# Technical Bulletin

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Reissued: 09-Jan-14

Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077001h
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### **RTB Reissue**

The items in **bold italics** have been added.

Subject: Firmwar	re Release Note: Engine		Prepare	d by: T. Miyamoto
From: 1st PP Ted	ch Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	☐ Part informat	tion	Action required
		☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	⊠ Tier 2

This RTB has been issued to announce the firmware release information for the **Engine**.

Version	Program No.	Effective Date	Availability of RFU
1.009:16	M0775253B	January 2014 production	Not available
1.008:16	M0775253A	January 2013 production	Not available
1.007:16	M0775253	June 2012 production	Not available
1.006:16	M0775252E	July 2011 production	Not available
1.005:16	M0775252D	May 2011 production	Not available
1.004:16	M0775252C	April 2011 production	Not available
1.003:16	M0775252B	February 2011 production	Not available
1.000A:16	M0775252A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card. "Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.009 :16	Specification changes:  1. To meet the Energy Star Ver2.0 standards, ITB alignment control values are no longer stored on the NVRAM during monochrome printing.  2. Higher reliability against SC39x (drum-lock); machine warm-up following a forced termination is performed after activating the development motor.  3. Higher reliability against Jam 170 when alternately running A3/DLT and A4/LT staple jobs.  NOTE  When applying this firmware, make sure to upgrade the firmware for SR5020 to Ver.3.19 (P/N:D4345620N) or newer.

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Reissued: 09-Jan-14

Model: Aries	-P1.5		Date: 04-0	Oct-10	No.: RM077001
Version	Mod	lified Points or	Symptom (	Corrected	
1.008 :16	Modified Points Support for both ProC9				
	Following Firmware nee	Part number	together.	Version	
	Web Support	M0776083A		1.04	
		M0775253A		1.008:16	
	Engine System	M0776081A		2.00	
	System	INOTTOOD IA		2.00	
1.007:16	Modified Points  1. Improvement for she 2. Improvement for rer 3. Countermeasure ag 4. Countermeasure ag 5. Improvement for mis 6. Countermeasure ag fusing temperature 7. Countermeasure ag during stapling, and When the flywheel is ac shockjitter, following SF SP2-992-001: 0.0 -> 0. SP2-993-001: 0 -> 1	moving JAM037 painst SC621 painst SC453 s-display of SR5 painst displaying painst jam in SR5 painst ja	"Now printing 5020 soon a stock.	fter recoveri	ing from pause
	Following Firmware nee	ed to be undated	together		
	Tollowing Timiware nee	Part number	together	Version	
	Web Support	M0776083		1.03.1	
	Engine	M0775253		1.007:16	
	System/Copy	M0776081		1.07	
1.006:16	Modified Points  - JAM for following sidecurler setting is of different tray every Eg. 1st sheet from 2nd sheet from tray 3rd sheet from tray - Order of signal from SR5020 setting  - PM counter for ther	changed for ever sheet. tray 1 go throug y 3 go through lo 1 go through up n SR5020 has be mistor can be cl	ry sheet, and the upper pass ower pass of oper pass of een modified eared	s of decurle decurler deculer aga	r ain < JAM
		Part number		version	
	Engine	M0775252E		1.006:16	
	System/Copy	M0776091E		1.04	
	Websys	M0776093C		1.02	

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Reissued: 09-Jan-14

Model: Aries	s-P1.5		Date: 04-Oct-10	No.: RM077001I
Version	M	odified Points or	Symptom Corrected	
	Ope Panel CHN	M0776387	1.05	
	Ope Panel NA	M0776385C	1.05	
	Ope Panel EU	M0776386C	1.05	
	Language	M0776390B	1.04	
	Network Support	M0776692C	7.12	
1.005:16	Modified Points			
		ng indication has b		
		•	ding to several fusing u	init to prevent
	fusing belt from v			
			s, waste toner could c	
			coil, which could result	
			ansport coil, and toner	
	Erase Margin Ac		en changed in Web Ima	age Monitor
	Erase Margin Ad	, ,		
	Minimum setting			
	William octaring	0.0 7 0.0		
	Following firmware no	eed to be upgraded	d together	
			9	
		Part number	Version	
	Engine	M0775252D	1.005:16	
	System/Copy	M0776091D	1.03	
	Websys	M0776093B	1.01	
	Ope Panel NA	M0776385B	1.04	
	Ope Panel EU	M0776386B	1.04	
	Language	M0776390A	1.03	
1.004:16	Modified Points			
	Bugs in menu items i	n Custom Paper S	etting Advanced Settin	ng are fixed.
	Item Menu No. 03 "P			
	Item Menu No. 15 "P	aper Transfer Feed	d Speed Adjustment"	
	Dug which has been	fived		
	Bug which has been		was sat as OFF incide	a tha machia
			was set as OFF, inside setting; therefore, depe	
	weight and Paper Siz			ending on Faper
	was activated.	c, Tickup Assist C	octing	
	was astivated.			
	Even the No 15 "Pap	er Transfer Feed S	Spped Adjustment" was	s set as
	0.0, PTR was not mo		• •	
	,	9	•	
	Apply Condition for C	<u> Creo Controller</u>		
	Please use Creo Cor	ntroller Ver 1 003·1	6 or older	
<u> </u>	1 10030 036 0160 001	ILIONOL VEL 1.003. I	o or older.	

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Reissued: 09-Jan-14

Model: Aries	-P1.5	Date: 04-Oct-10	No.: RM077001h
Version	Modified Points or	Symptom Corrected	

Woder. Aries		Datc. 04-00	
Version	Modifi	ed Points or Symptom Co	orrected
1.003:16	Modified Points		
	<pre>Specification Changes&gt;</pre>		
	Creo controller is support		
		added to avoid decrease in	
		tivating/deactivating the un	its involving image
	creation.	a image creation   Extend d	locativation time ON/OFF
		ng image creation   Extend d ng image creation   Time ext	
		vailable on System Firmwar	
		le when the System Firmwa	
	(Firmware Version: TE		are is apgraded.
		able with custom paper siz	es on the Plockmatic.
	(Available when connected		
		en modified to avoid the pr	oblem of ID exceeding
	the upper limit when power	ering on the machine.	
	/ Fives		
	<pre><fixes> 1 Problem of degrees in</fixes></pre>	print apped when addle a	titohing SDA2 on the
	Booklet Finisher (SR5020)	print speed when saddle-s	litering SRAS on the
		alting and disabled to resul	me from an error when
		on the Plockmatic has been	
		isabled to warm-up and red	
	open-door status has beer		
		correct jam locations in the	
		nsists of both Booklet Trimi	mer (TR5020) and
	Stacker (SK5010) has bee	en tixea.	
	Apply condition:		
	Firmwares below to be ap	plied together as a set	
	Program Name	Program No.	Version
	System	M0776091B	1.01
	Network Support (NCS)		7.11
	Engine	M0775252B	1.003:16
	* Update to the following v	rersions is required for all p	
	07.500	Program No.	Version
	SR5000	B8305102S	V02.030:62
	SR5020	D4345620K	V03.160:08
	TR5020 Note	D4555510D	V15.280:16
		ne peripherals in order of p	roximity to the main
	frame.	is poripriorate in order of pi	Towning to the main
		utively by selecting several	peripherals
	,		· •
1.000A:16	1st Mass production		

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Reissued: 12-Jul-11

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#### **RTB Reissue**

The items in **bold italics** have been corrected

Subject: Firmwar	re Release Note: Language Ins	stall	Prepare	d by: H. Kawamura
From: PPBG Ser	vice Planning Dept.			
Classification:	☐ Troubleshooting ☐ Mechanical	☐ Part informat	tion	☐ Action required ☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	Retrofit information
	☐ Product Safety	Other (Firmv	vare)	⊠ Tier 2

This RTB has been issued to announce the firmware release information for the Language Install.

Version	Program No.	Effective Date
1.04	M0776390B	July 2011 Production
1.03	M0776390A	May 2011 production
1.01	M0776390	1st Mass production

Version	Mo	dified Points or Sympt	tom Corrected
1.04	Programmed" ca When replacing restored. On the operation been changed. Recall Paper	an be adjusted. GW-Controller, data sa n panel, Paper Library Library → Paper Libr	for paper created from "*Not aved to paper library can be screen, some words have rary aper → Custom Paper
	Following firmware r	need to be upgraded to	ogether
	Following firmware r	need to be upgraded to Part number	ogether version
	Following firmware r		
		Part number	version
	Engine	Part number M0775252E	version 1.006:16
	Engine System/Copy	Part number  M0775252E  M0776091E	version 1.006:16 1.04
	Engine System/Copy Websys	Part number M0775252E M0776091E M0776093C	version 1.006:16 1.04 1.02
	Engine System/Copy Websys Ope Panel CHN	Part number M0775252E M0776091E M0776093C M0776387	version 1.006:16 1.04 1.02 1.05
	Engine System/Copy Websys Ope Panel CHN Ope Panel NA	Part number  M0775252E  M0776091E  M0776093C  M0776387  M0776385C	version 1.006:16 1.04 1.02 1.05 1.05

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Reissued: 12-Jul-11

IVIOUGI, AIIES*F 1.5   Daig, V4-Oci-10   INO NIVIO// VUZD	Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077002b
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Version	Modified Points or Symptom Corrected			
1.03	Modified point     fuser unit PM counter is corresponding to several fusing unit to prevent fusing belt from wearing away  Following firmware need to be upgraded together			
		Part number	Version	
	Engine	M0775252D	1.005:16	
	System/Copy	M0776091D	1.03	
	Websys	M0776093B	1.01	
	Ope Panel NA	M0776385B	1.04	
	Ope Panel EU	M0776386B	1.04	
	Language	M0776390A	1.03	
1.01	1st Mass production			

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Reissued: 11-Jul-11

Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077003b
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#### **RTB Reissue**

The items in **bold italics** have been corrected

no tono in <b>Dera name</b> have been consected.				
Subject: Firmware Release Note: OpePanel.EXP		Prepare	d by: H. Kawamura	
From: PPBG Ser	vice Planning Dept.			
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li></ul>	☐ Part informa☐ Electrical☐ Transmit/rec		☐ Action required ☐ Service manual revision ☐ Retrofit information
	☐ Product Safety	Other (Firmv		☑ Tier 2

This RTB has been issued to announce the firmware release information for the **OpePanel.EXP.** 

### For US Models

Version	Program No.	Effective Date
1.05	M0776385C	July 2011 production
1.04	M0776385B	May 2011 production
1.01	M0776385A	1st Mass production

### For EU Models

Version	Program No.	Effective Date
1.05	M0776386C	July 2011 Production
1.04	M0776386B	May 2011 production
1.01	M0776386A	1st Mass production

### **For CHN Models**

Version	Program No.	Effective Date
1.05	M0776387	1st Mass production

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Reissued: 11-Jul-11

Model: **Aries-P1.5** Date: 04-Oct-10 No.: RM077003b

### For US Models

Version	Mod	ified Points or Sympt	om Corrected	
1.05	<ul> <li>Modified Points         <ul> <li>In the Paper Library, Advanced setting for paper created from "*Not Programmed" can be adjusted.</li> <li>When replacing GW-Controller, data saved to paper library can be restored.</li> <li>On the operation panel, Paper Library screen, some words have been changed.</li></ul></li></ul>			
	Engine	Part number M0775252E	Version 1.006:16	
	System/Copy	M0776091E	1.04	
	Websys	M0776093C	1.02	
	Ope Panel CHN	M0776387	1.05	
	Ope Panel NA	M0776385C	1.05	
	Ope Panel EU	M0776386C	1.05	
	Language	M0776390B	1.04	
	Network Support	M0776692C	7.12	
1.04	Modified point  - fuser unit PM counte fusing belt from wea  Following firmware need	ring away	several fusing unit to prevent	
		Part number	Version	
	Engine	M0775252D	1.005:16	
	System/Copy	M0776091D	1.03	
	Websys	M0776093B	1.01	
	Ope Panel NA	M0776385B	1.04	
	Ope Panel EU	M0776386B	1.04	
	Language	M0776390A	1.03	
1.01	1st Mass production			

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Reissued: 11-Jul-11

Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077003b
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### For EU Models

1 05		odified Points or Sympt	tom Corrected		
1.05	<ul> <li>1.05         <ul> <li>Modified Points</li> <li>In the Paper Library, Advanced setting for paper created from Programmed" can be adjusted.</li> <li>When replacing GW-Controller, data saved to paper library can restored.</li> <li>On the operation panel, Paper Library screen, some words had been changed.</li></ul></li></ul>				
	Engine	Part number M0775252E	Version 1.006:16		
	System/Copy	M0776091E	1.04		
	Websys	M0776093C	1.02		
	Ope Panel CHN	M0776387	1.05		
	Ope Panel NA	M0776385C	1.05		
	Ope Panel EU	M0776386C	1.05		
	Language	M0776390B	1.04		
	Network Support	M0776692C	7.12		
1.04	fusing belt from w		several fusing unit to prevent		
1.04	- fuser unit PM cour fusing belt from w	earing away eed to be upgraded toget	her		
1.04	- fuser unit PM cour fusing belt from w Following firmware ne	earing away			
1.04	- fuser unit PM cour fusing belt from ware ne	earing away eed to be upgraded toget Part number M0775252D	her  Version 1.005:16		
1.04	- fuser unit PM cour fusing belt from w Following firmware ne Engine System/Copy	earing away eed to be upgraded toget Part number	her Version		
1.04	- fuser unit PM cour fusing belt from ware new Following firmware new Engine System/Copy Websys	Part number M0775252D M0776091D M0776093B	her    Version		
1.04	- fuser unit PM cour fusing belt from w Following firmware ne Engine System/Copy	earing away eed to be upgraded toget Part number M0775252D M0776091D	Version 1.005:16 1.03 1.01		
1.04	- fuser unit PM cour fusing belt from with Following firmware new Engine System/Copy Websys Ope Panel NA	Part number M0775252D M0776091D M0776385B	Version 1.005:16 1.03 1.01 1.04		

### **For CHN Models**

Version	Modified Points or Symptom Corrected
1.05	1st Mass production

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Reissued: 12-Jul-11

Model: <b>Aries-P1.5</b> Date: 04-Oct-10 No.: RM077004b	b
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### RTB Reissue

The items in bold italics have been corrected.

1110 1001110 111 001	a italioo havo boon oonot	710 0		
Subject: Firmwar	ubject: Firmware Release Note: Network Support		Prepare	d by: H.Kawamura
From: PPBG Ser	vice Planning Dept.			
Classification:	☐ Troubleshooting	☐ Part informat	tion	Action required
	☐ Mechanical	☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	⊠ Tier 2

This RTB has been issued to announce the firmware release information for the **Network Support.** 

Version	Program No.	Effective Date
7.12	M0776092C	July 2011 production
7.11	M0776092B	February 2011 production
7.10	M0776092A	1st Mass production

Version	Mo	odified Points or Symp	tom Corrected
7.12	Modified Points  - If SSDP = Active Security), a high locking up LP with an exteri only occurred if the LP's "NetWai settings were che - The LP icon might if SSDP is enable - The device might	(Web ImageMonitor > n load on the CPU might nal controller will lose the network settings were setting was already anged). This affected Windows tose network connections.	Configuration > Network It result in Web ImageMonito Inetwork connectivity. This Ivere changed repeatedly and Iv "Active" (before the network Ivere Windows "Network" dialogue Ivere Vista, 2008/R2, and 7. It it it it is some the network of the net
	cycle.	need to be upgraded to	arily restored after a power
	cycle.	,	
	cycle.	need to be upgraded to	gether
	cycle.  Following firmware n  Engine System/Copy	need to be upgraded to Part number	gether version
	cycle.  Following firmware n  Engine	Part number M0775252E	version 1.006:16
	cycle.  Following firmware n  Engine System/Copy	Part number M0775252E M0776091E	version 1.006:16 1.04
	cycle.  Following firmware not be a second or	Part number M0775252E M0776091E M0776093C	version 1.006:16 1.04 1.02 1.05 1.05
	cycle.  Following firmware not be a second or	Part number  M0775252E  M0776091E  M0776093C  M0776387	version 1.006:16 1.04 1.02 1.05 1.05
	cycle.  Following firmware not be a second or	Part number  M0775252E  M0776091E  M0776387  M0776385C	version 1.006:16 1.04 1.02 1.05

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Reissued: 12-Jul-11

Version	Modified Points or Symptom Corrected	
A CI 21011	Modified Points or Symptom Corrected	

Version	Modified Points or Symptom Corrected
7.11	<ol> <li>Symptom corrected:</li> <li>Scan to SMB fails if the file submitted to the DFS folder in the destination and the file of the same name exist in the DFS folder.</li> <li>If Windows Authentication is enabled, printing a large number of copies of a job might take longer than might typically be expected</li> <li>Chunk Transfer Encoding over an IPP port might results in print jobs being reset.</li> </ol>
7.10	1st Mass production

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Reissued: 22-Feb-13

	Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077005d
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#### **RTB Reissue**

The items in bold italics have been corrected

Subject: Firmwar	Subject: Firmware Release Note: Web Support		Prepared	d by: T. Miyamoto
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	☐ Part informat	tion	Action required
		☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2
		•	· ·	

This RTB has been issued to announce the firmware release information for the **Web Support.** 

Version	Program No.	Effective Date	Availability of RFU
1.04	M0776083A	January 2013 production	Not Available
1.03.1	M0776083	May 2012 production	Not Available
1.02	M0776093C	June 2011 production	Not Available
1.01	M0776093B	May 2011 production	Not Available
1.00	M0776093A	1st Mass production	Not Available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

Version	M	lodified Points or Symp	otom Corrected	
1.04	Modified Points			
	Support for both ProC901 and ProC901 PLUS			
	Following Firmware	e need to be updated to	gether.	
		Part number	Version	
	Web Support	M0776083A	1.04	
	Engine	M0775253A	1.008:16	
	System	M0776081A	2.00	
1.03.1	<ul><li>6. Countermeasure fusing temperature</li><li>7. Countermeasure during stapling, a</li><li>When the flywheel is</li></ul>	removing JAM037 against SC621 against SC453 mis-display of SR5020 Jagainst displaying "Now re against jam in SR5020 s and irregular paper stock.	printing" while adjusting the soon after recovering from pause or a countermeasure against the	

<sup>&</sup>quot;Available": The firmware can be updated via RFU or SD card.

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Reissued: 22-Feb-13

lodel: Arie	s-P1.5		Date: 04-Oct-10	No.: RM077005	
Version	М	odified Points or S	Symptom Corrected	ı	
	SP2-992-001: 0.0 ->				
	SP2-993-001: 0 -> 1				
	Fallessine Figures a		4 4 b		
	Following Firmware r	leed to be updated	together		
		Part number	Version		
	Web Support	M0776083	1.03.1		
	Engine	M0775253	1.007:16	;	
	System/Copy	M0776081	1.07		
1.02	Modified Point				
	In the Paper Library,	Advanced setting for	or paper created fron	า "*Not	
	Programmed" can be				
		,			
	Following firmware no	eed to be upgraded	I together		
		10	J		
		Part number	Version		
	Engine	M0775252E	1.006:16	}	
	System/Copy	M0776091E	1.04		
	Websys	M0776093C	1.02		
	Ope Panel CHN	M0776387	1.05		
	Ope Panel NA	M0776385C	1.05		
	Ope Panel EU	M0776386C	1.05		
	Language	M0776390B	1.04		
	Network Support	M0776692C	7.12		
1.01	Modified Points	<b>'</b>	<b>,</b>	<u>'</u>	
	- Early web cleaning indication has been fixed				
	- fuser unit PM counter is corresponding to several fusing unit to prevent				
	fusing belt from wearing away				
	- Countermeasure for 2 output checks, waste toner could clog and disable				
	the function of the toner collection coil, which could result in breakage of				
	the gear rotating the waste toner transport coil, and toner leakage.				
	- Following adjustable range has been changed in Web Image Monitor				
	Erase Margin Adj Leading Edge				
	Erase Margin Adj				
	Minimum setting (				
		- <del>-</del>			
	Following firmware no	eed to be upgraded	l together		
		11.0 1 2.0	5		

Ü	10	Ü
	Part number	\/e

	Part number	Version	
Engine	M0775252D	1.005:16	
System/Copy	M0776091D	1.03	
Websys	M0776093B	1.01	
Ope Panel NA	M0776385B	1.04	
Ope Panel EU	M0776386B	1.04	
Language	M0776390A	1.03	
1st Mass production			

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Reissued: 22-Feb-13

Model: Aries-P1.5	Date: 04-Oct-10	No.: RM077006g
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#### **RTB Reissue**

The items in bold italics have been added.

Subject: Firmware Release Note: System			Prepared by: T. Miyamoto	
From: 1st PP Ted	ch Service Sect., PP Tech Serv	vice Dept.		
Classification:	Troubleshooting	☐ Part informat	tion	Action required
		☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2

This RTB has been issued to announce the firmware release information for the **System**.

Version	Program No.	Effective Date	Availability of RFU
2.00	M0776081A	January 2013 production	Not available
1.07	M0776081	May 2012 production	Not available
1.06	M0776091G	April 2012 Production	Not available
1.05	M0776091F	September 2011 Production	Not available
1.04	M0776091E	July 2011 Production	Not available
1.03	M0776091D	May 2011 Production	Not available
1.02	M0776091C	May 2011 Production	Not available
1.01	M0776091B	February 2011 production	Not available
1.00	M0776091A	1st Mass production	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected						
2.00	Modified Points Support for both ProC901 and ProC901 PLUS Following Firmware need to be updated together.						
	<b>J</b>	Part number	Version				
	Web Support	M0776083A	1.04				
	Engine	M0775253A	1.008:16				
	System	M0776081A	2.00				
1.07	Modified Points  1. Improvement for shockjitter 2. Improvement for removing JAM037 3. Countermeasure against SC621 4. Countermeasure against SC453 5. Improvement for mis-display of SR5020 JAM 6. Countermeasure against displaying "Now printing" while adjusting the fusing temperature						

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

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Reissued: 22-Feb-13

Model: Aries-P1.5 Date: 04-Oct-10 No.: RM0						
Version	<b>,</b> 1					
	7. Countermeasure against jam in SR5020 soon after recovering from pause during stapling, and irregular paper stock.					
	When the flywheel is added to the machine for a countermeasure against the shockjitter, following SP need to be changed together. SP2-992-001: 0.0 -> 0.5 SP2-993-001: 0 -> 1					
	Following Firmware no	eed to be updated	together			
		Part number	Version			
	Web Support	M0776083	1.03.1			
	Engine	M0775253	1.007:16			
	System/Copy	M0776081	1.07			
1.06			using Plockmatic/COL			
	firmware 1-1B0MG8	ograde togetner w	ith following patch whe	en applying this		
1.05	Modified Points - Add the function t	o confirm the pap	er catalog version			
1.04	<ul> <li>Modified Points         <ul> <li>In the Paper Library, Advanced setting for paper created from "*Not Programmed" can be adjusted.</li> <li>When replacing GW-Controller, data saved to paper library can be restored.</li> <li>On the operation panel, Paper Library screen, some words have been changed.</li></ul></li></ul>					
	Following firmware ne					
		Part number	version			
	Engine	M0775252E	1.006:16			
	System/Copy	M0776091E	1.04			
	Websys	M0776093C	1.02			
	Ope Panel CHN	M0776387	1.05			
	Ope Panel NA	M0776385C	1.05			
	Ope Panel EU	M0776386C	1.05			
	Language	M0776390B	1.04			
	Network Support	M0776692C	7.12			

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Reissued: 22-Feb-13

Model: Aries-P1.5			Date: 04-Oct-10	No.: RM077006			
Version	Modif	ied Points or	Symptom Corrected				
1.03	Modified Points - Early web cleaning in - fuser unit PM counter fusing belt from weari	r is correspond	een fixed ding to several fusing ur	nit to prevent			
	Following firmware need to be upgraded together						
		Part number	Version				
	Engine	M0775252D	1.005:16				
	System/Copy	M0776091D	1.03				
	Websys	M0776093B	1.01				
	Ope Panel NA	M0776385B	1.04				
	Ope Panel EU	M0776386B	1.04				
	Language	M0776390A	1.03				
1.01	Counting method for Print <fixes>  1. Problem of "key mark' disappear when the page 2. JAM clearance anima"</fixes>	" for indicating aper was set t	Apply Auto Paper Sele o the tray has been fixe				
	Problem of indicating peripherals when the and Stacker (SK5010)      Apply condition:	incorrect jam I configuration ( ) has been fixe	ocations in the downstr consists of both Ring Bi ed.				
	Problem of indicating peripherals when the and Stacker (SK5010)      Apply condition:  Firmwares below to be ap	incorrect jam I configuration of the last been fixed option options.	ocations in the downstr consists of both Ring Bi ed.  as a set.	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name	incorrect jam I configuration of has been fixed pplied together Program No	cocations in the downstr consists of both Ring Bi ed.  as a set.  Version	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be approgram Name System	incorrect jam I configuration (c) has been fixed policy together Program No.	cocations in the downstr consists of both Ring Bi ed.  as a set.  Version 1.01	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS)	incorrect jam I configuration of has been fixed policed together Program No M0776091E M0776092E	cocations in the downstr consists of both Ring Bi ed.  as a set.  b. Version  1.01  7.11	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS) Engine	incorrect jam I configuration of has been fixed populed together Program November M0776091E M0775252	cocations in the downstreensists of both Ring Billed.  Tas a set.  D. Version  1.01  7.11  1.003:1	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS)	incorrect jam I configuration of has been fixed policy together Program No M0776091E M0775252	cocations in the downstream consists of both Ring Bi ed.  Tas a set.  D. Version  1.01  7.11  1.003:1	nder RB 5000			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS) Engine  * Update to the following vertical peripherals when the second control is a second control in the second	incorrect jam I configuration of has been fixe  pplied together Program No M0776091E M0776092E M0775252  versions is req Program No.	cocations in the downstream consists of both Ring Bi ed.  Tas a set.  D. Version  3 1.01  3 7.11  1.003:1	nder RB 5000  6  s listed below.			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS) Engine  * Update to the following versions:	incorrect jam I configuration of has been fixed population of has been fixed population of has been fixed program No. Incorrect jam I configuration of his population of his p	cocations in the downstree consists of both Ring Bi ed.  Tas a set.  D. Version  3 1.01  3 7.11  1.003:1	6 s listed below.			
	3. Problem of indicating peripherals when the cand Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS) Engine  * Update to the following versions: SR5000 SR5020	incorrect jam I configuration of has been fixed been fixed by the program No. Mo776091E M0776092E M0775252 wersions is required by the program No. B8305102S D4345620K	cocations in the downstreensists of both Ring Billed.  Tas a set.  D. Version  3 1.01  3 7.11  1.003:1  Uuired for all peripherals Version V02.030  V03.160	6 slisted below.			
	3. Problem of indicating peripherals when the and Stacker (SK5010)  Apply condition: Firmwares below to be ap Program Name System Network Support (NCS) Engine  * Update to the following versions:	incorrect jam I configuration of has been fixed has been fixed population of has been fixed population of has been fixed program No. M0776092E M0775252 versions is required program No. B8305102S D4345620K D4555510D poeripherals in configuration of his configura	cocations in the downstree consists of both Ring Bi ed.  Tas a set.  Tas a set	6 s listed below.:62::08::16			

## Technical Bulletin

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Model: Aries-P1.5/C1.5			Dat	te: 25-Oct-	10	No.: RM077007
Subject: Latest firmware version List			Prepared by: N.lida		da	
From: PPBG Ser	vice Planning Dept.					
Classification:	☐ Troubleshooting	☐ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electrica	al		Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$oxed{oxtime}$ Other (		)	⊠ Tier 2	

This RTB has been issued to announce the firmware versions applied to the 1<sup>st</sup> mass production of the Aries-P1.5/C1.5. Firmwares are available from the Download Center. Please refer to the table 'Peripheral Devices' described on the following page for peripheral devices installed with the Aries-P1.5/C1.5.

#### Aries-P1.5

Program Name	Firmware No.	Version	Note
System	M0776091A	Ver.1.00	
Engine	M0775252A	Ver.1.000A:16	
Websys	M0776093A	Ver.1.00	
OpePanel(NA)	M0776385A	Ver.1.01	
OpePanel(EU)	M0776386A	Ver.1.01	
Language	M0776390	Ver.1.01	
NCS	M0776092A	Ver.7.10	

#### Aries-C1.5

Program Name	Firmware No.	Version	Note
System/Copy	D0956091A	Ver.1.00.1	
Engine	D0955252A	Ver.1.000A:16	
Scanner	D0956097A	Ver.01.10	
Websys	D0956093A	Ver.1.00.1	
WebUapl	D0956095A	Ver.1.00.19	
OpePanel(NA)	M0776395A	Ver.1.01	
OpePanel(EU)	M0776396A	Ver.1.01	
Language	M0776391	Ver.1.01	
NCS	D0956092A	Ver.7.10	
NFA	D0956096A	Ver.1.00	

#### **Color controller E41**

Soft ware	System version	Parts number	Note
System soft ware	V1.0	M3916740	
User soft ware	V1.0	M3916730	

#### **Color controller E81**

Soft ware	System version	Parts number	Note
System soft ware	V1.0	M3926740	
User soft ware	V1.0	M3926730	

Model: Aries-P1.5/C1.5

# Technical Bulletin

Date: 25-Oct-10 No.: RM077007

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The firmware versions in the following table are required for proper operation of the unit. Please prepare the firmware in advance to perform the update upon site installation.

#### Note

- Peripheral devices must be updated from the units installed closest to the mainframe.
   Power cycle the mainframe after updating each peripheral.
- Make sure to check the notes described in the release note before updating the peripheral devices.

**Peripheral Devices** 

Devices	Firmware No.	Version	Note
Finisher SR5020	D4345620J	Ver.03.140:08	
Finisher SR5000	B8305102R	Ver.02.000:61	
High Capacity Stacker SK5000 1st	D4475104H_up	Ver.02.270:09	
High Capacity Stacker SK5000 2nd	D4475104H_down	Ver.02.270:09	
Cover Interposer Tray CI5010	B8355510H	Ver.03.010:46	
Z-Folding Unit ZF4000	B6605552	Ver 2.14	ROM replacement required for update. ROM p/n B6605552
Perfect Binder GB5000			
P-Binder_B1	D3915020E	Ver.0.320:11	
P-Binder_B2	D3915070D	Ver.0.220:00	
P-Binder_B3	D3915730A	Ver.1.19	
P-Binder_B4	D3915120C	Ver.0.160:00	
P-Binder_B5	D3915170C	Ver.0.28:00	
Ring Binder RB5000			
Ring Binder_B1	D3925510G	Ver 01.310:04	
Ring Binder_B2	D3925520C	Ver 01.060:01	
Trimmer Unit TR5020	D4555510C	Ver15.270: 15	
Buffer Pass Unit Type 5000	M3791702C	Ver.02.030:05	



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Reissued:27-Apr-11

Model: Aries-P1.5/C1.5	Date: 25-Oct-10	No.: RM077008c
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Paper Libraly Data for AriesP1.5/C1.5			Prepared by: H. Kawamura		
From: 1st PP Service Planning Sec., PP Service Planning					
Classification:	☐ Troubleshooting	Part informat	tion	Action required	
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	Other (	)	☐ Tier 2	

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries-P1.5/C1.5.

MQP files and Media Lists are confidential information.

### **About the Media List**

Media have been evaluated under 4 categories, "Image Quality", "Image Performance", "Feed Performance" and "Others", which are ranked in 4 levels (A+, A, B, and C). The lowest rank from among the 4 categories becomes the overall evaluation rank for each media.

### **About the MQP file**

The MQP file only contains data for media ranked either 'A+' or 'A'. Installing the MQP file into the Aries–P1.5/C1.5 will enable application of the media from the Paper Library.

Rank	Description
A+	Good results, no remarks. (Better than the product spec) (Only Image Quality)
Α	Good results, no remarks. (Product Spec)
В	Note the remarks. Customers must be aware of the remarks.
С	Not recommended.

#### Example of media evaluation results:

Overall	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	Α	Α	Α
В	В	A	В	A
С	С	Α	А	Α



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Reissued:27-Apr-11

Model: Aries-P1.5/C1.5 Date: 25-Oct-10 No.: RM077008c

### Media List & MQP file

The Media List and MQP file have been uploaded onto the GKM support site Tier2 under the title "Pro C901and 901S Media List/Paper Library Data" in the 'Summary' column. Download the latest version from the GKM, and install the MQP file when setting up the machine.

[NA] Release Date: 27th Apr 2011

Summary : Pro C901and 901S Media List/Paper Library Data for North America

Media List : ProC901\_C901S Media List for NA(Rev. 6).xls

MQP file : ProC901\_Printer\_NA\_Rev6.mqp

ProC901S\_Copier\_NA\_Rev6.mqp

[EU] Release Date: 27th Apr 2011

Summary : Pro C901and 901S Media List/Paper Library Data for EU

Media List : ProC901\_C901S Media List for EU(Rev.7).xls

MQP file : **ProC901\_Printer\_EU\_Rev7.mgp** 

ProC901S\_Copier\_EU\_Rev7.mqp

[AP] Release Date: 27th Apr 2011

Summary: Pro C901and 901S Media List/Paper Library Data for AP

Media List : ProC901\_C901S Media List for AP(Rev.7).xls

MQP file : **ProC901\_Printer\_AP\_Rev7.mgp** 

ProC901S Copier AP Rev7.mgp

#### **NOTE**

- The Printer model and the Copier model use different MQP files; no interchangeability. Install the correct MQP file for the machine. The software is designed to reject the installation if the MQP file is not for the correct machine.
- The MQP file does not incorporate regional restrictions. Reinstall the file if you installed a file for an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

Model: Aries-P1.5/C1.5

## Technical Bulletin

Date: 25-Oct-10

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No.: RM077008c

Reissued:27-Apr-11

### **Installation Procedure: Paper Library**

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Dat	Oate: 08-Nov-10		No.: RM077009
Subject: Change the PM Yield of Fusing Belt			Prepared by: Hiroaki Matsui			
From: PPBG Ser	vice Planning Dept.					
Classification:	□ Troubleshooting	☐ Part informa		tion	☐ Action	required
	☐ Mechanical	☐ Electrica	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2	

### **GENERAL**

As mentioned in the service manual, the PM yield of the fusing belt is prescribed as 400k. However, the operation panel indicates the yield of 800k.

### **SOLUTION**

F/W will be modified to indicate the correct PM yield of 400k.

For a temporary solution until the fixed f/w is released, please change the value from 800k to 400k in SP7951-118 (Page Counter:End Std Value Fusing Belt) when installing the machine on-site.

## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Dat	e: 16-Nov	No.: RM077010	
Subject: Manual Correction for Aries-P1.5/C1.5 Air Separator SP			tor	Prepared	d by: Hide	etoshi Kawamura
From: PPBG Ser	vice Planning Dept.					
Classification:	☐ Troubleshooting	☐ Part info	ormat	ion	Action	required
	☐ Mechanical	☐ Electric	al		⊠ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

The Service Manual for Aries-P1.5/C1.5 was corrected

• On pages from 355 to 357

Air Separator Setting (From SP 1-901-101 to SP 1-901-124), in the service manual, it is written as following.

0: No air blowing

1: Normal air blowing

2: Low air blowing

### Correction

Air Separator Setting (From SP 1-901-101 to SP 1-901-124)

0: No air blowing

1: Normal air blowing

Setting "2" is no longer used; therefore, please do not use setting "2" If "2" is used, air will not blow from the air separator.

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	•	_

**PAGE: 1/2** 

Model: Aries-P1.5 / C1.5			Dat	Date: 06-Dec-10		No.: RM077011
Subject: Removal of the RoHS decal - China Market			Prepared by: H.Matsui			
From: PPBG Service Planning Dept.						
Classification:	Troubleshooting	☐ Part informa		tion		required
	☐ Mechanical	☐ Electrical		Electrical Ser		ce manual revision
	☐ Paper path ☐ Transmit/red		☐ Transmit/receive ☐		☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

Please be notified that this RTB is targeted only for the **China market**.

#### **GENERAL**

Some of the Aries-P1.5 (ProC901) that did not require the attachment of the decals/labels indicating conformity to the RoHS directive were falsely attached with the decals/labels and shipped to China.

### **SOLUTION**

Please peel off and remove the following 3 decals/labels on your next service visit or new site installation for the affected units described below.

1	H5554492A	
	Decal: ROHS: CHN: 10: 20mm	<b>***</b>
2	H5554496A	
	Label: ROHS: CHN: date: 40mm	生产日期 20091031
3	G1787776	
	Decal : CMIIT : CHN : AEGIS	CMIT ID:2009DP2165

### Affected Units (Total of 10 units)

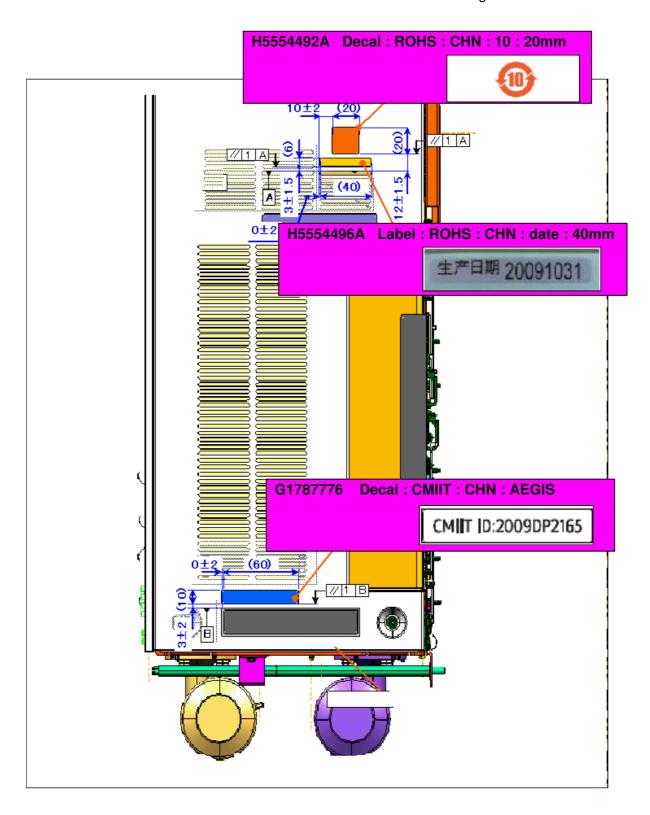
Product Description	Product Description	Serial Numbers	Number of affected units
Pro C901	M07729	T010100001 ~ T010100003	3
		T010110001 ~ T010110007	7



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Model: Aries-P1.5 / C1.5 Date: 06-Dec-10 No.: RM077011

The 2 decals and 1 label are attached to the locations shown in the diagram below.



## Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Dat	e: 21-Dec	-10	No.: RM077012
Subject: Counte	r Display			Prepare	d by: Hid	etoshi Kawamura
From: PPBG Ser	vice Planning Dept.					
Classification:	☐ Troubleshooting	☐ Part informa		tion		required
	☐ Mechanical ☐ Paper path	☐ Electrica		eive		ce manual revision fit information
	☐ Product Safety	Other (	10100	)	☐ Tier 2	

The Service Manual for Aries-P1.5/C1.5 was corrected

- On pages 603 in the appendix
- SP 5045 "Accounting Counter"

#### Correction

### Original

NOTE: The counting method can be changed only once, regardless of whether the counter value is negative or positive.

### Correction

NOTE: Aries-P1.5: The counting method can be changed only once, regardless of whether the counter value is negative or positive.

Aries C1.5: The counting method can be changed many times, regardless of whether the counter value is negative or positive.

### Original

SP5041-001 Counter Method → 0: Developer

1: Prints

#### Correction

SP5041-001 Counter Method → 0: Developer

1: Prints

2: Coverage

3: Not used

4: Not used

5: Developer (A3/DLT & Larger)

6: Prints (A3/DLT & Larger)

Please change the setting of Counter Method by following the contract type with the customer.

#### Note

• Default Counter Method settings are different between Aries P1.5 and Aries C1.5. Aries P1.5's default setting is set as: SP 5041-001-1, "Prints" and it can be only changed once

Aries C1.5's default setting is set as: SP-5041-001- 0, "Developer" and it can be changed many times.

Supplementary explanation of "Developer (A3/DLT & Larger)" and "Prints (A3/DLT & Larger)"

Model: Aries-P1.5/C1.5

# Technical Bulletin

Date: 21-Dec-10 No.: RM077012

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-"Developer (A3/DLT & Larger)" displays, SP 5041-001-0, "Developer" and Developer counter raised by using A3/DLT or larger size.

- -"Prints (A3/DLT & Larger)" displays, SP 5041-001-1, "Prints" and Print counter raised by using A3/DLT or larger size.
- Difference from Aegis P1/C1

On Aegis, (A3/DLT & Larger) displays the sum of FC A3/DLT & Larger and BW A3/DLT & Larger

On Aries, (A3/DLT & Larger) displays FC A3/DLT & Larger and BW A3/DLT & Larger separately.

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5	Date: 09-Jun-11	No.: RM077013a

#### **RTB Reissue**

The items in **bold italics** were added.

Subject: Hot Roller Modification				Prepared by: H. Matsui		
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	☐ Troubleshooting	□ Part informate     □ Part informate	tion	☐ Action required		
	☐ Mechanical	☐ Electrical		☐ Service manual revision		
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information		
	☐ Product Safety	Other (	)	☐ Tier 2		

#### General

The Hot Roller installed in the fusing unit of the Aries was found with a defect in which the rubber covering the hot roller was shifted. (See the photo below)

#### Cause

The defect was caused by a fault in the manufacturing process where the rubber was not heated to the prescribed time and was not hardened enough.

#### Solution

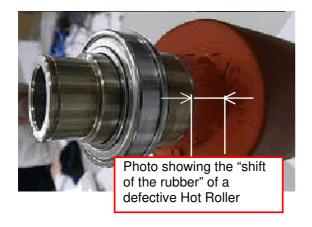
Manufacturing and check processes have been revised to prevent the fault.

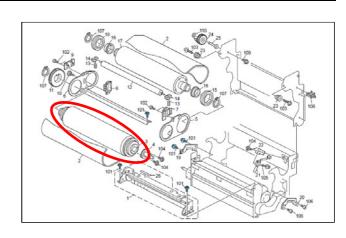
A New part number has been registered for the Hot Rollers manufactured under the revised processes.

#### **NOTE**

- The defective Hot Rollers were installed ONLY in the fusing units stocked as spare service parts, which have all been replaced with the proper hot roller.
- Aries machines in stock are all installed with the proper hot roller regardless of the hot roller p/n. (The hot roller p/n could be the former M0774105 but is not defective.)
- Please DO NOT USE the hot roller registered with the p/n M0774105 if procured separately as a service part.

Old part	New part	Description	Q'ty	Int	Page	Index	Note
number	number						
M0774105		HOT ROLLER	1	X/0	137	3	
	►M0774160	HOT ROLLER:PRESS FIT					





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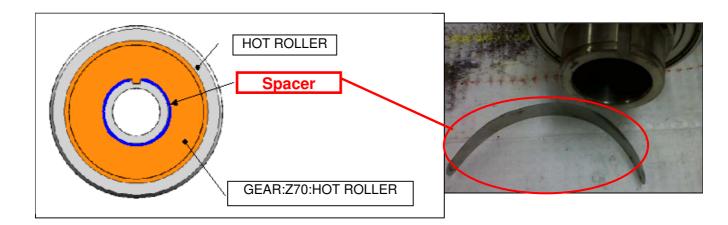
Model: Aries-P1.5/C1.5 Date: 09-Jun-11 No.: RM077013a

### Notes on the Old Hot Roller (M0774105) and the New Hot Roller (M0774160)

Some of the old Hot Rollers (M0774105) installed in the Pro C901/C901s of the initial production could be found with a "spacer" attached to the core to compensate for the deviation in the core size.

Please dispose of this spacer, if found, together with the Hot Roller when replacing this old hot roller with a new Hot Roller.

The spacer is not needed for the new Hot Roller (M0774160) because the core size of the new Hot Roller is precise.



## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Dat	Date: 19-Jan-11		No.: RM077014	
Subject: Apply auxiliary tray for SR5020				Prepared by: H. Matsui			
From: PPBG Ser	vice Planning Dept.						
Classification:		☐ Part info	orma	tion	Action	required	
	☐ Mechanical	☐ Electrica	al		Service	ce manual revision	
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information	
	☐ Product Safety	Other (		)	⊠ Tier 2		

### Information in this RTB applies only to the NA market.

#### General

When the Booklet Finisher (SR5020) is in use with ProC901/C901s, coated thin paper fed out to the finisher shift tray could result in poor stacking or jam.

**Reason**: High friction between the shift tray and coated thin paper

**Solution**: Attach the following auxiliary part to the finisher shift tray.

Part Number	Description
D4349901	MODIFICATION :Tray: Auxiliary : Stack

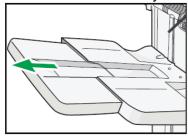
Please note that the Booklet Finisher registered with S/N V5301200075 or newer includes this auxiliary tray as an accessory.

The auxiliary tray should be used in the following conditions:

- S/N of the Booklet Finisher is V5301200075 or older
- Booklet Finisher is connected to Pro C901/C901s
- Paper type is "Coated & Thin"
- Poor stacking on the shift tray

### **Attaching the Auxiliary Tray:**

- 1. Press the "Stop" button on the Booklet Finisher.
- 2. If any, remove paper from the shift tray.
- 3. Pull out the extension tray.



4. Align the projection on the auxiliary tray with the back fence.



5. Press the "Stop" button to resume printing.

### Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Dat	Date: 24-Jan-11		No.: RM077015
Subject: Paper L		Prepared by: J. R			obayashi	
From: PPBG Ser						
Classification:	Troubleshooting	☐ Part informa		mation		required
		☐ Electrica	al		Service     Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	it information
	☐ Product Safety	Other (		)	☐ Tier 2	

#### General

This RTB has been issued to inform you that SP 5711-201 and SP 5711-202 (Paper Library Data version check) are currently inaccessible and will not function. Software design modification will be carried out to effectuate these SPs.

#### **Modification Schedule**

Schedule for software design modification is yet determined.

We will make an additional announcement as soon as the modification schedule is fixed.

### **Description in the Field Service Manual**

SP5711-201 and SP 5711-202 are used to check the Paper Library Data version as described in the following section of the D095/M077 Field Service Manual:

Installation > Mainframe > Installation > Paper Library Data

- 6. Make sure that the data version of the SD card is newer than the data version of the flash ROM on the controller. If not, prepare the latest data version of the Paper Library on an SD card.
  - The version of the data on the SD card can be checked with SP5711-202
  - The version of the data in the flash ROM on the controller can be checked with SP5711-201.

