
		Document size sensor	○	×	○	×	○	×	○
LSU		Dust-proof glass	○	×	○	×	○	×	○
Paper feed section	Multi paper feed section	Takeup roller	○	×	○	×	○	×	○
		Paper feed roller	○	×	○	×	○	×	○
		Spring clutch	○☆	×	○☆	×	○☆	×	○☆
Paper transport section		PS roller	○	×	○	×	○	×	○
		Transport (paper exit) rollers	○	×	○	×	○	×	○
		Spring clutch	○☆	×	○☆	×	○☆	×	○☆
Fusing section		Upper heat roller	○	×	○	×	○	×	▲
		Pressure roller	○	×	○	×	○	×	○
		Pressure roller bearing	×	×	×	×	×	×	○☆
		Upper separation pawl	×	×	×	×	×	×	○
		Lower separation pawl	×	×	×	×	×	×	○
Drive section		Gears	×☆	×	×☆	×	×☆	×	×☆
		Belts	×	×	×	×	×	×	○
Paper exit section		Ozone filter	×	×	×	×	×	×	×*1

*1 : Recommendable replacement time: 50K (Letter, 5% print)

2. MAINTENANCE DISPLAY SYSTEM

According to the change in toner and developer life, the LED ON timing is changed.

Toner	Life	18K	
	Remaining quantity check ∗1	a. Press and hold the density adjustment LIGHT key for more than 5 sec, and the machine will enter the user program mode. b. Press and hold the "%"key for more than 5 sec, and the remaining quantity will be displayed on the copy quantity display in one of the following levels: (Remaining quantity display levels: 100%, 75%, 50%, 25%, 10%, LO) c. Press the density adjustment LIGHT key to cancel.	
	Remaining quantity	NEAR EMPTY About 10%	EMPTY
	LED	ON	Flash
	Machine	Operation allowed	Stop
Developer	Life	50K	
	LED	ON at 50K of the developer count.	
	Machine	Selection is available between Not Stop and Stop by Service Simulation (SIM 26-37) Setup. (If Stop is selected, the LED will flash and stop at 50K) ∗ Default: Not Stop ∗ Clear: SIM 42-1	
Maintenance	LED	Selection is available among 50K, 25K, 10K, 7.5K, 5K, and free (no lighting) with SIM 21-1. ∗ Default: 25K ∗ Clear: SIM 20-1	
	Machine	Not stop.	

∗ 1 : Installation of a new toner cartridge allows to display the remaining quantity.