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Model: Aries-P1.5/C1.5			Dat	Date: 28-Jan-11		No.: RM077016
Subject: Force Print Feature					d by: J. K	obayashi
From: PPBG Ser	vice Planning Dept.					
Classification:	☐ Troubleshooting	☐ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electrica	al		⊠ Servic	e manual revision
	☐ Paper path	☐ Transmi	it/rec	eive	Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

#### General

This RTB has been issued to inform you that Force Print, which is documented in NPLI (New Product Launch Information) as a new feature of EFI's Fiery System9, is currently not supported by EFI as a specification.

EFI will support Force Print on the Aries-P1.5/C1.5 after evaluating and verifying its performance on the Taurus, the upcoming model.

### **Modified Software Release Information**

Release of the modified software is currently planned as follows:

Software release by EFI to Ricoh
 Patch release by Ricoh to field
 Early March, 2011
 Early April, 2011

#### **Force Print from Command Work Station**

Force Print is a conventional feature available on Ricoh printers and is operated on the control panel.

However, when operated from Command Work Station (CWS) the Force Print dialog box (Figure 1) will open but will result in another dialog box (Figure 2), and disables completion of the process.

**Figure 1** below shows the dialog box that displays the mis-matching error jobs when selecting Force Print on CWS.

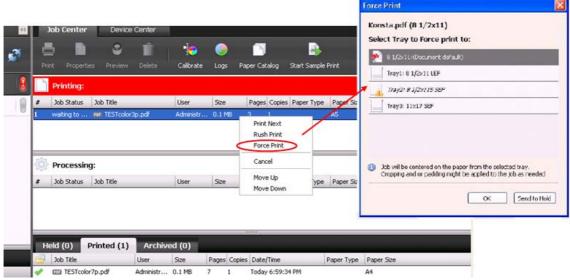


Figure 1

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Model: Aries-P1.5/C1.5 Date: 28-Jan-11 No.: RM077016

### Figure 2 below shows the actual error:

- Paper Tray information does not appear in the blue box under "Document default".
- The "OK" button is invalid.

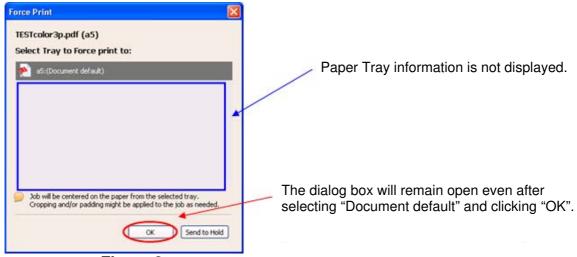


Figure 2

To close the dialog box, click "X" or "Send to Hold".

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Model: Aries-P1.5/C1.5			Dat	:e: 15-Feb	-11	No.: RM077017		
Subject: Notice for Exhasuting Developer					Prepared by: H. Kawamura			
From: PPBG Ser	vice Planning Dept.							
Classification:	Troubleshooting	☐ Part informa		ation   Actio		required		
		☐ Electric	al		⊠ Servic	e manual revision		
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information		
	☐ Product Safety	Other (		)	☐ Tier 2			

#### General

This RTB has been issued to inform you the procedure for exchanging the developer from the development unit. By following the procedure in the service manual, developer in the development unit may not be exchanged completely; therefore, please follow the following procedure when replacing the developer.

#### Cause

### Incomplete developer exhaust

The valve for exhausting the developer does not open properly; therefore, the developer may not exhaust completely.

### Incomplete developer fill

The developer may clog the exit of the developer bottle and it may not go into the development unit completely.

#### **Procedure**

#### **Developer Exhaust**

- 1. Set the empty developer bottle on the development unit, and select the color from SP 2-255-001
- 2. Check the Developer Exhaust Results from SP 2-255-009 to 2-255-012
- 3. Re-exhaust the developer and reselect the color from SP 2-355-001. Whenever, exhausting the developer, please exhaust it **twice**NOTE: For a development unit with a listed serial number, please re-exhaust the developer again, making it 3 times in total for the first time developer is exhausted.)
- 4. If the developer bottle feels light, please re-exhaust the developer.

### **Developer Fill**

- 1. Before opening the plastic bag, shake the bottle few times.
- 2. Execute "developer fill" and select the color from SP 2-256-001
- 3. While filling the developer, apply vibration.

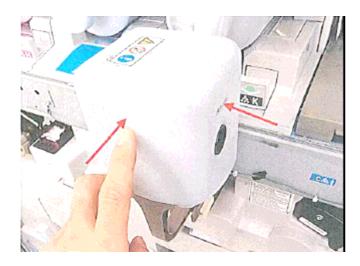
NOTE: When applying vibration constantly, push the developer bottle slightly so that the

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Model: Aries-P1.5/C1.5 Date: 15-Feb-11 No.: RM077017

developer bottle moves about 3mm either side of the bottle as shown below.



Serial numbers of **machines** that contains development units without countermeasure

T0100880001 to T0100880018

T0100890001 to T0100890009

T0100980001 to T0100980051

T0100990001 to T0100990037

T0101000001 to T0101000003

T0101080001 to T0101080027

T0101090001 to T0101090044

T0101100001

T0101180001 to T0101180016

T0101190001 to T0101190019

V9901000001 to V9901000003

V9901100001

Serial numbers of development units (service parts) that are without countermeasure

Yellow	K10SA0080001 to K10SA0080006
	K10SA0090001 to K10SA0090002
	K10SA0100001 to K10SA0100035
	K10SB0080001 to K10SB0100006
Magenta	K10SB0090001 to K10SB0090002
	K10SB0100001 to K10SB0100035
	K10SC0080001 to K10SC0080006
Cyan	K10SC0090001 to K10SC0090002
	K10SC0100001 to K10SC0100035
Black	K10SE0080001 to K10SE0080006
	K10SE0090001 to K10SE0090002
	K10SE0100001 to K10SE0100035

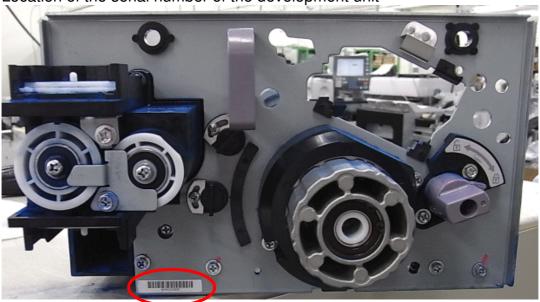
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Location of the serial number of the development unit



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Model: Aries-P1.5/C1.5				te: 17-Feb-11		No.: RM077018
Subject: Manual	Subject: Manual Correction for Aries-P1.5/C1.5 SC information   Prepared by: Hidetoshi Kawamura					
From: PPBG Ser	vice Planning Dept.					
Classification:	Troubleshooting	☐ Part info	ormat	tion	Action	n required
	☐ Mechanical	☐ Electric	al		⊠ Servic	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

The Service Manual for Aries-P1.5/C1.5 has been corrected, and corrections are indicated in red

- Appendix from page 117 to 131
- Appendix from page 133 to 149
- Appendix from page 182 to 203



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Model: Aries-P1.5/C1.5 Date: 17-Feb-11 No.: RM077018

Correction
Page 117 to 131

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Model: Aries-P1.5/C1.5 Date: 17-Feb-11 No.: RM077018

### Service Call Tables - 4-2

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
469	D	ITB cleaning motor lock error
		The machine detects an error of the ITB cleaning motor while it is rotating.
		<ul> <li>Harness to the ITB cleaning motor disconnected</li> <li>Overload to the ITB cleaning motor</li> <li>ITB cleaning motor defective</li> </ul>
		<ol> <li>Check the harness connection to the ITB cleaning motor.</li> <li>Remove the obstacle that affects the ITB cleaning motor.</li> <li>Replace the ITB cleaning motor.</li> </ol>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
470		ITB rotation error (Speed error)
		The machine detects a big speed difference while the ITB drive motor is rotating.
		Overload on the ITB drive motor (ITB cleaning blade rolled in) or motor defective  Defective belt as and a great.
-01	D	<ul><li>Defective belt speed sensor</li><li>Dirty or broken encoder for the belt speed sensor</li></ul>
		Check or replace the ITB drive motor.
		2. Check the harness connection, or replace the belt speed
		sensor.
		3. Clean the encoder for the belt speed sensor.
		ITB rotation error (Measurement error)
		The machine detects a data error from the belt speed sensor.
		Overload on the ITB drive motor (ITB cleaning blade rolled in)
00	_	or motor defective
-02	D	<ul> <li>Defective belt speed sensor</li> <li>Dirty or broken encoder for the belt speed sensor</li> </ul>
		<ul><li>Dirty or broken encoder for the belt speed sensor</li><li>1. Check or replace the ITB drive motor.</li></ul>
		2. Check the harness connection, or replace the belt speed
		sensor.
		3. Clean the encoder for the belt speed sensor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
471	D	ITB skew adjustment error: time out

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		The machine cannot complete the ITB centering control for 120 seconds after the ITB motor has started rotating.
		Belt centering roller out of home position
		<ul> <li>ITB motor rotation sensor defective</li> </ul>
		Belt centering roller sensor defective
		Belt centering roller motor defective
		1. Execute "Clearing SC471/475/476". (☐ "Clearing SC 471,
		475 or 476" under "Troubleshooting" chapter in the Field
		Service Manual.)
		2. Replace the ITB motor rotation sensor.
		3. Replace the belt centering roller sensor.
		4. Replace the belt centering roller motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
472	D	Belt centering roller HP error
		<ul> <li>The belt centering roller sensor does not detect the belt centering roller at HP during initialization.</li> <li>The belt centering roller sensor still detects the belt centering roller at HP after the belt centering roller motor has started rotating.</li> </ul>
		Belt centering roller sensor detective
		Belt centering roller motor defective
		Replace the belt centering roller sensor.
		2. Replace the belt centering roller motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
473	D	ITB skew error
		The machine detects the ITB skew error.
		ITB abnormal
		Belt centering roller out of home position
		<ul> <li>ITB motor rotation sensor defective</li> </ul>
		Belt centering roller sensor defective
		Belt centering roller motor defective
		1. Reinstall the ITB in the opposite direction or replace it.
		2. Execute "Clearing SC471/475/476". (☐"Clearing SC 471, 475
		or 476" under "Troubleshooting" chapter in the Field Service
		Manual.)
		3. Replace the ITB motor rotation sensor defective.
		4. Replace the belt centering roller sensor.
		5. Replace the belt centering roller motor.

No.   Type   Details (Symptom, Possible Cause, Troubleshooting Proce	dures)
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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
474	D	ITB position error 1
		The belt centering sensor detects an ITB position error.
		<ul> <li>ITB abnormal</li> <li>Belt centering roller out of home position</li> <li>ITB motor rotation sensor defective</li> <li>Belt centering roller sensor defective</li> <li>Belt centering roller motor defective</li> </ul>
		<ol> <li>Beit certifing folier motor defective</li> <li>Reinstall the ITB in the opposite direction or replace it.</li> <li>Execute "Clearing SC471/475/476". (         "Clearing SC 471, 475 or 476" under "Troubleshooting" chapter in the Field Service Manual.)</li> </ol>
		<ol> <li>Replace the ITB motor rotation sensor defective.</li> <li>Replace the belt centering roller sensor.</li> <li>Replace the belt centering roller motor.</li> </ol>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
475	Α	ITB position error 2
		The belt overrun front sensor detects an ITB position error.
		<ul><li>Belt overrun sensor: front defective</li><li>ITB abnormal or worn</li></ul>
		Belt centering roller out of home position
		ITB motor rotation sensor defective
		Belt centering roller sensor defective
		Belt centering roller motor defective
		Replace the belt overrun sensor: front.
		2. Reinstall the ITB in the opposite direction or replace it.
		3. Execute "Clearing SC471/475/476". (□"Clearing SC 471, 475
		or 476" under "Troubleshooting" chapter in the Field Service
		Manual.)
		4. Replace the ITB motor rotation sensor defective.
		5. Replace the belt centering roller sensor.
		6. Replace the belt centering roller motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
476	Α	ITB position error 3
		The belt overrun rear sensor detects an ITB position error.
		Belt overrun sensor: rear defective
		■ ITB abnormal or worn
		<ul> <li>Belt centering roller out of home position</li> </ul>
		<ul> <li>ITB motor rotation sensor defective</li> </ul>
		<ul> <li>Belt centering roller sensor defective</li> </ul>
		<ul> <li>Belt centering roller motor defective</li> </ul>

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Replace the belt overrun sensor: rear.
		2. Reinstall the ITB in the opposite direction or replace it.
		3. Execute "Clearing SC471/475/476". (□"Clearing SC 471, 475
		or 476" under "Troubleshooting" chapter in the Field Service
		Manual.)
		4. Replace the ITB motor rotation sensor defective.
		5. Replace the belt centering roller sensor.
		6. Replace the belt centering roller motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
477	D	PTR motor lock error
		The machine detects an error of the PTR motor while it is rotating.
		<ul> <li>PTR cleaning blade flipped or overloaded</li> <li>PTR drive overloaded</li> <li>PTR motor defective</li> </ul>
		<ol> <li>Check or replace the PTR unit.</li> <li>Check or replace the PTR motor</li> </ol>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
479	D	PTR position error
		The PTR lift sensor detects an error of the PTR lift motor while it is rotating.
		PTR lift sensor detective
		PTR lift motor defective
		Check or replace the PTR lift sensor.
		2. Check or replace the PTR lift motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
480	С	ITB feed-back counter error
		The ITB feed-back sensor detects an error of the ITB feed-back encoder counter.
		<ul><li>Noise</li></ul>
		This SC does not affect the machine's operation. This is for analytical use only.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
485	D	Waste toner transport motor 1: Lock error
		The machine detects an error of the waste toner transport motor 1 while it is rotating.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Harness loose or disconnected</li> </ul>
		<ul> <li>Waste toner transport motor 1 defective</li> </ul>
		<ul> <li>Blocking in the toner collection tube to the waste toner bottle.</li> </ul>
		Check the harness connection.
		2. Replace the waste toner transport motor 1.
		3. If necessary, unblock the toner transport path.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
486	D	Waste toner transport motor 2: Lock error
		The machine detects an error of the waste toner transport motor 2 while it is rotating.
		Harness loose or disconnected
		<ul> <li>Blocking in the toner collection tube to the waste toner bottle.</li> <li>Waste toner transport motor 2 defective</li> </ul>
		Check the harness connection.
		2. Replace the waste toner transport motor 2.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
489	D	Waste toner transport motor 2 sensor error
		The machine detects an error of the waste toner transport motor
		2.
		<ul> <li>Blocking in the toner collection tube to the waste toner bottle.</li> </ul>
		<ul> <li>Waste toner transport motor 2 defective</li> </ul>
		<ul> <li>Waste toner transport motor 2 sensor defective</li> </ul>
		Check or replace the waster toner bottle.
		2. Replace the waster toner transport motor 2
		3. Replace the waster toner transport motor 2 sensor

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Charge unit cleaning motor K error
-001		The machine detects a short or open signal of the coil in the
001		charge unit cleaning motor K (black).
		<ul><li>Harness from IOB 1 to this motor short, broken or</li></ul>
		disconnected
		Coil in this motor short or open
		Check the harness connection.
		2. Replace the harness.
		3. Replace the charge corona unit cleaning motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Charge unit cleaning motor C error
-002		The machine detects a short or open signal of the coil in the charge unit cleaning motor C (cyan).

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul><li>Possible causes are same as SC490-001.</li></ul>
		Countermeasures are same as SC490-001.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Charge unit cleaning motor M error
-003		The machine detects a short or open signal of the coil in the charge unit cleaning motor M (magenta).
		<ul> <li>Possible causes are same as SC490-001.</li> </ul>
		Countermeasures are same as SC490-001.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Charge unit cleaning motor Y error
-004		The machine detects a short or open signal of the coil in the charge unit cleaning motor Y (yellow).
		<ul><li>Possible causes are same as SC490-001.</li></ul>
		Countermeasures are same as SC490-001.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Drum motor K error
-005		The machine detects a short or open signal of the coil in the drum motor K (black).
		<ul> <li>Harness from IOB 1 to this motor short, broken or</li> </ul>
		disconnected
		Coil in this motor short or open
		Check the harness connection.
		2. Replace the harness.
		3. Replace the drum motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Drum motor C error
-006		The machine detects a short or open signal of the coil in the drum motor C (cyan).
		<ul><li>Possible causes are same as SC490-005.</li></ul>
		Countermeasures are same as SC490-005.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Drum motor M error
-007		The machine detects a short or open signal of the coil in the drum motor M (magenta).
		<ul> <li>Possible causes are same as SC490-005.</li> </ul>
		Countermeasures are same as SC490-005.

	No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
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	No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
Γ.	490	D	Drum motor Y error
	-008		The machine detects a short or open signal of the coil in the drum motor Y (yellow).
			<ul> <li>Possible causes are same as SC490-005.</li> </ul>
			Countermeasures are same as SC490-005.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	IITB black lift motor error
-009		The machine detects a short or open signal of the coil in the ITB black motor.
		ITB drawer incorrectly set
		<ul> <li>Harness from IOB 2 to this motor short, broken or</li> </ul>
		disconnected
		Coil in this motor short or open
		Check if the ITB drawer is correctly set.
		2. Check the harness connection.
		3. Replace the harness.
		4. Replace the ITB black lift motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	ITB color lift motor error
-010		The machine detects a short or open signal of the coil in the ITB color motor.
		ITB drawer incorrectly set
		<ul><li>Harness from IOB 2 to this motor short, broken or</li></ul>
		disconnected
		Coil in this motor short or open
		Check if the ITB drawer is correctly set.
		2. Check the harness connection.
		3. Replace the harness.
		4. Replace the ITB color lift motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	Belt centering motor error
-011		The machine detects a short or open signal of the coil in the belt
		centering motor.
		<ul> <li>ITB drawer incorrectly set</li> </ul>
		<ul> <li>Harness from IOB 2 to this motor short, broken or</li> </ul>
		disconnected
		<ul> <li>Coil in this motor short or open</li> </ul>
		Check if the ITB drawer is correctly set.
		2. Check the harness connection.
		3. Replace the harness.
		4. Replace the belt centering motor.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	ITB drive motor error
-012		The machine detects a short or open signal of the coil in the ITB
-012		drive motor.
		ITB drawer incorrectly set
		<ul> <li>Harness from IOB 2 to this motor short, broken or</li> </ul>
		disconnected
		Coil in this motor short or open
		Check if the ITB drawer is correctly set.
		2. Check the harness connection.
		3. Replace the harness.
		4. Replace the ITB drive motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
490	D	PTR lift motor error
-013		The machine detects a short or open signal of the coil in the PTR lift motor.
		ITB drawer incorrectly set
		<ul> <li>Harness from RCB to this motor short, broken or disconnected</li> </ul>
		Coil in this motor short or open
		Check the harness connection.
		2. Replace the harness.
		3. Replace the PTR lift motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
492	D	TD sensor K error
493	D	TD sensor C error
494	D	TD sensor M error
495	D	TD sensor Y error
		<ul> <li>The TD sensor for a color determines that no developer is in the development unit at TD sensor initialization.</li> <li>The TD sensor for a color does not detect a normal output from the development unit during printing.</li> <li>No developer in the development unit</li> <li>Agitation auger defective</li> <li>Check or reinstall developer in the development unit.</li> <li>Replace the development unit.</li> </ul>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	C	MUSIC sensor: Front LED adjustment error
-011		
-012	C	MUSIC sensor: Center LED adjustment error
-013	С	MUSIC sensor: Rear LED adjustment error
		The LED adjustment for the front, center or rear MUSIC sensor
		fails at the Vsg adjustment.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>ID/MUSIC sensor unit shutter defective</li> </ul>
		<ul> <li>Harness of sensor unit disconnected or broken</li> </ul>
		<ul> <li>Front, center or rear MUSIC sensor defective</li> </ul>
		Check the harness and connection.
		2. Replace the ID/MUSIC sensor unit.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	С	MUSIC sensor: Front patterns error 1
-014		
-015	С	MUSIC sensor: Center patterns error 1
-016	С	MUSIC sensor: Rear patterns error 1
		The front, center or rear MUSIC sensor detects the less number
		of the MUSIC patterns on the ITB.
		<ul> <li>Sensor harness disconnected or broken</li> </ul>
		<ul><li>LD board(s) defective</li></ul>
		<ul> <li>Image transferring to the ITB insufficient</li> </ul>
		Check the harness and connection.
		2. Replace the laser unit(s).
		<b>Note:</b> If one of SC250 to SC257 has occurred before, you can tell
		which is the problem laser unit (YM or CK).

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	С	MUSIC sensor: Front patterns error 2
-017		
-018	С	MUSIC sensor: Center patterns error 2
-019	С	MUSIC sensor: Rear patterns error 2
		The front, center or rear MUSIC sensor detects too many MUSIC
		patterns on the ITB.
		<ul> <li>ITB scratched or broken</li> </ul>
		<ul><li>Dust on the ITB</li></ul>
		1. Clean the ITB.
		2. Replace the ITB.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	С	MUSIC sensor: Y color shift error 1
-020		
-021	С	MUSIC sensor: M color shift error 1
-022	С	MUSIC sensor: C color shift error 1
		The yellow, magenta or cyan image shifting in the sub-scan direction exceeds the capable correction range during process
		control
		ITB scratched or broken
		<ul><li>Dust on the ITB</li></ul>
		New laser unit installed
		<ul> <li>Process control execution incorrect</li> </ul>

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Execute the manual process control with SP3820-001.
		2. Clean or replace the ITB.
		3. Replace the laser unit YM or CK.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	С	MUSIC sensor: Y color shift error 2
-023		
-024	С	MUSIC sensor: M color shift error 2
-025	С	MUSIC sensor: C color shift error 2
		The yellow, magenta or cyan image shifting in the main-scan
		direction exceeds the capable correction range in the process
		control
		ITB scratched or broken
		<ul><li>Dust on the ITB</li></ul>
		New laser unit installed
		Process control incorrect
		Execute the manual process control with SP3820-001.
		2. Clean or replace the ITB.
		3. Replace the laser unit YM or CK.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	C	MUSIC sensor: Y magnification correction error 1
-026		
-027	С	MUSIC sensor: M magnification correction error 1
-028	C	MUSIC sensor: C magnification correction error 1
		The magnification correction in the main-scan for yellow, magenta
		or cyan image exceeds the capable range in the process control.
		<ul><li>ITB scratched or broken</li></ul>
		<ul><li>Dust on the ITB</li></ul>
		New laser unit installed
		<ul> <li>Process control execution incorrect</li> </ul>
		1. Execute the manual process control with SP3820-001.
		2. Clean or replace the ITB.
		3. Replace the laser unit YM or CK.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
496	C	MUSIC sensor: Y magnification correction error 2
-029		
-030	C	MUSIC sensor: M magnification correction error 2
-031	С	MUSIC sensor: C magnification correction error 2
		The left and right magnification correction in the main-scan for
		yellow, magenta or cyan image exceed the capable range in the
		process control.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>ITB scratched or broken</li> </ul>
		<ul><li>Dust on the ITB</li></ul>
		New Laser unit installed
		<ul> <li>Process control execution incorrect</li> </ul>
		1. Execute the manual process control with SP3820-001.
		2. Clean or replace the ITB.
		3. Replace the laser unit YM or CK.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
497	С	Temperature/Humidity sensor K error
		The output of the temperature sensor was not within the
		prescribed range (0.5V to 4.2V) for 3 minutes.
		<ul> <li>Temperature and humidity sensor harness disconnected,</li> </ul>
		loose, defective
		<ul> <li>Temperature and humidity sensor defective</li> </ul>
		Check the connector and harness.
		2. Replace the temperature/humidity sensor K below the black PCDU.

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### Service Call Tables - 5-1

#### SC codes Group 5: Paper Feed

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
501	В	Tray 1 (tandem tray) feed error
		<ul> <li>The tray 1 lift sensor does not switch on 10 s after the tray lift motor switches on and starts lifting the bottom plate.</li> <li>When the tray lowers, the tray lift sensor does not go off within 1.5 sec.</li> </ul>
		Tray lift motor 1 defective or disconnected
		<ul> <li>Paper or other obstacle trapped between tray and motor</li> </ul>
		<ul> <li>Pick-up solenoid 1 disconnected or blocked by an obstacle</li> </ul>
		3. Check the harness connection.
		4. Check or clear obstacles between tray and motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
502	В	Tray 2 (universal tray) feed error
		The lift sensor is not activated within 10 seconds after the tray lift motor starts lifting the bottom plate.
		<ul> <li>When the tray lowers, the tray lift sensor does not go off within 1.5 sec.</li> </ul>
		Tray lift motor 2 defective or disconnected
		<ul> <li>Paper or other obstacle trapped between tray and motor</li> </ul>
		<ul> <li>Pick-up solenoid 2 disconnected or blocked by an obstacle</li> </ul>
		5. Check the harness connection.
		6. Check or clear obstacles between tray and motor.
		7. Check or clear obstacles around the pick-up solenoid.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
503	В	Tray 3 (A4 LCT) feed error (M077 only)
504	В	Tray 4 (A4 LCT) feed error (M077 only)
505	В	Tray 5 (A4 LCT) feed error (M077 only)
		One of the following conditions is detected in tray 3, 4 or 5 of the
		A4 LCT:
		The tray 3, 4 or 5 lift sensor is not activated for 10 s after the tray
		3, 4 or 5 lift motor turned on.
		Upper limit is not detected within 10 s while the paper tray is
		lifting during paper feed.
		The tray 3, 4 or 5 lift sensor is already activated when tray 3, 4 or
		5 is placed in the machine

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul><li>Poor connection or defective tray 3, 4 or 5 lift motor</li></ul>
		<ul> <li>Poor connection or defective tray 3, 4 or 5 lift sensor</li> </ul>
		<ul> <li>Remaining paper or another obstruction has stopped the tray</li> </ul>
		and motor.
		<ul><li>Pick-up solenoid 3, 4 or 5 connector is loose.</li></ul>
		<ul><li>Pick-up solenoid 3, 4 or 5 is blocked by an obstruction.</li></ul>
		8. Replace the tray 3, 4 or 5 lift motor.
		9. Replace the tray 3, 4 or 5 lift sensor.
		10. Check or clear obstacles around pick-up solenoid 3, 4, or 5.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
506	В	Tray 3 (1st A3 LCT) feed error
507	В	Tray 4 (1st A3 LCT) feed error
		One of the following conditions is detected in tray 3 or 4 of the 1st
		A3 LCT:
		The tray 3 or 4 lift sensor is not activated for 10 s after the tray 3
		or 4 lift motor turned on.
		Upper limit is not detected within 10 s while the paper tray is
		lifting during paper feed.
		The tray 3 or 4 lift sensor is already activated when tray 3 or 4 is
		placed in the machine
		<ul><li>Poor connection or defective tray 3 or 4 lift motor</li></ul>
		<ul> <li>Poor connection or defective tray 3 or 4 lift sensor</li> </ul>
		<ul> <li>Remaining paper or another obstruction has stopped the tray</li> </ul>
		and motor.
		<ul><li>Pick-up solenoid 3 or 4 connector is loose.</li></ul>
		<ul><li>Pick-up solenoid 3 or 4 is blocked by an obstruction.</li></ul>
		11. Replace the tray 3 or 4 lift motor.
		12. Replace the tray 3 or 4 lift sensor.
		13. Check or clear obstacles around pick-up solenoid 3 or 4.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
508	В	Tray 5 (2nd A3 LCT) feed error
509	В	Tray 6 (2nd A3 LCT) feed error
		One of the following conditions is detected in tray 5 or 6 of the
		2nd A3 LCT:
		<ul><li>The tray 5 or 6 lift sensor is not activated for 10 s after the tray</li></ul>
		5 or 6 lift motor turned on.
		<ul> <li>Upper limit is not detected within 10 s while the paper tray is</li> </ul>
		lifting during paper feed.
		The tray 5 or 6 lift sensor is already activated when tray 5 or 6
		is placed in the machine

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Poor connection or defective tray 5 or 6 lift motor</li> </ul>
		<ul> <li>Poor connection or defective tray 5 or 6 lift sensor</li> </ul>
		<ul> <li>Remaining paper or another obstruction has stopped the tray</li> </ul>
		and motor.
		<ul> <li>Pick-up solenoid 5 or 6 connector is loose.</li> </ul>
		<ul> <li>Pick-up solenoid 5 or 6 is blocked by an obstruction.</li> </ul>
		14. Replace the tray 5 or 6 lift motor.
		15. Replace the tray 5 or 6 lift sensor.
		16. Check or clear obstacles around pick-up solenoid 5 or 6.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
510	В	Bypass Tray (tray 7) feed error
		One of the following conditions is detected in the optional bypass
		tray.
		<ul> <li>The bypass upper limit sensor is not activated for 10 s after</li> </ul>
		the tray lift motor turned on.
		■ The bypass lower limit sensor is not detected within 10 s while
		the paper tray is going down after paper feed.
		The bypass tray lift sensor is already activated paper is placed
		in the bypass (tray 7) tray.
		Poor connection or defective bypass tray lift motor
		<ul> <li>Poor connection or defective bypass upper limit sensor</li> </ul>
		<ul> <li>Poor connection or defective bypass lower limit sensor</li> </ul>
		<ul> <li>Remaining paper or another obstruction has stopped the tray</li> </ul>
		and motor.
		<ul> <li>Bypass pick-up solenoid connector is loose.</li> </ul>
		<ul> <li>Bypass pick-up solenoid is blocked by an obstruction.</li> </ul>
		17. Check the harness connection or replace it.
		18. Replace the bypass tray lift motor.
		19. Replace the bypass upper limit sensor.
		20. Replace the bypass lower limit sensor.
		21. Check or clear obstacles around the bypass pick-up solenoid.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
511	В	A3 LCT exit roller contact motor 1 error
512	В	A3LCT exit roller contact motor 2 error
		<ul> <li>One of the following conditions is detected in the A3 LCT.</li> <li>The LCT exit roller sensor is not activated within 225 pulses after the LCT exit roller contact motor has turned on at its initialization.</li> <li>The LCT exit roller sensor detects for 25 pulses even after the LCT exit roller has moved away from its home position.</li> <li>The LCT exit roller sensor does not detect within 25 pulses after the LCT exit roller has moved back to its home position.</li> <li>Poor connection or defective LCT exit roller contact motor</li> <li>Poor connection or defective LCT exit roller sensor</li> </ul>

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		22. Check the harness connection.
		23. Replace the LCT exit roller contact motor.
		24. Replace the LCT exit roller sensor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
520	В	Registration gate position error
		The registration gate HP sensor does not detect the registration gate position properly.
		Dirt or defective registration gate lift sensor
		<ul> <li>Defective registration gate motor</li> </ul>
		25. Check the harness connection of the above devices.
		26. Clean or replace the registration gate lift sensor.
		27. Replace the registration gate motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
521	В	Shift roller unit position error
		The shift roller HP sensor does not detect the shift roller unit position properly.
		Dirt or defective shift roller HP sensor
		Defective shift roller unit motor
		28. Check the harness connection of the above devices.
		29. Clean or replace the shift roller HP sensor.
		30. Replace the shift roller unit motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
523	В	Fusing motor lock error
		<ul> <li>The machine detects a rotation error of the fusing motor for 1 second after the fusing motor has rotated for 1 second.</li> <li>The machine does not detect any signal from the fusing motor for 1 second when the fusing motor is in the ready condition</li> </ul>
		<ul> <li>Fusing oil not circulated in the fusing unit</li> </ul>
		<ul><li>Overload to the fusing motor</li></ul>
		<ul> <li>Poor connection or defective LCT exit roller contact motor</li> </ul>
		31. Check or replace the fusing unit.
		32. Check if remaining paper or obstruction in the fusing unit stops
		the fusing motor drive.
		33. Replace the fusing motor.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
524	В	Paper exit motor error
		The machine detects the motor lock signal from the paper exit motor.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Overload on the paper exit motor because the paper transfer belt stuck to the PTB rollers. This happened because there was no operation for a long time.</li> <li>Overload on the paper exit motor due to the different rotation speeds between the paper exit motor and fusing motor.</li> </ul>
		34. Rotate the fusing knob manually.
		35. Input the default setting for the paper exit motor with SP1-805-001.
		36. Input the default setting for the fusing motor with SP1-907-001.
		37. Replace the paper exit motor.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
525	В	Drive motor (right) error (M379)
		The machine detects a lock signal of the drive motor (right) in the buffer pass unit (M379) for 1.2 seconds after the drive motor (right) has rotated for 2 seconds.
		<ul> <li>Harness disconnected or broken</li> <li>38. Defective drive motor (right) (M379)</li> </ul>
		39. Check or replace the harness.
		40. Replace the motor (right).

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
526	В	Drive motor (left) error (M379)
		The machine detects a lock signal of the drive motor (left) in the buffer pass unit (M379) for 1.2 seconds after the drive motor (left) has rotated for 2 seconds.
		<ul> <li>Harness disconnected or broken</li> <li>41. Defective drive motor (left) (M379)</li> </ul>
		42. Check or replace the harness. 43. Replace the motor (left).

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: PTB (Paper Transport Belt) fan 1
-001		The machine detects a fan alarm signal from PTB fan 1 for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped PTB fan 1.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		44. Pull out the fusing unit drawer and then push it into the machine.
		45. Check the harness connection to PTB fan 1.
		46. Replace PTB fan 1.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: PTB (Paper Transport Belt) fan 2
-002		The machine detects a fan alarm signal from PTB fan 2 for 0.1 second during the fan operation.
		<ul><li>An obstruction has stopped PTB fan 2.</li><li>Harness disconnected</li></ul>
		47. Pull out the fusing unit drawer and then push it into the machine.
		48. Check the harness connection to TB fan 2.
		49. Replace PTB fan 2.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: PTB motor fan
-003		The machine detects a fan alarm signal from the PTB motor fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the PTB motor fan.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		50. Pull out the fusing unit drawer and then push it into the machine.
		51. Check the harness connection to the PTB motor fan.
		52. Replace the PTB motor fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Paper cooling fan 3
-004		The machine detects a fan alarm signal from paper cooling fan 3 for 0.1 second during the fan operation.
		<ul><li>An obstruction has stopped paper cooling fan 3.</li><li>Harness disconnected</li></ul>
		53. Pull out the fusing unit drawer and then push it into the machine.
		54. Check the harness connection to paper cooling fan 3. 55. Replace paper cooling fan 3.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: ITB fan
-005		The machine detects a fan alarm signal from the ITB fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the ITB fan.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		56. Pull out the ITB unit drawer and then push it into the machine.
		57. Check the harness connection to the ITB fan.
		58. Replace the ITB fan.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Paper cooling fan 1
-006		The machine detects a fan alarm signal from paper cooling fan 1 for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped paper cooling fan 1.</li> <li>Harness disconnected</li> </ul>
		59. Check the harness connection to paper cooling fan 1. 60. Replace paper cooling fan 1.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Paper cooling fan 2
-007		The machine detects a fan alarm signal from paper cooling fan 2 for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the paper cooling fan 2.</li> <li>Harness disconnected</li> </ul>
		61. Check the harness connection to paper cooling fan 2. 62. Replace paper cooling fan 2.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Laser unit YM fan
-008		The machine detects a fan alarm signal from the laser unit YM fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the laser unit YM fan.</li> <li>Harness disconnected</li> </ul>
		63. Check the harness connection to the laser unit YM fan. 64. Replace the laser unit YM fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Laser unit CK fan
-009		The machine detects a fan alarm signal from the laser unit CK fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the laser unit CK fan.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		65. Check the harness connection to the laser unit CK fan.
		66. Replace the laser unit CK fan.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: CIS cleaning fan
-010		The machine detects a fan alarm signal from the CIS cleaning fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the CIS cleaning fan.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul><li>67. Pull out the registration unit drawer and then push it into the machine.</li><li>68. Check the harness connection to the CIS cleaning fan.</li><li>69. Replace the CIS cleaning fan.</li></ul>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Registration unit fan
-011		The machine detects a fan alarm signal from the registration unit fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the registration unit fan.</li> <li>Harness disconnected</li> </ul>
		70. Pull out the registration unit drawer and then push it into the machine.
		71. Check the harness connection to the registration unit fan. 72. Replace the registration unit fan.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Black PCDU fan
-012		The machine detects a fan alarm signal from the black PCDU fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the black PCDU fan.</li> <li>Harness disconnected</li> </ul>
		73. Check the harness connection to the black PCDU fan. 74. Replace the registration unit fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Inverter/paper exit fan
-013		The machine detects a fan alarm signal from the inverter/paper exit fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the inverter/paper exit fan.</li> <li>Harness disconnected</li> </ul>
		75. Check the harness connection to the inverter/paper exit fan. 76. Replace the Inverter/paper exit fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Development unit K fan
-014		
-015	D	Fan alarm 1: Development unit C fan
-016	D	Fan alarm 1: Development unit M fan
-017	D	Fan alarm 1: Development unit Y fan
		The machine detects a fan alarm signal from the development
		unit K, C, M or Y fan for 0.1 second during the fan operation.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>An obstruction has stopped the development unit K, C, M or Y</li> </ul>
		fan.
		<ul> <li>Harness disconnected</li> </ul>
		77. Check the harness connection to the development unit K, C,
		M or Y fan.
		78. Replace the development unit K, C, M or Y fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Fusing fan 1
-018		
-019	D	Fan alarm 1: Fusing fan 2
-020	D	Fan alarm 1: Fusing fan 3
-021	D	Fan alarm 1: Fusing fan 4
-022	D	Fan alarm 1: Fusing fan 5
-023	D	Fan alarm 1: Fusing fan 6
		The machine detects a fan alarm signal from fusing unit fan 1, 2,
		3, 4, 5 or 6 for 0.1 second during the fan operation.
		<ul><li>An obstruction has stopped fusing unit fan 1, 2, 3, 4, 5 or 6.</li></ul>
		<ul> <li>Harness disconnected</li> </ul>
		79. Check the harness connection to fusing unit fan 1, 2, 3, 4, 5 or
		6.
		80. Replace fusing unit fan 1, 2, 3, 4, 5 or 6.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
530	D	Fan alarm 1: Inverter motor fan
-024		The machine detects a fan alarm signal from the inverter motor fan for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the inverter motor fan.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		81. Check the harness connection to the inverter motor fan.
		82. Replace the inverter motor fan.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
531	D	Fan alarm 2: Ozone fan K
-001		
-002	D	Fan alarm 2: Ozone fan C
-003	D	Fan alarm 2: Ozone fan M
-004	D	Fan alarm 2: Ozone fan Y
		The machine detects a fan alarm signal from the ozone fan K, C,
		M or Y for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped the ozone fan K, C, M or Y.</li> </ul>
		<ul><li>Harness disconnected</li></ul>
		83. Check the harness connection to the ozone fan K, C, M or Y.
		84. Replace the ozone fan K, C, M or Y.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
531	D	Fan alarm 2: PSU fan 1
-005		
-006	D	Fan alarm 2: PSU fan 2
-007	D	Fan alarm 2: PSU fan 3
-008	D	Fan alarm 2: PSU fan 4
		The machine detects a fan alarm signal from PSU fan 1, 2, 3 or 4
		for 0.1 second during the fan operation.
		<ul><li>An obstruction has stopped PSU fan 1, 2, 3 or 4.</li></ul>
		<ul> <li>Harness disconnected</li> </ul>
		85. Check the harness connection to PSU fan 1, 2, 3 or 4.
		86. Replace PSU fan 1, 2, 3 or 4.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
531	D	Fan alarm 2: Fusing exhaust fan 1
-009		
-010	D	Fan alarm 2: Fusing exhaust fan 2
-011	D	Fan alarm 2: Fusing exhaust fan 3
		The machine detects a fan alarm signal from fusing exhaust fan
		1, 2 or 3 for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped fusing exhaust fan 1, 2 or 3.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		87. Check the harness connection to fusing exhaust fan 1, 2 or 3.
		88. Replace fusing exhaust fan 1, 2 or 3.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
531	D	Fan alarm 2: Controller fan 1
-012		
-013	D	Fan alarm 2: Controller fan 2
-014	D	Fan alarm 2: Controller fan 3
-015	D	Fan alarm 2: Controller fan 4
-016	D	Fan alarm 2: Controller fan 5
		The machine detects a fan alarm signal from controller fan 1, 2, 3,
		4 or 5 for 0.1 second during the fan operation.
		<ul> <li>An obstruction has stopped controller fan 1, 2, 3, 4 or 5.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		89. Check the harness connection to controller fan 1, 2, 3, 4 or 5.
		90. Replace controller fan 1, 2, 3, 4 or 5.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
531	D	Fan alarm 2: Plotter cooling fan 1
-017		(Right fan from front view)
-018	D	Fan alarm 2: Plotter cooling fan 2
		(Center fan from front view)
-019	D	Fan alarm 2: Plotter cooling fan 3
		(Left fan from front view)
-020	D	Fan alarm 2: Compressor fan 1

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		(Right fan from front view)
-021	D	Fan alarm 2: Compressor fan 2
		(Left fan from front view)
		The machine detects a fan alarm signal from the plotter cooling
		fan 1, 2, 3, or compressor fan 1 or 2 0.1 second during the fan
		operation.
		<ul> <li>An obstruction has stopped plotter cooling fan 1, 2, 3, or</li> </ul>
		compressor fan 1 or 2.
		<ul> <li>Harness disconnected</li> </ul>
		91. Check the harness connection to plotter cooling fan 1, 2, 3, or
		compressor fan 1 or 2.
		92. Replace plotter cooling fan 1, 2, 3, or compressor fan 1 or 2.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
532	В	Fan alarm 3: A3 LCT front air assist fan 1
-001		
-002	В	Fan alarm 3: A3 LCT rear air assist fan 1
		The machine detects a fan alarm signal from front or rear air
		assist fan 1 for 0.7 second after the paper exit motor has started
		rotating for 1 second.
		<ul> <li>An obstruction has stopped front or rear air assist fan 1.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		93. Check the harness connection to front or rear air assist fan 1.
		94. Replace front or rear air assist fan 1.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
533	В	Fan alarm 4: A3 LCT front air assist fan 2
-001		
-002	В	Fan alarm 4: A3 LCT rear air assist fan 2
		The machine detects a fan alarm signal from front or rear air
		assist fan 2 for 0.7 second after the paper exit motor has started
		rotating for 1 second.
		<ul> <li>An obstruction has stopped front or rear air assist fan 2.</li> </ul>
		<ul> <li>Harness disconnected</li> </ul>
		95. Check the harness connection to the front or rear air assist fan
		2.
		96. Replace front or rear air assist fan 2.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
534	В	Fan alarm 5: A3 LCT rear air assist fan 3
-001		
-002	В	Fan alarm 5: A3 LCT rear air assist fan 3
		The machine detects a fan alarm signal from front or rear air assist fan 3 for 0.7 second after the paper exit motor has started
		rotating for 1 second.

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>An obstruction has stopped front or rear air assist fan 3.</li> </ul>
		<ul><li>Harness disconnected</li></ul>
		97. Check the harness connection to front or rear air assist fan 3.
		98. Replace front or rear air assist fan 3.

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### Service Call Tables - 7-1

#### SC Codes Group 7: Peripherals

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
701	В	ADF Pickup Roller Release Malfunction (D095 only)
		The pick-up roller HP sensor does not activate or de-activate when the pick-up motor turns on.
		HP sensor connector, harness loose, broken, defective
		Pick-up motor connector, harness loose, broken defective
		<ul> <li>Pick-up roller HP sensor defective</li> </ul>
		Pick-up motor defective
		<ul> <li>ADF main control board defective</li> </ul>
		99. Check the harness connections.
		100. Replace the pick-up roller HP sensor.
		101. Replace the pick-up motor.
		102. Replace the main board of the ADF.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
702	В	ADF Feed-In Motor Error (D095 only)
		While the feed motor is operating, the encoder pulse signal is not received within the specified time, or the paper size length encoder signal cannot be detected within the specified time (the encoder is built into the feed-in motor).
		<ul> <li>Feed-in motor connector, harness loose, broken, defective</li> <li>Paper length sensor connector, harness loose, broken, defective</li> <li>Feed-in motor defective</li> <li>Paper length sensor or encoder is defective</li> <li>ADF main control board defective</li> </ul>
		<ul> <li>103. Check the harness connections.</li> <li>104. Replace the feed-in motor.</li> <li>105. Replace the paper length sensor.</li> <li>106. Replace the main board of the ADF.</li> </ul>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
703	В	ADF Transport Belt Motor Error (D095 only)
		The encoder pulse signal did not change within 100 ms after 3 attempts to detect any change, causing a "P1" jam error.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Transport belt motor defective</li> <li>Poor connection between the transport motor and ADF main board</li> <li>ADF main board defective</li> </ul>
		<ul><li>107. Replace the transport belt motor.</li><li>108. Check or replace the harness connections.</li><li>109. Replace the transport belt motor.</li></ul>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
704	В	ADF Feed-Out Motor Error (D095 only)
		The encoder pulse signal did not change within 80 ms after 3 attempts to detect any change, causing a "P2 jam error.
		Feed-out motor defective
		<ul> <li>Poor connection between the feed-out motor and ADF main board</li> </ul>
		<ul> <li>ADF main control board defective</li> </ul>
		110. Replace the feed-out motor.
		111. Check or replace the harness connections.
		112. Replace the ADF main control board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
705	В	ADF Original Table Lift Malfunction (D095 only)
		<ul> <li>One of the following conditions was detected.</li> <li>The bottom plate position sensor did not activate when the bottom plate motor lifted the original table.</li> <li>The bottom plate HP sensor did not activate when the bottom plate motor lowered the original table.</li> <li>Bottom plate position sensor defective</li> <li>Bottom plate HP sensor defective</li> <li>Bottom plate motor defective</li> <li>ADF main control board defective</li> </ul>
		113. Replace the bottom plate position sensor.
		114. Replace the bottom plate HP sensor.
		115. Replace the bottom plate motor
		116. Replace the ADF main control board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720	D	Finisher (B830) upper transport motor error
		No encoder pulse signal is detected for the transport motor within the prescribed time. The 1st failure causes this SC code.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Upper transport motor disconnected, defective</li> </ul>
		<ul> <li>Finisher connection to transport motor loose, defective</li> </ul>
		<ul> <li>Upper transport motor defective</li> </ul>
		Finisher main board defective
		117. Check the harness of the upper transport motor.
		118. Replace the upper transport motor.
		119. Replace the main board of the finisher (B830).

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
720	D	Finisher (D453): Entrance roller motor error
-01		
-02	D	Finisher (D453): Proof tray vertical motor error
-03	D	Finisher (D453): Horizontal roller motor error
-04	D	Finisher (D453): Registration motor error
		The motor driver for each motor detects short or open signal from
		each motor.
		<ul> <li>Motor disconnected, defective</li> </ul>
		<ul> <li>Motor overloaded due to obstruction</li> </ul>
		120. Check and remove obstruction to the target motor.
		121. Check the harness connections.
		122. Replace the target motor; entrance roller motor for 720-01,
		proof tray vertical motor error for 720-02, horizontal roller
		motor error for 720-03 or registration motor for 720-04.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
721	В	Finisher (B830) jogger motor error
		The jogger fences move out of the home position but the HP sensor output does not change within the specified number of pulses.  The 1st failure causes an original jam message, and the 2nd failure causes this SC code.
		<ul> <li>Jogger HP sensor disconnected, defective</li> <li>Jogger motor disconnected, defective</li> <li>Jogger motor overloaded due to obstruction</li> <li>Finisher main board and jogger motor connection loose, defective</li> <li>Finisher main board defective</li> </ul>
		<ul> <li>123. Check and remove obstruction to the jogger motor.</li> <li>124. Check the harness connections.</li> <li>125. Replace the jogger HP sensor.</li> <li>126. Replace the jogger motor.</li> <li>127. Replace the main board of the finisher (B830).</li> </ul>

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
721	В	Finisher (D434) jogger motor error: Front
-01		
-02	В	Finisher (D434) jogger motor error: Rear
		The jogger fences move out of the home position but the HP sensor output does not change within the specified number of pulses.
		The 1st failure causes an original jam message, and the 2nd failure causes this SC code.
		<ul> <li>Jogger HP sensor disconnected, defective</li> </ul>
		<ul> <li>Jogger motor disconnected, defective</li> </ul>
		<ul> <li>Jogger motor overloaded due to obstruction</li> </ul>
		Finisher main board and jogger motor connection loose,
		defective
		Finisher main board defective
		128. Check and remove obstruction to the jogger motor.
		129. Check the harness connections.
		130. Replace the jogger HP sensor.
		131. Replace the jogger motor.
		132. Replace the main board of the finisher (D434).

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
723	В	Finisher feed-out motor
		The stack feed-out belt HP sensor does not activate within the specified time after the stack feed-out belt motor turns on. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
		Stack feed-out HP sensor disconnected, defective
		<ul> <li>Feed-out motor disconnected, defective</li> </ul>
		<ul> <li>Finisher main board connection to feed out motor</li> </ul>
		disconnected, defective
		<ul> <li>Motor overload due to obstruction</li> </ul>
		133. Check or clear obstructions around the motor drive
		mechanism.
		134. Replace the stack feed-out motor.
		135. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
724	В	Finisher stapler hammer motor error
		Stapling does not finish within the prescribed time after the staple hammer motor turns on. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Stapler hammer motor overloaded due to obstruction, jammed staple, number of sheets exceeds limit for stapling</li> <li>Stapler hammer motor disconnected, defective</li> <li>Staple hammer motor HP sensor disconnected, defective</li> </ul>
		<ul> <li>136. Check or clear obstacles around the motor drive mechanism.</li> <li>137. Check the harness connection.</li> <li>138. Replace the staple hammer motor HP sensor if the motor is rotating.</li> <li>139. Replace the finisher main board.</li> </ul>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
725	В	Finisher exit guide plate motor error
		After moving away from the guide plate position sensor, the exit guide is not detected at the home position within the prescribed time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		Guide plate motor disconnected, defective
		<ul> <li>Guide plate motor overloaded due to obstruction</li> </ul>
		<ul> <li>Guide plate position sensor disconnected, defective</li> </ul>
		140. Check the connections and cables for the components mentioned above.
		141. Check for blockages in the guide plate motor mechanism.
		142. Replace the guide plate position sensor and/or guide plate motor
		143. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
726	В	Shift jogger motor 1 error
		The sides fences do not retract within the prescribed time after the shift jogger motor switches on. The 1st detection failure
		causes a jam error, and the 2nd failure causes this SC code.  Shift jogger motor disconnected, defective
		<ul> <li>Shift jogger motor overloaded due to obstruction</li> </ul>
		<ul> <li>Shift jogger HP sensor disconnected, defective</li> </ul>
		144. Check or clear obstacles around the motor drive
		mechanism.
		145. Check the harness connection.
		146. Replace the shift jogger HP sensor
		147. Replace the shift jogger motor.
		148. Replace the finisher main board.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
728	В	Shift jogger retraction motor error
		The side fences do not retract within the prescribed time after the retraction motor switches on. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
		<ul> <li>Motor harness disconnected, loose, defective</li> </ul>
		Motor defective
		Motor overload
		HP sensor defective
		149. Check or clear obstacles around the motor drive mechanism.
		150. Check the harness connection.
		151. Replace the shift tray jogger lift HP sensor.
		152. Replace the shift jogger retraction motor.
		153. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
730	В	Lower Transport Motor Error: 3K Finisher B830
		No encoder pulse signal is detected for the lower transport motor within 600 ms. The 1st failure issues this SC code.
		<ul> <li>Lower transport motor disconnected, defective</li> </ul>
		Finisher connection to lower transport motor loose, defective
		<ul> <li>Lower transport motor blocked by an obstruction</li> </ul>
		<ul> <li>Lower transport motor defective</li> </ul>
		Finisher main board defective
		154. Check or clear obstacles around the motor drive
		mechanism.
		155. Check the harness connection.
		156. Replace the lower transport motor.
		157. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
731	В	Upper Tray Exit Motor Error (Proof Tray): 3K Finisher B830
		No encoder pulse signal is detected for the upper transport motor within 600 ms. The 1st failure issues this SC code.
		<ul> <li>Upper tray exit motor disconnected, defective</li> <li>Finisher connection to upper transport motor loose, defective</li> </ul>
		<ul> <li>Upper tray exit motor blocked by an obstruction</li> </ul>
		<ul> <li>Upper tray exit motor defective</li> </ul>
		Finisher main board defective
		158. Check or clear obstacles around the motor drive mechanism.
		159. Check the harness connection.
		160. Replace the upper tray exit motor.
		161. Replace the finisher main board.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
732	В	Shift Tray Exit Motor: 3K Finisher B830
		The shift tray exit motor is not operating.
		The 1st failure issues this SC code.
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		<ul> <li>Motor is blocked by an obstruction</li> </ul>
		<ul> <li>Motor defective</li> </ul>
		Finisher main control board defective
		162. Check or clear obstacles around the motor drive
		mechanism.
		163. Check the harness connection.
		164. Replace the shift tray exit motor.
		165. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
733	В	Stapler Exit Motor: 3K Finisher B830
		The stapler exit motor is not operating. The 1st failure issues this SC code.
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		<ul> <li>Motor is blocked by an obstruction</li> </ul>
		Motor defective
		Finisher main control board defective
		166. Check or clear obstacles around the motor drive
		mechanism.
		167. Check the harness connection.
		168. Replace the stapler exit motor.
		169. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
734	В	Upper Tray Junction Gate Motor: 3K Finisher B830
		The upper tray junction gate HP sensor did not detect the gate at the home position within 200 ms after two attemptsor-
		The HP sensor twice detected the gate at the home position for more than 200 ms after it was supposed to open. The 1st failure causes a jam error, and the 2nd failure causes this SC code.
		<ul> <li>Junction gate did not arrive at the home position within the specified time.</li> <li>Junction gate did not leave the home position within the specified time.</li> </ul>

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>170. Check or clear obstacles around the motor drive mechanism.</li> <li>171. Check the harness connection.</li> <li>172. Replace the upper tray junction gate HP sensor.</li> <li>173. Replace the upper tray junction gate motor.</li> <li>174. Replace the finisher main board.</li> </ul>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
735	В	Staple Junction Gate Motor Error: 3K Finisher B830
		The staple tray junction gate HP sensor did not detect the gate at the home position within 200 ms after two attempts.
		The HP sensor twice detected the gate at the home position for
		more than 200 ms after it was supposed to open.
		The 1st failure causes a jam error, and the 2nd failure causes this
		SC code.
		<ul> <li>Junction gate did not arrive at the home position within the specified time</li> </ul>
		Junction gate did not leave the home position within the
		specified time
		175. Check or clear obstacles around the motor drive.
		176. Check the harness connection.
		177. Replace the staple tray junction gate HP sensor.
		178. Replace the staple junction gate motor.
		179. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
736	В	Pre-Stack Junction Gate Motor Error: 3K Finisher B830
		The pre-stack junction gate HP sensor did not detect the gate at the home position for within 200 ms after two attempts.
		The HP sensor twice detected the gate at the home position for more than 200 ms after it was supposed to open.  The 1st failure causes a jam error, and the 2nd failure causes this SC code.
		<ul> <li>Junction gate did not arrive at the home position within the specified time</li> <li>Junction gate did not leave the home position within the specified time</li> </ul>

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		180. Check or clear obstacles around the motor drive mechanism.
		181. Check the harness connection.
		182. Replace the pre-stack junction gate HP sensor.
		183. Replace the pre-stack junction gate motor.
		184. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
737	В	Pre-Stack Transport Motor Error: 3K Finisher B830
		The pre-stack transport motor is not operating.
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		<ul> <li>Motor is blocked by an obstruction</li> </ul>
		<ul> <li>Motor defective</li> </ul>
		Finisher main control board defective
		185. Check or clear obstacles around the motor drive
		mechanism.
		186. Check the harness connection.
		187. Replace the pre-stack transport motor.
		188. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
738	В	Pre-Stack Junction Gate Release Motor Error: 3K Finisher B830
		The pre-stack junction gate release HP sensor did not detect the gate at the home position within 200 ms after two attemptsor-
		The HP sensor twice detected the gate at the home position for more than 200 ms after it was supposed to open.
		The 1st failure causes a jam error, and the 2nd failure causes this SC code.
		<ul> <li>Junction gate did not arrive at the home position within the specified time.</li> </ul>
		<ul> <li>Junction gate did not leave the home position within the specified time.</li> </ul>
		189. Check or clear obstacles around the motor drive mechanism.
		190. Check the harness connection.
		191. Replace the pre-stack junction gate release HP sensor.
		192. Replace the pre-stack junction gate release motor.
		193. Replace the finisher main board.

	No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
•	740	В	Finisher corner stapler motor error: 3K Finisher B830

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		The stapler motor did not switch off within 600 ms after operating. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		<ul> <li>Number of sheets in the stack exceeded the limit for stapling</li> <li>Stapler rotation sensor 1 defective</li> <li>Staple jam</li> <li>Motor blocked by an obstruction</li> <li>Stapler motor harness loose, broken, defective</li> <li>Corner stapler motor defective</li> <li>Main control board defective</li> </ul>
		<ul> <li>194. Check the connections and cables for the components mentioned above.</li> <li>195. Check or clear staple jams around the stapler.</li> <li>196. Replace the stapler.</li> <li>197. Replace the finisher main board.</li> </ul>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
741	В	Finisher corner stapler rotation motor error: 3K Finisher B830
		The stapler did not return to its home position within the specified time after stapling.
		-or-
		The stapler failed to leave the home position within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		Defective stapler rotation motor
		<ul> <li>Overload to the stapler rotation motor</li> </ul>
		Defective stapler rotation HP sensor
		198. Check or clear obstacles around the motor drive
		mechanism.
		199. Check the harness connection.
		200. Replace the stapler rotation HP sensor.
		201. Replace the corner stapler rotation motor.
		202. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
742	В	Finisher Stapler Movement Motor Error: 3K Finisher B830
		Staple movement is not finished for a certain time. The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>Motor overload</li> <li>Loose connection of the stapler home position sensor</li> <li>Loose connection of the stapler movement motor</li> <li>Defective stapler home position sensor</li> <li>Defective stapler movement motor</li> </ul>
		<ul> <li>203. Check or clear obstacles around the motor drive mechanism.</li> <li>204. Check the harness connection.</li> <li>205. Replace the stapler home position sensor.</li> <li>206. Replace the stapler movement motor.</li> <li>207. Replace the finisher main board.</li> </ul>

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
743	В	Booklet Stapler Motor Error 1: Front Motor (Booklet Finisher D434)
		The booklet stapler - front does not start operation within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		Booklet stapler motor (front) harness loose, broken, defective
		<ul> <li>Booklet stapler motor (front) overloaded due to obstruction</li> <li>Booklet stapler motor (front) defective</li> </ul>
		Booklet finisher control board defective
		208. Check or clear obstacles around the motor drive mechanism.
		209. Check the harness connection.
		210. Replace the booklet stapler motor - front.
		211. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
744	В	Booklet Stapler Motor Error 2: Rear Motor (Booklet Finisher D434)
		The booklet stapler - rear does not start operation within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		<ul> <li>Booklet stapler motor (rear) harness loose, broken, defective</li> <li>Booklet stapler motor (rear) overloaded due to obstruction</li> </ul>
		<ul><li>Booklet stapler motor (rear) defective</li><li>Booklet finisher control board defective</li></ul>

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		212. Check or clear obstacles around the motor drive
		mechanism.
		213. Check the harness connection.
		214. Replace the booklet stapler motor - rear.
		215. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
745	В	Feed-Out Belt Motor Error (Finisher B830)
		The stack feed-out belt HP sensor does not activate within the
		specified time after the stack feed-out belt motor turns on.
		The 1st detection failure causes a jam error, and the 2nd failure
		causes this SC code.
		If the motor is operating
		<ul> <li>Stack feed-out HP sensor harness loose, broken, defective</li> </ul>
		<ul> <li>Stack feed-out HP sensor defective</li> </ul>
		If the motor is not operating:
		<ul> <li>Feed-out belt motor blocked by an obstruction</li> </ul>
		<ul> <li>Feed-out belt motor harness loose, broken, defective</li> </ul>
		Feed-out belt motor defective
		Booklet finisher main board defective
		216. Check or clear obstacles around the motor drive
		mechanism.
		217. Check the harness connection.
		218. Replace the stack feed-out belt HP sensor.
		219. Replace the feed-out belt motor.
		220. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
746	В	Stack Plate Motor Error 1: Center Motor (B830)
		The stack plate HP sensor (center) does not activate within 500 ms after the motor turns on.
		The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
		If the motor is operating
		<ul> <li>Center stack plate HP sensor harness loose, broken, defective</li> <li>Center stack plate HP sensor defective</li> </ul>
		If the motor is not operating:
		<ul> <li>Motor blocked by an obstruction</li> </ul>
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		Motor defective
		Finisher main board defective

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		221. Check or clear obstacles around the motor drive mechanism.
		222. Check the harness connection.
		223. Replace the stack plate HP sensor (center).
		224. Replace the stack plate motor (center).
		225. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
747	В	Stack Plate Motor Error 2: Front Motor (B830)
		The stack plate HP sensor (front) does not activate within 500 ms after the motor turns on. The 1st detection failure causes a jam error, and the 2nd failure
		causes this SC code.
		If the motor is operating
		Front stack plate HP sensor harness loose, broken, defective
		Front stack plate HP sensor defective
		If the motor is not operating:
		<ul> <li>Motor blocked by an obstruction</li> </ul>
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		<ul> <li>Motor defective</li> </ul>
		Finisher main board defective
		226. Check or clear obstacles around the motor drive
		mechanism.
		227. Check the harness connection.
		228. Replace the stack plate HP sensor (front).
		229. Replace the stack plate motor (front).
		230. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
748	В	Stack Plate Motor Error 3: Rear Motor (B830)
		The stack plate HP sensor (rear) does not activate within 500 ms after the motor turns on. The 1st detection failure causes a jam error, and the 2nd failure causes this SC code.
		If the motor is operating
		<ul> <li>Rear stack plate HP sensor harness loose, broken, defective</li> <li>Rear stack plate HP sensor defective</li> </ul>
		If the motor is not operating:
		<ul> <li>Motor blocked by an obstruction</li> </ul>
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		Motor defective
		Finisher main board defective

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		231. Check or clear obstacles around the motor drive mechanism.
		232. Check the harness connection.
		233. Replace the stack plate HP sensor (rear).
		234. Replace the stack plate motor (rear).
		235. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
750	В	Tray 1 (Upper Tray Lift) Motor Error: 3K Finisher B830
		The upper tray paper height sensor does not change its status within 20 sec. after the tray raises or lowers.
		The 1st detection failure issues a jam error, and the 2nd failure
		issues this SC code.
		<ul> <li>Tray lift motor disconnected, defective</li> </ul>
		<ul> <li>Upper tray paper height sensor disconnected, defective</li> </ul>
		<ul> <li>Finisher main board connection to motor loose</li> </ul>
		Finisher main board defective
		236. Check or clear obstacles around the motor drive
		mechanism.
		237. Check the harness connection.
		238. Replace the upper tray paper height sensor.
		239. Replace the upper tray lift motor.
		240. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
753	В	Drag Drive Motor Error: 3K Finisher B830
		The drag drive HP sensor did not detect the stacking roller at the HP sensor within 1 sec.
		The drag roller did not leave the home position at the specified time.
		The 1st failure causes a jam error, and the 2nd failure causes this SC code.
		If the motor is operating
		<ul> <li>Drag drive HP sensor harness loose, broken, defective</li> <li>Drag drive HP sensor defective</li> </ul>
		If the motor is not operating:
		<ul> <li>Motor blocked by an obstruction</li> </ul>
		Motor harness loose, broken, defective
		Motor defective
		Finisher main board defective

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No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		241. Check or clear obstacles around the motor drive mechanism.
		242. Check the harness connection.
		243. Replace the drag drive HP sensor.
		244. Replace the drag drive motor.
		245. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
754	В	Drag Roller Motor Error: 3K Finisher B830
		The stacking roller drag motor did not turn on.
		<ul> <li>Motor harness loose, broken, defective</li> </ul>
		Motor defective
		Finisher control board defective
		246. Check or clear obstacles around the motor drive
		mechanism.
		247. Check the harness connection.
		248. Replace the drag roller motor.
		249. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
755	В	Shift Motor Error: 3K Finisher (B830)
		The shift tray half-turn sensors: Failed twice to detect the shift tray at the home position at the specified timeor- Failed twice to detect that the shift tray had left the home position. The 1st failure causes a jam error, and the 2nd failure causes this
		SC code.
		If the motor is operating  Half-turn sensor 1, 2 harnesses loose, broken, defective  One of the half-turn sensors defective  If the motor is not operating:  Motor blocked by an obstruction  Motor harness loose, broken, defective  Motor defective  Finisher main board defective
		<ul> <li>250. Check or clear obstacles around the motor drive mechanism.</li> <li>251. Check the harness connection.</li> <li>252. Replace the shift tray half-turn sensor 1 or 2.</li> <li>253. Replace the shift motor.</li> <li>254. Replace the finisher main board.</li> </ul>

ı	NI -	T	Details (Symptom, Possible Cause, Troubleshooting Procedures)
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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
760	В	Finisher punch motor error: 3K Finisher B830
		The punch HP sensor is not activated within the specified time after the punch motor turned on.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		<ul> <li>Punch HP sensor disconnected, defective</li> </ul>
		<ul> <li>Punch motor disconnected or defective</li> </ul>
		Punch motor overload due to obstruction
		255. Check the connections and cables for the punch motor and
		HP sensor.
		256. Check for blockages in the punch motor mechanism.
		257. Replace the punch HP sensor and/or punch motor
		258. Replace the finisher main board.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
761	В	Fold Plate Motor Error: Booklet Finisher D434
		The fold plate moves but is not detected at the home position within the specified time.
		The 1st detection failure issues a jam error, and the 2nd failure issues this SC code.
		<ul> <li>Fold plate HP sensor disconnected, defective</li> <li>Fold plate motor disconnected, defective</li> <li>Fold plate motor overloaded due to obstruction.</li> </ul>
		259. Check the connections and cables for the fold plate motor and HP sensor.
		<ul><li>260. Check for blockages in the folder plate motor mechanism.</li><li>261. Replace the fold plate HP sensor and/or fold plate motor</li><li>262. Replace the finisher main board.</li></ul>

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
765	В	Fold Unit Bottom Fence Lift Motor Error: Booklet Finisher D434
		The fold unit bottom fence did not return to the home position within the specified time.
		<ul> <li>Fold bottom fence mechanism overloaded due to an obstruction</li> </ul>
		<ul> <li>Fold bottom fence HP sensor connector loose, broken, defective</li> </ul>
		<ul> <li>Fold bottom fence HP sensor defective</li> </ul>
		<ul> <li>Fold bottom fence lift motor connector loose, broken, defective</li> </ul>
		<ul> <li>Fold bottom fence lift motor defective</li> </ul>
		Main control board defective

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No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		<ul> <li>263. Check or clear obstacles around the motor drive mechanism.</li> <li>264. Check the harness connection.</li> <li>265. Replace the fold bottom fence HP sensor.</li> </ul>
		266. Replace the fold bottom fence lift motor. 267. Replace the finisher main board.

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
766	В	Clamp Roller Retraction Motor: Booklet Finisher D434
		The clamp roller did not return to the home position within the specified time.
		<ul> <li>Clamp roller mechanism overloaded due to an obstruction</li> <li>Clamp roller HP sensor connector loose, broken, defective</li> <li>Clamp roller HP sensor defective</li> </ul>
		<ul> <li>Clamp roller retraction motor connector loose, broken, defective</li> </ul>
		<ul> <li>Clamp roller retraction motor defective</li> <li>Main control board defective</li> </ul>
		268. Check or clear obstacles around the motor drive mechanism.
		269. Check the harness connection.
		<ul><li>270. Replace the clamp roller HP sensor.</li><li>271. Replace the clamp roller retraction motor.</li><li>272. Replace the finisher main board.</li></ul>

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Model: Aries-P1.5/C1.5 Date	ate: 18-Feb-11	No.: RM077019g
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Trouble shooting for banding / shock jitter			Prepared by: H. Kawamura			
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:		☐ Part informat	tion	☐ Action required		
		☐ Electrical		☐ Service manual revision		
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information		
	☐ Product Safety	Other (	)	☐ Tier 2		

#### General

This RTB has been issued to announce the troubleshooting procedures for Banding / Jitter.

#### Definition

Banding: Bands that appear in the main scan direction at a certain interval

Shock-jitter: Bands that appear in the main scan direction at the same location from the

2<sup>nd</sup> page onward

Troubleshooting procedures are provided for the following 9 types of banding:

**No1.** Shock-jitter at ITB (PTR originated)

**No2.** Shock-jitter at OPC (PTR originated)

**No3.** Shock-jitter at PTR (Fusing unit entrance originated)

**No4.** Banding at 85 mm TE (Shock at PTR when paper exits PTR)

No5. Banding at 1.8 mm intervals

**No6.** Banding at 2.5 mm intervals

No7. Banding at 5 mm intervals

No8. Banding at 10 mm intervals

**No9.** Pitch Banding at 56 mm intervals

No10. Banding at 8 mm intervals

The following table summarizes the 9 types of banding/shock-jitter.

See each section for more details.

Coo dadii codioni loi more detalle.	
Number Symptom Action	Side effect
No.1 Shock-jitter at ITB  Actions for No.1 & No.2 to be performed as a set.  1. Update the firmware to the following versions:  a) Web Support p/n D0956083 Version 1.03 b) Engine p/n D0955252 Version 1.007:16 c) System/Copy p/n D0956081 Version 1.05 2. Add the modified fly wheel	<ul> <li>Possible toner scattering or poor transfer</li> <li>Low productivity</li> <li>Blistering could appear</li> </ul>

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Model: Aries-P1.5/C1.5 No.: RM077019g Date: 18-Feb-11 3. Adjust the image transfer current. Black: 55uA → 70uA 50uA → 70uA Cyan: Magenta: 50uA → 70uA Yellow: 55uA → 70uA 4. Reduce the process speed from normal to low. 5. Change the paper interval. Actions for No.1 & No.2 to be No.2 Shock-jitter at Low productivity OPC performed as a set. (See actions described for No.1.) No.3 PTR vibration 1. Adjust the paper feeding Possible Banding at due to Shock at speed to +/- 0.2% against 85 mm TE (No.4) Possible banding at 5 Fusing Unit the current speed. 2. Adjust the paper transfer mm intervals (No.7) Entrance current to -10uA. Possible change in 3. Apply paper with grain in image length cross direction White spots could appear Possible Shock-jitter No.4 Banding at 85 1. Adjust the paper feed speed mm TE (Shock at PTR (No.3) to +/- 0.2% against the at PTR when Possible banding at 5 current speed. paper exits PTR) mm intervals (No.7) Possible change in image length No.5 Banding at 1.8 1. Change the dither pattern to Possible density mm intervals Dot unevenness Possible Moire Banding at 2.5 1. Change the dither pattern to Possible banding at No.6 1.8 mm intervals mm intervals Line No.7 Banding at 5 mm 1. Reduce the paper feed Possible Banding at speed to -0.1% or -0.2% 85 mm TE (No.4) intervals Possible change in from the current speed. image length

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No.8	Banding at 10 mm intervals	Remove the modified	<ul> <li>Possible shock-jitter at OPC (No.2)</li> </ul>		
No.9	Banding at 56 mm intervals	Replace the drum cle unit.	aning	None	
No.10	Banding at 8 mm intervals	Replace the develop assembly.	per gear	None	

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### No1. Shock-jitter at ITB

#### <u>Cause</u>

ITB vibrates due to the shock generated when the leading edge enters the PTR nip.

### Location of the band by color and paper size

Y: 166 mm from leading edge (5<sup>th</sup> page and later)

M: 208 mm from leading edge (4<sup>th</sup> page and later)

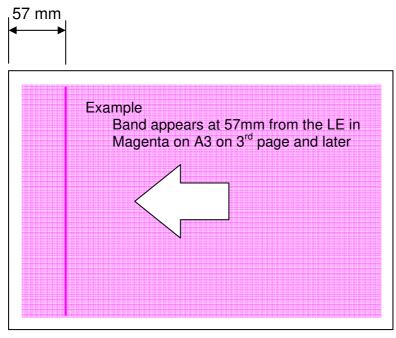
C: Does not occur

K: 1 mm from leading edge (3<sup>rd</sup> page and later)

#### **A3**

Y: 307 mm from leading edge (3<sup>rd</sup> page and later)
M: 57 mm from leading edge (3<sup>rd</sup> page and later)
C: 321 mm from leading edge (2<sup>nd</sup> page and later)

K: 71 mm from leading edge (2<sup>nd</sup> page and later)



#### SRA3

Y: 191 mm from leading edge (3<sup>rd</sup> page and later)

M: Does not occur

C: 263 mm from leading edge (2<sup>nd</sup> page and later)

K: 13 mm from leading edge (2<sup>nd</sup> page and later)

#### 8.5" x 11"

Y: 166 mm from leading edge (5<sup>th</sup> page and later)

M: 208 mm from leading edge (4<sup>th</sup> page and later)

C: Does not occur

K: 1 mm from leading edge (3<sup>rd</sup> page and later)

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Model: Aries-P1.5/C1.5 No.: RM077019g Date: 18-Feb-11

8.5" x 14"

Y: 20 mm from leading edge (4<sup>th</sup> page and later)

M: 208 mm from leading edge (3<sup>rd</sup> page and later)

C: Does not occur

K: 147 mm from leading edge (2<sup>nd</sup> page and later)

11" x 17"

Y: 307 mm from leading edge (3<sup>rd</sup> page and later)
M: 57 mm from leading edge (3<sup>rd</sup> page and later)
C: 321 mm from leading edge (2<sup>nd</sup> page and later)
K: 71 mm from leading edge (2<sup>nd</sup> page and later)

12" x 18"

Y: 191 mm from leading edge (3<sup>rd</sup> page and later)

M: Does not occur

C: 263 mm from leading edge (2<sup>nd</sup> page and later)

K: 13 mm from leading edge (2<sup>nd</sup> page and later)

13" x 19"

Y: 191 mm from leading edge (3<sup>rd</sup> page and later)

M: Does not occur

C: 263 mm from leading edge (2<sup>nd</sup> page and later) K: 13 mm from leading edge (2<sup>nd</sup> page and later)

#### Action

See "Action" described in the following section "No.2 Shock-jitter at OPC".



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### No2. Shock-jitter at OPC

#### Cause

OPC vibrates due to the shock generated when the leading edge enters the PTR nip.

#### Location of band by color and paper size

#### **A4**

Y: 26 mm from leading edge (6<sup>th</sup> page and later)
M: 68 mm from leading edge (5<sup>th</sup> page and later)
C: 111 mm from leading edge (4<sup>th</sup> page and later)
K: 153 mm from leading edge (3<sup>rd</sup> page and later)

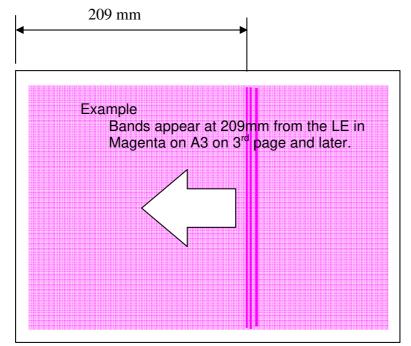
#### **A**3

Y: Does not occur

M: 209 mm from leading edge (3<sup>rd</sup> page and later)

C: Does not occur

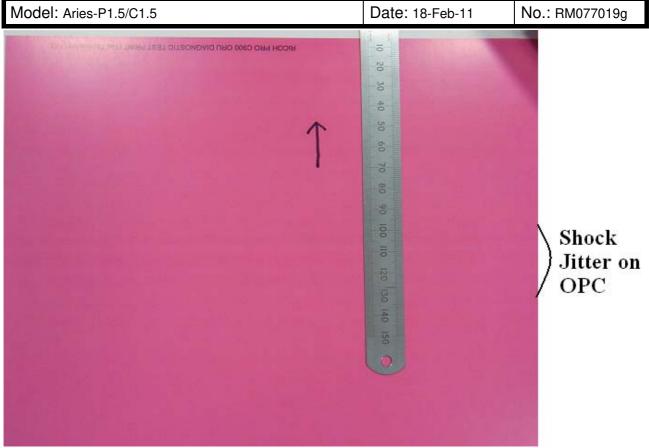
K: 223 mm from leading edge (2<sup>nd</sup> page and later)



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#### SRA3

Y: 343 mm from leading edge (3<sup>rd</sup> page and later)
M: 93 mm from leading edge (3<sup>rd</sup> page and later)

C: 415 mm from leading edge (2<sup>nd</sup> page and later) K: 165 mm from leading edge (2<sup>nd</sup> page and later)

#### 8.5"x11"

Y: 26 mm from leading edge (6<sup>th</sup> page and later)
M: 68 mm from leading edge (5<sup>th</sup> page and later)
C: 111 mm from leading edge (4<sup>th</sup> page and later)
K: 153 mm from leading edge (3<sup>rd</sup> page and later)

#### 8.5"x14"

Y: 172 mm from leading edge (4<sup>th</sup> page and later)

M: Does not occur

C: 111 mm from leading edge (3<sup>rd</sup> page and later)

K: 299 mm from leading edge (2<sup>nd</sup> page and later)

#### 11"x17"

Y: Does not occur

M: 209 mm from leading edge (3<sup>rd</sup> page and later)

C: Does not occur

K: 223 mm from leading edge (2<sup>nd</sup> page and later)

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12"x18"

Y: 343 mm from leading edge (3<sup>rd</sup> page and later) M: 93 mm from leading edge (3<sup>rd</sup> page and later) C: 415 mm from leading edge (2<sup>nd</sup> page and later) K: 165 mm from leading edge (2<sup>nd</sup> page and later)

13"x19"

Y: 343 mm from leading edge (3<sup>rd</sup> page and later) M: 93 mm from leading edge (3<sup>rd</sup> page and later) C: 415 mm from leading edge (2<sup>nd</sup> page and later) K: 165 mm from leading edge (2<sup>nd</sup> page and later)

#### **Action**

1. Install 2 modified fly wheels (P/N: M0771294) in between the mainframe and the default fly wheel, so that a total of 3 fly wheels are installed per station. Secure the fly wheels with TAPPING SCREW:4X12 (P/N: 04514012N) (x3). See "Installing the Modified Fly Wheels" for the detailed procedure.

2. Apply the following firmware versions.

	Part number	Version
Web Support	D0956083	1.03
Engine	D0955253	1.007:16
System/Copy	D0956081	1.05

3. Change the following SP values:

SP	Modified	Default	Remarks
SP2-992-001	0.5	0	Drum process speed increases 0.5% and becomes level with the ITB rotation speed. As a result, the main scan starting point shifts approx 0.75 mm towards the leading edge on both sides of the paper. Image position must be readjusted in the Adjustment Settings for Skilled Operators menu to compensate for the shift.
SP2-993-001	1	0	Cut-off frequency for drum revolution control is reduced from 30Hz to 13Hz to prevent resonance vibration.

4. Enter the Adjustment Settings for Skilled Operators menu and adjust the main scan starting point in "0101: Adjust Image Position With Feed Direction" for both front and back sides to compensate for the image position shift as a result of the SP modification in the previous step.

If the results are accepted by the customer, the procedure is complete. If the results are not accepted by the customer, do the following step.

5. Register the paper that is now being used into the Paper Library.

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6. Increase the transfer current for all stations in the Advanced Settings as follows.

-No 18: Image Transfer Current: FC: Black
-No 19: Image Transfer Current: FC: Cyan
-No 20: Image Transfer Current: FC: Magenta
-No 21: Image Transfer Current: FC: Yellow

55uA → 70uA
50uA → 70uA
55uA → 70uA

### Note the possible side effect "a" when applying the above setting.

If the results are accepted by the customer, the procedure is complete. If the results are not accepted by the customer and/or exhibits No.2 Shock-jitter at OPC, do the following step.

- 7. Set the transfer current values back to the default for all 4 stations.
- 8. Modify the Advanced Settings "No 14: Process Speed Setting" from High → Low, to reduce the amount of shock generated at the PTR nip.

### Note the possible side effect "b" when applying the above setting.

If the results are accepted by the customer, the procedure is complete. If the results are not accepted by the customer, do the following step.

- 9. Set the process speed back to "High" in Advanced Settings "No 14: Process Speed Setting".
- 10. In Advanced Settings, adjust "No 37: Paper Feed Interval Setting" to move the band to a position less noticeable on the printouts.

#### Note the possible side effects "c" and "d" when applying the above setting.

Increase the value in 0.1 increments to move the banding/shock-jitter toward the leading edge. Banding/shock-jitter exhibited on the 2<sup>nd</sup> page and later will move 46 mm toward the leading edge, and those exhibited on 3<sup>rd</sup> page and later will move 92 mm toward the leading edge.

For more detail, see the appendix.

Make sure to retrieve the default value in the Advanced Settings if no improvements are confirmed.

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### Side effects

- a) Possible toner scattering of poor transfer
- b) Productivity will reduce to approximately 78%
- c) Productivity will reduce as follows:
  - "No 37: Paper Feed Interval Setting"
    - 0.1 → Approx 90% productivity
    - 0.2 → Approx 85% productivity
    - 0.3 → Approx 80% productivity
- d) Possible occurrences of "Blistering"

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Installing the Modified Fly Wheels

#### Required parts:

Fly wheel (P/N M0771294) 8 pcs per machine; 2 pcs per station

• TAPPING SCREW: 4X12 (P/N: 04514012N) 12 pcs per machine; 3 pcs per station

1. Open the back Unit



2. Remove the fly wheel.



Fly wheel

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- 3. Insert 2 modified fly wheels in between the originally installed fly wheel and the mainframe, and secure them with the TAPPING SCREW:4X12 (P/N: 04514012N). (x3 per station)
- 4. Repeat the above for all stations.

Note: After installing 2 modified fly wheels, the originally installed fly wheel should be visible when viewed from the non-operator side of the unit.

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### **Simplified Paper Feed Interval Setting**

Apply the simplified paper feed interval setting by referring to the table below. The values are described for each paper size and color, which allows the shock-jitter to occur not on the sheets but in between the sheets. This however will require customer acceptance as productivity will be reduced. Reduced productivity as a result of this modification is also shown in the bottom table.

		Pa	per size ( m	m )	Paper size ( inch )				
		A4	A3	SRA3	11 x 8.5	8.5 x 14	11 x 17	12 x 18	13 x 19
2) Advanced Settings; #37 Paper Feed Interval to set ITR*1 Shock Jitter off position	Bk	0.0	0.2	0.1	0.0	0.4	0.2	0.1	0.1
	C	0.0	0.7	0.6	0.0	0.0	0.7	0.6	0.6
	M	0.2	0.1	0.0	0.2	0.3	0.1	0.0	0.0
	Y	0.1	0.4	0.3	0.1	0.0	0.4	0.2	0.2
<< as reference >>									
Productivity (%)	Bk	100	85	92	100	70	85	92	92
	C	100	67	67	100	100	67	67	67
	M	76	91	100	76	76	91	100	100
	Y	86	74	81	86	90	74	86	86

<sup>\*1 :</sup> Image Transfer Roller

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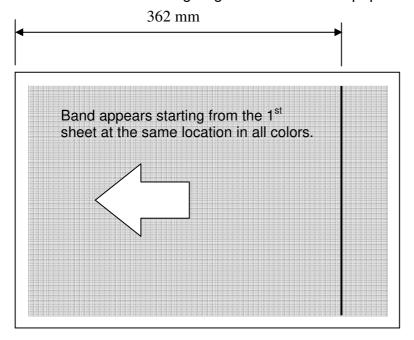
#### No3. Shock-jitter at PTR

#### Cause

PTR vibrates due to the shock generated when the leading edge enters the fusing unit.

#### Location of the band by color and paper size

362 mm from the leading edge in all colors and paper sizes



#### Action

- 1. Register the paper that is now being used into the Paper Library.
- 2. In Advanced Settings, adjust **No15: Paper Transfer Feed Speed Adjustment** to a value +/- 0.2% in relation to the current value.

Note the possible side effects "a", "b", and "c" when applying the above setting.

If the results are accepted by the customer, the procedure is complete. If the results are not accepted by the customer, do the following step.

- 3. Set the paper transfer feed speed back to the default value.
- 4. Set the paper transfer current to **-10uA** for the following in Advanced Setting:

No 22: Paper Transfer Current: B&W Current Setting

No 23: Paper Transfer Current: FC Current Setting

If the results are accepted by the customer, the procedure is complete. If the results are not accepted by the customer, do the following step.

Note the possible side effect "d" when applying the above setting.

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5. Set the paper transfer current back to the default value.

6. Apply a different paper that has its grain in cross direction.

### Side effects

- a) Possible banding at 85 mm trailing edge (No.4)
- b) Possible banding at 5 mm intervals (No.7)
- c) Possible change in image length
- d) White spots could be generated due to insufficient paper transfer current



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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

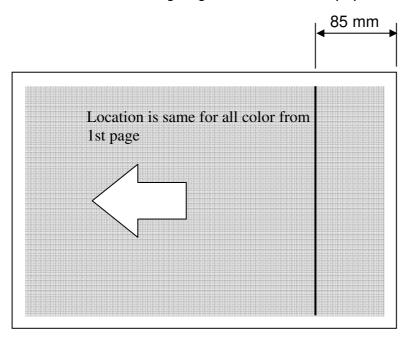
## No4. Banding at 85 mm TE (due to the shock generated when the trailing edge exits the PTR)

#### Cause

Change in the image transfer properties when the trailing edge exits the registration gate

### Location of the band by color and paper size

85 mm from the trailing edge in all colors and paper sizes



#### Action

- 1. Register the paper that is now being used into the Paper Library.
- 2. In Advanced Settings, adjust No15: Paper Transfer Feed Speed Adjustment to a value +/- 0.2% in relation to the current value.

Note the possible side effects "a", "b", and "c" when applying the above setting.

If the results are accepted by the customer, the procedure is complete.

If the results are not accepted by the customer, set the paper transfer speed back to the default.

#### Side effects

- a) Possible PTR vibration due to Shock at Fusing Unit Entrance (No.3)
- b) Possible banding at 5 mm intervals (No.7)
- c) Possible change in image length

**PAGE: 16/28** 

Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

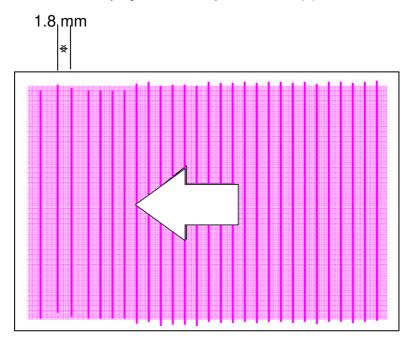
### No5. Banding at 1.8 mm Intervals

#### <u>Cause</u>

- If the bands appear in every color, the problem is originating in the ITB drive motor/ gear.
- If the bands appear in certain color(s), the problem is originating in the drum drive motor/gear of the affected color.

### Location of the band by color and paper size

Across the entire page in all or specific color(s)



#### **Action**

### Change the Dither to "dot".

- a. 200 Dot + Fine Text & Graphic
- b. 150 Dot
- c. 175 Dot

Among the above options a~c, select the one that least generates the possible side effects.

#### Side effects

The above a-c corresponds with the following side-effects a-c.

- a. Possible density inconsistency
- b. Possible density inconsistency
- c. Possible moiré

### Technical Bulletin

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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

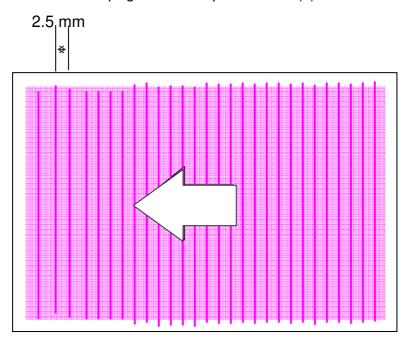
### No6. Banding at 2.5 mm Intervals

<u>Cause</u>

The problem is originating in the development roller gear of the affected color.

### Location of the band by color and paper size

Across the entire page in all or specific color(s)



#### Action

### Change the Dither to "line"

- a. 175 Line + Fine text
- b. 200 Line + fine text

Please select the one with fewer side effects.

#### Side effects

The above a & b correspond with the following side-effects a & b.

- a. Possible banding at 1.8 mm intervals (No 5. Banding at 1.8 mm Intervals)
- b. Possible banding at 1.8 mm intervals (No 5. Banding at 1.8 mm Intervals)

### Technical Bulletin

**PAGE: 18/28** 

Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

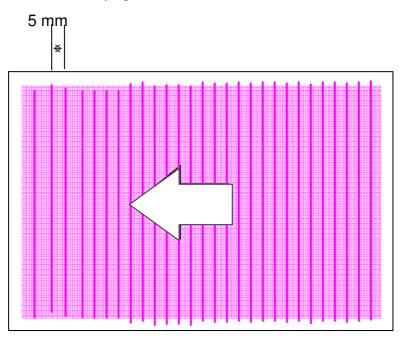
### No7. Banding at 5 mm Intervals

<u>Cause</u>

PTR Roller Gear

### Location of the band by color and paper size

Across the entire page



#### Action

- 1. Register the paper that is now being used into the Paper Library.
- 2. In Advanced Settings **No15: Paper Transfer Feed Speed Adjustment**, reduce the paper feed speed to -0.1% or -0.2% from the current speed.

If the results are accepted by the customer, the procedure is complete.

If the results are not accepted by the customer, set the paper transfer speed back to the default.

#### Side effects

The following side effects could be caused when modifying the paper feed speed.

- a. Possible Trailing 85 mm banding (No4)
- b. Possible change in image length



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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

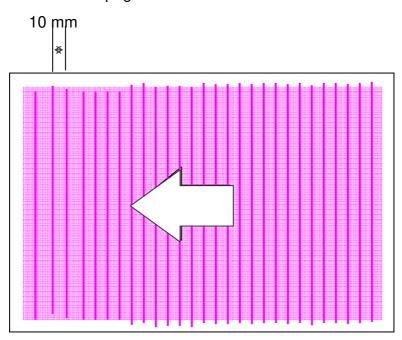
### No8. Banding at 10 mm Intervals

#### <u>Cause</u>

Addition of the two modified fly wheels causes the fly wheels to resonate with either the PTR drive assembly or the Drum drive assembly.

#### Location of the band by color and paper size

Across the entire page



#### <u>Action</u>

**Remove one of the two modified fly wheels** (P/N: M0771294), and secure one original fly wheel and one modified fly wheel with TAPPING SCREW:4X12.

Repeat the procedure for all stations.

Note: The originally installed fly wheel should be visible when viewed from the nonoperator side of the unit, because the modified fly wheel is installed between the original fly wheel and the mainframe.

If the results are accepted by the customer, the procedure is complete.

If the results are not accepted by the customer, remove the modified fly wheel so that only the original fly wheel is installed for each station.

#### Side effect

a) Possible Shock-jitter at OPC (No.2)

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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

### No9. Banding at 56 mm Intervals

<u>Cause</u>

Drum cleaning brush was damaged because the machine was not used for a long time

### Location of the band by color and paper size

Across the entire page in specific color(s)

#### Action

Replace the drum cleaning unit.

### Side effects

None

### No10. Banding at 8 mm Intervals

#### Cause

Breakage of the plastic piece attached to the development roller gear.

### Location of the band by color and paper size

Across the entire page in specific color(s)

### <u>Action</u>

Replace the developer gear assembly.

#### Side effects

None

See RTB RM07767a for details.

## Technical Bulletin

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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

## **Appendixes**

## Technical Bulletin

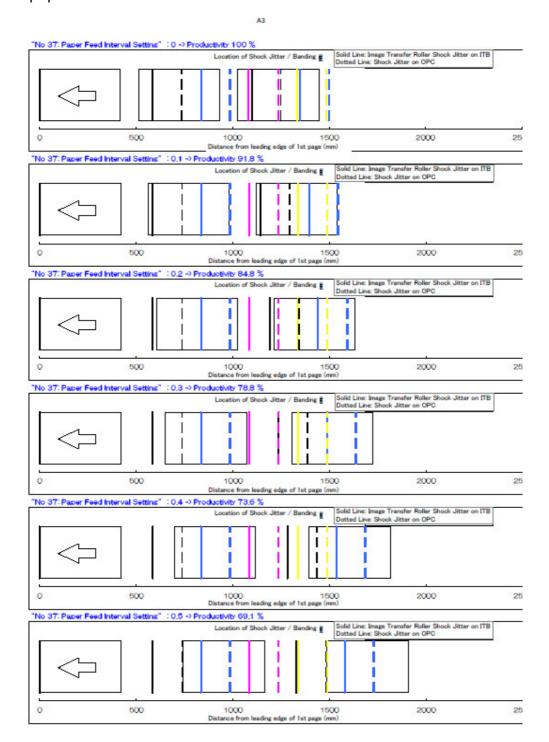
Cai Bulletin Page: 22/28

Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

Double click on the diagram below for an enlarged view in PDF format.