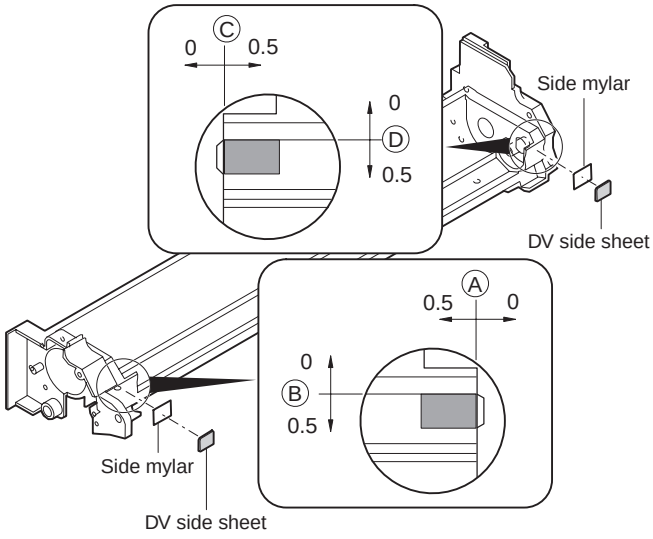
[11] DISASSEMBLY AND ASSEMBLY

11. DEVELOPING SECTION

A. Developing box

a) Side mylar attachment reference

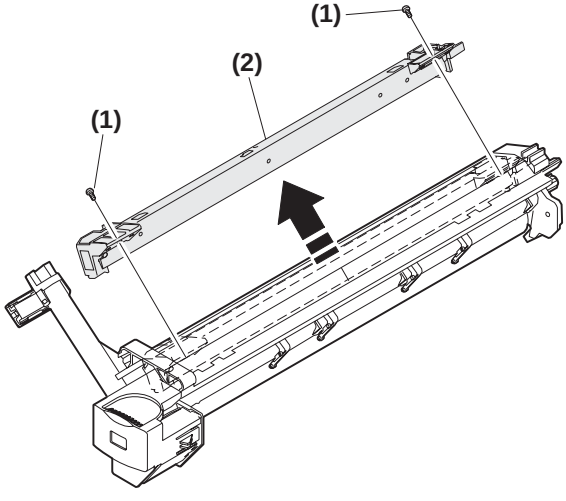
The side mylar attachment reference is shonw in the figure below.



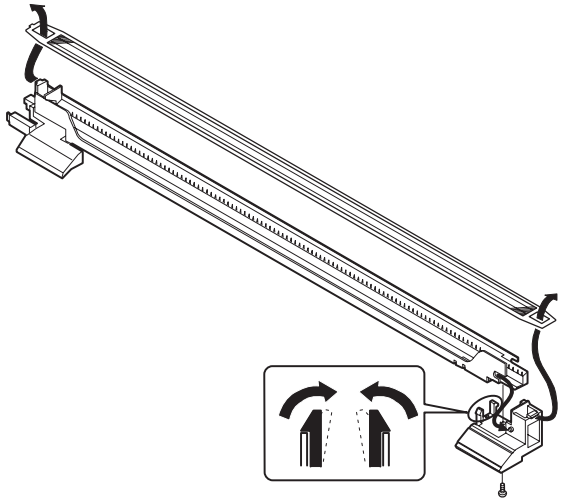
12. PROCESS SECTION

B. Charger cleaning

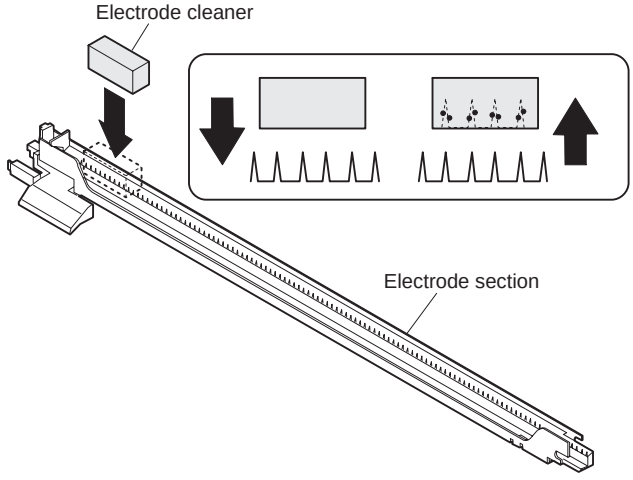
1. Remove the MC holder unit



2. Remove the Screen grid



3. Push the electrode cleaner onto the electrode tip so that the electrode tip comes into the electrode cleaner to clean. (repeat two or three times.)



Note: Do not move the electrode cleaner with the electrode tip in it. When cleaning, clean all the electrodes evenly.

D. Moquette F/R of process frame unit

To improve reliability of the drum unit, the AR-5015 must use the following parts.

- Process frame unit : CFRM-0021QS67
- Moquette F : PSEL-0129QSZZ
- Moquette R : PSEL-0130QSZZ

SHARP

COPYRIGHT © 2001 BY SHARP CORPORATION

All rights reserved.
Printed in Japan.
No part of this publication may be reproduced,
stored in a retrieval system, or transmitted.
In any form or by any means,
electronic, mechanical, photocopying, recording, or otherwise,
without prior written permission of the publisher.

SHARP CORPORATION
Digital Document Systems Group
Quality & Reliability Control Center
Yamatokoriyama, Nara 639-1186, Japan

2001 June Printed in Japan (t)