These diagrams show the locations of the bands that appear according to the values set in "No 37 Paper Feed Interval Setting" of the Advanced Settings for A3, SRA3, 11x17, and 12x18 paper sizes.



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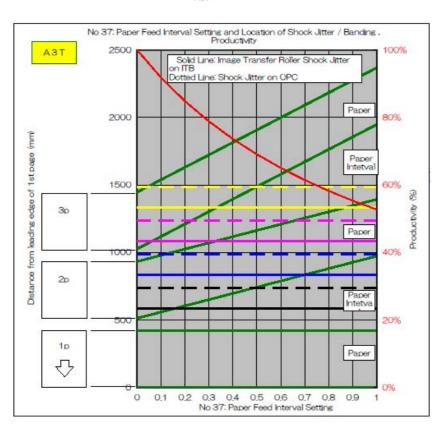
Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

Double click on the diagram below for an enlarged view in PDF.

This graph describes the relationship of the location of the bands, values set in "No 37 Paper Feed Interval Setting" of the Advanced Settings, and productivity for A3, SRA3, 11x17, and 12x18 paper sizes.

A3T



### Technical Bulletin

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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

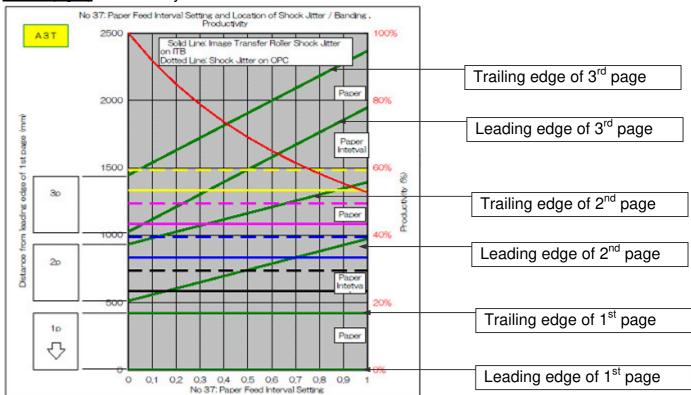
#### -Legend-

Solid lines: Shock-jitter at ITB Dotted lines: Shock-jitter at OPC

The color of the lines correspond to the toner colors

<u>Y axis (left)</u>: Distance from the leading edge of the first page <u>X axis</u>: Value set in "No 37 Paper Feed Interval Setting"

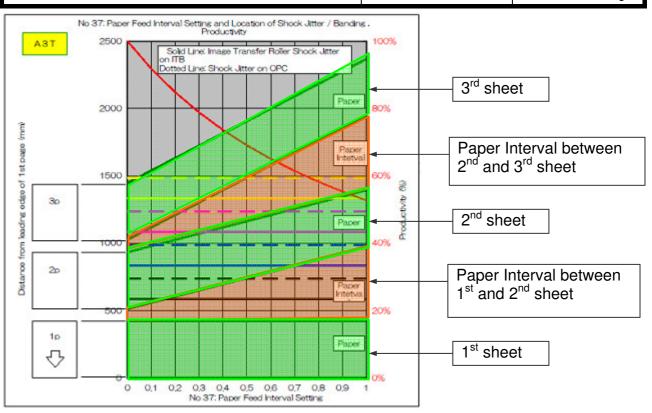
Red line: Productivity Y axis (right): Productivity



## Technical Bulletin

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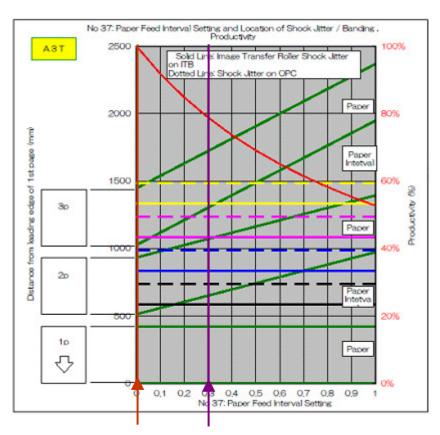
Reissued: 07-Aug-2012



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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g



The following describes an example of a result obtained after adjusting the paper feeding speed.

### Brown line: When No37: Paper Feed Interval Setting is set to 0.0 (Default)

The shock-jitter/banding appears on the 2<sup>nd</sup> page as follows:

- Shock-jitter at ITB in Black and Cyan
- Shock Jitter at OPC in Black

The shock-jitter/banding appears on the 3<sup>rd</sup> page as follows:

- Shock-jitter at ITB in Magenta and Yellow
- Shock Jitter at OPC in Magenta

Productivity: 100%

#### Purple line: When modifying No37: Paper Feed Interval Setting to 0.3

The shock-jitter/banding appears on the 2<sup>nd</sup> page as follows:

- Shock-jitter at ITB in Cyan
- Shock-jitter at OPC in Black and Cyan

The shock-jitter/banding appears on the 3<sup>rd</sup> page as follows:

- Shock-jitter at ITB in Yellow
- Shock Jitter at OPC in Yellow

Productivity: Approx 80%

The above adjustment allows the shock-jitter to occur between the sheets, resulting in elimination of the shock-jitter/banding in Magenta.

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Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

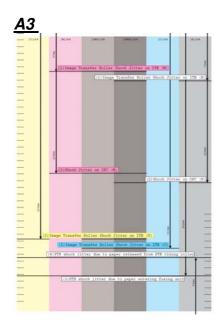
The following charts describe the location of the shock-jitter/banding that could appear if the default settings are used.

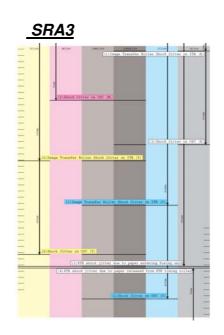
Double click on the diagrams below for an enlarged view in PDF, and print these PDF files to the controller.

However, make sure that the image quality is checked using the customer's job.

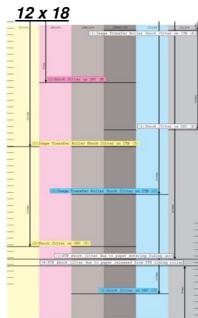
#### **IMPORTANT!!**

These charts are confidential. Make sure to handle these charts with care.









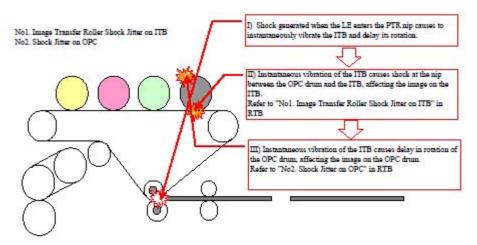
### Technical Bulletin

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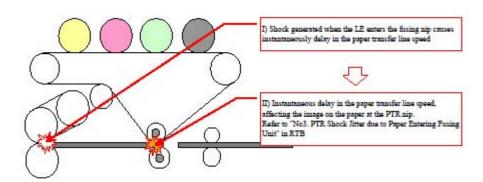
Reissued: 07-Aug-2012

Model: Aries-P1.5/C1.5 Date: 18-Feb-11 No.: RM077019g

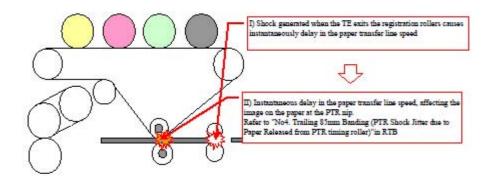
The following diagrams illustrate the mechanism of the shock-jitter. Double click on the diagrams for an enlarged view in PDF.



No3. PTR Shock Jitter due to Paper Entering Fusing Unit



No4. Trailing 85mm Banding (PTR Shock Jitter due to Paper Released from PTR timing roller)





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### Reissued:24-Mar-11

Model: Aries-P1.5/C1.5 Date: 18-F	eb-11 No.: RM077020a
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#### **RTB Reissue**

The illustrations have changed as shown below.

Subject: Countermeasure for toner scatter			Prepared by: H. Kawamura		
From: PPBG Serv	vice Planning Dept.				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informa Electrical Transmit/rec Other (		<ul><li>✓ Action required</li><li>✓ Service manual revision</li><li>✓ Retrofit information</li><li>✓ Tier 2</li></ul>	

## General

This RTB has been issued to inform you the permanent countermeasure for toner scattering

### **Problem**

Toner scattering (refer to the diagram below) may occur, if the toner coverage is extremely low.

(Reference value: Toner coverage is less than 2.0 %)







### **Procedure**

1. At the next visit to the customer's site or during installation, please change the following SP.

SP: 3701-009 (Max Pattern Length), 10 → 25

## Target:

All machines in the field

#### Note:

In the previous RTB, (RM077020) we asked to check whether from SP 3-561-001 to SP 3-561-004 are less than 1.1 or not.

That was a tentative countermeasure; therefore, from now on, there is no need to check SP 3-561-xxx.

# Technical Bulletin

**PAGE: 1/2** 

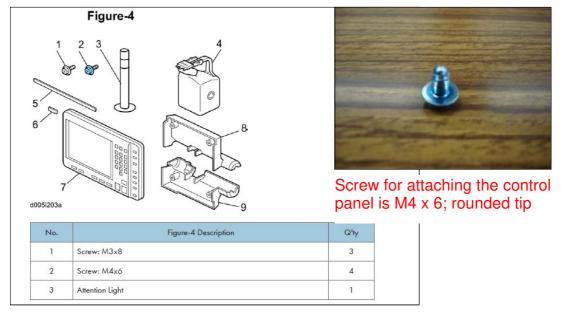
Model: Aries-P1.5/C1.5 Date			Date: 28-Feb-11		No.: RM077021	
Subject: Additional explanation on screw types for installing the operation panel				Prepare	d by: H. N	∕latsui
From: PPBG Ser	vice Planning Dept.					
Classification:	☐ Troubleshooting	☐ Part info	ormation 🖂 Acti			required
		☐ Electric	al		⊠ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retrof	it information
	☐ Product Safety	Other (		)	☐ Tier 2	

#### General:

Instructions on the installation procedures of the operation panel in the service manual were missing the explanation of screw types.

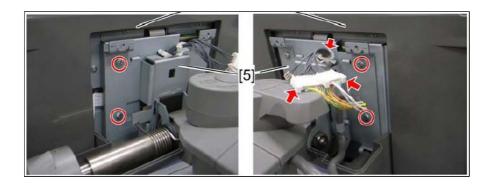
This RTB has been issued to announce the additional explanation.

If the operation panel is attached using the M4x8 screws and fastened completely, the screw may contact the control board of the operation panel due to the narrow gap between the control board and the bracket. Although the M4x6 screws are included as accessories, the service manual does not mention that we should use these screws to fasten the operation panel.



#### Action:

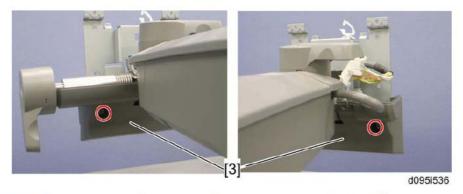
Please make sure the control panel is fastened with M4 x 6 screws for machines in the field.



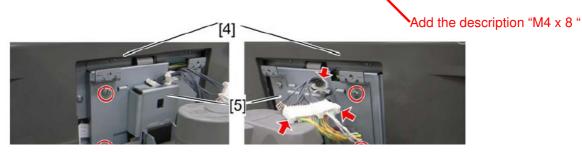
**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 28-Feb-11 No.: RM077021

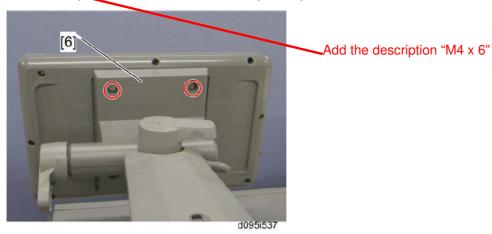
### **Service Manual Corrections**



3. Attach the operation panel lower cover [3] to the operation panel bracket (  $\mathcal{F} \times 2$ ).



- 5. Secure the operation panel and connect two connectors to the relay connectors from the mainframe  $(\mathscr{F} \times 4, \overset{\mathfrak{S}}{\cong} \times 1, \overset{\mathfrak{\mathfrak{S}}}{\bowtie} \times 2)$ 
  - The three-pin harness in these harnesses of the operation panel is not used.



6. Attach the operation panel upper cover [5] ( \*\* 2 each: M4×6).

Correct the description to "M4 x 8

# Technical Bulletin

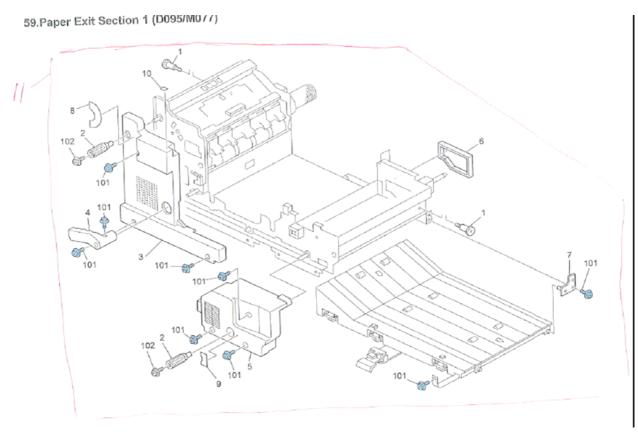
**PAGE: 1/2** 

Model: Aries C1.5 / P1.5 Date			Date: 23-Mar-11		No.: RM077022	
Subject: PAPER EXIT UNIT:ASS'Y			Prepare	ed by: H. I	Kawamura	
From: PPBG Ser	vice Planning Dept.					
Classification:	Troubleshooting	□ Part inference       □ Part inference      □ Part inference       □ Part inference       □ Part inference       □ Part inference       □ Part inference       □ Part inferen	information $\square$		Action	n required
	☐ Mechanical	☐ Electric	al		☐ Servi	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retro	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

This RTB has been issued to announce the release of the "paper exit unit: ass'y".

New part	Description	Q'ty	Int	Page	Index	Note
number						
M0774565	PAPER EXIT UNIT; ASS'Y	1	-	143	11	

PCIL: October 2012 P/N change



**PAGE: 2/2** 

Model: Aries C1.5 / P1.5 Date: 23-Mar-11 No.: RM077022

## Supplying of the Paper Exit Unit; Ass'Y

Delivery will take approximately 2 months after order placements. (Although this will depend on the stock).

### **Notes**

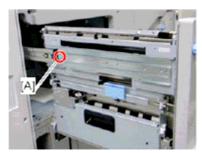
- > This unit contains parts mentioned in part catalog, "Paper Exit Unit" from section 1 to 12
- > This unit is too heavy for one person to lift or move safely. Two people are required to life or move the unit.

## Procedure for removing the Paper Exit unit

1. Pull out the paper exit unit ass'y with the fusing unit on it.

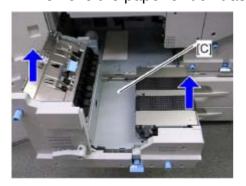


- 2. Remove the fusing unit. (Refer to the service manual.)
- 3. Remove 2 screws on the rails, (one on the right [B], one on the left [A])





4. Remove the paper exit unit ass'y from the rails



Follow the above procedure in reverse order to re-assemble the paper exit unit.

1	

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Date: 28-Mar-11		·11	No.: RM077023
Subject: Parts Description Correction - Operation Panel					d by: N.li	da
From: PPBG Service Planning Dept.						
Classification:	Troubleshooting	⊠ Part info	orma	tion	Action	required
		☐ Electric	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

New part	Description		Int	Page	Index	Note
number						
D0951780	PLATE:APPLICATION:C:NA	0→1	-	39	9	
D0951782	PLATE:APPLICATION:CREO:NA	0→1	-	39	9	
D0951774	KEYTOP:PRINTER:EFI	0→1	1	39	3	

## Change/Reason:

Section "7.Operation Panel 3 (D095/M077)" of the parts catalog had descriptions missing for the following 3 parts.

The 3 missing parts indicated in blue in the table below have been added to the parts catalog.

Index No.	Part No.	Description	
1	D0951771	KEYTOP:COPY(D095)	
2	D0951772	KEYTOP:DOC(D095)	
3	M0771774	KEYTOP:PRINTER(M077)	
3	D0951774	KEYTOP:PRINTER:EFI	<b>■ 4</b> /4 <b>0</b>
4	D0951773	KEYTOP:SCANNER(D095)	<b>a</b> 6 <b>b</b>
5	M0771778	KEYTOP:BLANK	
8	D0951787	KEYTOP:RESERVATION:SPACER(D095)	(♦)
9	M0771780	PLATE:APPLICATION(EU)	
9	M0771790	PLATE:APPLICATION:P:NA(NA)	Printer
9	D0951780	PLATE:APPLICATION:C:NA	Copy Document Server New Job fiory driven Scanner
9	D0951782	PLATE:APPLICATION:CREO:NA	Copy Document Server New Job Printer Scanner

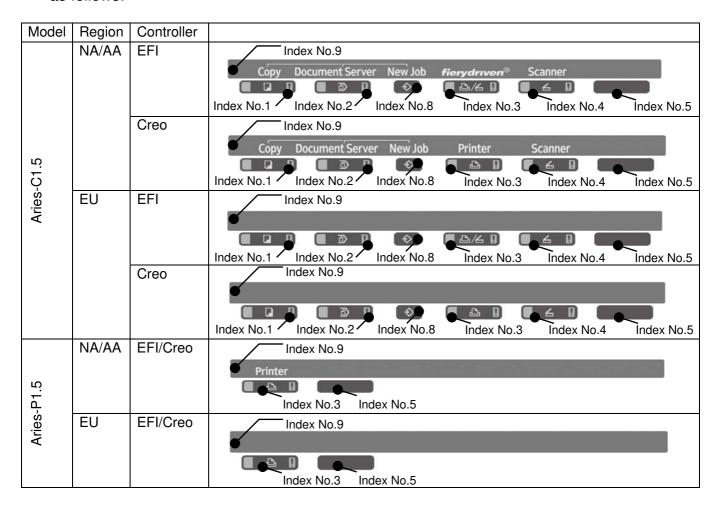


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Model: Aries-P1.5/C1.5 Date: 28-Mar-11 No.: RM077023

#### <Reference>

Combinations of the Plate and Keytop according to the Model, Region, and Controller are as follows:



# Technical Bulletin

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Model: AG-P1 / C1			Date: 20-Apr-11		11	No.: RM077024
Subject: Buffer Pass unit modification			Prepared	d by: Hire	oaki Matsui	
From: PPBG QA	Service Planning Dept.					
Classification:	Troubleshooting	☐ Part info	orma	tion		n required
	☐ Mechanical	☐ Electrication	al		Service	ce manual revision
	☐ Paper path	Transm	it/rec	eive	Retro	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

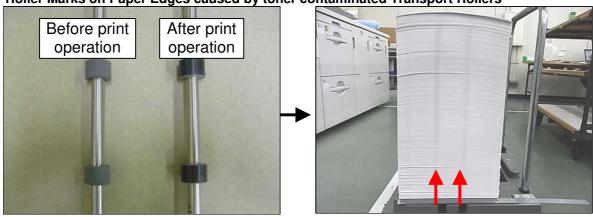
## **Symptom**

The Buffer Pass Unit of the initial production connected to the Pro C901/C901s may cause image quality problems of "roller marks on paper edges" and/or "vertical white streaks".

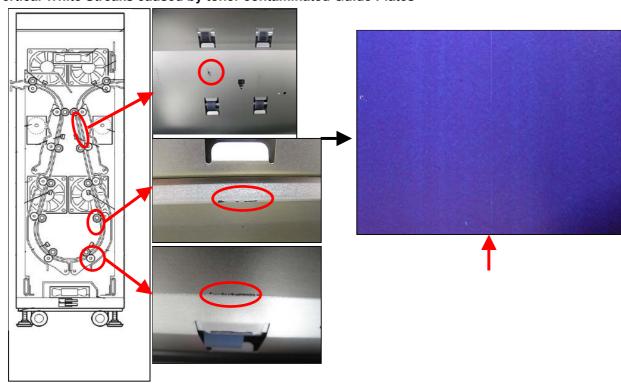
#### Cause

The Transport Rollers and the Guide Plates installed in the Buffer Pass Unit of the initial production tend to easily pick up toner when printing high density images, and may result in the following image quality problems.

Roller Marks on Paper Edges caused by toner contaminated Transport Rollers



### Vertical White Streaks caused by toner contaminated Guide Plates



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Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

## **SOLUTION:**

Please replace the Transport Rollers, Spring, and Guide Plates at your next service visit (or for a new site installation) by ordering the following replacement kits. Replacement will require both kits; M3799901 & M3799902.

Kit #	Kit Description	Part Number	Description	Q'ty
M3799901	MODIFICATION KIT:	M0774604	Transport Roller:Duplex	10
	BUFFER PASS	M3791637	Transfer Roller:Knob	2
		AA063678	Spring – 3.5N	2
M3799902	MODIFICATION KIT:	M3791658	Guide Plate:Vertical transport :Right	1
	BUFFER PASS-1	M3791659	Guide Plate:Lower	1

M3799901 --- Material of the Transport Roller and the tension of the Spring have been modified to prevent toner contamination.

M3799902 --- The Guide Plates have been coated to reduce friction and prevent toner contamination.

Part	Previous	Modified
Transport Roller	Roller: Black	Roller: Blue
Spring	AA063674 Spring Pressure: 8N	AA063678 Spring Pressure: 3.5N
Guide Plate	Surface color is slightly yellow.	Surface color is silver.



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Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

## **Affected Units**

Units of the serial numbers below M379-27S6701200007 and connected to the C901/C901s  NOTE (Only EU): Units attached with a sticker on the bottom frame (See the photo below) have already been implemented of the modification. Modification is not required for these units. Fist of all, make sure to open the front door and check for this sticker.	NA	Units of the serial numbers below M379-17S6701100001 and connected to the C901/C901s
Units attached with a sticker on the bottom frame (See the photo below) have already been implemented of the modification.  Modification is not required for these units. Fist of all, make sure	EU	Units of the serial numbers below M379-27S6701200007 and
		Units attached with a sticker on the bottom frame (See the photo below) have already been implemented of the modification.  Modification is not required for these units. Fist of all, make sure
Particular Control Con		Purple may test 1/4 years to get the second of the second
Asia Units of the serial numbers below M379-27S6701200007 and connected to the C901/C901s	Asia	

The aforementioned image quality problems only occur with the above affected units and conditions.

# Technical Bulletin

Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

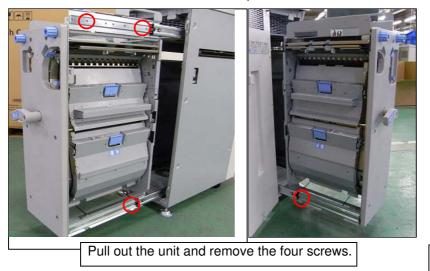
**Replacement Procedure:** 

**Transport Roller & Spring** 

Modification Kit:

M3799901 MODIFICATION KIT: BUFFER PASS

Step 1-1. Open the front door, pull out the transport unit, remove four screws from the slide rails and seven from the inner cover, and remove the inner cover and lever.

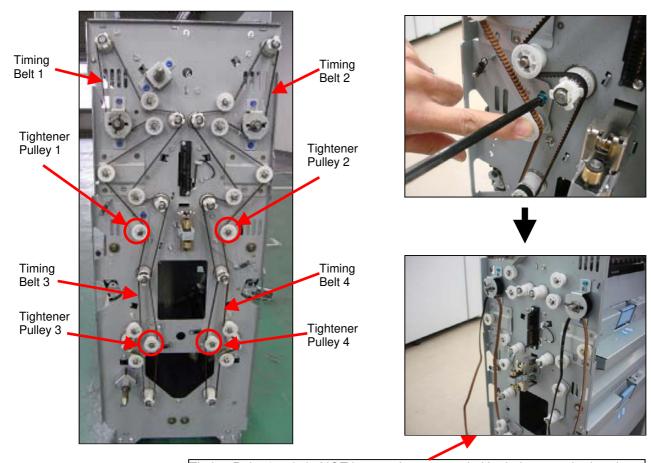




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Remove the seven screws, lever, and inner cover.

Step 1-2. Loosen the four Tightener Pulleys, and remove the Timing Belts from the pulleys.

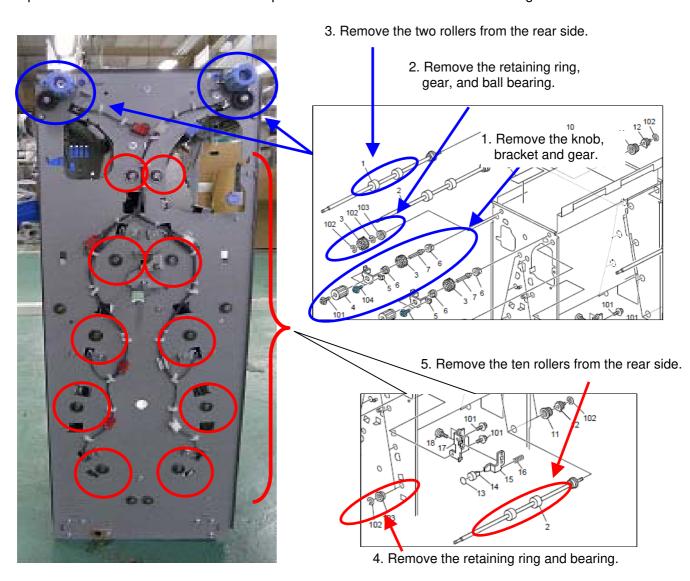


Timing Belts 1 & 2 do NOT have to be removed. Hook them on the bracket. Timing Belts 3 & 4 must be removed.

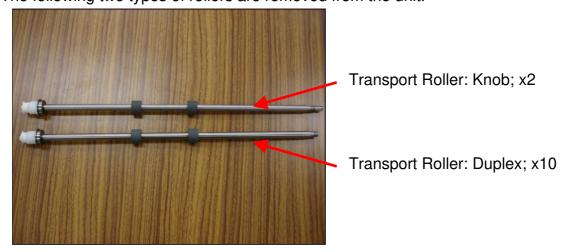
# Technical Bulletin

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Step 1-3. Remove a total of twelve Transport Rollers from the unit in the following order.



The following two types of rollers are removed from the unit.





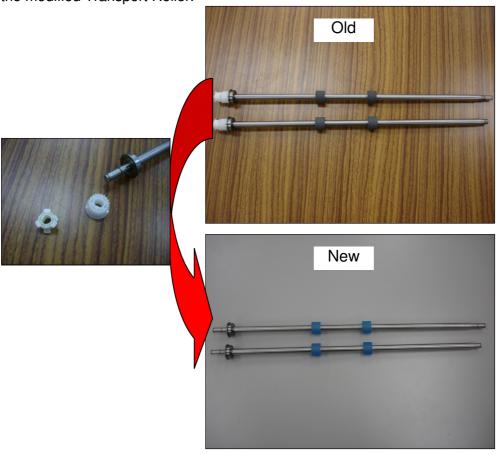
Model: AG-P1 / C1

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Step 1-4. Move the Pulley, Timing Pulley, and Retaining Ring from the current Transport Roller to the modified Transport Roller.



Step 1-5. Follow steps '1-1' to '1-3' in reverse order to install the Transport Roller, and re-install the Timing Belt, Tightener Pulley, and Knob. Leave the transport unit drawn out.

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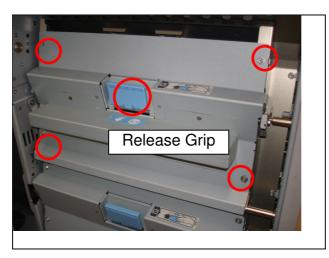
**Replacement Procedure:** 

**Transport Roller & Spring** 

Modification Kit:

M3799901 MODIFICATION KIT: BUFFER PASS

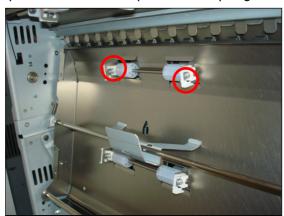
Step 2-1. Remove the four screws on the Guide Plate Cover and the Release Grip.



Step 2-2. Open the Guide Plate Cover, and lift it up to remove it.



Step 2-3. Replace the two Transport Roller Springs with the modified Transport Roller Springs.



Two sets of transport roller springs are installed in the top and bottom positions.

Only replace the springs installed in the top position.

Step 2-4. Put back the Guide Plate Cover and Release Grip in their original positions.

# Technical Bulletin

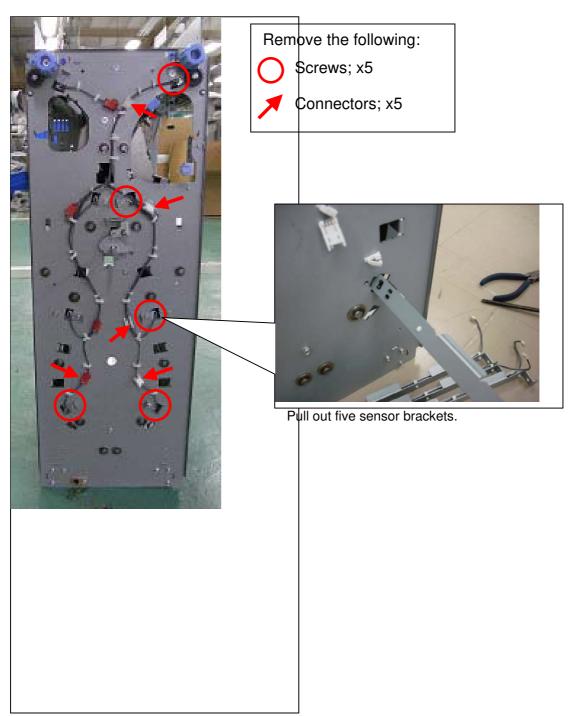
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Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

Replacement Procedure:
Modification Kit:

Vertical Transport Guide Plate & Lower Guide Plate M3799902 MODIFICATION KIT: BUFFER PASS-1

Step 3-1. Remove the sensor bracket.



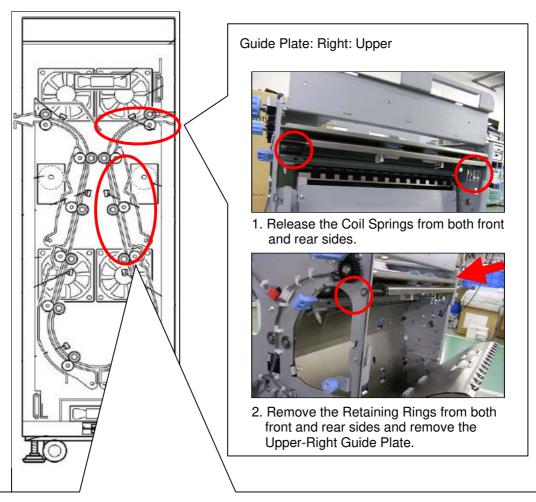
Model: AG-P1 / C1

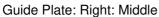
# Technical Bulletin

Date: 20-Apr-11 No.: RM077024

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Step 3-2. Remove the Upper-Right and Upper-Middle Guide Plates.







1. Release the spring hook.

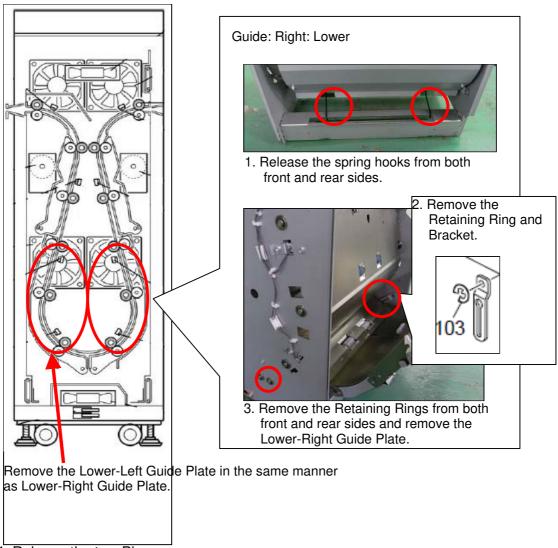


3. Remove the Retaining Rings from both front and rear sides and remove the Middle-Right Guide Plate.

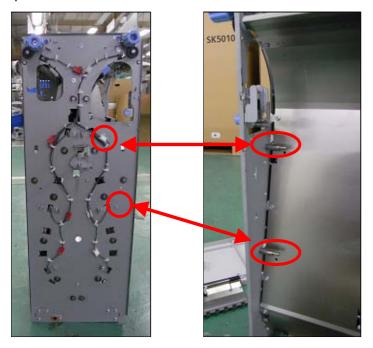
**PAGE: 10/11** 

Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

Step 3-3. Remove the Lower-Right and Lower-Left Guide Plates.



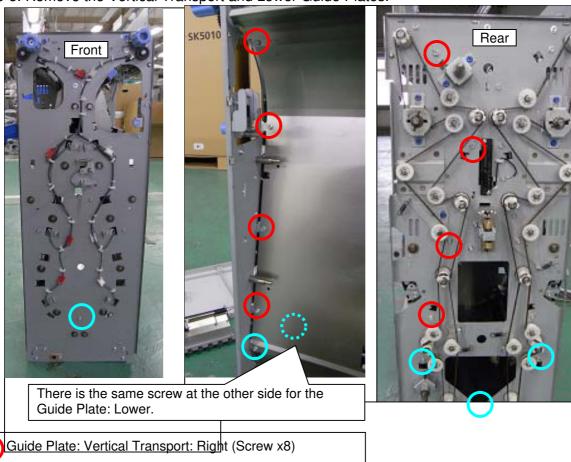
Step 3-4. Release the two Pins.



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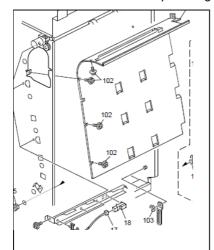
Model: AG-P1 / C1 Date: 20-Apr-11 No.: RM077024

Step 3-5. Remove the Vertical Transport and Lower Guide Plates.

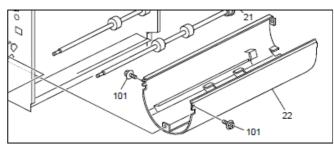


Guide Plate: Lower (Screw x6)

Guide Plate: Vertical Transport: Right



Guide Plate: Lower



Step 3-6. Replace the two Guide Plates with the modified Guide Plates, and follow steps '3-1' to '3-5' in reverse to order to reassemble the unit.

Step 3-7. Put back the transport unit to complete the procedure. (See 'Step 1-1'.)

# Technical Bulletin

Model: Aries-P1.5/C1.5				Date: 20-Apr-11		No.: RM077025
Subject: Addition	nal Procedures Required for Ou	S	Prepared	d by: Hiro	oaki Matsui	
From: PPBG Service Planning Dept.						
Classification:	Troubleshooting	☐ Part info	orma	tion		required
	☐ Mechanical ☐ Electrical		al	☐ Servi		ce manual revision
☐ Paper path ☐ Transmi		it/rec	eive	☐ Retrof	fit information	
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2	

This RTB has been issued to announce the additional procedures required when performing the following output checks:

- **Development Motor** (SP5804 -162: Y, -163: M, -164: C, -165: K)
- Waste Toner Transport Motor 1 (SP5804-152).

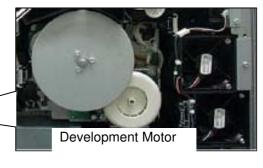
Output Check	Required Procedure				
<b>Development Motor</b> (SP5804 -162:Y, -163:M, -164:C, -165:K)	Output checks Waste Toner Transport Motor 1 (SP5804-152) and Waste Toner Transport Motor 2 (SP5804-153) to be performed also.				
Waste Toner Transport Motor 1 (SP5804-152)	Output check Waste Toner Transport Motor 2 (SP5804-153) to be performed also.				

NOTE: Output check for Waste Toner Transport Motor 2 (SP5804-153) can be performed independently and does not require an additional procedure.

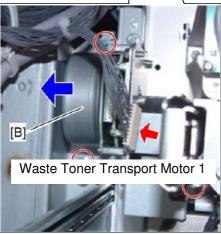
The above additional procedures are required to prevent toner from clogging. If the output check for the Development Motor is run independently, toner could clog between the Development Motor and the Waste Toner Transport Motor 1.

If the output check for Waste Toner Transport Motor 1 is run independently, toner could clog between Waste Toner Transport Motor 1 and Waste Toner Transport Motor 2.





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Waste Toner Transport Motor 2

Waste Toner Transfer Motor 2 is located behind the IOB board.

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5 Dat			te: 10-May-11		No.: RM077026	
Subject: Additional SC codes SC57X				Prepared by: Hiroaki Matsui		
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	ion: Troubleshooting Part informa		ormat	tion Action required		
	☐ Mechanical ☐ Electrical		al	⊠ Service ma		e manual revision
☐ Paper path ☐ Transmit		it/rec	eive	Retrof	fit information	
	☐ Product Safety	Other (		)	☐ Tier 2	

This RTB has been issued to announce the fusing related SC codes that had been missing from the Aries-P1.5/C1.5 Field Service Manual.

Please add the following SC tables to your service manual in between pages 157 and 158 in section "3. Appendix: Service Call Conditions".

## **Service Call Tables 5-2**

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)				
		Fusing roller thermistor error (Fusing roller thermistor)				
		The core temperature of the hot roller does not reach 0 degrees Celsius for 2100				
F-34		seconds.				
571	Α	Defective fusing roller thermistor				
		<ul> <li>Loose connection of the fusing roller thermistor</li> </ul>				
		<ul> <li>Do SP5810 to cancel the SC fusing code. Turn the main power off, and then or</li> </ul>				
		Check if the fusing roller thermistor is firmly connected.				
		Replace the fusing roller thermistor.				

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Hot roller warm-up error (Fusing roller thermistor)
570		The core temperature of the hot roller does not reach 45 degrees Celsius for 2100 seconds after the hot roller lamp turned on.
572	A	• The core temperature of the hot roller does not reach the warm-up temperature for 4000 seconds after the hot roller lamp turned on.
		Defective (deformed) fusing roller thermistor
		Loose connection of the fusing lamps
		<ul> <li>Do SP5810 to cancel the SC fusing code. Turn the main power off, and then on.</li> </ul>
		<ul> <li>Check the appearance of the fusing roller thermistor for any anomalies and the input voltage.</li> </ul>
		Check if the fusing lamps are firmly connected.
		Replace the fusing roller thermistor.
		Replace the thermostat.

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)			
		Fusing belt thermistor error (Fusing belt thermistor)			
		The temperature of fusing belt does not reach 0 degrees Celsius for 135 seconds.			
F70		Defective fusing belt thermistor			
576	A	<ul> <li>Loose connection of the fusing belt thermistor</li> </ul>			
		<ul> <li>Do SP5810 to cancel the SC fusing code. Turn the main power off, and then on.</li> </ul>			
<ul> <li>Check if the fusing belt thermistor is firmly connected.</li> </ul>		<ul> <li>Check if the fusing belt thermistor is firmly connected.</li> </ul>			
		Replace the fusing belt thermistor.			



**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 10-May-11 No.: RM077026

No.	Туре	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Hot roller warm-up error (Fusing belt thermistor)
		The temperature of the fusing belt does not reach 90 degrees Celsius for 306
		seconds after the hot roller lamp turned on.
577	Α	<ul> <li>The temperature of the fusing belt does not reach the "warm-up temperature − 35</li> </ul>
		degrees Celsius (SP correlated value)" when a) the pressure roller reaches its
		target core and surface temperatures, and b) the time for warm-up has elapsed.
		Defective (deformed) fusing belt thermistor
		Loose connection of the fusing lamps
		<ul> <li>Do SP5810 to cancel the SC fusing code. Turn the main power off, and then on.</li> </ul>
		<ul> <li>Check the appearance of the fusing belt thermistor for any anomalies and the input voltage.</li> </ul>
		Check if the fusing lamps are firmly connected.
		Replace the fusing belt thermistor.
		Replace the thermostat.

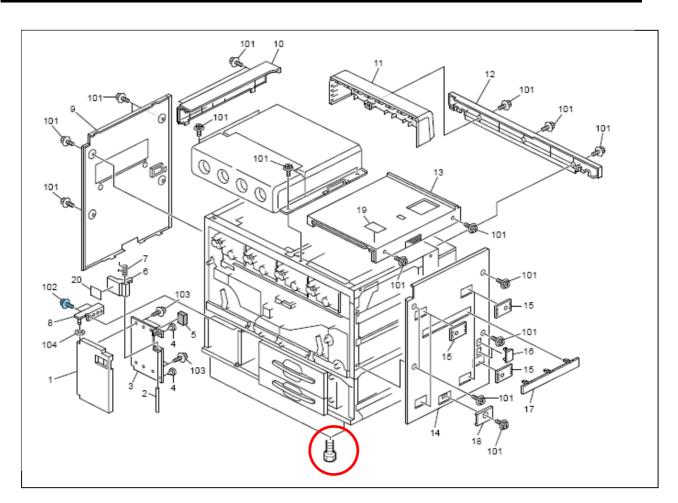
# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Date: 12-May-11		y-11	No.: RM077027
Subject: New pa	rt HEXAGONAL BOLT	Prepared by: Hiroaki Matsui				
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	☐ Troubleshooting	□ Part inf	orma	tion	☐ Action	n required
	☐ Mechanical ☐ Electric		ical		☐ Service manual revision	
	☐ Paper path ☐ Transm		it/rec	eive	Retro	fit information
	☐ Product Safety	☐ Other (		)	☐ Tier 2	

This RTB has been issued to announce the release of the HEXAGONAL BOLT as a new service part.

New part	Description	Q'ty	Int	Page	Index	Note
number						
G1781134	HEXAGONAL BOLT:M20X70	4	-	31	105	



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Reissued:15-Jun-11

Model: Aries-P1.5/C1.5	Date: 12-May-11	No.: RM077028a

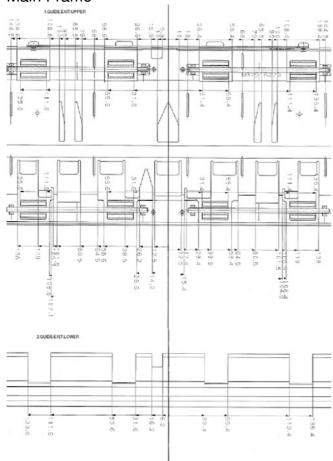
## **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Exploded view of Aries				Prepared by: H. Kawamura		
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:		☐ Part informat	ion	Action required		
		☐ Electrical		☐ Service manual revision		
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information		
	☐ Product Safety	Other (	)	☐ Tier 2		

This RTB contains exploded views of Aries and its peripherals. By double clicking the diagrams, a pdf file will open in a different window. This pdf is a tool to help find the cause of scratches in the paper feed direction. Print the pdf on the machine, and if you find a location where the scratches match, this could be the cause.

## Main Frame



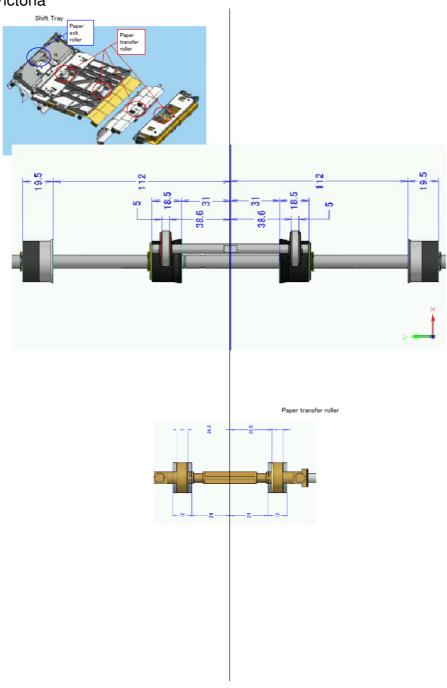


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Reissued:15-Jun-11

Model: Aries-P1.5/C1.5 Date: 12-May-11 No.: RM077028a

## Victoria



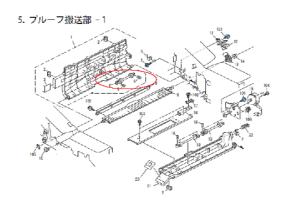


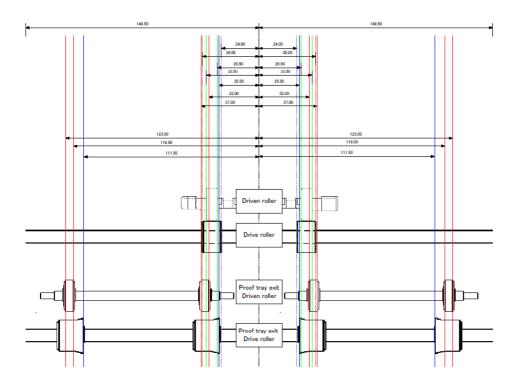
**PAGE: 3/3** 

Reissued:15-Jun-11

Model: Aries-P1.5/C1.5 Date: 12-May-11 No.: RM077028a

Columbia





# Technical Bulletin

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Model: Aries-P1.5/C1.5		Date: 13-May-11		-11	No.: RM077029	
Subject: Fusing Cleaning Web Near-end Not Detected			Prepared by: Hiroaki Matsui			
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	Troubleshooting	☐ Part informatio		tion 🖂 Action required		n required
		☐ Electric	al		Service	e manual revision
	☐ Paper path	☐ Transmit/receive		eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

## **SYMPTOM**

Near-end for the Fusing Cleaning Web is not detected; near-end alert is not displayed on the operation panel.

## **CAUSE**

System F/W problem

## **SOLUTION**

System F/W will be fixed to detect Cleaning Web near-end and display the alert.

## **TEMPORARY SOLUTION**

Please check the remaining service life of the Cleaning Web during your next service visit and replace the Web Cleaning Unit if it is expected to reach its service life before your next visit.

#### Reference

The current System F/W could detect Cleaning Web near-end and display the alert if SP5062-001 (Parts PM Display Setting) is set to "ON". (The default is "OFF".) However, setting this SP to "ON" will also display near-end alerts for all other PM parts, and may appear confusing on the operation panel.

# Technical Bulletin

**PAGE: 1/1** 

Reissued:19-May-11

Model: Aries-P1.5/C1.5 Date:	13-May-11 No.: RM077030a
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### **RTB Reissue**

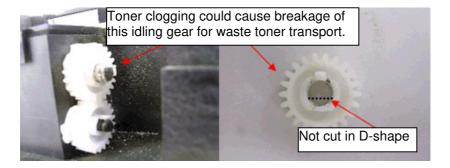
The items in **bold italics** were corrected.

Subject: Additional output check when toner feeding		Prepared by: Hiroaki Matsui		
From: 1st PP Service Planning Sec., PP Service Planning				
Classification:	☐ Troubleshooting	☐ Part informat	tion	
	☐ Mechanical	☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (	)	☐ Tier 2

### **SYMPTOM**

When performing the following 2 output checks waste toner could clog and disable the function of the toner collection coil, which could result in breakage of the gear rotating the waste toner transport coil, and toner leakage.

- Toner Fill (SP2253 -001:K, -002:C, -003:M, -004:Y, -005:Col, -006:All Color)
- Init TD Sensor (*SP3801* -001:All Color, -002:Col, -003:K, -004:C, -005:M, -006:Y)



## **CAUSE**

Waste toner clog

### **TEMPORARY SOLUTION**

Output Check	Required Additional Procedure
1	Do the following output checks together:
Init TD Sensor	Waste Toner Transport Motor 1 (SP5804-152)
( <i>SP3801</i> -001:All Color, -002:M, -003:K, -004:C, -005:M, -006:Y)	Waste Toner Transport Motor 2 (SP5804-153)

#### SOLUTION

F/W will be modified.(Release schedule: TBD)

## Technical Bulletin

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Reissued:18-Apr-14

Madalasa	Data to the	NI
Model: Aries-P1.5/C1.5	Date: 16-May-11	No.: RM077031d

## **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Trouble	shooting for vertical lines		Prepared	d by: H. Kawamura
From: 1st Tech Service Sect., PP Tech Service Dept.				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informate Electrical Transmit/rec Other (		<ul><li>☐ Action required</li><li>☐ Service manual revision</li><li>☐ Retrofit information</li><li>☑ Tier 2</li></ul>

This bulletin provides troubleshooting procedures for the following *5* types of Vertical Lines (white and color).

No1. White lines caused by ITB

No2. White lines caused by Dust Shield Glass No3. Color lines caused by Charge Corona Unit

No4. Color lines caused by Drum Cleaning Unit or OPC Drum

No5. White lines caused by Development Unit

## Overview of the workflow:

1. Do the lines appear at the same location for all 4 colors?

YES: Do the troubleshooting procedure for "Lines No.1."

NO: Go to the next step.

2. Clean the dust shield glass and check the results with the customer job.

Are the results accepted by the customer?

YES: Finished (Refer to Lines No 2, below this procedure)

NO: Go to the next step

3. Press "User tools" on the operation panel, select "Maintenance" and execute "Color Registration." (Note that "User tools" is not indicated on the panel for EU machines. Look for the mark on the button shown below.)



Are the results accepted by the customer or better than before?

YES: See the troubleshooting procedures for "Lines No 3."

NO: Go to the next step.

4. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.

## Technical Bulletin

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Model: Aries-P1.5/C1.5 No.: RM077031d Date: 16-May-11

5. Do "No.203 Execute Photoconductor Refreshing" in the Adjustment Settings for Skilled Operators Menu for the affected color and check the results with the customer job. Are the results accepted by the customer?

YES: Finished (Refer to Lines No 4, below this procedure)

NO: Go to the next step.

6. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu for the affected color and check the results with the customer job.

Are the results accepted by the customer?

YES: Finished (Refer to Lines No 4, below this procedure)

NO: Go to the next step.

7. Clean the "doctor gap" of the development unit of the affected color and check the results with the customer job.

Are the results accepted by the customer?

YES: Finished (Refer to Lines No 5, below this procedure)

NO: Go to the next step.

8. Replace the developer of the affected color by referring to the procedures in RTB RM077072a.



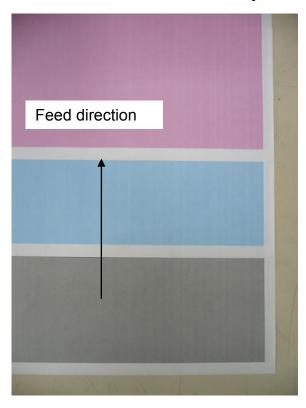
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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

## Troubleshooting procedures in detail

## Line No.1: White lines caused by ITB



#### Cause

Lubricant powder on the ITB is not evenly spread out, causing poor transfer in areas with less lubricant.

#### Procedure

1. Is the belt cleaning unit exceeding its service life?

YES: Replace the belt cleaning unit.

NO: Go to the next step.

2. Press "User tools" on the operation panel, select "Maintenance" and execute "Color registration."

Are the results accepted by the customer?

YES: Finished

NO: Go to the next step.

3. Do "No.202 ITB Manual Lubrication" in the Adjustment Settings for Skilled Operators Menu. Make sure the cleaning blade and lubricant blade are retracted from the ITB before executing the lubrication.

Are the results accepted by the customer?

YES: Finished

NO: Repeat the above. If the lubrication does not resolve the problem, replace the ITB Cleaning Unit.



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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5	Date: 16-May-11	No.: RM077031d
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## Line No.2: White lines caused by Dust Shield Glass

## Cause

Light exposed to the drum is insufficient due to a dirty dust shield glass.

## Procedure

1. Clean the dust shield glass.

## Line No.3: Color lines caused by Charge Corona Unit

## Cause

Charge level is insufficient due to a dirty charge corona unit.

## Procedure

1. Press the "User tools" button on the Panel, select "Maintenance" and do "Color Registration." (Note that "User tools" is not indicated on the panel for EU machines. Look for the mark on the button shown below.)



- 2. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 3. Swap the charge corona unit of the affected color with another unit of a different color.
- 4. Again, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
  - Do the vertical lines appear in a different color after swapping the charge corona unit? YES: Replace the unit of the affected color confirmed in step 2 with a new unit to complete the procedure.

NO: Do the troubleshooting procedures for "Line No.4."

IMPORTANT: Make sure to put the charge corona units back to their original stations to prevent PM counter error.

# Technical Bulletin

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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

## Line No.4: Color lines caused by OPC Drum

## Cause

Lubricant powder on the OPC drum is not evenly spread out, causing poor transfer in areas with less lubricant.

## **Procedure**

- 1. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 2. Do "No 203 Execute Photoconductor Refreshing" in Adjustment Settings for Skilled Operators Menu for the affected color.
- 3. Do "No 208 Execute Toner Refreshing" in Adjustment Settings for Skilled Operators Menu for the affected color.

Are the results accepted by the customer?

Yes: Finished

No: Go to the next step.

- 4. Swap the drum cleaning unit of the affected color with another unit of a different color.
- 5. Again, print 3 sheets of the halftone pattern (SP2-106-002-16).
  - Do the vertical lines appear in a different color after swapping the drum cleaning unit?
    - YES: Replace the drum cleaning unit of the affected color confirmed in step 1 with a new drum cleaning unit to complete the procedure.

NO: Go to the next step.

- 6. Swap the drum of the affected color confirmed in step 1 with another drum of a different color.
- 7. Again, print 3 sheets of the halftone pattern (SP2-106-002-16).
  - Do the vertical lines appear in a different color after swapping the drum?
    - YES: Replace the drum of the affected color to complete the procedure.
    - NO: Do the troubleshooting procedures for "Line No.5."

IMPORTANT: Make sure to put the drum cleaning unit and OPC drum back to their original stations to prevent PM counter error.

# Technical Bulletin

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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

Line No.5: White lines caused by Development Unit

## Cause

a) The edge of the mylar attached to M0773457 (index #5 in Figure1 on the next page) is torn and split, and is contacting the development roller. Due to this contact, toner supply is blocked and a sufficient amount of toner is not transferred to the drum.

Note that M0773457 is attached with 2 different types of mylars. One has a round edge and the other a straight and flat edge. (See the bottom photo on the next page.)

b) Developer is accumulated at the doctor gap, causing insufficient toner transfer to the OPC drum.

# Technical Bulletin

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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

### Procedure

- 1. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 2. Check if the edge of the mylar attached to M0773457 is torn or not. If torn, replace M0773457 and print a halftone pattern in the color causing the line. Confirm the line has disappeared to complete the procedure. If the mylar is not torn, do the next step.

Figure 1 (Index #5: p/n M0773457 Cover:Upper:Development Unit:Ass'y)

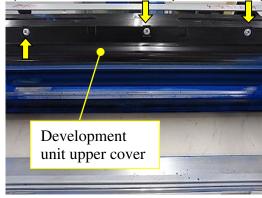


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Reissued:18-Apr-14

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

- 3. Clean the doctor gap as follows.
  - a) Remove the PCDU from the mainframe.
  - b) Remove the drum cleaning unit and OPC Drum.
  - c) Remove the development unit upper cover. (screw x3)



d) Rotate the development roller downward until the upper development roller is clear of developer.



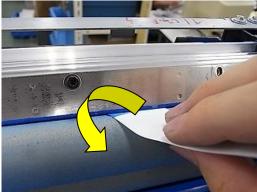


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Reissued:18-Apr-14

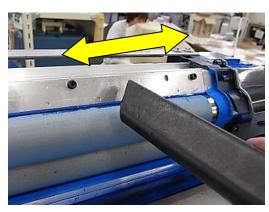
Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077031d

e) Slide in a piece of paper in  $\succeq$  the doctor gap to remove developer stuck in the gap.



f) Use a vacuum cleaner to remove the remaining particles.

IMPORTANT: Work carefully to avoid damage to the development rollers.



- g) Follow the above step  ${\bf s}$  in reverse order to put back the development unit.
- 4. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu so that clumps of toner/developer are removed and do not clog the doctor gap.
- 5. Run the customer job.

Are the results accepted by the customer?

Yes: Finished

No: Repeat steps 2 and 3 because the development unit still contains clumps of toner/developer.

6. Replace the developer of the affected color by referring to the procedures in RTB RM077072a, if the doctor gap is still clogged even after repeating steps 2~4 twice.

Model: Aries-P1.5/C1.5

### Technical Bulletin

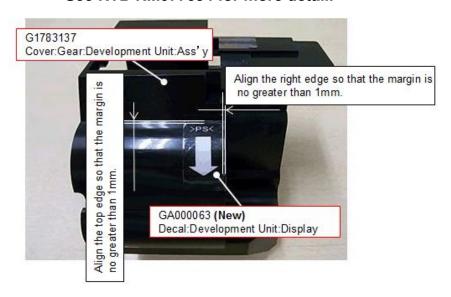
**PAGE: 10/10** Reissued:18-Apr-14

Date: 16-May-11

No.: RM077031d

Notes 1: To prevent recurrence of White Lines originating in the color development units, Cyan, Magenta and Yellow, modify the value set in SP 2-907-001 (ACS Switch Set) to 10. Higher toner consumption will prevent degradation of toner and developer and maintain better flow of the mixture in the unit. See RTB RM077095 for details.

Note 2: Rotating the development roller in the opposite direction may wear the mylar and entrance seal of the development unit and cause adverse effects. Rotate the development roller only in the direction indicated with the seal. See RTB RM077054 for more detail.



Note 3: If the machine continues to run with a torn Mylar, toner will adhere to the development roller. In such case, do the procedure on pages 11 ~ 13 of RTB RG178128d.

## RICOH Technical Bulletin (CONFIDENTIAL) PAGE: 1/3

Reissued:10-Jan-12

Model: Aries-P1.5/C1.5 Date: 16	6-May-11 No.: RM077032a
---------------------------------	-------------------------

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Trouble shooting for white / color band in trailing edge			Prepared by: H. Kawamura		
From: 1st PP S	Service Planning Sec., PP Ser	vice Planning			
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informa Electrical Transmit/red Other (	Service manual revision		

#### General

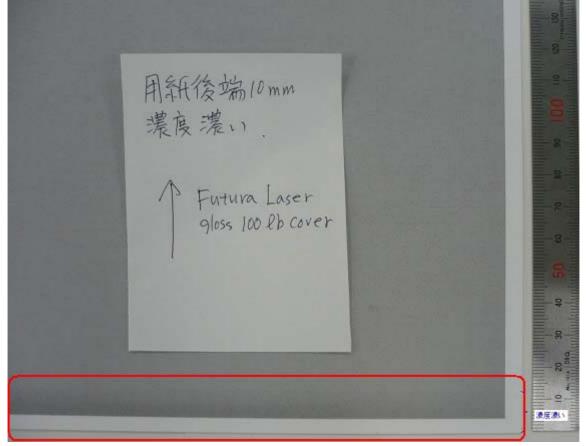
This RTB has been issued to inform you about troubleshooting for white band / colored band at the trailing edge.

### **Symptom**

Reduced color density or a white band appears in an area between the trailing edge and around 16mm from the trailing edge.

In halftone areas, a colored band (high color density) appears in an area between the

trailing edge and around 16mm from the trailing edge.



## RICOH Technical Bulletin (CONFIDENTIAL)

Reissued:10-Jan-12

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077032a

**PAGE: 2/3** 

#### Cause

#### **Reduced Color Density**

After the trailing edge passes the ITB entrance guide, the angle of paper entering the PTR nip changes, and the electrical charge properties of the paper change; therefore, the paper transfer current is not enough to transfer the image properly.

#### **White Band**

After the trailing edge passes the ITB entrance guide, the paper becomes closer to the ITB, and paper transfer current leaks due to high paper resistance; therefore, the image does not transfer to the paper.

#### **Colored Band (High Color Density)**

After the trailing edge passes the ITB entrance guide, the paper become closers to ITB, and paper transfer current leaks and toner scatter appears, which looks like a colored band. If the paper resistance is high, paper transfer current leaks more and becomes a white band.

#### **Troubleshooting**

#### <u>NOTE</u>

During troubleshooting for white band at the trailing edge, when adjusting "Paper Transfer Current; Trail Edge" for both B&W and FC, the white band may change to a colored band. If you keep adjusting the "Paper Transfer Current; Trail Edge" for both B&W and FC more, the colored band disappears.

- 1. Measure the distance of Reduced Color Density / White Band / Colored Band from the trailing edge of the paper, in mm. Xmm
- 2. Register the paper in the Paper Library
- 3. Adjust the following parameters in "Custom Paper Setting"
- "No 32. Ppr Transfer Current Trail Edg Dist: BW"
- "No 33. Ppr Transfer Current Trail Edg Dist: FC" Length measured in Step 1 (X mm) + 10mm
- 4. Adjust the following parameters in "Custom Paper Setting"
- "No 30. Paper Transfer Current; Trail Edge: B&W"
- "No 31. Paper Transfer Current; Trail Edge: FC"
   Default setting 10%
- 5. Check the output with the customer's job.

Did Reduced Color Density / White Band / Colored Band become better than the original?

YES: Go to Step 7 NO: Go to Step 6

6. Adjust the following parameters in "Custom Paper Setting"

## RICOH Technical Bulletin (CONFIDENTIAL)

Reissued:10-Jan-12

Model: Aries-P1.5/C1.5 Date: 16-May-11 No.: RM077032a

**PAGE: 3/3** 

- "No 30. Paper Transfer Current; Trail Edge: B&W"

- "No 31. Paper Transfer Current; Trail Edge: FC"

Default setting +10%

Go to Step 9

7. Has the copy quality of the customer's job been accepted by the customer?

YES: Done No: Go to Step 8

- 8. Adjust the following parameters in "Custom Paper Setting"
- "No 30. Paper Transfer Current; Trail Edge: B&W"
- "No 31. Paper Transfer Current; Trail Edge: FC

Current setting -5% until the copy quality of the customer's job has been accepted by the customer

Done

\*If the copy quality becomes worse after adjusting a parameter, there is no other procedure.

9. Has the copy quality of the customer's job been accepted by the customer?

YES: Done

No: Go to Step 10

- 10. Adjust the following parameters in "Custom Paper Setting"
- "No 30. Paper Transfer Current; Trail Edge: B&W"
- "No 31. Paper Transfer Current; Trail Edge: FC

Current setting +5% until the copy quality of the customer's job has been accepted by the customer

Done

\*If the copy quality becomes worse after adjusting a parameter, such as white spots or mottled image, there is no other procedure. Please return the setting to the value where the copy quality is better.

### Technical Bulletin

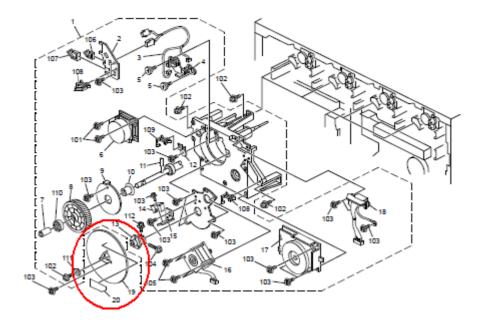
**PAGE: 1/1** 

							_
Model: Aries-P1.5/C1.5			Dat	e: 23-May	-11	No.: RM077033	
Subject: New part Counter measure Fly Wheel				Prepared by: H. Kawamura			
From: 1st PP Ser	rvice Planning Sec., PP Servic	e Planning					
Classification:	☐ Troubleshooting	□ Part infe	orma	tion	☐ Action	required	
	☐ Mechanical	☐ Electric	al		Service	ce manual revision	
	☐ Paper path	☐ Transm	it/rec	eive	Retro	fit information	
	☐ Product Safety	Other (		)	☐ Tier 2		

This RTB has been issued to announce the release of the Countermeasure fly wheel as a new service part, which is used for improving the level of Shock Jitter on the OPC.

For more detail of Shock Jitter on the OPC, please refer to the RTB for countermeasures for Banding / Jitter.

New part number	Description	Q'ty	Int	Page	Index	Note
M0771294	FLY WHEEL:DRUM:T2	8	-	173	19	



When using this fly wheel, the following parts must be ordered.

- 8 Countermeasure fly wheels; P/N M0771294. 2 Countermeasure fly wheels per station
- 12 TAPPING SCREW:4X12; P/N: 04514012N. 3 tapping screws per station.

For the procedure for applying the countermeasure fly wheel and other details, please refer to the RTB for countermeasures for Banding / Jitter.

### Technical Bulletin

**PAGE: 1/1** 

							_
Model: Aries-P1.	5/C1.5		Dat	e: 23-May	·-11	No.:RM077034	
Subject: Manual Correction for Aries-P1.5/C1.5 Safety nstructions for this Machine				Prepare	d by: he l	Hidetoshi Kawamura	1
rom: 1st PP Ser	vice Planning Sec., PP Service	e Planning					
Classification:	☐ Troubleshooting	☐ Part info	orma	tion	☐ Action	required	
	☐ Mechanical	☐ Electric	al		⊠ Service	e manual revision	
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	fit information	
	☐ Product Safety	Other (		)	☐ Tier 2		

The Service Manual for Aries-P1.5/C1.5 was corrected

• On page 9

The text in the red box has been modified.

_	_		
Ton	er D	ISDO	osal

#### **≜WARNING**

- Never attempt to incinerate toner, used toner, or empty toner containers (bottles or cartridges). Burning toner can explode and scatter, causing serious burns.
- Always wrop used toner and empty toner bottles and cartridges in plastic bags to avoid spillage.
   Follow the local laws and regulations regarding the disposal of such items.
- Dispose of used toner and toner cartridges at one of our dealers or at an authorized collection site.
   Always dispose of used toner cartridges and toner bottles in accordance with the local laws and regulations regarding the disposal of such items.

#### Safety Instructions for this Machine

#### Prevention of Physical Injury

- Before disassembling or assembling parts of the machine and peripherals, make sure that the machine and peripheral power cords are unplugged.
- 2. The plug should be near the machine and easily accessible.
- Note that some components of the machine and the paper tray unit are supplied with electrical voltage even if the main power switch is turned off.
- If any adjustment or operation check has to be made with exterior covers off or open while the main switch is turned on, keep hands away from electrified or mechanically driven components.
- 5. If the [Start] key is pressed before the machine completes the warm-up period (the [Start] key starts blinking red and green), keep hands away from the mechanical and the electrical components as the machine starts making copies as soon as the warm-up period is completed.
- The inside and the metal parts of the fusing unit become extremely hot while the machine is operating.
   Be careful to avoid touching those components with your bare hands.
- 7. To prevent a fire or explosion, keep the machine away from flammable liquids, gases, and aerosols.

#### Health Safety Conditions

- 1. Never operate the machine without the azone filters installed.
- 2. Always replace the azone filters with the specified types at the proper intervals.
- Toner and developer are non-toxic, but if you get either of them in your eyes by accident, it may caus temporary eye discomfort. Try to remove with eye drops or flush with water as first aid. If unsuccessful get medical attention.

#### Correction

7. Keep the machine away from flammable liquids, gases, and aerosols. A fire or an explosion might occur.

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## Technical Bulletin

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Model: Aries-P1.5/C1.5			Date: 30-May-11		y-11	No.: RM077035
Subject: New part Frames				Prepared by: Hiroaki Matsui		
rom: 1st PP Service Planning Sec., PP Service Planning						
Classification:	Troubleshooting	□ Part info	orma	tion	Action	n required
	☐ Mechanical	☐ Electric	☐ Electrical		Service	ce manual revision
	☐ Paper path	☐ Transmit/red		eive	Retro	fit information

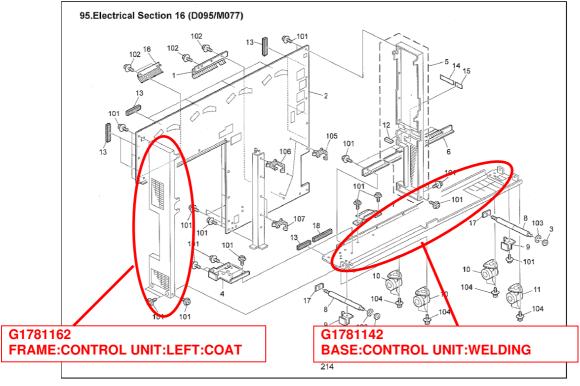
This RTB has been issued to announce the release of the following frames as new service parts.

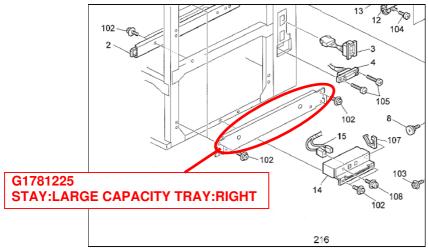
☐ Product Safety

Other ( )

Tier 2

New part	Description	Q'ty	Int	Page	Index	Note
number						
G1781162	FRAME:CONTROL UNIT:LEFT:COAT	1	-	215	19	
G1781142	BASE:CONTROL UNIT:WELDING	1	-	215	20	
G1781225	STAY:LARGE CAPACITY TRAY:RIGHT	1	-	217	16	





### Technical Bulletin

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Model: Aries-P1.5/C1.5			Dat	e: 13-May	-11	No.: RM077036
Subject: PM Counter Clearance Unfunctional for Heating Roller Thermistor			Prepare	d by: Hird	oaki Matsui	
From: 1st PP Ser	vice Planning Sec., PP Servic	e Planning				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li></ul>	☐ Part informati ☐ Electrical ☐ Transmit/rece			Service	required ce manual revision fit information
	☐ Product Safety	Other (	10100	)	☐ Tier 2	

#### **SYMPTOM**

The screen on the operation panel freezes when clearing the PM counter of the Heating Roller Thermistor (PM interval 1600k).

Keys (Screen) on the operation panel will not function and the PM counter of the Heating Roller Thermistor is NOT cleared in this frozen status.

#### NOTE

The PM counter of the Heating Roller Thermistor can be cleared by clearing the PM counter of the entire Fusing Unit.

#### **CAUSE**

Engine F/W defect

#### **SOLUTION**

Engine F/W will be fixed.

#### REQUEST

Until the fixed firmware becomes available, please do not clear the counter of the Heating Roller Thermistor individually even if a message requesting counter clearance of the Heating Roller Thermistor appears on the operation panel.

If the counter of the Heating Roller Thermistor is cleared by any chance and the screen freezes, turn machine power off/on to resume.

### Technical Bulletin

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Model: Aries-P1.	5/C1.5		Dat	e: 15-Jun-	11	No.: RM077037
Subject: Modification of SK5010			Prepared	d by: Hiro	oaki Matsui	
From: 1st PP Ser	vice Planning Sec., PP Service	e Planning				
Classification:	Troubleshooting	☐ Part informa		tion		required
		☐ Electric	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	☐ Tier 2	

### **Symptom**

The High Capacity Stacker (SK5010) could exhibit the following symptoms if it is of the initial production and configured with the Pro C901/C901s mainframe:

- A) Shift Tray Jams
- B) Roller Marks on Coated Paper
- C) Tray Elevation Gear Slippage

#### Cause

A) Shift Tray Jams Caused by Static Electricity

Static electricity causes the first sheet to stick to the shift tray in low humidity & low temperature environments, especially with coated paper.

B) Roller Marks on Coated Paper

The flange of the paper exit drive roller generates the roller marks. (It is more noticeable on coated paper)

C) Tray Elevation Gear Slippage

The tray belt tension allows a max load capacity of 100kg. But the load could exceed this max capacity when coated thin and heavy paper is fed from the Pro C901/C901s, resulting in slippage of the gear.

#### Solution

A) Shift Tray Jams Caused by Static Electricity

Attach Mylars to the surface of the shift tray to prevent static electricity.

B) Roller Marks on Coated Paper

Modify the paper exit drive/driven rollers.

C) Tray Elevation Gear Slippage

Apply higher belt tension, add a timing pulley and modified tension spring.



Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

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Please place an order for the following modification kit and modify the High Capacity Stacker on your next service visit for existing sites. The same procedure muat be done also for new site installations.

#### **D4479903: MODIFICATION KIT: STACKER**

**Modification Kit Components** 

Rework No. Part Number Description	
Shift Tray Jams A-1 D4477578 SHEET:SHIFT TRAY:INNER BA	ACK 1
(Modification A) A-2 D4477579 SHEET:SHIFT TRAY:MIDDLE	1
A-3 D4477581 SHEET:SHIFT TRAY:FRONT	1
Roller Marks – B-1 D4342474 ROLLER:EXIT ROLLER:SHIFT	2
Exit Roller B-2 D4472877 SHAFT:EXIT ROLLER:SHIFT	1
(Shift Tray) B-3 06330120G PARALLEL PIN - 3X12	2
(Modification B) B-4 07200060E RETAINING RING - M6	2
B-5 D4472852 END FENCE:SHIFT:ASS'Y	1
B-6 D4472327 GUIDE PLATE:EXIT:LOWER:A	SS'Y 1
B-7 D4472326A FILM:GUARD:FAN	1
B-8 D4342459 ROLLER:DRIVEN:RUBBER:50:	:DIA22 2
B-9 D4472879 SHAFT:SHIFT:DRIVEN	1
B-10 11050717 CLAMP:JDW-1S	2
Roller Marks – B-11 D4472432 ROLLER:EXIT:AUXILIARY:ASS	S'Y 1
Exit Roller B-12 D4472434 GUIDE PLATE:PROOF TRAY:L	EFT UPPER:ASS'Y 1
(Proof Tray) B-13 D4342576 EXIT ROLLER:PROOF TRAY:A	ASS'Y 1
(Modification B) B-14 D4472454 GUIDE PLATE:END FENCE:PF	ROOF TRAY 1
B-15 D4342551 EXIT ROLLER:DRIVEN:PROOF	TRAY:ASS'Y 2
B-16 AA080237A BUSHING - 4X5X7	4
B-17 11050717 CLAMP:JDW-1S	1
Gear Slippage C-1 D4474121 BRACKET:PROTECT:DRIVE S	UB-UNIT 1
(Modification C) C-2 D4474123 BRACKET:AUXILIARY:TIMING	PULLEY:ASS'Y 1
C-3 AE030030 BALL BEARING - 8X19X6	3
C-4 07200060E RETAINING RING - M6	1
C-5 04514006N TAPPING SCREW - 4X6	2
C-6 D4474425 BRACKET:PROTECT:SHAFT:L	EFT INNER REAR 1
C-7 D4474533A FILM:GUARD:DC BRUSHLESS	MOTOR 1
C-8 D4474534 SUPPORTING PLATE:SYNCH	RONOUS BELT 1
C-9 04514008N TAPPING SCREW:4X8	2
C-10 D4474318 TENSION SPRING:TENSIONEI	R:RISING TRAY:24N 4



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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

#### **Affected Units**

The modification rework described in this bulletin is targeted only for stackers configured with the Pro C901/C901s mainframe.

#### **Affected Units in NA**

Modification	Symptom	Serial Numbers
Α	Shift Tray Jams Caused by Electricity	Older than V5500800001
		(Modification is reflected to the production
		starting from V5500800001.)
В	Roller Mark on Coated Paper	Older than V5501200001
		(Modification is reflected to the production
		starting from V5501200001.)
С	Tray Elevation Gear Slippage	Older than V5510300001
		(Modification is reflected to the production
		starting from V5510300001.)

#### NOTE

Units with the sticker attached on the bottom frame (see the photo below) have already received all 3 modifications "A", "B", and "C", and therefore, will not require the modification. (The color of the sticker is not determined.)



#### How to identify an affected unit and determine the required modification

If a stacker registered with the S/N V05510200001 is connected to a Pro C901/C901s and does not have a blue sticker, this indicates that this stacker has received modifications "A" and "B", and will only require modification "C".

In this case, parts included in the modification kit for modifications "A" and "B" will be discarded.



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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

#### Affected Units in EU

Modification	Symptom	Serial Numbers
Α	Shift Tray Jams Caused by Electricity	Older than V5501100006
		(Modification is reflected to the production
		starting from V5501100006.)
В	Roller Mark on Coated Paper	Older than V5510300002
		(Modification is reflected to the production
		starting from V5510300002.)
С	Tray Elevation Gear Slippage	Older than V5510300002
		(Modification is reflected to the production
		starting from V5510300002.)

#### NOTE

Units with the sticker attached on the bottom frame (see the photo below) have already received all 3 modifications "A", "B", and "C", and therefore, will not require the modification. (The color of the sticker is not determined.)



How to identify an affected unit and determine the required modification

If a stacker registered with the S/N V05510100001 is connected to a Pro C901/C901s and does not have a blue sticker, this indicates that this stacker has received modification "A", and will require modifications "B" and "C".

In this case, parts included in the modification kit for modification "A" will be discarded.

#### **Affected Units in Asia**

Modification	Symptom	Serial Numbers
Α	Shift Tray Jams Caused by Electricity	Older than V5501100006
		(Modification is reflected to the production
		starting from V5501100006.)
В	Roller Mark on Coated Paper	Older than V5510300002
		(Modification is reflected to the production
		starting from V5510300002.)
С	Tray Elevation Gear Slippage	Older than V5510300002
		(Modification is reflected to the production
		starting from V5510300002.)

How to identify an affected unit and determine the required modification

If a stacker registered with the S/N V05510100001 is connected to a Pro C901/C901s and does not have a blue sticker, this indicates that this stacker has received modification "A", and will require modifications "B" and "C".

In this case, parts included in the modification kit for modifications "B" and "C" will be discarded.

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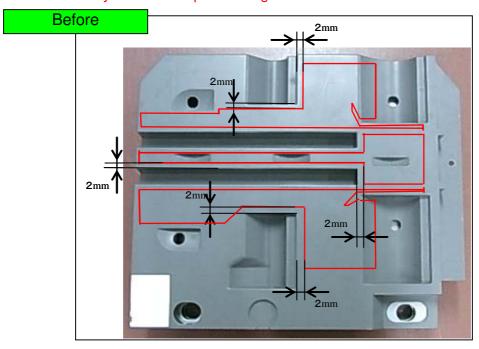
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

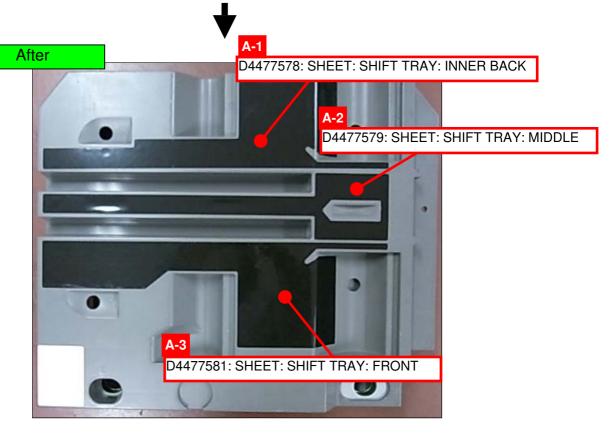
### Modification "A": Shift Tray Jams Caused by Static Electricity

[Overview of the Modification]

Apply alcohol and wipe the tray surface with a piece of cloth. Use water if alcohol is not at hand.

Attach the 3 Mylars to the position outlined in red in the photo below: 2mm inside the black line. Maker sure the Mylars do NOT protrude against the lines and do NOT have air-bubbles.





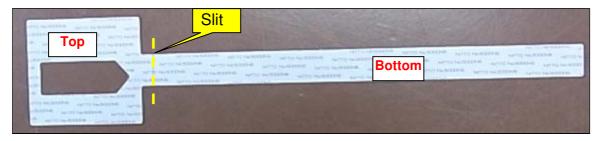


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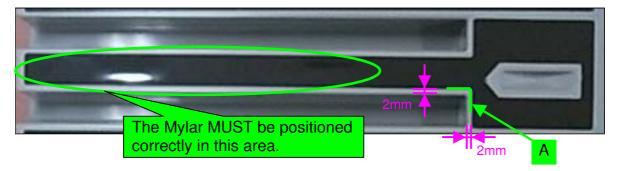
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step A-1. "D4477579: SHEET: SHIFT TRAY: MIDDLE"

The Mylar is attached to 2 separate sheets divided by a slit. Peel off only the 'Top' part.



Step A-2. Keep in mind the corner indicated 'A' as a reference point, and attach the 'Top' part of the Mylar to the tray so that all edges of the Mylar are positioned 2mm inside the edges of the tray.



Step A-3. Peel off the 'Bottom' sheet and slowly attach the Mylar outward from the center. Make sure that the edge of the far side also does not protrude against the line.

Step A-4. Finally, rub the Mylar entirely for complete attachment.

#### NOTE

- 1. Attach the Mylar slowly to avoid air-bubbles between the Mylar and the tray.
- 2. The Mylar must be attached in one attempt.

  Do NOT peel off and reattach the Mylar to correct the position.

  The position should be well adjusted before actually attaching the Mylar.

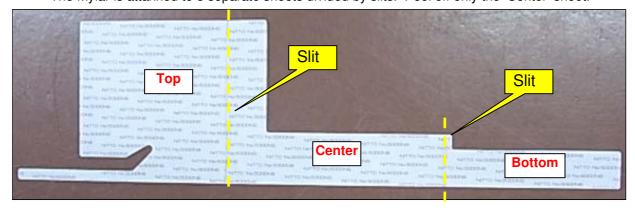


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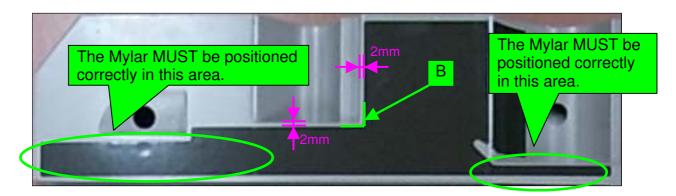
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step A-5. "D4477578: SHEET\*SHIFT TRAY: INNER BACK"

The Mylar is attaxhed to 3 separate sheets divided by slits. Peel off only the 'Center' sheet.

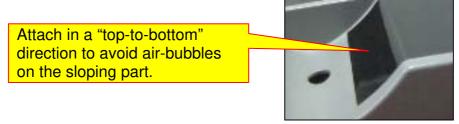


Step A-6. Keep in mind the corner indicated 'B' as a reference point, and attach the 'Center' part of the Mylar to the tray so that all edges of the Mylar are positioned 2mm inside the edges of the tray.



Step A-7. Peel off both 'Top' and 'Bottom' sheets and slowly attach the Mylar outward from the center.

Make sure the edges far from the reference point 'B' also do not protrude against the line.



Step A-8. Finally, rub the Mylar entirely for complete attachment.

#### NOTE

- 1. Attach the Mylar slowly to avoid air-bubbles between the Mylar and the tray.
- The Mylar must be attached in one attempt.
   Do NOT peel off and reattach the Mylar to correct the position.
   The position should be well adjusted before actually attaching the Mylar.

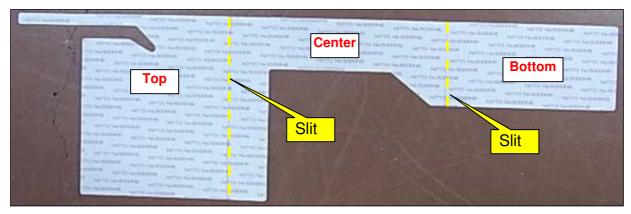


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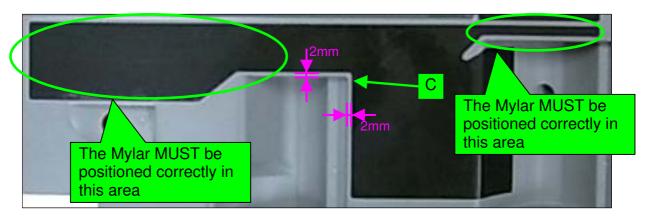
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step A-9. "D4477581:SHEET\*SHIFT TRAY\*FRONT"

The Mylar is attached to 3 separate sheets divided by slits. Peel off only the 'Center' part.



Step A-10. Keep in mind the corner indicated 'C' as a reference point, and attach the 'Center' part of the Mylar to the tray so that all edges of the Mylar are positioned 2mm inside the edges of the tray.



Step A-11. Peel off both 'Top' and 'Bottom' sheets and slowly attach the Mylar outward from the center.

Make sure the edges far from the reference point 'C' also do not protrude against the line.

Attach in a "top-to-bottom" direction to avoid air-bubbles on the sloping part.



Step A-12. Finally, rub the Mylar entirely for complete attachment.

#### NOTE

- 1. Attach the Mylar slowly to avoid air-bubbles between the Mylar and the tray.
- The Mylar must be attached in one attempt.
   Do NOT peel off and reattach the Mylar to correct the position.
   The position should be well adjusted before actually attaching the Mylar.

Model: Aries-P1.5/C1.5

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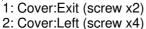
No.: RM077037

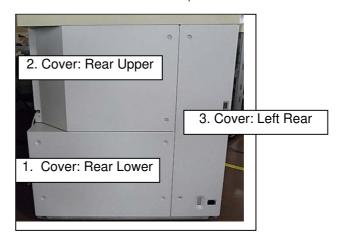
## Modification "B": Roller Marks on Coated Paper

Step B-1. Remove the left covers in the order "1" → "2".

Remove all rear covers (in the order indicated with the numbers).

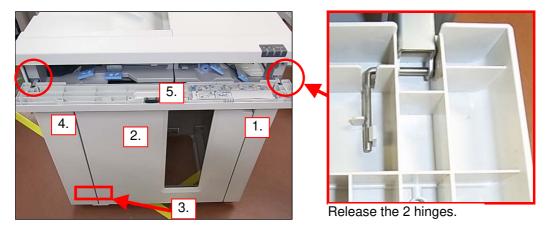




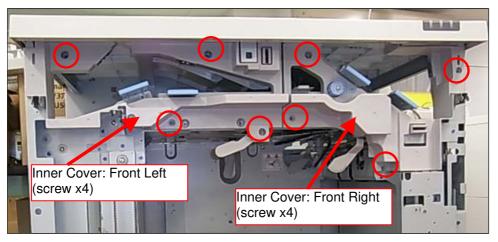


Date: 15-Jun-11

Step B-2. Remove the front door and covers in the order as indicated in the photo below.



Step B-3. Remove the 2 front inner covers.



Model: Aries-P1.5/C1.5

Date: 15-Jun-11 No.: RM077037

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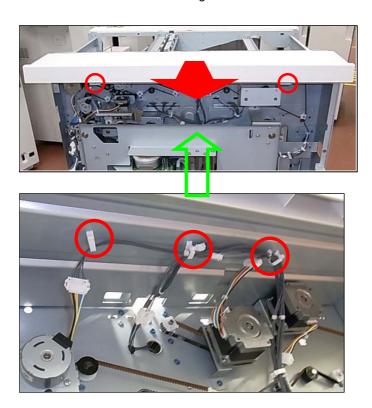
Step B-4. Remove the "Proof Tray" and "Cover: Upper: Middle".

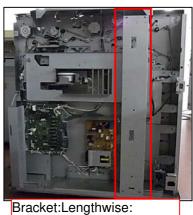




Step B-5. Remove the rear upper cover.

Remove the "Bracket: Lengthwise: Cover: Rear".

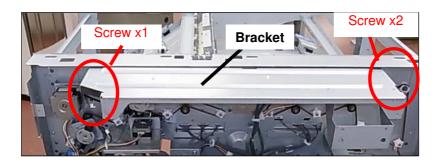




Cover: Rear

Step B-6. Remove the bracket.

Release the 3 harness clamps, and remove the 3 screws.

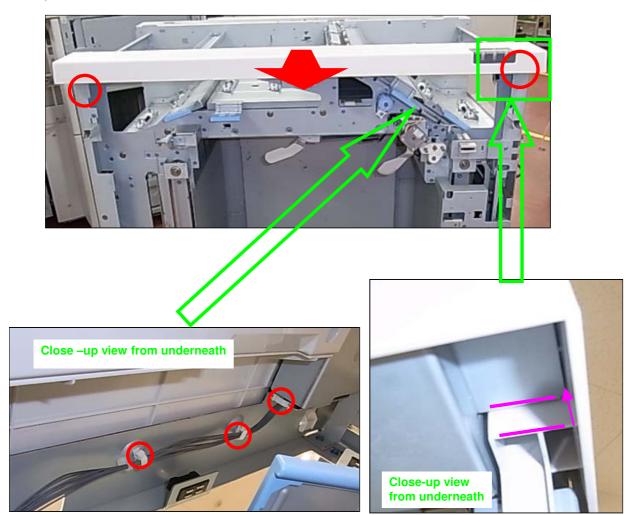




Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-7. Remove the front upper cover.

Release the 2 harness clamps and 1 edge-saddle. Remove the 2 screws and slide the cover forward to remove it.



Slightly pull up the cover so that the bracket doesn't block it.

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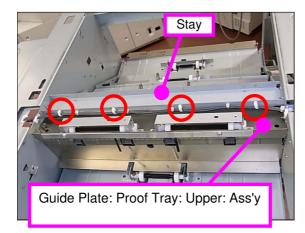
Disconnect this connector connected to the control panel.

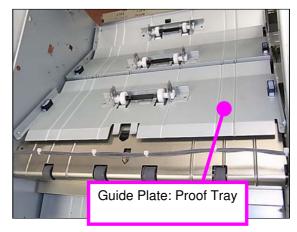


Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-8. Remove the 2 guide plates.

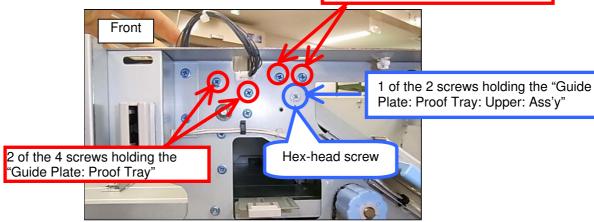
Release the 4 harness clamps attached to the stay. Remove the stay (screw x3). Remove the Guide Plate: Proof Tray (screw x4). Remove the Guide Plate: Proof Tray: Upper: Ass'y (screw x2).

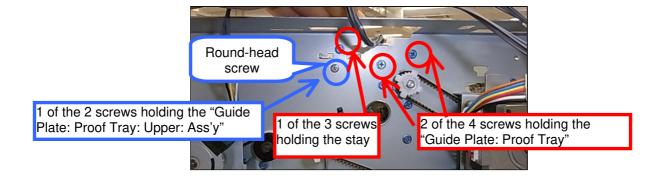




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2 of the 3 screws holding the stay

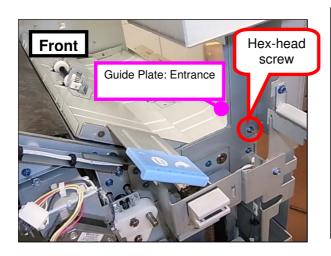


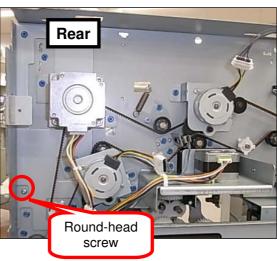




Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

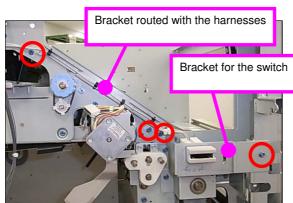
Step B-9. Remove the "Guide Plate: Entrance".





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Step B-10. Remove the 2 brackets: bracket routed with the harnesses and the bracket for the switch.



Remove 2 screws for each bracket.



Leave the switch hanging on the bracket after removing the screws..

Model: Aries-P1.5/C1.5

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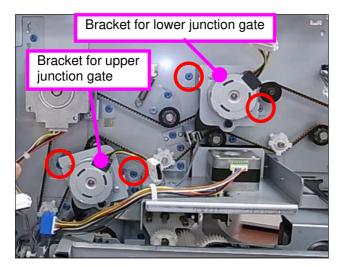
Date: 15-Jun-11 No.: RM077037

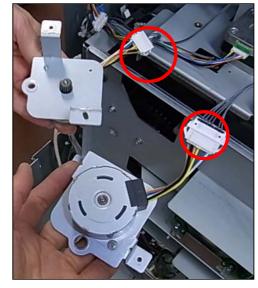
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Step B-11. Remove the brackets for the junction gates.

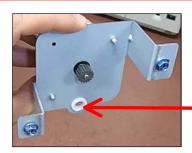
Remove the 2 screws for the upper and lower junction gates respectively.

Disconnect the harness from the motor.



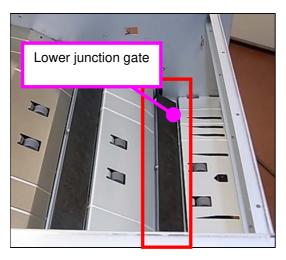


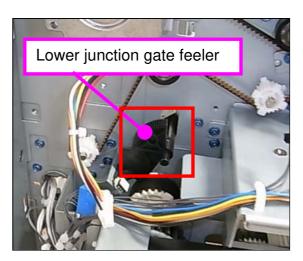
Be careful not to drop the white bushing from the bracket.



White bushing

Do NOT drop and lose this bushing.







Remove the feeler attached to the rear side of the lower junction gate and remove the lower junction gate.

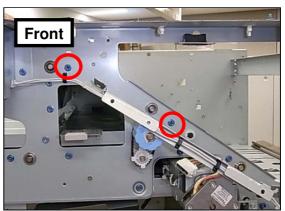


Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

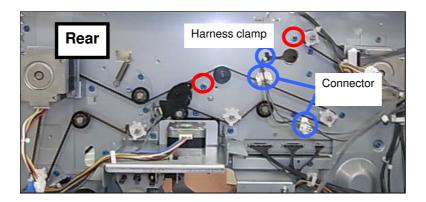
Step B-12. Remove the "Guide Plate: Proof Tray: Left Upper".

Release the 1 harness clamp located at the rear side and disconnect the 2 connectors. Remove 4 screws and the guide plate.





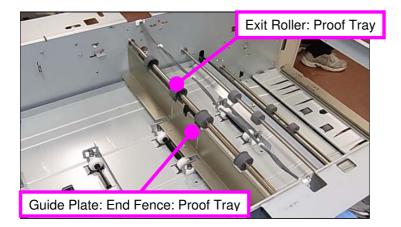
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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-13. Remove the "Guide Plate: End Fence: Proof Tray" and the "Exit Roller: Proof Tray".

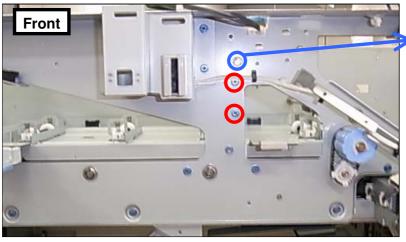


To remove the Guide Plate: Remove the 4 screws.

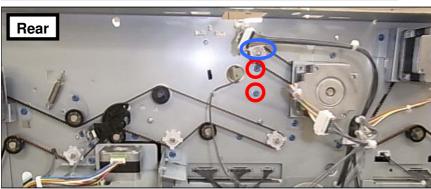
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To remove the Exit Roller: Remove the E-ring and the bearing located at the front side.

Then remove the pulley located at the rear and pull out the shaft.



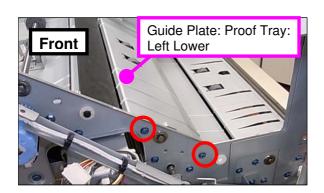






Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

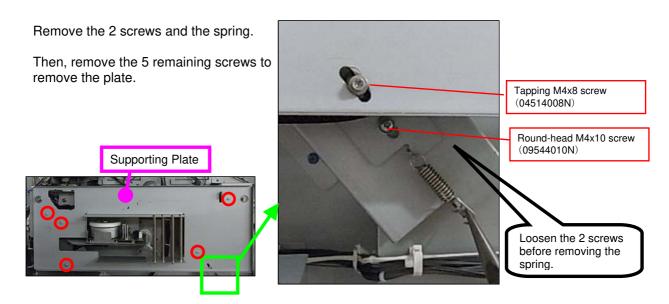
Step B-14. Remove the "Guide Plate: Proof Tray: Left Lower". (screw x4)





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Step B-15. Remove the Supporting Plate.

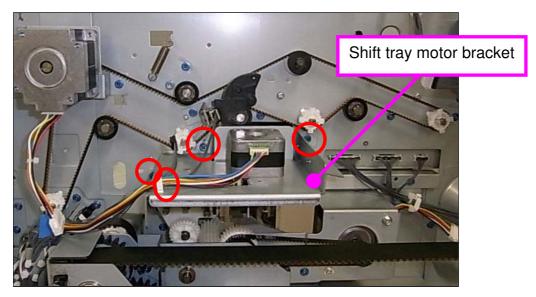


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Step B-16. Remove the shift tray motor bracket.

Disconnect the 3 connectors, release the 1 harness clamp, and remove the 4 screws.



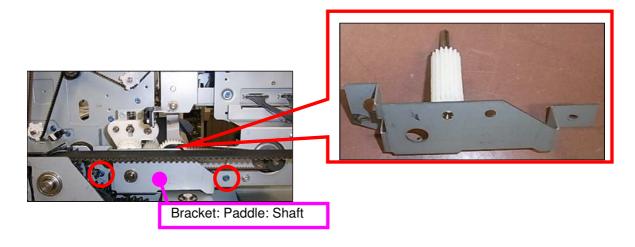


### **IMPORTANT**

Mark the connectors in advance to prevent false connection.

Step B-17. Remove the "Bracket: Paddle: Shaft".

Disconnect the 3 connectors, release the 1 harness clamp, and remove the 4 screws.

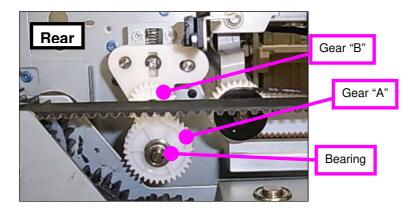




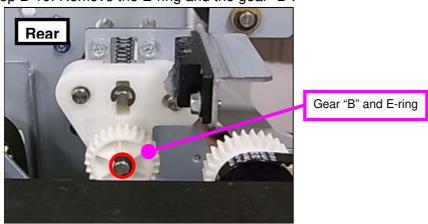
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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-18. Remove the gear "A" and the bearing.

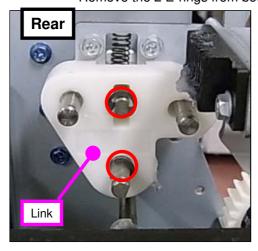


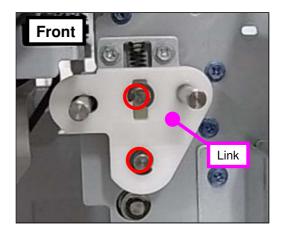
Step B-19. Remove the E-ring and the gear "B".



Step B-20. Remove the front and rear links.

Remove the 2 E-rings from both links respectively.



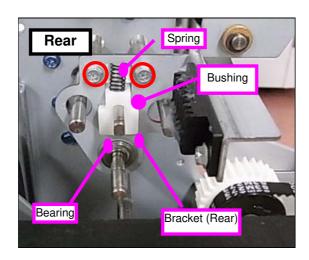


Model: Aries-P1.5/C1.5

Date: 15-Jun-11 No.: RM077037

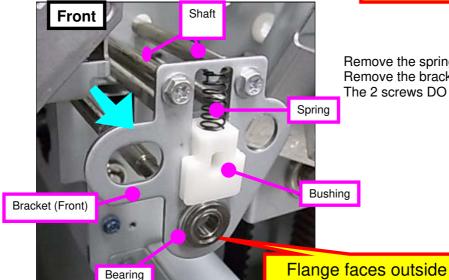
Step B-21. Remove the 2 brackets located in the front and rear sides.

Remove the 2 screws, spring, and the bearing.



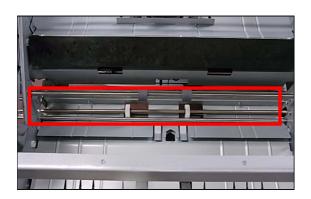


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Remove the spring and the bushing. Remove the bracket together with the bearing. The 2 screws DO NOT have to be removed.

Step B-22. Remove the shift tray exit driven roller.





Model: Aries-P1.5/C1.5

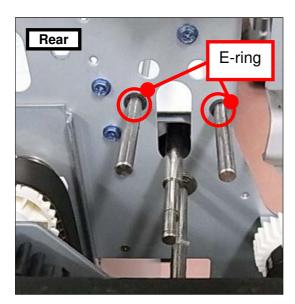
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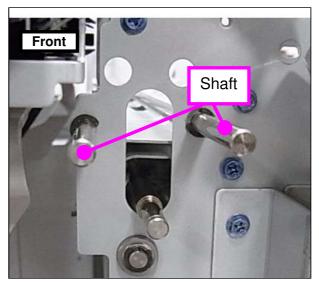
Date: 15-Jun-11 No.: RM077037

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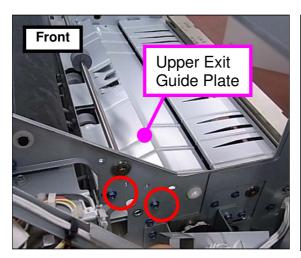
Step B-23. Pull out the 2 shafts.

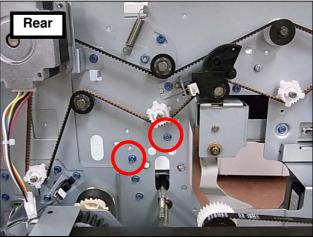
Remove only the E-ring installed at the rear side and pull out the shaft from the front side.





Step B-24. Remove the upper exit guide plate. (screw x4)



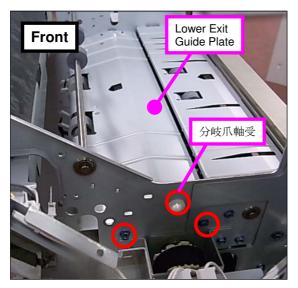


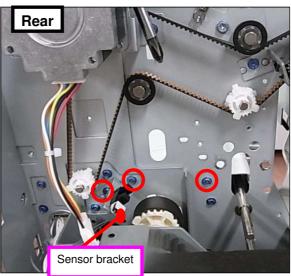


Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

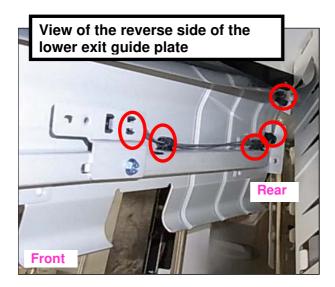
Step B-25. Remove the lower exit guide plate. (screw x4)

Remove the junction gate bushing, sensor bracket (screw x1; rear), and the guide plate (screw x4).





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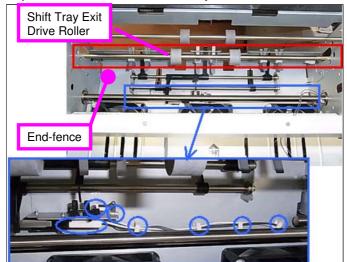


Hold the front side of the guide plate and flip it over. Release the 4 harness clamps and disconnect the connector from the sensor.

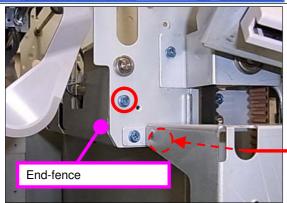
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Step B-26. Remove the shift tray exit drive roller.

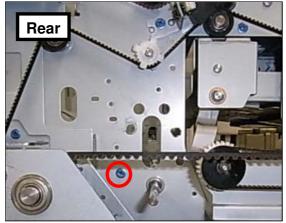


Disconnect the connector from the end-fence, and release the silencer and the harness clamps.



Remove the 3 screws to remove the end-fence.



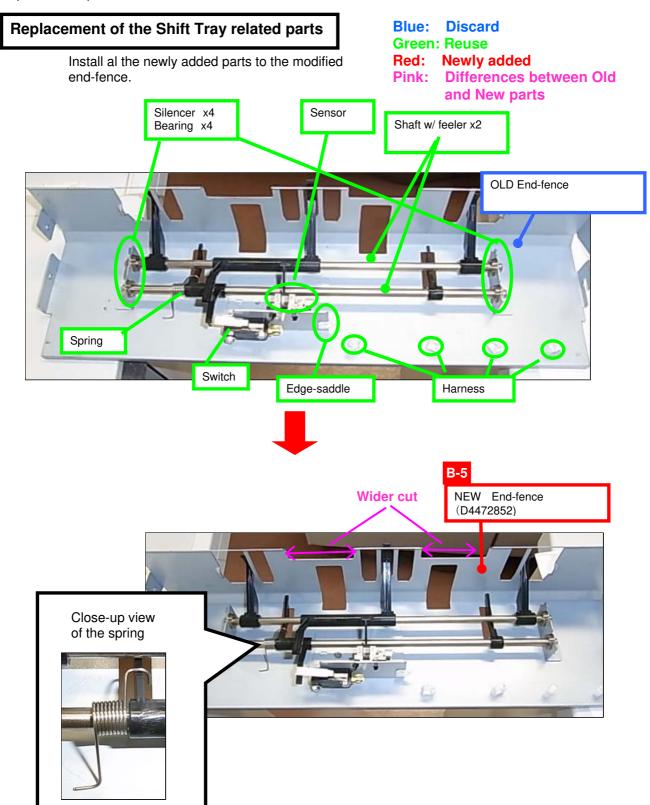


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Step B-27. Replace with the modified end-fence.

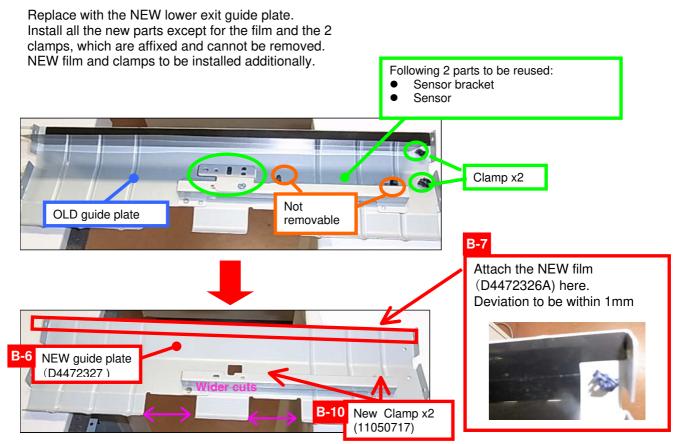


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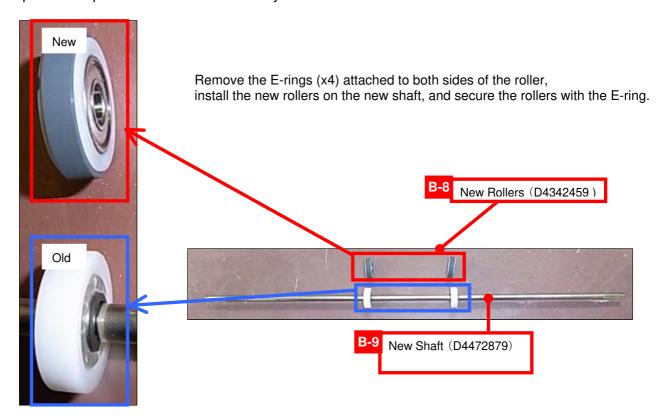
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Step B-28. Replace the lower exit guide plate.



Step B-29. Replace with the NEW shift tray exit driven rollers.



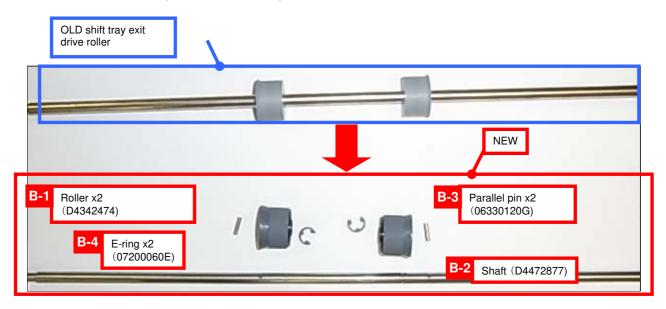


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Step B-30. Replace the shift tray exit drive rollers.

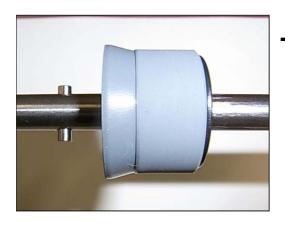
Assemble the new parts for the shift tray exit rollers.



- Assembling the Rollers -

After inserting the parallel pin, secure the roller with the E-ring.

Install the roller so that the flange faces the outside, and then insert the parallel pin.





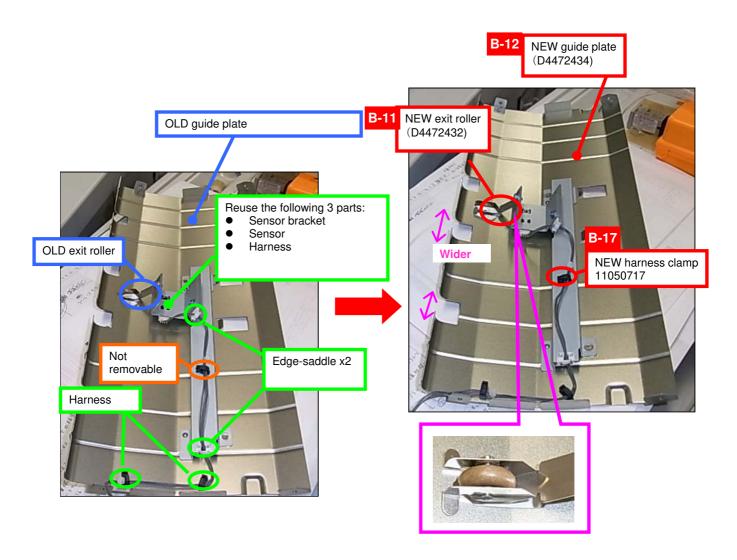
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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-31. Replace the "Guide Plate: Proof Tray: Left Upper".

Replace with the NEW exit roller and guide plate. Install the new parts except for the irremovable harness clamp. New harness clamp to be installed additionally.

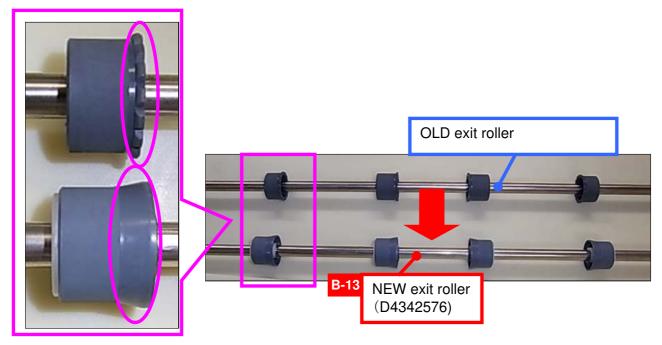




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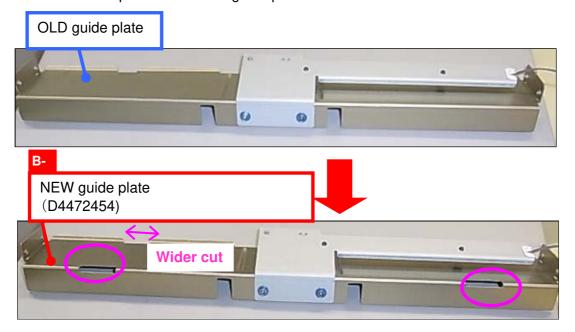
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step B-32. Replace the exit rollers.



Step B-33. Replace with the NEW "Guide Plate: End Fence: Proof Tray".

Install all the new parts on the new guide plate.

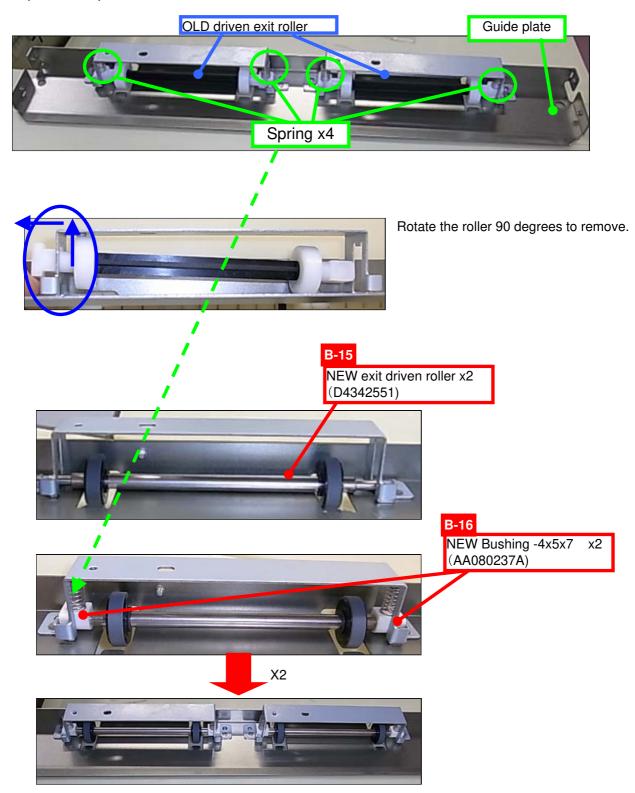




Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

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Step B-34. Replace with the NEW driven exit rollers.



Step B-35. Reassemble the unit by following the "Steps B-1" to "B-26" in reverse order.

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If the Modification "C"(Tray Elevation Gear Slippage) will be executed immediately afterwards, it is not necessary to reattach the following parts.

These will be removed in the process of Modification C.

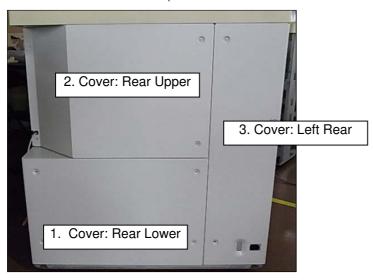
* All Rear Covers	removed in Step B-1
* Front door No.1 / No.2 / No.3 / No.4	removed in Step B-2
* Bracket Lengthwise: Cover:Rear	removed in Step B-5
* Supporting Plate	removed in Step B-15

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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

### Modification "C": Tray Elevation Gear Slippage

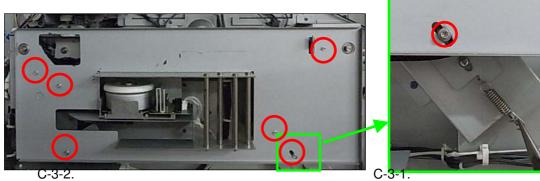
Step C-1. Remove all rear covers (in the order indicated with the numbers).



Step C-2. Remove the "Bracket: Lengthwise: Cover: Rear".



Step C-3. Remove the "Supporting Plate: Timing Belt".



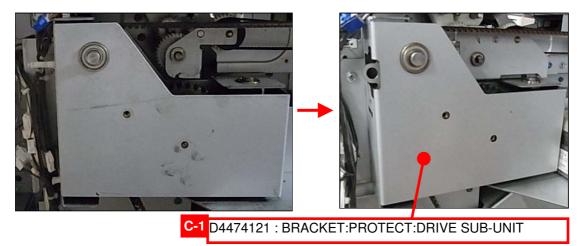
Then, remove the remaining 5 screws to remove the supporting plate.

First, remove this screw and spring.

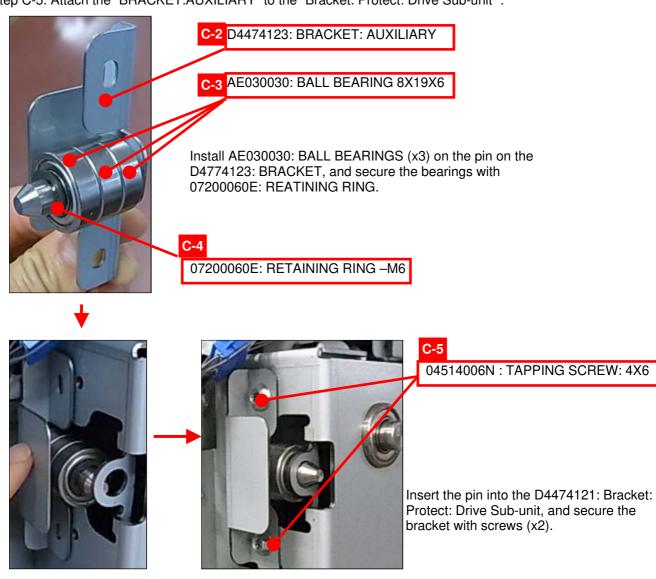
**PAGE: 4/39** 

Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-4. Replace with the new "Bracket: Protect: Drive Sub-unit".



Step C-5. Attach the "BRACKET:AUXILIARY" to the "Bracket: Protect: Drive Sub-unit ".

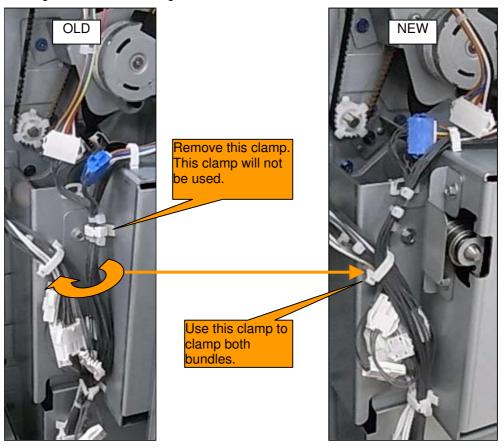


Model: Aries-P1.5/C1.5

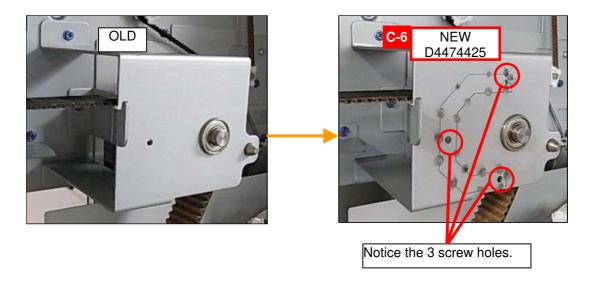
Date: 15-Jun-11 No.: RM077037

**PAGE: 5/39** 

Step C-6. Change the harness routing as shown below.



Step C-7. Replace with the new "BRACKET:PROTECT:SHAFT:LEFT INNER REAR".



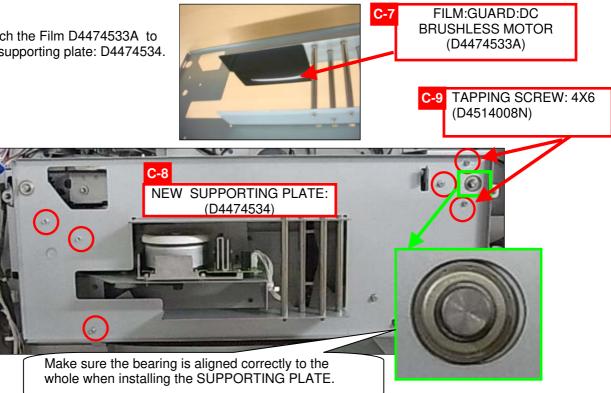
Technical Bulletin

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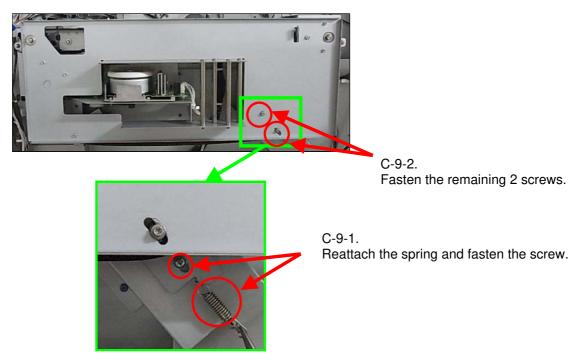
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-8. Install the new SUPPORTING PLATE and fix it with 6 screws (M4x8).

Attach the Film D4474533A to the supporting plate: D4474534.



Step C-9. Reattach the spring and fasten the screws to apply tension to the belt.

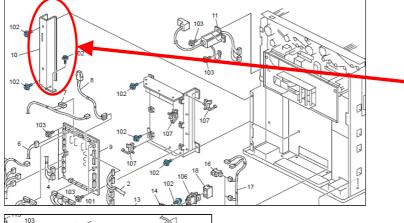


# Technical Bulletin

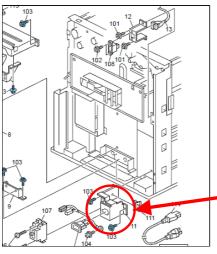
**PAGE: 7/39** 

Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-10. Remove the following 2 brackets.

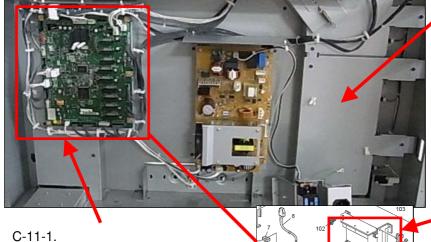


Remove 2 screws and "Bracket: Cover: Rear Lower"



Remove 2 screws, ground wire, and "Bracket: Inlet: Leak Breaker".

Step C-11. Disconnect the PCB connectors, and remove the inner cover and the bracket.

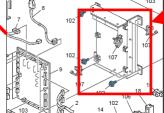


C-11-3.

Remove the Inner Cover: Rear Right (screw x4)

Remove all the connectors from

PCB: Main Control: Ass'y

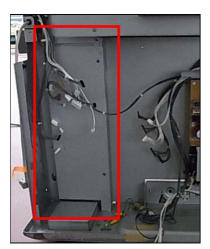


C-11-2. Remove the bracket that holds the PCB: Main Control: Ass'y (screw x4)

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Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-12. Remove the "Inner Cover: Rear Left". (screw x4)



Step C-13. Remove the front covers in the order as indicated in the photo below.



Step C-14. Remove the bracket. (screw x4)



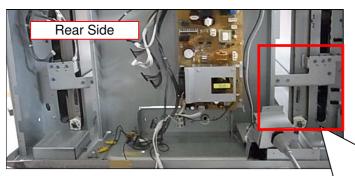
**PAGE: 9/39** 

Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

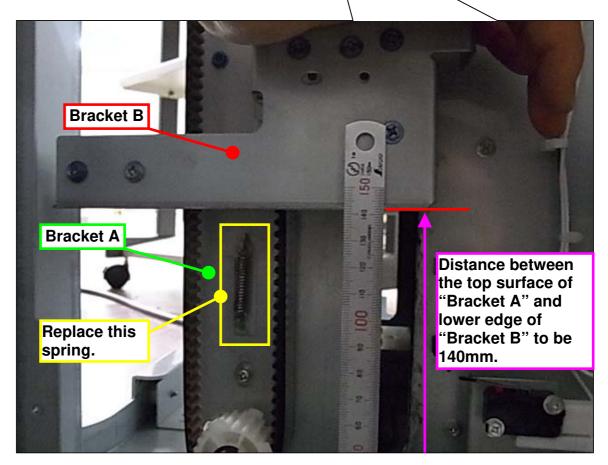
Step C-15. Adjust the height of bracket "B". (See below for details.)



Manually rotate the DC Brushless Motor located at the rear side to adjust the height of bracket "B".



Bracket "B"

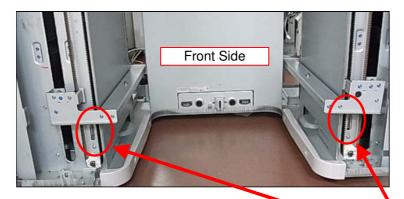


Manually rotate the DC Brushless Motor located at the rear side to move "Bracket B". Secure it in position when the distance between the top surface of "Bracket A" and the lower edge of "Bracket B" is 140mm.



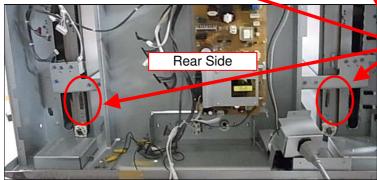
Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-16. Replace with the new Tension Spring. (Front side: x2, Rear side: x2)



Replace with the new TENSION SPRING D4474318, and then fasten the screws.

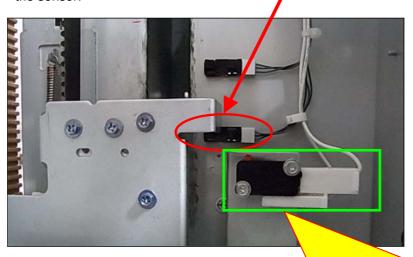
**PAGE: 10/39** 



New TENSION SPRING (D4474318)

C-

Step C-17 Again, manually rotate the DC Brushless Motor until the curved part of "Bracket B" reaches the sensor.



The curved part of "Bracket B" must not reach this microswitch.

# Technical Bulletin

**PAGE: 11/39** 

Model: Aries-P1.5/C1.5 Date: 15-Jun-11 No.: RM077037

Step C-18. Reinstall the following parts that have been removed.

* Bracket (screw x4)	removed in Step C-14
* Inner Cover: Rear Left (screw x4)	removed in Step C-12
* Inner Cover: Rear Right	removed in Step C-11
* Bracket holding PCB: Main Control: Ass'y (screw x4)	removed in Step C-11
* PCB	removed in Step C-11
* Bracket: Inlet: Leak Breaker (screw x2, ground wire)	removed in Step C-10
* Bracket: Cover: Rear Lower (screw x2)	removed in Step C-10

Reference: Harness routing of the "PCB: Main Control: Ass'y"



## Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Date: 23-May-11			No.: RM077038
Subject: Note for in Correction for Arie	nual	Prepared	d by: Hide	etoshi Kawamura		
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	☐ Troubleshooting	☐ Part information		ation		required
	☐ Mechanical	☐ Electrical			⊠ Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	☐ Tier 2	

This manual correction is only for the Buffer Pass Machine used in China The Service Manual for Aries-P1.5/C1.5 was corrected

- On page 277
- On page 281

#### **Manual Corrections**

Corrections are highlighted in red

Page 271

### Buffer Pass Unit Type 5000 (M379)

#### Accessory Check

Check the quantity and condition of the accessories in the box against the following list:

	Description	Qly
1.	Sponge Stripe	1
2.	Screw	4
3.	Leveling Shoes	4
4.	Rear Dacking Bracket	1
5.	Front Docking Bracket	- 1
ó.	Mylar	2*1
7.	Power Cord	1
	Caution Decal for Multi Power Sources	1

<sup>\*1:</sup> These items are used for the paper guide plate of the downstream peripheral.

<sup>\*2</sup> If using this unit in China, do not use this power cord in the accessories of the Buffer Pass Unit Type 5000 (M379). Ask your supervisor and use a power cord specified for use in China.

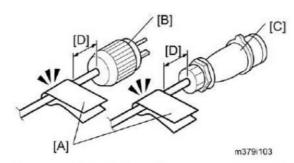
Model: Aries-P1.5/C1.5

## Technical Bulletin

Date: 23-May-11 No.: RM077038

**PAGE: 2/2** 

Page 281



- 11. Attach the caution decal [A] for multi power sources to the power plug [B] (for NA) or [C] (for EU) of the mainframe. Don't attach the caution decal [A] for multi power sources to the power plug for China.
  - . The caution decal [A] must be attached approximately 30 mm [D] from the power plug end.

#### (3 Important)

In case of using this unit in China, do not use this power cord in the
accessories of the Buffer Pass Unit Type 5000 (M379). Ask your supervisor and
use a power cord specified for China's usage.

### Decal [A] in above the correction is the following decal.

- Always disconnect all disconnect devices connected with this system, before doing maintenance procedure,
   Entfernen Sie vor dem Durchführen der Wartung stets alle an dieses System und andere Einheiten angeschlossenen Stromkabel und Geräte,
- ×PS<
- Always disconnect all disconnect devices connected with this system, before doing maintenance procedure,
   Entfernen Sie vor dem Durchführen der Wartung stets alle an dieses System und andere Einheiten angeschlossenen Stromkabel und Geräte,

### Note for installing Buffer Pass Unit for Aries in China

Please ask your supervisor and use a power cord specified for use in China.

Supervisors > Please prepare power cords specified for use in China (P/N: GZ000004) before installing the Buffer Pass Unit.

## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5				e: 23-May	-11	No.:RM077039		
Subject: Manual Correction for Aries-P1.5/C1.5				Prepared by: Hidetoshi Kawam				
From: 1st PP Service Planning Sec., PP Service Planning								
Classification:	Troubleshooting	☐ Part info	orma	tion	☐ Action	required		
		☐ Electrical ☐ Transmit/rece			⊠ Service manual revision			
	☐ Paper path			☐ Transmit/rec		☐ Transmit/rece		eive
	☐ Product Safety	Other (		)	☐ Tier 2			

The Service Manual for Aries-P1.5/C1.5 was corrected

• On page 731, the area surrounded by the red box below.

#### Process Control Self Check SP3821

	VdHome Error 2 (SC436 to SC439)	V0 (SP3571) below –700V, or VdHome (SP3772) below – 500V.  • Potential sensor relay board damaged  • Drum abnormal  • Drum motor not operating
16	<ul> <li>Do SP2261 to che again if Vd is less t</li> <li>Remove the malfur then on, then do th</li> <li>If the replaced PCD side, or the potential</li> </ul>	o check the function of the potential sensor.  eck the Vd reading. For more, see Section 6. This error occurs than -500V.  Inctioning PCDU with a functioning PCDU, turn the machine off the potential sensor check again.  OU does not function normally, then the problem is on the machine tial sensor relay board is malfunctioning.  DU functions normally, then there may be a problem with the

### Correction

Major Cause

<del>Vo (SP3571) below 700V</del> or VdHome (SP3572) below -500

- Potential sensor relay board damaged
- Drum abnormal
- Drum motor not operating

# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5 Dat				e: 6-July-1	11	No.: RM077040		
Subject: Manual Correction for Aries-P1.5/C1.5				Prepared by: Hidetoshi Kawamur				
From: 1st PP Service Planning Sec., PP Service Planning								
Classification:	Troubleshooting	Part in	form	nation	Actio	on required		
	Mechanical	☐ Electrical			Servi	ice manual revision		
	Paper path	h Transmit		☐ Transmit/receiv		eceive	Retro	ofit information
	Product Safety	Other	(	)	Tier	2		

The Service Manual for Aries-P1.5/C1.5 is corrected

• On page 689 in the Appendices, the area surrounded by the red box below is corrected.

System SP7-xxx: 1

J		Abnormal signal – rin	
	122	Upper Stopper Motor Lock	
	123	Not Used	

	Paper Jam Locations — Cover Interposer B835					
7504		e locations where a jam could have occurred. Press the appropriate int for that location. These jams are caused by the failure of a sensor				
	Paper late error: Paper failed to arrive at prescribed time.					
	Paper lag error: Paper failed to leave at prescribed time.					
	On Screen What It Means					

#### Correction

(Wrong) 123: Not Used

(Correct) 123: Paper Jam Count by Location: FIN: GBC Punch Unit Jam

#### Note

Every time the GBC Front Door is opened, even if the jam is not in the GBC paper path, it will record JAM Code 123, and you will see the Jam Code 123 incremented by 1.

Closing the front door of the GBC, Jam 123 is cleared and the machine will operate normally.

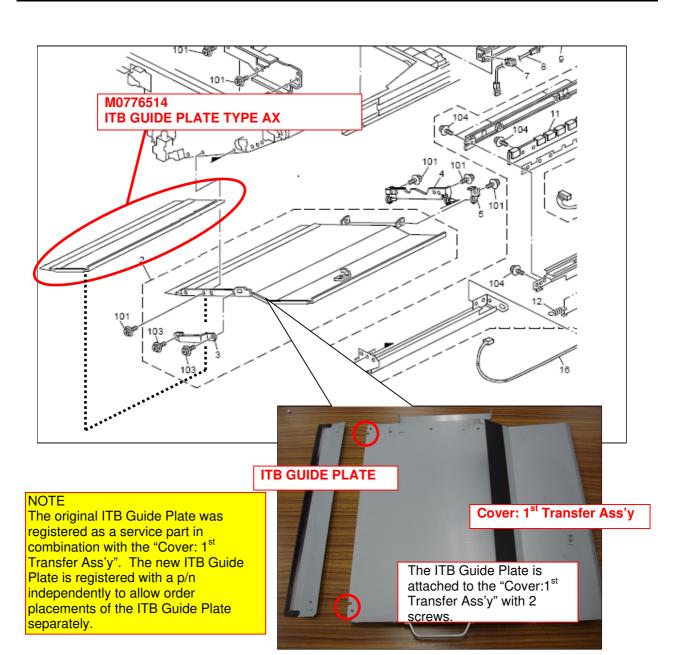
## Technical Bulletin

PΑ	GE:	1/4

Model: Aries-P1.5/C1.5				e: 11-Jul-1	1	No.: RM077041						
Subject: New ITB Guide Plate / Troubleshooting					Prepared by: Hiroaki Matsui							
From: 1st PP Service Planning Sec., PP Service Planning												
Classification:		☐ Part informat☐ Electrical☐ Transmit/rec☐ Other (		tion	Action	required						
	☐ Mechanical ☐				☐ Service manual revision							
	☐ Paper path			☐ Transmit/re		☐ Transmit/		☐ Transm		eive	Retrof	fit information
	☐ Product Safety			)	⊠ Tier 2							

This RTB has been issued to announce the release of the new ITB Guide Plate.

New part	Description	Q'ty	Int	Page	Index	Note
number						
M0776514	ITB GUIDE PLATE TYPE AX	1	-	101	17	



**PAGE: 2/4** 

Model: Aries-P1.5/C1.5 Date: 11-Jul-11 No.: RM077041

#### **SYMPTOM**

Printed images could appear as if "scratched" as shown in the photo below when feeding highly stiff paper stocks.



#### CAUSE

Feeding stiff & thick paper causes the paper to lift up the Guide Plate as the paper enters the PTR nip. Due to the small gap between the tip of the Guide Plate and the ITB, the lifted Guide Plate contacts the ITB and brushes the toner, resulting in a "scratched" image.

#### **SOLUTION**

Replace with the modified Guide Plate (ITB GUIDE PLATE TYPE AX, p/n M0776514) if the symptom described is observed when feeding stiff & thick paper stocks.

The modified Guide Plate is designed with a shorter tip to secure wider gap between the Guide Plate and the ITB, which prevents the Guide Plate from lifting up and contacting the ITB even when feeding thick paper stocks.

See the appendix for details.

#### NOTES ON THE POSSIBLE TRADE-OFF

With the modified Guide Plate, the stability when entering the nip is reduced as the paper is hardly guided (by pressing in downward direction) in comparison to the original Guide Plate. This could result in "toner scattering/diffusion" in an area of 10mm in width at the leading edge, especially with stiff and coated paper stocks as high surface smoothness causes further instability when the paper enters the PTR nip.

#### NOTES ON STORING THE ORIGINAL GUIDE PLATE AFTER REPLACEMENT

If replacement with the modified Guide Plate results in the trade-off described above, switch the guide plate back to the original Guide Plate.

DO NOT discard the original Guide Plate. Make sure the original Guide Plate is stored.

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Model: Aries-P1.5/C1.5 Date: 11-Jul-11 No.: RM077041

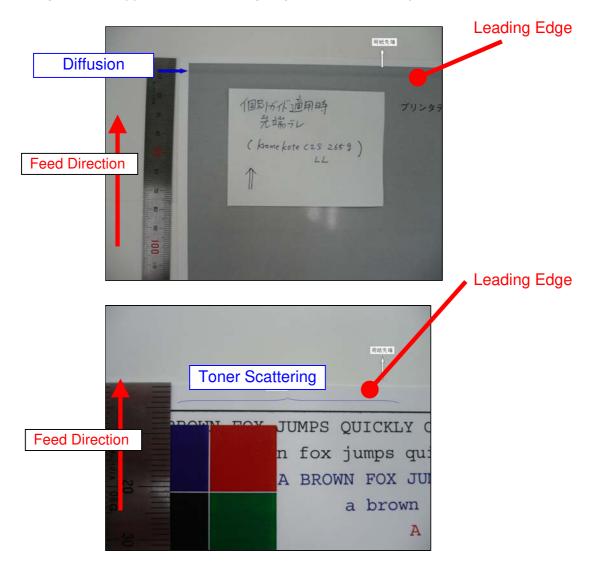
### When to use the modified Guide Plate "AX"

The modified Guide Plate "AX" is to be used when scratched image appear in the trailing edge as shown in the photo below.



#### When to use the original Guide Plate "AD"

The guide plate should be switched back to the original Guide Plate Type AD if toner scattering/diffusion appears in the leading edge as shown in the photo below.



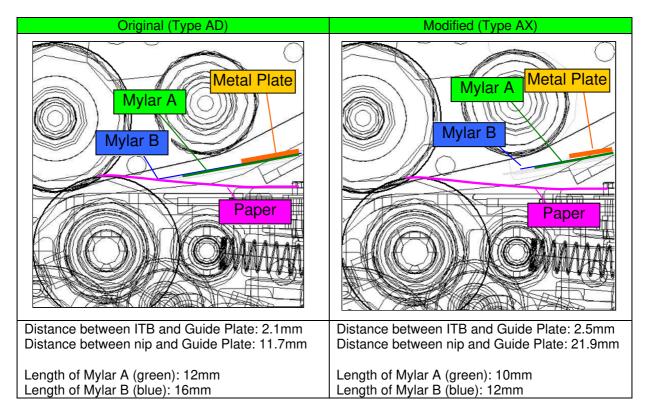
## Technical Bulletin

**PAGE: 4/4** 

Model: Aries-P1.5/C1.5 Date: 11-Jul-11 No.: RM077041

**Appendix** 

The diagram below shows the differences between the Original Guide Plate and the Modified Guide Plate.



#### **NOTE**

The "Cover: 1<sup>st</sup> Transfer Ass'y" may come with Mylars (0~3 pcs) as an accessory depending on the finishing precision of the Cover. Attach the Mylar(s) to secure optimum distance between the Cover: 1<sup>st</sup> Transfer Ass'y and the guide plate when applying the ITB Guide Plate Type AX.



Mylar for adjustment



**PAGE: 1/8** Reissued:06-Jan-12

		·
Model: Aries-P1.5/C1.5	Date: 15-Jul-11	No.: RM077042a

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: New Management procedure of multi fusing unit			Prepared by: Hiroaki Matsui		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	☐ Troubleshooting	Part informat	tion	Action required	
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	Other (	)	☐ Tier 2	

#### General

Conventionally, one fusing unit was assigned for one mainframe. Multiple fusing units could not be assigned for one mainframe because the mainframe could only manage the PM counter for one fusing unit.

The system has been modified to enable application of multiple fusing units per mainframe and independent PM counter management accordingly.

The main purpose of this system modification is to prevent image quality problems caused by a damaged fusing belt. Continuous feeding of a particular paper size causes the paper edges to damage the fusing belt, which generates a line on the output image when changing to a larger paper size.

### Requirements

This modification will become available by installing the firmware versions listed below.

#### **Pro C901**

	Part number	Version
Engine	M0775252D	1.005:16
System	M0776091D	1.03
Websys	M0776093B	1.01
Ope Panel NA	M0776385B	1.04
Ope Panel EU	M0776386B	1.04
Language	M0776390A	1.03

#### Pro C901

	Part number	Version
Engine	D0955252D	1.005:16
System	D0956091C	1.03
Websys	D0956093B	1.01
Ope Panel NA	M0776395B	1.02
Ope Panel EU	M0776396B	1.02
Language	M0776391A	1.02



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Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

The mainframe is capable of managing PM counters for a maximum of 4 fusing units.

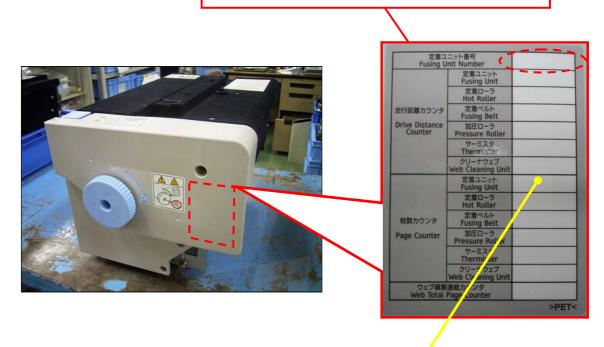
Fusing Unit 1: Originally installed at the factory

Fusing Unit 2, 3 & 4: Optional

A decal has been registered as a new service part, which will be attached to the fusing unit cover to distinguish between the units.

Write the fusing unit number and the counter values on this decal.





Use a marker or a ball-point pen to write the counter values here.

Characters can be erased with an eraser (rubber).

**DO NOT erase the Fusing Unit Number.** 



Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

**PAGE: 3/8** 

### <Newly Added SPs>

The following SPs have been added to enable management of multiple fusing units.

	SP	
Fusing Unit Number	1-210-001	Input the fusing unit ID number (1~4).
Fusing Unit Number: Present Value	1-210-002	Displays the ID number of the fusing unit currently installed.

	Unit 1	Unit 2	Unit 3	Unit 4
Fusing Unit: Distance	1-210-003	1-210-016	1-210-029	1-210-042
Counter				
Hot Roller: Distance Counter	1-210-004	1-210-017	1-210-030	1-210-043
Fusing Belt: Distance	1-210-005	1-210-018	1-210-031	1-210-044
Counter				
Pressure Roller: Distance	1-210-006	1-210-019	1-210-032	1-210-045
Counter				
Thermister1 2 3: Distance	1-210-007	1-210-020	1-210-033	1-210-046
Counter				
Web Cleaning: Distance	1-210-008	1-210-021	1-210-034	1-210-047
Counter				
Fusing Unit: Pg Counter	1-210-009	1-210-022	1-210-035	1-210-048
Hot Roller: Pg Counter	1-210-010	1-210-023	1-210-036	1-210-049
Fusing Belt: Pg Counter	1-210-011	1-210-024	1-210-037	1-210-050
Pressure Roller: Pg Counter	1-210-012	1-210-025	1-210-038	1-210-051
Thermister1 2 3: Pg Counter	1-210-013	1-210-026	1-210-039	1-210-052
Web Cleaning: Pg Counter	1-210-014	1-210-027	1-210-040	1-210-053
Web Total: Page Counter	1-210-015	1-210-028	1-210-041	1-210-054

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Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

#### <How PM Counters are Managed>

There are 2 possible ways to manage the PM counter; either using the Distance Counter or the Page Counter.

Display of the counter values can be selected by specifying SP7943-001 (Drive Distance PM mode).

- 1) SP7943-001= 0 → Counter values will be displayed in Drive Distance
- 2) SP7043-001= 1 → Counter values will be displayed in Page Counter
- 3) Default is set to 1.
- 4) Web Total: Page Counter is displayed in SP7913 regardless of the setting made in SP7043-001.

#### Example 1

When Fusing Unit #2 is installed and SP7943-001 = 0:

- \* Values in SP1-210-016 to SP-210-021 are displayed in SP7621-115 to SP7621-129
- \* The value in SP1210-028 is displayed in SP1903.

#### Example 2

When Fusing Unit #3 is installed and SP7943-001 = 1,

- \* Values in SP1-210-035 to SP-210-040 is displayed in SP7621-115 to SP7621-129.
- \* The value in SP1210-041 is displayed in SP1903.

The system will only count up the counters for the fusing unit that is currently installed. Counter values of the reserve fusing unit(s) will remain as they are.

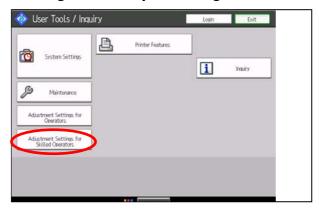
For example, if the system is operated with Fusing Unit #1 installed, counter values of SP1210-003 to SP1210-015 will be counted up and counter values of SP1210-016 to SP1210-054 (for Fusing Unit #2, #3 and #4) will remain the same.

Also, the counter values are reflected in the same manner when the PM Counter is cleared.

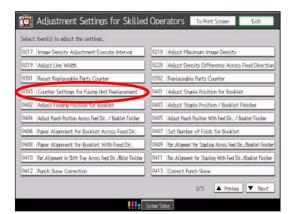
	Unit1	Unit2	Unit3	Unit4	
Fusing Unit:	1-210-003	1-210-016	1-210-029	1-210-042	
Distance Counter					
Hot Roller:	1-210-004	1-210-017	1-210-030	1-210-043	
Distance Counter					
Fusing Belt:	1-210-005	1-210-018	1-210-031	1-210-044	
Distance Counter					SP7943-001=0
Pressure Roller:	1-210-006	1-210-019	1-210-032	1-210-045	Page Counter
Distance Counter					r age Counter
Thermister1 2 3:	1-210-007	1-210-020	1-210-033	1-210-046	SP7621
Distance Counter					
Web Cleaning:	1-210-008	1-210-021	1-210-034	1-210-047	-115 Fusing Unit
Distance Counter					-117 Hot Roller
Fusing Unit:	1-210-009	1-210-022	1-210-035	1-210-048	-118 Fusing Belt
Pg Counter					-119 Pressure Roller
Hot Roller:	1-210-010	1-210-023	1-210-036	1-210-049	-125 Thermistor 1 2 3
Pg Counter					-129 Web Cleaning Unit
Fusing Belt:	1-210-011	1-210-024	1-210-037	1-210-050	, i
Pg Counter					CD7040 001 1
Pressure Roller:	1-210-012	1-210-025	1-210-038	1-210-051	SP7943-001=1
Pg Counter					Page Counter
Thermister1 2 3:	1-210-013	1-210-026	1-210-039	1-210-052	
Pg Counter					
Web Cleaning:	1-210-014	1-210-027	1-210-040	1-210-053	
Pg Counter					ノ
Web Total:	1-210-015	1-210-028	1-210-041	1-210-054	Reflected in SP1903
Page Counter					Tichicoted III Of 1000

Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

### <How to Register Multiple Fusing Units>



 "Administrator login" from Adjustment Setting for Skilled Operators **PAGE: 5/8** 



 Press "Next" and open the menu screen 2/3.
 Select "0303:Counter Setting for Fusing Unit Replacement".



3. Press "Fusing Unit No.".

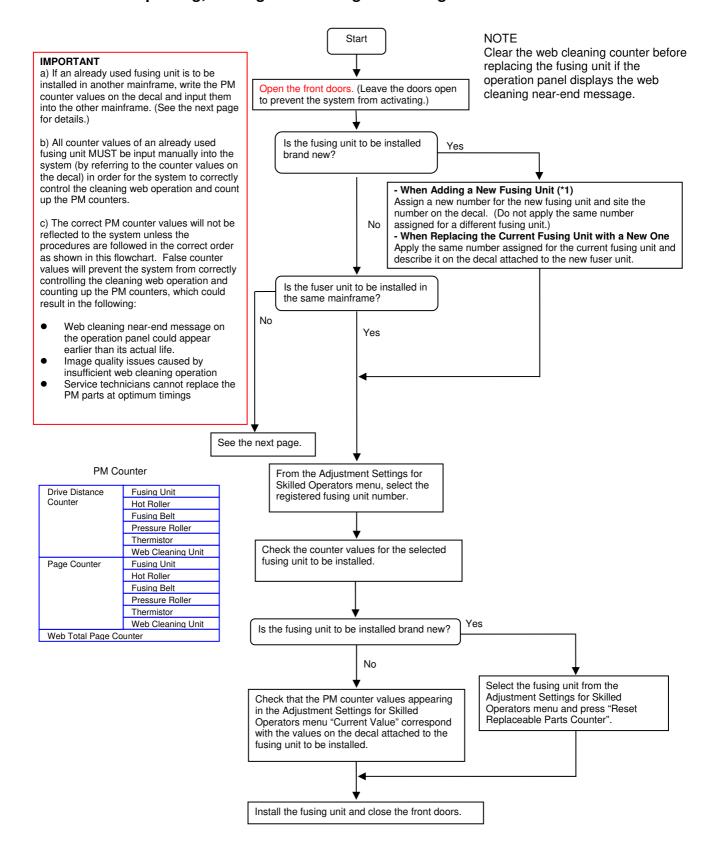


4. Specify the Fusing Unit Number by pressing -/+, and press "OK".

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Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

#### Flowchart: Replacing, Adding & Switching the Fusing Unit



**PAGE: 7/8** 

1-210-034

1-210-035

1-210-036

1-210-037

1-210-038

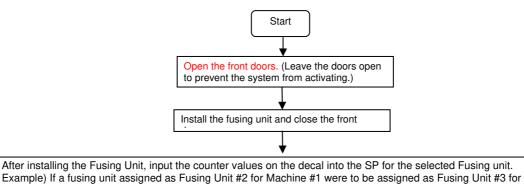
1-210-039

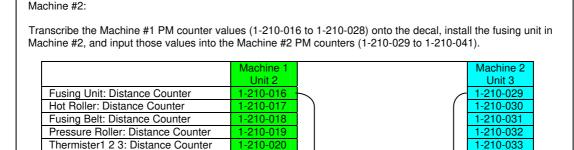
1-210-040

1-210-041

Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

#### Flowchart: Installing a Used Fusing Unit in a Different Mainframe





1-210-021

1-210-022

1-210-023

1-210-024

Web Cleaning: Distance Counter Fusing Unit: Pg Counter

Hot Roller: Pg Counter

Fusing Belt: Pg Counter

Pressure Roller: Pg Counter

Thermistor1 2 3: Pg Counter

Web Cleaning: Pg Counter

Web Total: Page Counter

1-210-025 1-210-026 1-210-027 1-210-028 Specify the Fusing Unit Number

Note for customers who already use multiple fusing units before installing new firmware. The following must be done by service technicians

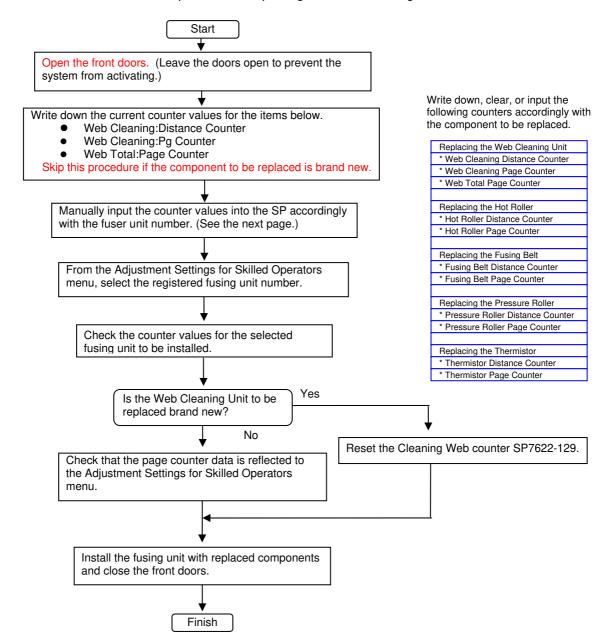
- 1. After the new firmware is installed, the default fusing unit counter (the one which was used when new firmware was installed) will be used as the PM counter. When the fusing unit is replaced with another one, the default fusing unit counter will be saved as "Unit 1"
- 2. If the customer has multiple fusing units already, input the counter values for each fusing unit from SP1-210-016 to SP1-210-028, from SP1-210-029 to SP1-210-041, and from SP1-210-042 to SP1-210-054, for "Unit 2", "Unit 3" and "Unit 4", respectively, in order to carry on each counter value.
- 3. In order to clear the counter value for fusing unit, execute SP 7-622-115 after replacing to a brand new fusing unit.

**PAGE: 8/8** 

Model: Aries-P1.5/C1.5 Date: 15-Jul-11 No.: RM077042a

# Flowchart: Replacing, Adding & Switching the Fusing Unit Components (Web Cleaning Unit/Hot Roller/Fusing Belt/Pressure Roller/Thermistor)

\* The flowchart below is an example of when replacing the Web Cleaning Unit.



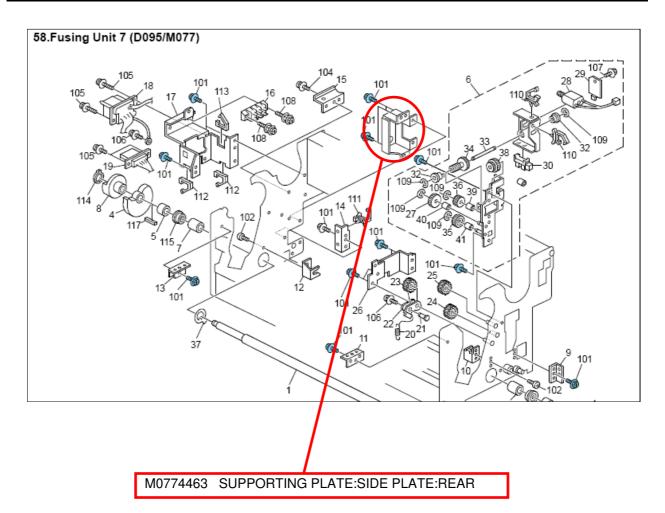
# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Date: 10-Aug-11			No.: RM077043
Subject: New part Bracket of Fusing Unit				Prepared	d by: Hir	roaki Matsui
From: 1st PP Ser	vice Planning Sec., PP Service	e Planning				
Classification:	Troubleshooting	□ Part inference     □	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

This RTB has been issued to announce the release of a bracket for the Fusing Unit as a new service part.

New part	Description	Q'ty	Int	Page	Index	Note
number						
M0774463	SUPPORTING PLATE:SIDE PLATE:REAR	1	1	141	42	



## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Date: 21-Sept-11			No.: RM077044
Subject: Manual Correction for Aries-P1.5/C1.5					d by: H M	<b>1</b> atsui
From: 1st PP Service Planning Sec., PP Service Planning						
Classification:	Troubleshooting	☐ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electrical		Electrical		e manual revision
	☐ Paper path	☐ Transmit/rec		eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

The Service Manual for Aries-P1.5/C1.5 is corrected

- On page 473 in the Appendices, the area surrounded by red box in the diagram below is corrected.
  - 4. Insert a sheet [A] of paper (A4 or LT SEF) under the shift roller
  - Set the paper so that the leading edge [C] of the paper is visib is aligned with the front edge [E] of the registration timing sens
  - 6. Install the registration drawer unit in the mainframe.
  - 7. Check that the value of SP1916-001 is set to "1.61".
  - Execute the "CIS LED Power Adjustment" with SP1912-001.

#### Correction

(Wrong) Install the registration drawer unit in the machine.

(Correct) Install the registration drawer unit in the machine and close the front cover.

8		

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Date: 26-Sept-11			No.: RM077045
Subject: Additional SC code SC590-021				Prepared by: Hiroaki Matsui		
From: PPBG Ser	vice Planning Dept.					
Classification:	□ Troubleshooting	☐ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electrica	al		⊠ Servic	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	⊠ Tier 2	

This RTB has been issued to announce a fusing related SC code that had been missing from the Aries-P1.5/C1.5 Field Service Manual.

Please add the following SC to your service manual on page 164 in section "3. Appendix: Service Call Conditions".

### **Service Call Tables 5-2**

No.	Type	Details (Symptom, Possible Cause, Troubleshooting Procedures)
		Inverter motor error
		The machine detects a short or open signal of the inverter motor, or the
590	D	safety function went off to prevent temperature rise.
-021		<ul> <li>Harness from PDB to this motor short or disconnected</li> </ul>
		Coil in this motor short or open
		Relay connector between PDB and this motor disconnected
	PDB board defect	
		Turn machine power Off and On either by the main power switch or
		the power button on the operation panel.
		Replace the PDB motor.
		Check the harness connection. Replace the harness if damaged.
		Replace the PDB board.

## Technical Bulletin

**PAGE: 1/4** 

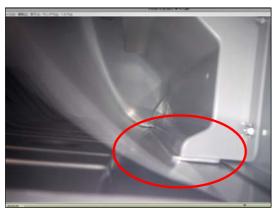
Model: Aries-P1.5/C1.5				e: 21-Oct-	11	No.: RM077046	
Subject: Guide Attachment to Prevent Purge Tray Jams					Prepared by: J. Kobayashi		
From: 1st Tech Service Sect., PP Tech Service Dept.							
Classification:		☐ Part informa		ion 🖂 Action		required	
	<ul><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Transmit/rec</li></ul>		al		☐ Service	ervice manual revision	
			eive Retrof		fit information		
	☐ Product Safety	Other (		)	⊠ Tier 2		

### **Symptom**

Jam042 (Duplex Transport Sensor 1: Late) could occur when feeding paper of 13x19 in size and approximately 250gsm in thickness.

#### Cause

The trailing edge of the sheet gets caught in the gap between the plate and the cooling duct during switchback operation.



### Solution

Check the purge tray if the following part is attached. If not, procure the part and attach it to cover the gap.

Part Number	Description				
GM0774927	GUIDE:LOWER:DUCT				



**PAGE: 2/4** 

Model: Aries-P1.5/C1.5 Date: 21-Oct-11 No.: RM077046

### Attaching the "Guide: Lower: Duct"

- 1. Remove the clip and open the front left door. Lift up the door and remove it. (Fig 1)
- 2. Pull out the fusing unit handle. (Fig 1)
- 3. Remove the purge tray inner cover; screw x4. (Fig 1)

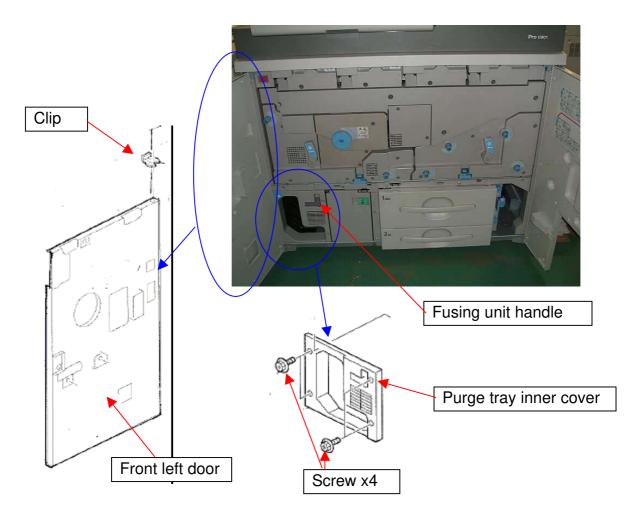


Fig 1



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Model: Aries-P1.5/C1.5 Date: 21-Oct-11 No.: RM077046

- 4. Clean the surface of the duct with alcohol where the "Guide: Lower Duct" is to be attached.
- 5. Attach the "Guide: Lower Duct" along the surface of the duct. Make sure the edge of the "Guide: Lower Duct" is in contact with the edge of the purge guide plate; area indicated with the blue rectangle in Fig2.

See "Fig 3" for more detailed description on where and how to attach the guide.

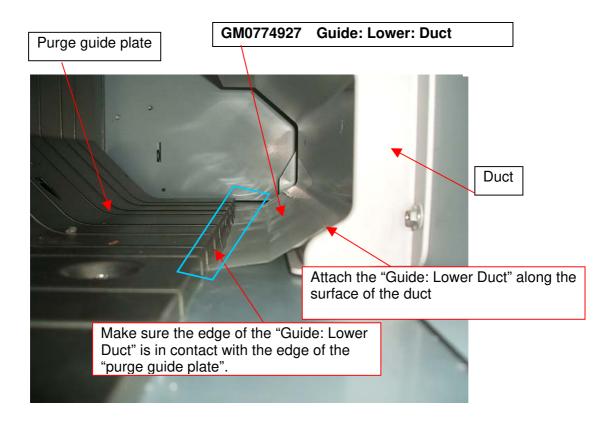
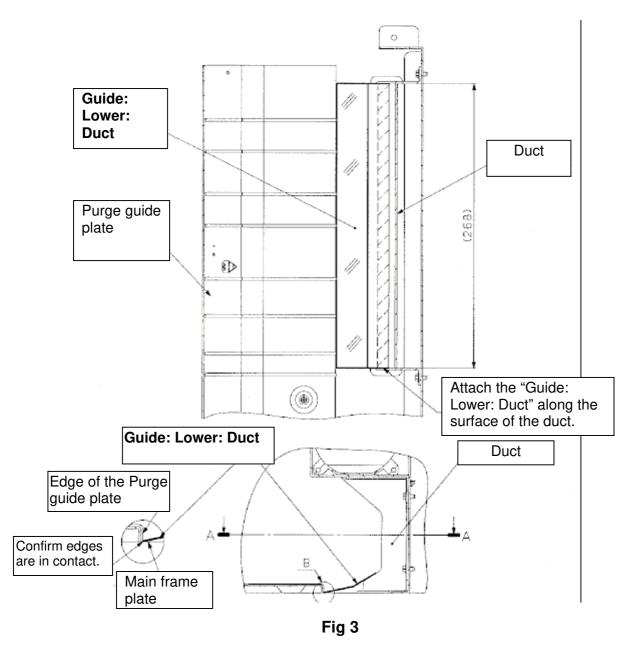


Fig 2



Model: Aries-P1.5/C1.5 Date: 21-Oct-11 No.: RM077046

**PAGE: 4/4** 



- 6. Confirm the guide is attached completely; no peel-offs.
- 7. Repeat steps 1-3 in reverse order to complete the procedure.

## Technical Bulletin

**PAGE: 1/2** 

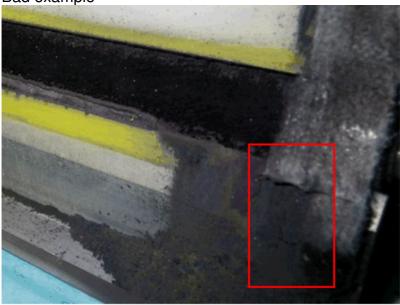
Model: Aries-P1.5/C1.5				Date: 24-Oct-11		No.: RM077047	
Subject: Note on servicing the ITB belt cleaning unit				Prepared by: J. Kobayashi			
From: 1st Tech Service Sect., PP Tech Service Dept.							
Classification:		Part informati		ion 🛛 Action red		required	
	☐ Mechanical	☐ Electric	ical		☐ Service	ice manual revision	
	☐ Paper path	☐ Transm	nit/receive		Retrof	etrofit information	
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2		

This RTB has been issued to provide an important note on servicing the ITB belt cleaning unit.

#### Note

When servicing the ITB belt cleaning unit, make sure the "Seal: Belt Cleaning: Entrance: Side" is NOT lapping over the "Entrance Seal: Belt Cleaning".

Bad example



The "Entrance Seal:Belt Cleaning" is positioned **underneath** the "Seal: Belt Cleaning: Entrance: Side".

**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 24-Oct-11 No.: RM077047

Good example



The "Entrance Seal: Belt Cleaning" is positioned **above** the "Seal: Belt Cleaning: Entrance: Side".

#### **Possible Symptoms**

The following symptoms may occur if the "Entrance Seal: Belt Cleaning" is positioned **underneath** the "Seal: Belt Cleaning: Entrance: Side".

- Toner drops onto the image
- Toner adhesion inside the machine
- Toner contamination on the backside or edge of paper
- Dirty background

☐ Product Safety

# Technical Bulletin

Model: Aries-P1.5/C1.5		Date: 04-Nov-11		No.: RM077048		
Subject: Manual Correction – Process Control Self-check			Prepared by: Shinnosuke Sasaki			
From: 1st PP Te	chnical Service Section					
Classification:	☐ Troubleshooting	☐ Part info	rmat	ion	Action	required
	☐ Mechanical	☐ Electrical				e manual revision
	☐ Paper path	☐ Transmit/rec		eceive		it information

☐ Tier 2

**PAGE: 1/1** 

Please apply the following correction to your Aries-P1.5/C1.5 field service manual in the section:

Other (

)

6. Troubleshooting > Special Procedures > Process Control Troubleshooting > Process Control Self-Check: SP3821

#### Process Control Self-Check: SP3821

After the process control self-check is executed manually with SP3820, you can execute SP3821 to check the results of the self-check. The possible error codes are listed in the "Displayed Code" column in the table below.

When you do \$P3821, the normal display (no errors) will look like this:

10101010

Reading from left to right each "10" represents a color: K, M, C, Y.

If a problem occurs, the code will appear in the column for the color PCDU where the error has occurred. For example, If a Vdhome error (Code 15) (see table below) occurs in the M PCDU, the display will look like this:

#### **Correction**

**INCORRECT:** Reading from left to right each "10" represents a color: K, M, C, Y.

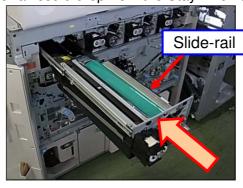
**CORRECT:** Reading from left to right each "10" represents a color: K, C, M, Y.

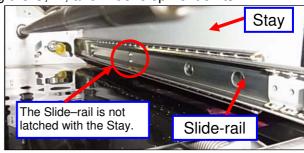
# Technical Bulletin

Model: Aries-P1.5/C1.5			Dat	ate: 04-Nov-11		No.: RM077049
Subject: PCDU Slide-rail Rework			Prepared	d by: J. K	lobayashi	
From: 1st Tech S	ervice Sect., PP Tech Service	Dept.				
Classification:		☐ Part info	orma	tion		required
	☐ Mechanical	☐ Electric	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

#### **Symptom**

Slide-rail could drop from the Stay when setting the C, M, and Y development units.

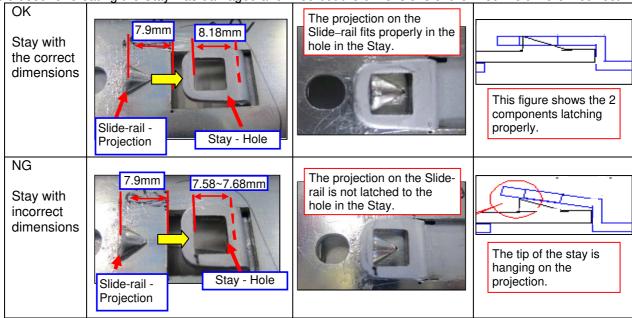




**PAGE: 1/7** 

#### Cause

Mold used for creating the Stay was damaged and fixed but the dimensions of the fixed mold were incorrect.



The mold used for Black is separate from the other colors, and therefore, the problem occurs only with the Stays (positioned to the right hand side viewed from the front) for Cyan, Magenta, and Yellow.



Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### Solution

Replace the current slide-rails with the modified slide-rails for C, M, and Y stations either on new installs or a service visit for the affected units shown on the following page.

#### NA

The modified slide-rails are either attached to the mainframe as an accessory or have already been shipped to the local service stations.

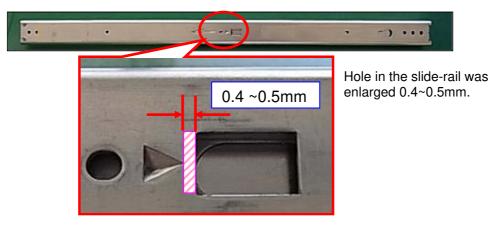
#### RE / Asia

Procure the modified slide-rails by referring to the information below.

Part Number	Description	Remark
M0779901	SLIDE RAIL:DEVELOPMENT UNIT	3 pcs required per unit

#### **Details of the Modified Slide-rail**

The hole in the Slide-rail was enlarged to allow the latch on the Stay to reach the projection.



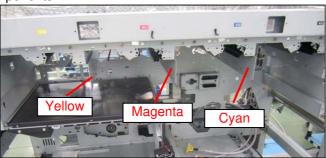
#### NOTE 1

The modified slide-rails are indicated with a white marking.



#### NOTE 2

Instead of modifying the Stay which had the incorrect dimensions, the Slide-rails were modified because replacement of the Stay is complex and is inappropriate to carry out in the field. Replacement with the modified Slide-rails will have no adverse affect on the durability of the Stay and enables proper latching of the two components.



Replace the 3 slide-rails installed in the right hand side of Cyan, Magenta, and Yellow stations.

**PAGE: 2/7** 



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Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### **Affected Units**

Total Number of Affected units in NA: 26

Model	Product code No	No	Serial Numbers	Total
Pro C901	M07757	1	T0115700001	10
		2	T0115700002	
		3	T0115700005	
		4	T0115600053	
		5	T0115600054	
		6	T0115600052	
		7	T0115600040	
		8	T0115600051	
		9	T0115600050	
		10	T0115700008	
Pro C901S	D09557	11	V9915600052	16
		12	V9915600042	
		13	V9915600040	
		14	V9915600055	
		15	V9915700009	
		16	V9915600038	
		17	V9915600046	
		18	V9915600047	
		19	V9915700006	
		20	V9915600039	
		21	V9915600048	
		22	V9915600045	
		23	V9915600037	
		24	V9915700005	
		25	V9915600056	
		26	V9915700010	

Total Number of Affected units in FU: 6

Total Number of Alle	cied units in EU. 6			
Model	Product code No	No	Serial Numbers	Total
Pro C901	M07767	1	T0113200013	2
		2	T0113300003	
Pro C901S	D09567	3	V9913200020	4
		4	V9913200015	
		5	V9913200016	
		6	V9913300001	

Affected units in Asia: 7

Model	Product code No	No	Serial Numbers	Total
Pro C901	M07729	1	T0110800001	7
		2	T0110800002	
		3	T0110800003	
		4	T0110800004	
		5	T0110800005	
		6	T0110800006	
		7	T0110800007	

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Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### Slide-rail: Replacement Procedure

Note 1: Make sure the machine power is turned off before doing this procedure.

Note 2: Handle Development units, Drum cleaning units and photoconductor drums with care

by following the Note in RTB RG178128b to prevent drum scratching.

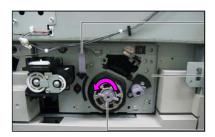
1. Open both front doors, and remove the front upper cover.

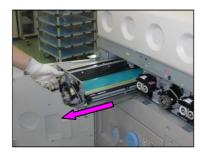


2. Remove the inner covers of the Yellow, Magenta, and Cyan development units, and pull out the Yellow, Magenta, and Cyan development units.





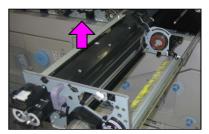




3. Remove the Drum Cleaning unit, OPC drum, and the Development unit for Cyan / Magenta / Yellow.







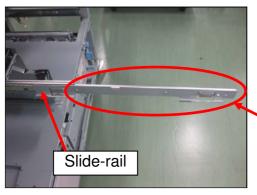


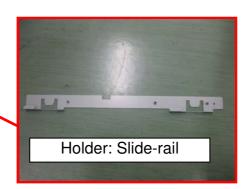
Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### 4. Remove the "Holder: Slide-rail" for Cyan / Magenta / Yellow.

Pull out the slide-rail and remove 2 screws that secure the "Holder Slide-rail" to the slide-rail.







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#### 5. Remove the Slide-rail for Cyan / Magenta / Yellow.

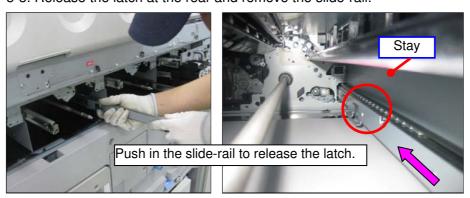
5-1. Protect the ITB by covering it with a few sheets of paper.



#### 5-2. Slide in the slide-rail to the rear.



5-3. Release the latch at the rear and remove the slide-rail.

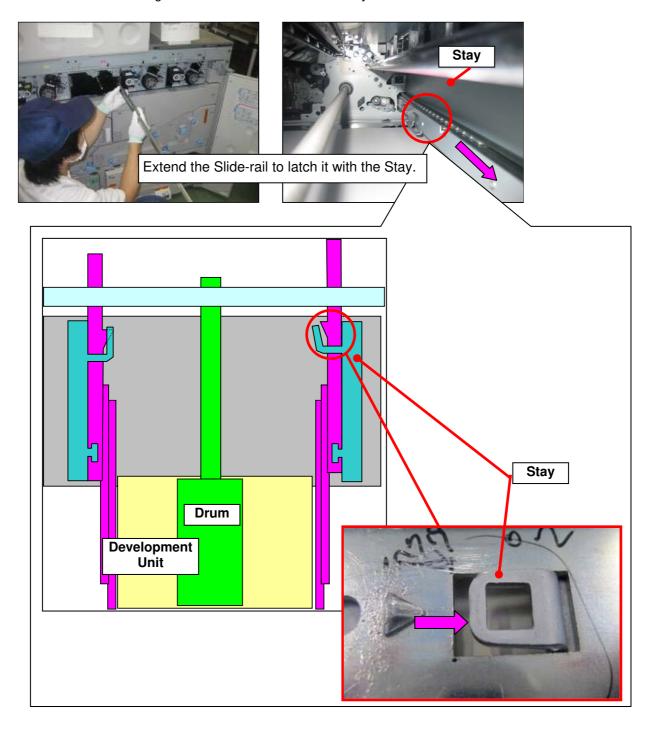


**PAGE: 6/7** 

Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### 6. Install the modified Slide-rail for Cyan / Magenta / Yellow.

Extend the slide-rail and align its hole with the latch on the Stay.





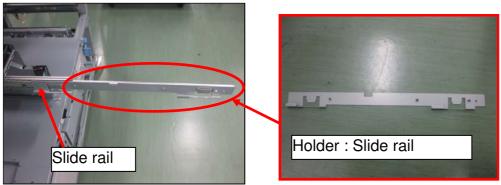
**PAGE: 7/7** 

Model: Aries-P1.5/C1.5 Date: 04-Nov-11 No.: RM077049

#### 7. Install the Holder:Slide rail.

Pull out the Slide-rail and attach it to the "Holder: Slide-rail" removed in step 2 with the 2 screws.





- 7. Remove the sheets used for protecting the ITB and follow steps 1-3 in reverse order to set the
- 8. Turn on the machine power and print out a 4x4 Flat pattern to check the image quality before completing the procedure.

# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5/C1.5			Dat	Date: 10-Nov-11 No.		No.: RM077050
Subject: Adjustment Item Menu Guide: TCRU/ORU Correction			Prepared by: Shinnosuke Sasaki			
From: 1st Tech S	ervice Sect., PP Tech Service	Dept.				
Classification:	☐ Troubleshooting	ooting Part informat		tion	Action	required
	☐ Mechanical	☐ Electrical			Service	ce manual revision
	☐ Paper path	☐ Transmit/red		eive	☐ Retrof	fit information
	☐ Product Safety	<del></del>		☐ Other (TCRU Manual Revision)		

Please apply the following correction to your Aries-P1.5/C1.5 TCRU guide "Adjustment Item Menu Guide: TCRU/ORU" in the section:

- 2. Details of Menu Items in Adjustment Settings for Skilled Operators > 2.2. Setting Values > 2.2.1 Shift Image Adjustment > 0104: Auto Image Position Adjustment Across Feed Direction
  - ♦ 0104: Auto Image Position Adjustment Across Feed Direction

Specify whether or not the machine automatically detects paper pathway deviations during the paper feeding process and adjusts the horizontal position of the print image accordingly.

This setting can be specified for each tray independently.

Setting	Selection	Default Value
Tray 1	On	Off
Tray 2	Off	
Tray 3: Wide LCT		
Tray 4: Wide LCT		
Tray 5: Wide LCT		
Tray 6: Wide LCT		
Tray 3: LCT		
Tray 4: LCT		
Tray 5: LCT		
Tray 7		

#### Note:

- This function relies on a sensor that receives light reflected from the paper's surface. For this reason, it might not work with non-reflective paper such as dark paper, or with transparent film such as OHP transparencies, or with printed paper that has no margins. If this function does not work with the paper you have loaded, disable it by selecting "Off"
- Settings for LCT are available only on Pro C901.

#### Correction

#### **INCORRECT:**

If this function does not work with the paper you have loaded, disable it by selecting "Off"

#### **CORRECT:**

If this function does not work with the paper you have loaded, disable it by selecting "On"

# Technical Bulletin

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Reissued: 20-Jun-14

Model. Alles-F 1.3/C1.3	Model: Aries-P1.5/C1.5	Date: 22-Nov-11	No.: RM077051m
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#### **RTB Reissue**

The items in **bold italics** have been corrected.

	TO TOUT OF THE TO BOOT OUT			
Subject: Firmware Release Note: Paper Library EU		Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	☐ Part informat	tion	Action required
	☐ Mechanical	☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	⊠ Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries P1.5 and C1.5

MQP files and Media Lists are confidential information.

Aries P1.5

Version	Program No.	Availability of RFU
Rev.22	M0776064_R22	Not available
Rev.21	M0776064_R21	Not available
Rev.20	M0776064_R20	Not available
Rev.19	M0776064_R19	Not available
Rev.18	M0776064_R18	Not available
Rev.17	M0776064_R17	Not available
Rev.16	M0776064_R16	Not available
Rev.15	M0776064_R15	Not available
Rev.14	M0776064_R14	Not available
Rev.13	M0776064_R13	Not available
Rev.12	M0776064_R12	Not available
Rev.11	M0776064_R11	Not available
Rev.10	M0776064	Not available

#### Aries C1.5

Version	Program No.	Availability of RFU
Rev.22	D0956165_R22	Not available
Rev.21	D0956165_R21	Not available
Rev.20	D0956165_R20	Not available
Rev.19	D0956165_R19	Not available
Rev.18	D0956165_R18	Not available
Rev.17	D0956165_R17	Not available
Rev.16	D0956165_R16	Not available
Rev.15	D0956165_R15	Not available
Rev.14	D0956165_R14	Not available
Rev.13	D0956165_R13	Not available
Rev.12	D0956165_R12	Not available

# Technical Bulletin

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Reissued: 20-Jun-14

Model: Aries-P1.5/0	C1.5	Date: 22-Nov-11	No.: RM077051m
Rev.11	D0956165_R11	Not available	
Rev.10	D0956165	Not available	

Note: Definition of Availability of RFU via @Remote

#### Aries P1.5

Version	Modified Points or Symptom Corrected
Rev.22	(1) Add 9 Media.(RE1312, RE2099, RE2100, RE2118, RE2119, RE2124, RE2125, RE2146, RE2212)
	(2) RE1303, RE1303A, RE1303B: Corrected Fusing temp. from 165
	to 155, Overall rank from B to A, Image Quality rank from B
	to A+ and add Notes on paper curl.
	(3) RE0022: Corrected Fusing temp. from 155 to 160 and Overall
	rank from B to A.  (4) PE0022A: Corrected Fusing temp, from 170 to 160 and IO rank
	(4) RE0022A: Corrected Fusing temp. from 170 to 160 and IQ rank from A+ to A.
	(5) RE0022B: Corrected Grain direction from Long to Short,
	Fusing temp. from 170 to 160 and IQ rank from A+ to A.
	(6) RE0023, RE0023A: Corrected IQ rank from A to A+.
	(7) RE0023B: Corrected Grain direction from Long to Short and Fusing temp. from 165 to 160.
	(8) RE0024, RE0024A, RE0024B: Corrected Fusing temp. from 175 to 170 and IQ rank from A to A+.
	(9) RE1059: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk and Fusing temp. from 165 to 160.
	(10) RE1059A, RE1059B: Corrected Fusing temp. from 165 to 160.
	(11) RE1308: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk and Fusing temp. from 150 to 155.
	(12) RE1308A, RE1308B: Corrected Fusing temp. from 150 to 155.
	(12) RE1309: Corrected Product name from Digi Finesse Premium Silk to UPM DIGI Finesse Premium Silk.
	(14) RE1312A: Corrected Fusing temp. from 175 to 170.
	(15) RE1312B: Corrected RCL Control No. from RE1312 to RE1312B.
	(16) RE1598: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk, Fusing temp. from 190
	to 170, Grain direction from Unknown to Short, Overall rank
	from B to A, IQ rank from B to A+ and IP rank from B to A.
	(17) RE1598A: Corrected Fusing temp. from 190 to 170, Grain
	direction from Unknown to Short, Overall rank from B to A, IQ rank from B to A+ and IP rank from B to A.
	(18) RE1598B: Corrected Fusing temp. from 190 to 170, Overall
	rank from B to A, IQ rank from B to A+ and IP rank from B
	to A.
Rev.21	(1) Add 1 media

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

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Reissued: 20-Jun-14

Model: **Aries-P1.5/C1.5** Date: 22-Nov-11 No.: RM077051m

Version	Modified Points or Symptom Corrected
Rev.20	<ul><li>(1) Add 21 media</li><li>(2) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".</li></ul>
	(3) RE0022A: Corrected RCL Control Number from "Ricoh Pro-Graphic Gloss (RE1696A)" to RE0022A.
	<ul> <li>(4) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.</li> <li>(5) RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.</li> <li>(6) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".</li> </ul>
	(7) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".
	(8) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".
	(9) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".
	(10)RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".
	(11)RE1006: Corrected Production Name from "Iprint Digital" to "Iprint Digital Silk".
	(12) RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".
	(13)RE1312: Corrected RCL Control No. from RE1118 to RE1312. (14)RE1696: Deleted because RE1696 repeated with RE0022.
Rev.19	<ol> <li>(1) Add 6 media</li> <li>(2) RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>(3) RE0996, RE0997: Corrected Media Type from Silk to Recycled (Silk)</li> <li>(4) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>(5) RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic</li> </ol>
Rev.18	<ul> <li>(1) Add 17 media</li> <li>(2) RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium</li> <li>(3) RE1532: Corrected Media type from Gloss to Cast Coated and</li> <li>(4) Production name from Bindakote Cover to Bindakote Cover Bianco</li> </ul>
Rev.17	(1) Add 15 media
Rev.16	<ul> <li>(1) Add 3 media</li> <li>(2) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1057, 1058, 1164, 1165, 1815: Correct the Manufacturer</li> <li>(3) RE1773, 1776, 1778: Correct Media Type to "Recycled" from "Recycled'(Matte)".</li> <li>(4) RE1152x, 1161x: Deleted because they were registered by mistake.</li> </ul>
Rev.15	(1) Add 9 Media (2) RE1164, 1165: Correct the Manufacture
Rev.14	(1) Add 32 media
Rev.13	(1) Add 12 media

# Technical **B**ulletin

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Reissued: 20-Jun-14

Model: Aries-P1.5/C1.5 Date: 22-No	lov-11 No.: RM077051m
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Version	Modified Points or Symptom Corrected			
Rev.12	(1) Add 21 media			
	(2) RE1537: Correct the Paper thickness			
	(3) RE1702: Correct the Paper setting Type			
Rev.11	(1) Add 53 media			
	(2) RE0033: Correct the paper thickness			
Rev.10	31 media are added			

#### Aries C1.5

Version	Modified Points or Symptom Corrected
Ver.22	(1) Add 9 Media.(RE1312, RE2099, RE2100, RE2118, RE2119, RE2124,
	RE2125, RE2146, RE2212)
	(2) RE1303, RE1303A, RE1303B: Corrected Fusing temp. from 165
	to 155, Overall rank from B to A, Image Quality rank from B
	to A+ and add Notes on paper curl.
	(3) RE0022: Corrected Fusing temp. from 155 to 160 and Overall rank from B to A.
	(4) RE0022A: Corrected Fusing temp. from 170 to 160 and IQ rank
	from A+ to A.
	(5) RE0022B: Corrected Grain direction from Long to Short,
	Fusing temp. from 170 to 160 and IQ rank from A+ to A.
	(6) RE0023, RE0023A: Corrected IQ rank from A to A+.
	(7) RE0023B: Corrected Grain direction from Long to Short and
	Fusing temp. from 165 to 160.
	(8) RE0024, RE0024A, RE0024B: Corrected Fusing temp. from 175
	to 170 and IQ rank from A to A+.
	(9) RE1059: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk and Fusing temp.
	from 165 to 160.
	(10) RE1059A, RE1059B: Corrected Fusing temp. from 165 to 160.
	(11) RE1308: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk and Fusing temp.
	from 150 to 155.
	(12) RE1308A, RE1308B: Corrected Fusing temp. from 150 to 155.
	(13) RE1309: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk.
	(14) RE1312A: Corrected Fusing temp. from 175 to 170.
	(15) RE1312B: Corrected RCL Control No. from RE1312 to RE1312B.
	(16) RE1598: Corrected Product name from Digi Finesse Premium
	Silk to UPM DIGI Finesse Premium Silk, Fusing temp. from 190
	to 170, Grain direction from Unknown to Short, Overall rank
	from B to A, IQ rank from B to A+ and IP rank from B to A.
	(17) RE1598A: Corrected Fusing temp. from 190 to 170, Grain
	direction from Unknown to Short, Overall rank from B to A,
	IQ rank from B to A+ and IP rank from B to A.
	(18) RE1598B: Corrected Fusing temp. from 190 to 170, Overall
	rank from B to A, IQ rank from B to A+ and IP rank from B
	to A.

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Reissued: 20-Jun-14

Model: **Aries-P1.5/C1.5** Date: 22-Nov-11 No.: RM077051m

Version	Modified Points or Symptom Corrected
Rev.21	(1) Add 1 media
Rev.20	<ol> <li>Add 21 media</li> <li>RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".</li> <li>RE0022A: Corrected RCL Control Number from "Ricoh Pro-Graphic Gloss (RE1696A)" to RE0022A.</li> <li>RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.</li> <li>RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.</li> <li>RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".</li> <li>RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".</li> <li>RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".</li> <li>RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".</li> <li>RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".</li> <li>RE1006: Corrected Production Name from "Iprint Digital" to "Iprint Digital Silk".</li> <li>RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".</li> <li>RE1312: Corrected RCL Control No. from RE1118 to RE1312.</li> <li>RE1696: Deleted because RE1696 repeated with RE0022.</li> </ol>
Rev.19	<ol> <li>Add 6 media</li> <li>RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>RE0996, RE0997: Corrected Media Type from Silk to Recycled (Silk)</li> <li>RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic</li> </ol>
Rev.18	<ol> <li>Add 17 media</li> <li>RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium</li> <li>RE1532: Corrected Media type from Gloss to Cast Coated and</li> <li>Production name from Bindakote Cover to Bindakote Cover Bianco</li> </ol>
Rev.17	(1) Add 15 media
Rev.16	<ul> <li>(1) Add 3 media</li> <li>(2) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1057, 1058, 1164, 1165, 1815: Correct the Manufacturer</li> <li>(3) RE1773, 1776, 1778: Correct Media Type to "Recycled" from "Recycled'(Matte)".</li> <li>(4) RE1152x, 1161x: Deleted because they were registered by mistake.</li> </ul>
Rev.15	(1) Add 9 Media (2) RE1164, 1165: Correct the Manufacture
Rev.14	(1) Add 32 media
Rev.13	(1) Add 12 media

# Technical **B**ulletin

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Reissued: 20-Jun-14

Model: Aries-P1.5/C1.5	Date: 22-Nov-11	No.: RM077051m
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Version	Modified Points or Symptom Corrected			
Rev.12	(1) Add 21 media			
	(2) RE1537: Correct the Paper thickness			
	(3) RE1702: Correct the Paper setting Type			
Rev11	(1) Add 53 media			
	(2) RE0033: Correct the paper thickness			
Rev.10	31 media are added			



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Reissued: 20-Jun-14

Model: **Aries-P1.5/C1.5** Date: 22-Nov-11 No.: RM077051m

#### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

#### About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
<b>A</b> +	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.
С	Not suggested for use

#### **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	А	А	Α
В	В	А	В	Α
С	С	А	А	А

#### NOTE

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

#### **Paper Library Data Installation**

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.

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Reissued: 20-Jun-14

Model: **Aries-P1.5/C1.5** Date: 22-Nov-11 No.: RM077051m

- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

## Technical Bulletin

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Model: Aries-P1.5 (M077)			Dat	e: 25-Nov	-11	No.: RM077052
Subject: Procedures for installing the GBC StreamPunch				Prepared by: Shinnosuke Sasaki		
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:		□ Part informa		tion Action required		required
	☐ Mechanical	☐ Electrical			☐ Service manual revision	
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	□ Product Safety	$\square$ Other (		)	⊠ Tier 2	

# Procedures for Installing the StreamPunch directly downstream on M077/D095/G178/D016 printers and copier

#### 1. Overview

If you wish to install the GBC StreamPunch directly downstream from a M077/D095/G178/D016 copier/printer, do the following:

- 1. Order the special parts shown in the next section "2. Parts Requirement".
- 2. Install the special parts according to the procedure in section "3. Installation".

#### **IMPORTANT**

Never install the punch unit directly downstream from the main machine without using the special parts shown in section 2 for the following reasons:

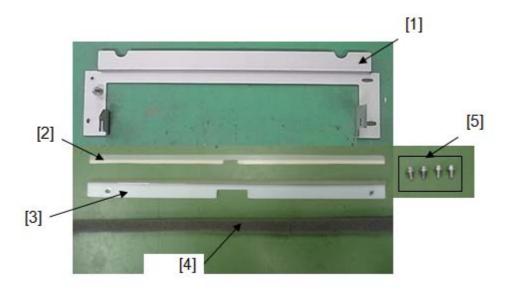
- 1. Possible jams
- 2. Possible injuries to your or customer's hands if the door of the punch unit is open

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Model: Aries-P1.5 (M077) Date: 25-Nov-11 No.: RM077052

## 2. Required Parts

Make sure that you order the following special parts together. Install these parts by following the installation procedure in the next section "3. Installation".



No.	Part number	Description	Q'ty	Note
[1]	M0774703	BRACKET:ADAPTER SECTION:GBC:PEEN	1	
[2]	G1785145	SHEET:GBC:UPPER	1	
[3]	M0774707	GUIDE PLATE:GBC:ASS'Y	1	
[4]	B8321371	SPACER CUSHION	1	
[5]	04514008N	TAPPING SCREW:4X8	4	



Date: 25-Nov-11 No.: RM077052

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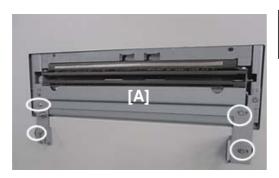
#### 3. Installation

#### **Installation Overview**

Model: Aries-P1.5 (M077)

- Step 1. Installing the special bracket
- Step 2. Removing the guide plate supplied with the GBC StreamPunch (if installed)
- Step 3. Installing the special guide plate
- Step 4. Docking the GBC StreamPunch to the main machine
- Step 5. Mainframe height adjustment

#### Step 1. Installation of the special bracket





1.1. Install the special bracket [A] (4 screws)

Step 2. Removing the guide plate supplied with the GBC Stream Punch.





2.1. If installed on the punch unit, remove the guide plate [A] supplied with the GBC Stream Punch. Keep the screws you removed. You will need them to install the special guide plate (Step 3).



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Model: Aries-P1.5 (M077) Date: 25-Nov-11 No.: RM077052

Step 3. Installing the special guide plate (Guide Plate:GBC:ASS'Y M0774707)

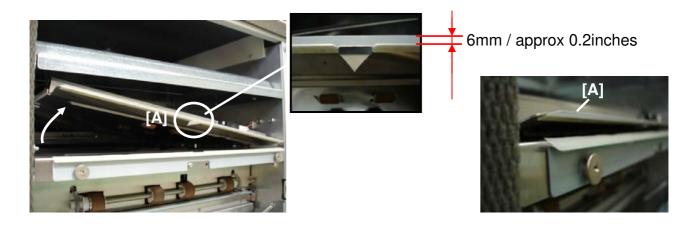


Front



Rear

3.1. Install the special guide plate [A] (2 screws) (GUIDE PLATE:GBC:ASS'Y: M0774707), so that the oval shaped hole [B] indicated with the red circle positions to the front side.



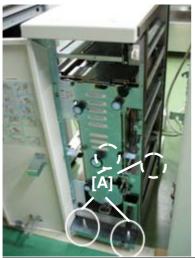
3.2. Lift and hold the paper entrance guide to attach the special mylar [A] (SHEET:GBC:UPPER: G1785145).

**Note**: Make sure to align the center slit on the mylar with the center slit on the entrance guide.



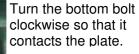
Model: Aries-P1.5 (M077) Date: 25-Nov-11 No.: RM077052

#### Step 4 Docking the GBC StreamPunch to the G178/D095/M077/D016 copier/printer



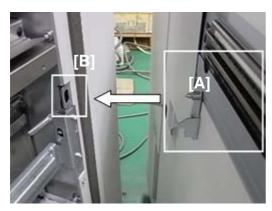
Loosen the nut and make a space of approx 2mm.

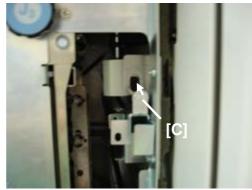




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4.1. To decrease the height of the StreamPunch, loosen the 4 nuts [A] on the top of the plate (2 on the front, 2 on the rear) so that the space between the nut and the plate is approximately 2mm. Then, turn the bottom bolt (immediately above the caster) clockwise so that it is in contact with the plate.





4.1. Dock the GBC StreamPunch with the mainframe and set the fixing pin [C].

**Note**: Make sure the positioning pin [A] on the mainframe is inserted properly in the location hole [B] on the GBC StreamPunch.



Model: Aries-P1.5 (M077)

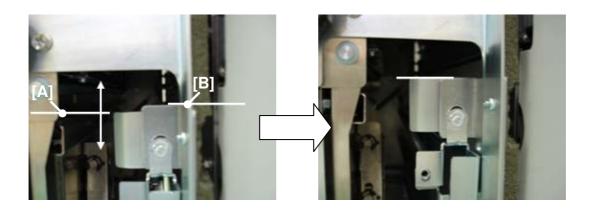
# Technical Bulletin

al **B**ulletin Page: 6/6

No.: RM077052

Date: 25-Nov-11

#### Step 5. Mainframe height adjustment

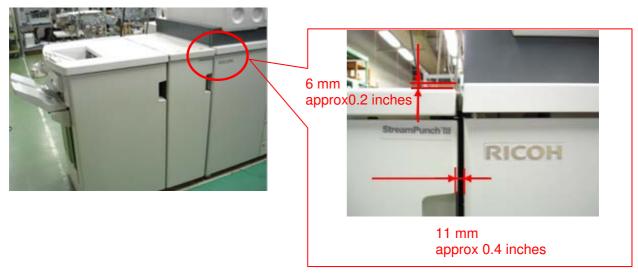


- 5.1. Adjust the height of the mainframe so that the top edge of the mainframe bracket [A] aligns with the top edge of the GBC StreamPunch bracket [B].
- 5.2. Adjust the height of the mainframe on the rear side as necessary.

**Note**: Make sure the top surface of the copier/printer is level after adjusting the height.

#### Confirming the height and space after installing the GBC StreamPunch

G178 copier/printer + the GBC StreamPunch + B830 finisher



# Technical Bulletin

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Model: Aries-P1.5/C1.5 Dat				e: 14-Dec	-11	No.: RM077053	
Subject: Troubleshooting Paper Skews					Prepared by: H. Kawamura		
From: 1st Tech Service Sect., PP Tech Service Dept.							
Classification:		☐ Part info	ormat	ion Action required			
	☐ Mechanical	☐ Electrica	al		Service	e manual revision	
	☐ Paper path	☐ Transmi	it/rec	eive	☐ Retrof	fit information	
	☐ Product Safety	Other (		)	⊠ Tier 2		

This RTB has been issued to announce the troubleshooting procedure for large paper skews (Jam 098).

#### **SYMPTOM**

Jam code 098, which indicates that the CIS (contact image sensor) does not turn off, is issued when printing on dark colored paper, especially red or blue colored paper.

#### **CAUSE**

The CIS fails to correctly detect paper edges, especially when feeding red or blue paper because the light source of the CIS is green.

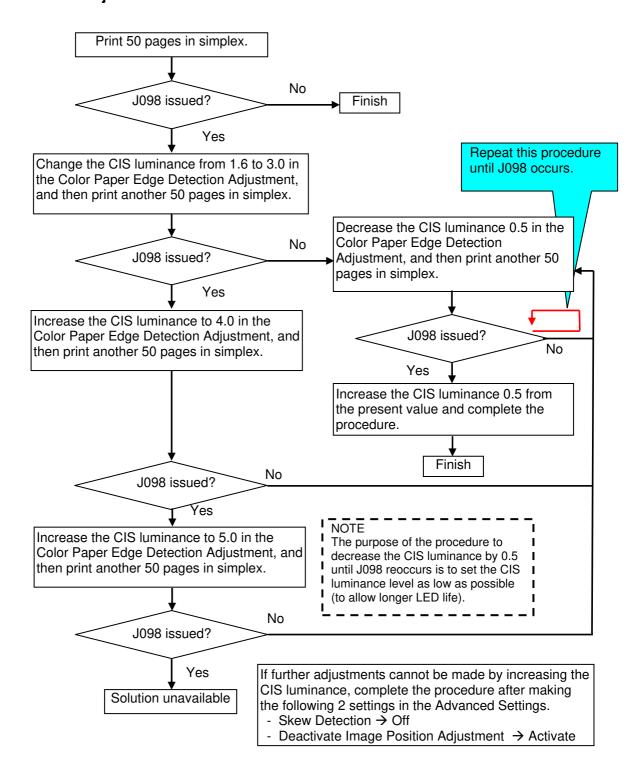
#### SOLUTION

Adjust the luminance of the CIS in Advanced Settings "06: Color Paper Edge Detection Adjustment".

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Model: Aries-P1.5/C1.5 Date: 14-Dec-11 No.: RM077053

#### **CIS Luminance Adjustment Flow Chart**



#### **Important**

Although the Color Paper Edge Detection Adjustment allows the CIS luminance level to range between 1 and 5, setting this value to a high level could cause the LED to reach its life quickly. Therefore, it is recommended that the CIS luminance is set to approximately 3.5.

Also, if jobs applying colored paper are to be run regularly, the CIS luminance level should be adjusted for each occasion.

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Model: Aries-P1.5/C1.5 Date: 14-Dec-11 No.: RM077053

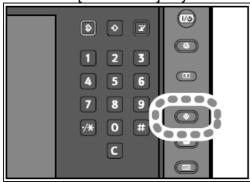
## **Appendix**

# Accessing 06 Color Paper Edge Detection Adjustment in Advanced Settings

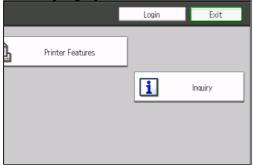
The machine's administrator can adjust the custom paper settings registered in [Program/ Change/ Delete Custom Paper].

To directly access the advanced settings for custom paper adjustment, you must first configure your machine's Administrator Authentication Management setting. (See, p.4 "Displaying the [Adjustment Settings for Skilled Operators] Button".)

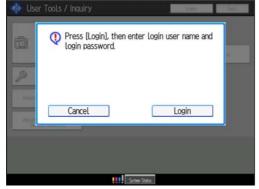
1. Press the [User Tools] key on the control panel.



2. Press [Login].



3. Press [Login].



PAGE: 4/5

Model: Aries-P1.5/C1.5 Date: 14-Dec-11 No.: RM077053

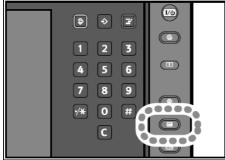
4. Enter your login user name, and then press [OK]. If you are logging in as the administrator for the first time, enter "admin".



5. Enter your login password, and then press [OK].



6. Press the [Paper Setting] key on the control panel.



7. Press [Program/ Change/ Delete Custom Paper].



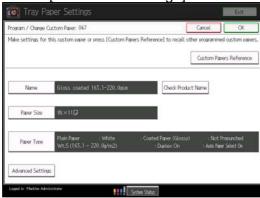
**PAGE: 5/5** 

Model: Aries-P1.5/C1.5 Date: 14-Dec-11 No.: RM077053

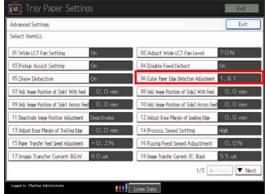
8. Check that [Program/ Change] is selected.



9. Select the program number of the custom paper setting you wish to adjust. Press [Advanced Settings].



The advanced settings for custom paper adjustment appear.
 Select 06 Color Paper Edge Detection Adjustment.



# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5 (M077)				e: 06-Jan-	12	No.: RM077054
Subject: Addition of Decal to the development roller cover					d by: A. T	Гакаda
From: PP Tech S	ervice Dept., 1st PP Tech Serv	vice Sect.				
Classification:	Troubleshooting	□ Part info	orma	tion	Action	n required
		☐ Electrical			☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec		eive	Retro	fit information
	☐ Product Safety	$\square$ Other (		)	☐ Tier 2	

Change: Addition of a decal

**Reason**: To indicate the direction of development roller rotation. The entrance seal of the development unit could wear and cause adverse effects if the development roller is rotated in the opposite direction.

#### **Procedure**

- 1. Clean the surface of the Cover: Gear: Development Unit: Ass'y (G1783382) with alcohol.
- 2. Attach the Decal: Development Unit: Display (GA000063) as shown in the photo below.
- 3. Make sure the decal is securely attached; no air-bubbles or peel-offs.



# Technical Bulletin

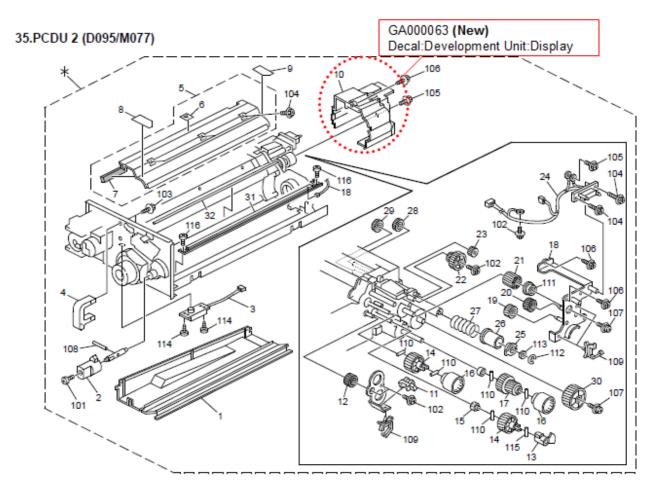
**PAGE: 2/2** 

Model: Aries-P1.5 (M077) Date: 06-Jan-12 No.: RM077054

Model: Aries-P1.5 (M077)

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
-	GA000063	Decal:Development Unit:Display	1		95	33	

• The modification described in this bulletin also applies to Aries-C1.5 (D095), Aries-P1 Lt (M078), Aries-C1 Lt (D097), Aegis-P1 (G178), Aegis-C1 (D016).



# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5				te: 06-Jan-12		No.: RM077055		
Subject: Manual Correction SC detail					Prepared by: H.Kawamura			
From: 1st Tech S	Service Sect., PP Tech Service	Dept.						
Classification:	☐ Troubleshooting	☐ Part info	orma	tion Action required		required		
	☐ Mechanical	☐ Electric	al		⊠ Service manual revision			
	☐ Paper path ☐ Transmit/		nit/receive		☐ Retrofit information			
	☐ Product Safety	Other (		)	⊠ Tier 2			

The following SC details were not written in the service manual

SC636-01

SC636-02

SC636-99

SC823

SC899

#### **Details**

SC 636-01

#### **Symptom**

SD Card Error

#### Cause

Expanded authentication module error

#### **Action**

- 1. Install the expanded authentication module
- 2. Install the SD Card
- 3. Install the DESS module

SC 636-02

#### **Symptom**

Incorrect IC module version

#### Cause

Incorrect version of IC module is used.

#### **Action**

Re-install the IC module

Model: Aries-P1.5/C1.5 Date: 06-Jan-12 No.: RM077055

SC 636-99

#### **Symptom**

Error in software

#### Cause

Incorrect certification information accumulated inside the software.

#### **Action**

Turn the main power off and on

SC 823

#### **Symptom**

Self-diagnostic error: NIB

#### Cause

[6101]:

MAC address check sum error

The result of the MAC address check sum does not match the check sum stored in

ROM.

[6104]

PHY IC error

The PHY IC on the controller cannot be correctly recognized.

[6105]

PHY IC loop-back error

An error occurred during the loop-back test for the PHY IC on the controller.

#### **Action**

Replace the controller.

SC899

#### **Symptom**

Software Error

#### Cause

A software error occurred in the GW controller.

#### **Action**

- 1. Update all the firmware to the latest versions.
- 2. If the above action did not solve the issue, replace the GW controller

**PAGE: 2/2** 

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5				e: 17-Jan-	12	No.: RM077056	
Subject: (China Only) Rating Name Plate				Prepared by: H.Kawamura			
From: 1st Tech S	Service Sect., PP Tech Service	Dept.					
Classification:	☐ Troubleshooting	☐ Part info	orma	tion		n required	
	☐ Mechanical	☐ Electrical			☐ Service manual revision		
	☐ Paper path ☐ Transmi		nit/receive		☐ Retrofit information		
	☐ Product Safety	Other (		)	☐ Tier 2		

This RTB is only for Ricoh China, to inform about the Rating Name Plate

The Rating Name Plate is in the accessory box which contains the operation touch panel The rating name plate is in the plastic bag circled in red.



Example of the Rating Name Plate

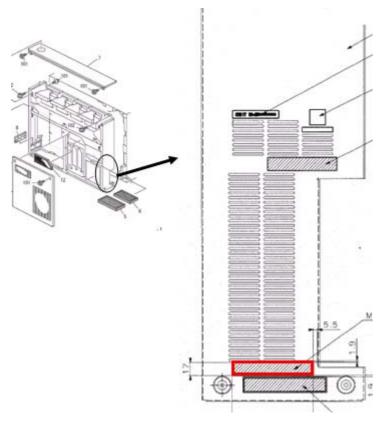
RICOH	彩色激光打印机 型号: Pro C901			
他E 220-240V本 頻率 50/60Hz 机种M077-29 代数编号: T0110700001	电流 25A 功率 5500W 自5B 回5A		理光打印系统有限公司 日本茨城县常陆那珂市 武田1060 株式会社理外	

**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 17-Jan-12 No.: RM077056

#### **Action Required**

When installing a new machine, please attach the rating name plate above the old rating name plate. The attachment location is shown in the diagram below, indicated in a red square.



# Technical Bulletin

**PAGE: 1/5** 

Reissued: 31-Mar-14

Model: Aries-P1.5 (M077)	Date: 23-Jan-12	No.: RM077057b

#### **RTB Reissue**

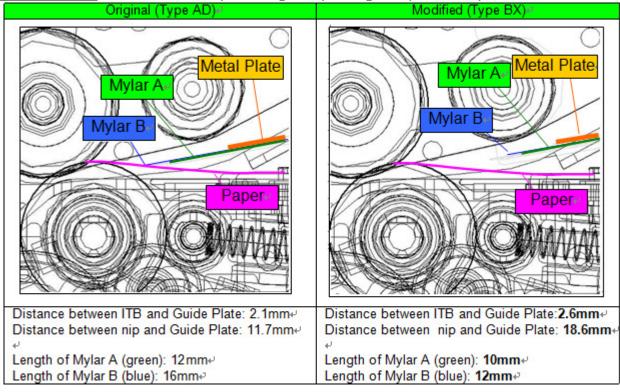
The items in **bold italics** were corrected or added.

Subject: Part changes in image transfer area				Prepared by: J. Kobayashi			
From: PP Tech Service Dept., 1st PP Tech Service Sect.							
Classification:	☐ Troubleshooting	□ Part information	tion	Action required			
	☐ Mechanical	Electrical		☐ Service manual revision			
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information			
	☐ Product Safety	Other (	)	☐ Tier 2			

Change: Image transfer related parts and design

**Reason:** To prevent scratched images that could occur when feeding thick paper. Thick paper lifts up the guide plate and causes the tip of the mylar to contact the ITB.

Modification 1: Position of the tip of the guide plate, guide plate component



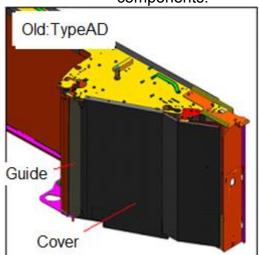
## Technical Bulletin

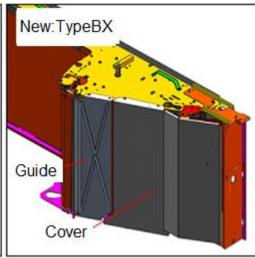
**PAGE: 2/5** 

Reissued: 31-Mar-14

Model: Aries-P1.5 (M077) Date: 23-Jan-12 No.: RM077057b

Modification 2: The ITB cover and the guide plate were divided into 2 separate components.





Model: Aries-P1.5 (M077)

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
-	M0776527	Guide Plate :Intermediate Transfer:Ass'y	1	-	101	18	Α
-	M0776518	Guide Plate :Intermediate Transfer:BX:Ass'y	1	ı	101	19	-
-	M0776515	Sheet:Guide Plate:No.1:AX	1	-	101	20	-
-	M0776516	Sheet:Guide Plate:No.2:AX	1	-	101	21	-
-	M0776519	Holder:Guide Plate : Intermediate Transfer:BX	1	-	101	22	-
-	M0776520	Screw:Positioning	2	-	101	23	-
M0776720	M0776528	Cover:Intermediate Transfer:Ass'y	1	X/X	101	2	Α

- When replacing the above parts, replace M0776527 and M0776528 as a set.
  - **M0776518, M0776515, M0776516, M0776519, and M0776520 are components of M0776527.**
- The modification described in this bulletin also applies to Aries-C1.5 (D095).
- The modified guide plate Type BX can only be installed on units of production from September 2010. For former units produced until August, install the modified guide plate M0776514 to prevent scratched images that could occur when feeding thick paper.

Part Number	Description	Q'ty	Int	Page	Index	Note
M0776514	Guide Plate: Intermediate Transfer: AX: Ass'y	1	ı	101	17	-

### Technical Bulletin

**PAGE: 3/5** 

Reissued: 31-Mar-14

Model: Aries-P1.5 (M077) Date: 23-Jan-12 No.: RM077057b

• The modified guide plate Type BX could cause "poor transfer on leading edge" as a side effect. If this side effect is confirmed, switch the guide plate back to the mass production Type AD, or replace M0776527 with Type BF: M0776522, which was modified to prevent this side effect.

M0776523, M0776524, and M0776525 are components of M0776522.

Type BF Guide Plate modified to prevent "poor transfer on LE"

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
-	M0776522	Guide Plate: Intermediate Transfer: Ass'y	1	-	101	24	-
-	M0776523	Holder:Guide Plate: Intermediate Transfer: BF	1	-	101	25	-
-	M0776524	Sheet: Guide Plate: No.1: BF	1	-	101	26	-
-	M0776525	Sheet: Guide Plate: No.2: BF	1	-	101	27	-

#### [Reference]

When ordering a Guide Plate, refer to the following table for the correct

combinations. [See RTB RM077041 for details on Type AX.]

Type	Guide Plate	Cover	Accessory screws
BX	M0776527	M0776528	Screws are included with the Guide Plate.
BF	M0776522	M0776528	Screw M0776520 (x2) must be ordered separately.
AX	M0776514	-	-

# The following table describes the combinations of the Guide Plate and the Intermediate Cover.

	Production	until Au	ıg 2010	from Sep 2010			
	Guide Plate	Type AD	Type AX	Type AD Type BX		Type BF	
			M0776514		M0776527	M0776522	
Cover:	M0776720	Yes	Yes	Yes	No	No	
Intermediate	(AD)						
Transfer:	M0776528 (BX)	No	No	No	Yes	Yes	
Ass'y							

- There are no additional screw holes in the printers manufactured before September 2010 to install the "Cover: Intermediate Transfer: Ass'y" for the Type BX Guide Plate. Printers manufactured after September 2010 have additional screw holes.
- When installing the Cover M0776720 at the factory, the distance between ITB and the Guide Plate is adjusted for each unit using Mylar sheets, which differ in their quantity and thickness according to the gap. Do not remove these Mylar sheets when replacing Type AD Guide Plate with Type AX Guide Plate.
- Do not use Type AD Cover M0776720 for Sep 2010 or later units. Use Type BF, which has a much higher ability to counter "poor transfer on leading edge".

## Technical Bulletin

**PAGE: 4/5** 

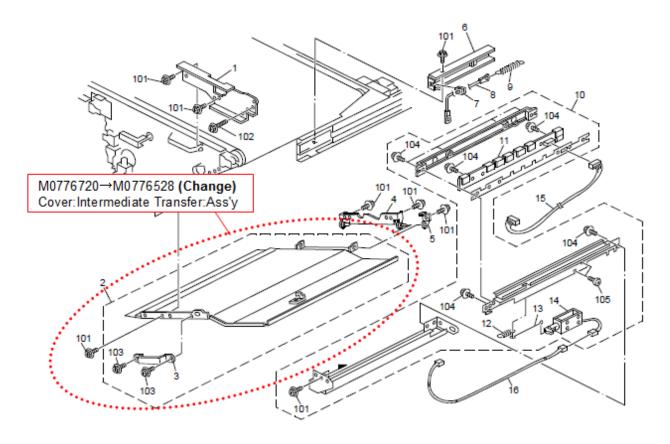
Reissued: 31-Mar-14

Model: Aries-P1.5 (M077)	ate: 23-Jan-12	No.: RM077057b
--------------------------	----------------	----------------

### 3. Image quality problem occurrence rate accordingly with the guide plate types

Туре	Type AD	Type BX	Type BF	Type "AX" (See RTB			
				RM077041 for detail.)			
Part Number	M0776720	M0776528 + M0776527	<i>M0776528</i> +	M0776720 + M0776514			
			M0776522				
Serial #	Same with	T0105700001 and above	Same with	T01056xxxxx and below			
(Serial # dependent)	Type AX	V9905700001 and above	Type BX	V99056xxxxx and below			
Image quality problem occurrence rate							
Scratched image	High	Low	Low	Low			
Low density	High	Low	High	Low			
Jitter	High	Low	High	Low			
Dark band	High	Low	High	Low			
Poor image transfer at TE	High	Low	High	Low			
Poor image transfer	Low	Medium	Low	Medium			
at LE							

#### 38.Transfer Belt Unit 1 (D095/M077)



### Technical Bulletin

**PAGE: 5/5** 

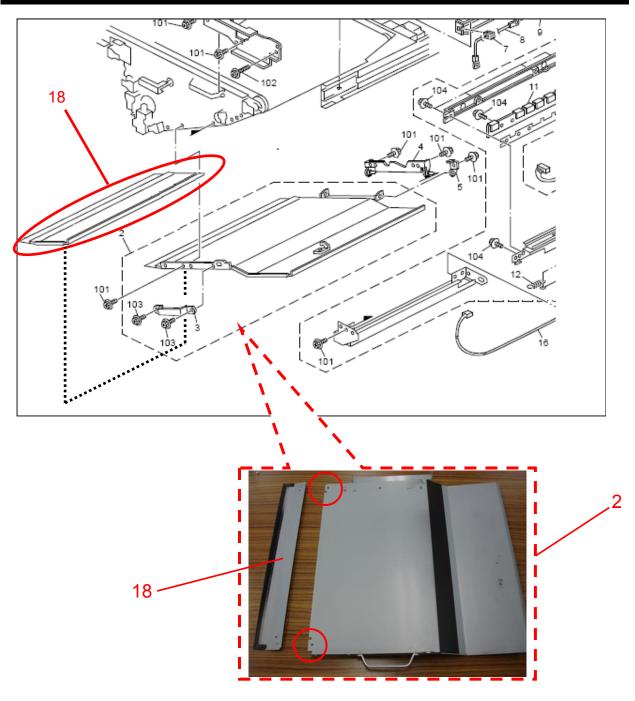
Reissued: 31-Mar-14

Model: Aries-P1.5 (M077) Date: 23-Jan-12 No.: RM077057b

The following part was newly registered as a service part for units that use Type AD

(p/n: M0776720).

New part	Description		Int	Page	Index
number					
M0776513	GUIDE PLATE:INTERMEDIATE TRANSFER:ASS'Y	1	-	101	18



#### **NOTE:**

- #18 (p/n: M0776513) is a component of #2 (p/n: M0776720). #18 is attached to #2 with 2 screws circled in the above photo.



[IN PAGE: 1/9

Reissued:23-Feb-12

Model: Aries-P1.5/C1.5	Date: 23-Jan-12	No.: RM077058a
------------------------	-----------------	----------------

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

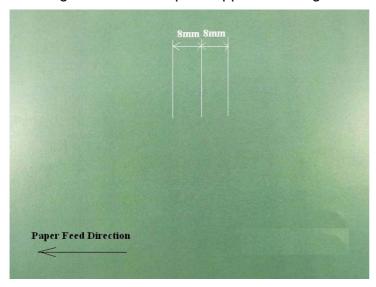
Subject: Part information about drum drive gear				Prepared by: H. Kawamura			
From: 1st Tech Service Sect., PP Tech Service Dept.							
Classification:	☐ Troubleshooting	☐ Part information					
	☐ Mechanical	☐ Electrical		☐ Service manual revision			
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information			
	☐ Product Safety	Other (	)	☐ Tier 2			

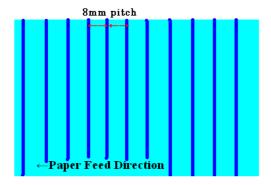
This RTB is to inform the new part information about the drum drive gear, which is the countermeasure for the 8mm pitch banding.

In the past, the only way to fix the 8mm pitch banding was to replace the "Drive Unit: Around The Photoconductor:Ass'y". Only the gear in the drive unit needs to be replaced.

### **Symptom**

Banding of about 8mm pitch appears throughout the page







**PAGE: 2/9** 

Reissued:23-Feb-12

Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a

#### Cause

After shaping the GEAR:DEVELOPMENT ROLLER Z29, the plastic around the gear shrinks. Refer to figure 1 below

The plastic around the gear breaks (refer to the red lines in figure 2) and creates a backlash. Then, the development roller does not rotate uniformly, which creates the 8mm pitch banding.

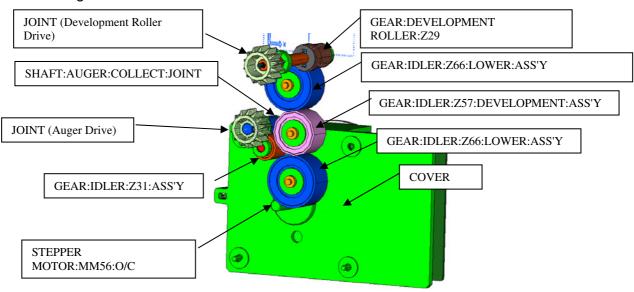


Figure 1: Layout of gears inside the drum drive unit

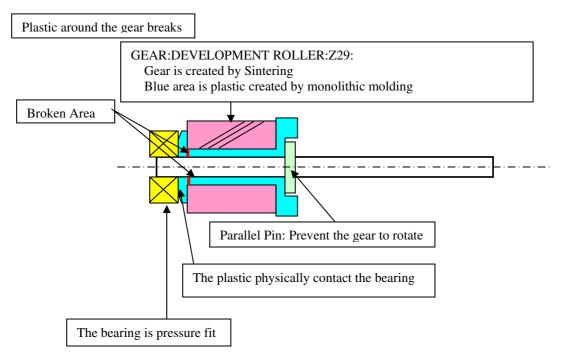


Figure 2 Composition of GEAR: DEVELOPMENT ROLLER Z29



**PAGE: 3/9** 

Reissued:23-Feb-12

Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a

#### **Action**

Temporary countermeasure: Replace the GEAR:DEVELOPMENT ROLLER Z29

Permanent countermeasure will be released by end of February, and the RTB will be reissued. RTB 67

New Part Number: TBD

Replace the part when 8mm pitch banding occurred.

### Required parts and equipment

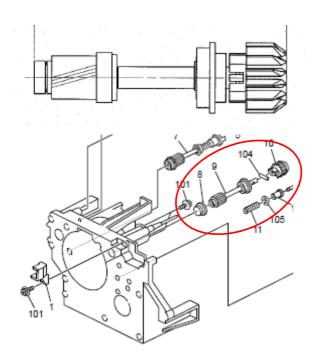
- Old cloth to clean off the grease
- Long Phillips screwdriver
- Modified GEAR:DEVELOPMENT ROLLER:Z29

### Part information

Temporary solution

Part	Description	Q't	Int	Page	Index
number		y			
M0771297	DEVELOPMENT	4	0/0	175	26
	SLEEVE:JOINT:GEAR:ASS'Y				

Instead of ordering the DRIVE UNIT:AROUND THE PHOTOCONDUCTOR:ASS'Y (M0771298), please order DEVELOPMENT SLEEVE:JOINT:GEAR:ASS'Y (M0771297)





Reissued:23-Feb-12

Model: Aries-P1.5/C1.5

## Technical Bulletin

**PAGE: 4/9** 

Date: 23-Jan-12

No.: RM077058a

### **Procedure**

1. Pull out the PCDU and put paper on top of drum to protect the drum from exposure to light.



2. Remove the fly wheel. 3 screws.



3. Remove 8 connectors and open the harness



**PAGE: 5/9** 

Reissued:23-Feb-12

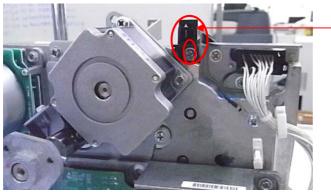
Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a



- 4. Remove 3 screws.
- \* A long Phillips screwdriver is required to remove the screws.



5. Pull out the drum drive unit.



CASE:TERMINAL: DEVELOPMENT BIAS

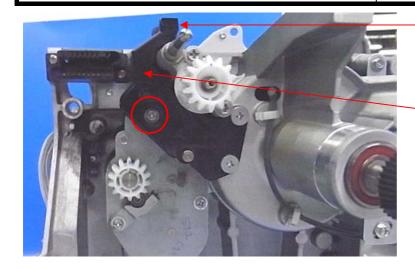
6. Remove CASE:TERMINAL:DEVELOPMENT BIAS. 1 screw



**PAGE: 6/9** 

Reissued:23-Feb-12

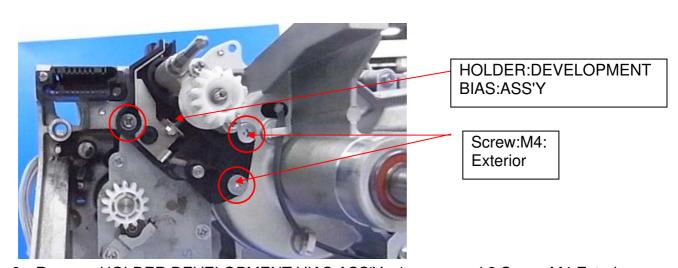
Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a



Snap fit at side

COVER:BIAS:DEVELOPMENT ROLLER

7. Remove COVER:BIAS:DEVELOPMENT ROLLER. 1 screw and 1 snap fit When rebuilding the unit, use the same screw.

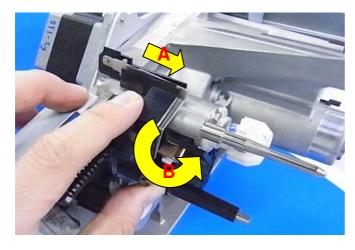


8. Remove HOLDER:DEVELOPMENT VIAS:ASS'Y. 1 screw and 2 Screw:M4:Exterior

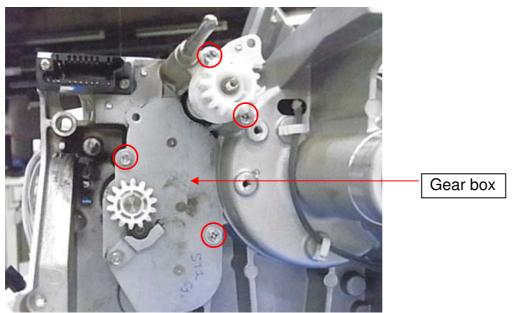


**PAGE: 7/9** 

Reissued:23-Feb-12



9. Hold HOLDER:DEVELOPMENT BIAS:ASS'Y, pull it in direction A slightly and rotate it in direction B



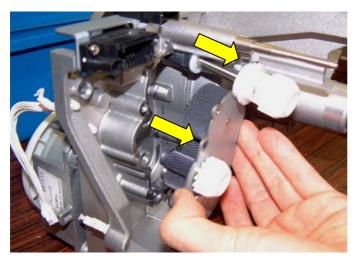
9. Remove the gear box. 4 screws



**PAGE: 8/9** 

Reissued:23-Feb-12

Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a



10. Pull the gear box downward and GEAR:DEVELOPMENT ROLLER:Z29 together, in the direction shown by the arrows.

Gears in the gear box may fall. Hold the gear so that the gears will face up. These gears do not need to be replaced.



In the photo above, INSULATOR:REAR:BEARING came with GEAR: DEVELOPMENT ROLLER: Z29. Remove and keep the insulator. The insulator will be used later. The insulator may stay in the gear box



For **DEVELOPMENT SLEEVE:JOINT:GEAR:ASS'Y**, put 0.2g of grease which overflowed from gear box at each of the areas circled in red. Put the insulator back if it came out with GEAR: DEVELOPMENT ROLLER: Z29.

\*Do not use any other type of grease.

Follow the procedure in reverse to rebuild the drum drive unit.

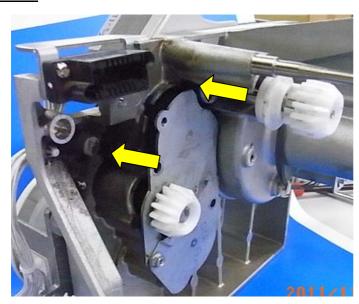


**PAGE: 9/9** 

Reissued:23-Feb-12

Model: Aries-P1.5/C1.5 Date: 23-Jan-12 No.: RM077058a

### Note:



When putting back the gear box, it is easier to put the gear box and **DEVELOPMENT SLEEVE:JOINT:GEAR:ASS'Y** back together.

It is impossible to put back the **DEVELOPMENT SLEEVE:JOINT:GEAR:ASS'Y** after the gear box is put back.

Classification:

Model: Aries-P1.5/C1.5

Subject: Part Catalog Correction

From: 1st Tech Service Sect., PP Tech Service Dept. ☐ Troubleshooting

☐ Mechanical

☐ Paper path

☐ Product Safety

# Technical Bulletin

	Date: 26	-Jan-12	No.: RM077059
	Prep	ared by: H.K	awamura (awamura
Dept.			
□ Part inference       □ Part inference      □ Part inference       □ Part inference       □ Part inference       □ Part inference       □ Part inference       □ Part inferen	ormation	☐ Action	n required
☐ Electric	al	☐ Service	ce manual revision
☐ Transm	it/receive	Retro	fit information

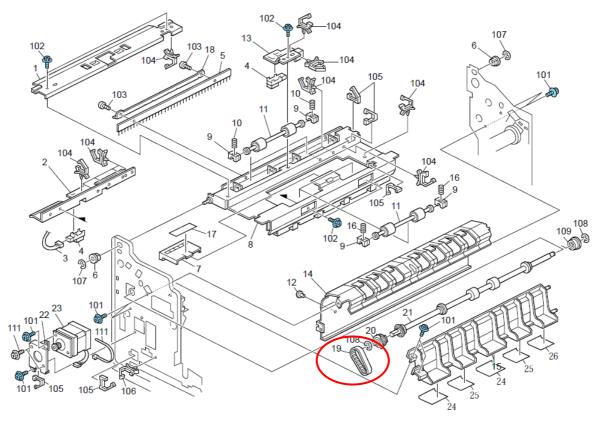
☐ Tier 2

**PAGE: 1/2** 

This RTB is to announce the part catalog correction in Paper Exit Section 8, page 156-157

Other (

#### 66.Paper Exit Section 8 (D095/M077)



### Originally

Index 19, P/N: AA042552, Description: Timing Belt - B60S2M176

#### Correction

Index 19, P/N: D3553875, Description: TIMING BELT:60S2M224



## Technical Bulletin

**PAGE: 1/1** 

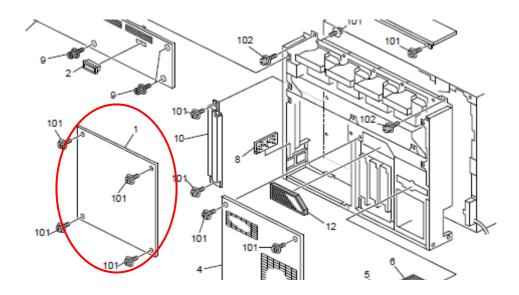
Model: Aries-P1/C1 Date				e: 27-Jan-12	No.: RM077060
Subject: Part information for COVER:CONTROL UNIT:LEFT LOWER				Prepared by: H	lidetoshi Kawamura
From: 1st Tech S	Service Sect., PP Tech Service	Dept.			
Classification:	Troubleshooting	□ Part info	orma	tion	ion required
		☐ Electrical		☐ Ser	vice manual revision
	☐ Paper path	Transm	it/rec	eive 🗌 Ret	rofit information
,	☐ Product Safety	Other (		) 🔲 Tie	r 2

This RTB has been issued to announce the COVER:CONTROL UNIT:LEFT LOWER.

Old part	New part	Description	Q'ty	Int	Page	Index	Note
number	number						
	M0641672	COVER:CONTROL UNIT:LEFT LOWER	1		33	1	

The part was mentioned in the part catalog, but it was not possible to order it.

The part has been registered as a service part.





**PAGE: 1/18** 

#### Reissued:22-Feb-12

Model: Aries-P1.5/C1.5	Date: 27-Jan-12	No.: RM077061a

#### **RTB Reissue**

Affected machine's list is simplified

Subject: Modified	d Fusing Unit Handle		Prepared	d by: H. Kawamura
From: 1st Tech S	ervice Sect., PP Tech Service	e Dept.		
Classification:	Troubleshooting	Part information	tion	
	☐ Mechanical	☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (	)	☐ Tier 2

This RTB has been issued to announce the information on the modified fusing unit handle.

#### **SYMPTOM**

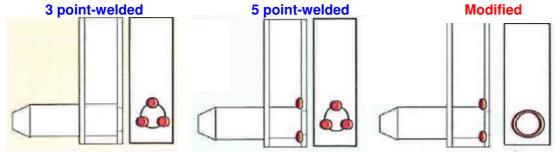
The pins welded to the detachable fusing unit handle for some of the units could loosen after using the handle a few hundred times to load/unload the fusing unit.

#### **CAUSE**

The pins could become loose on the currently available 3 point-welded type and 5 point-welded type handles due to the insufficient amount of weld.

#### SOLUTION

The handle was modified to apply the weld to the entire periphery of the pin to secure higher durability.



<sup>\*</sup> Areas colored in red indicate the locations of the weld.

#### **ACTION**

Replace the 3 point-welded handle and the 5 point-welded handle with the modified handle on your next service visit.

Please note that replacements are given priority to the following:

- Customers who frequently load/unload the fusing unit
- Units installed with the 3 point-welded or 5 point-welded handle

See the appendix for the serial numbers of the affected units.

The modified handles will be ready by the middle of January 2012 and delivered in separate shipments until the middle of March 2012.



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#### Reissued:22-Feb-12

Model: Aries-P1.5/C1.5	Date: 27-Jan-12	No.: RM077061a
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#### **REQUEST**

To confirm replacement of all affected handles, RCL kindly requests you to send an e-mail listing the serial numbers of the units for which replacement has been completed on a biweekly basis to the following contact:

Kawamura Hidetoshi (Hidetoshi Kawamura/R/RICOH).

#### **PART INFORMATION**

Part Number	Description	Interchangeability
M0779902	GRIP:FUSING UNIT:ASS'Y	X/O

Discard the handle after replacing with the modified handle.

The modified handle is indicated with a mark as shown in the photo below.





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Reissued:22-Feb-12

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077061a

### **APPENDIX**

	Serial Number	Welding
RA	T0101000001	3 points welding
	T0101000002	3 points welding
	T0101000003	3 points welding
	T0101100001	3 points welding
	T0101100002	3 points welding
	T0101100003	5 points welding
	T0101100004	5 points welding
	T0101100005	5 points welding
	T0101100006	5 points welding
	T0101100007	5 points welding
	T0101200002	5 points welding
	T0101200003	5 points welding
	T0101200001	5 points welding
	T0101200006	5 points welding
	T0101200004	5 points welding
	T0101200005	5 points welding
	T0101200007	5 points welding
	T0101200008	5 points welding
	T0101200009	5 points welding
	T0101200010	5 points welding
	T0110100001	5 points welding
	T0110100002	5 points welding
	T0110100003	5 points welding
	T0110100004	5 points welding
	T0110100005	5 points welding
	T0110100006	5 points welding
	T0110100007	5 points welding
	T0110200001	5 points welding
	T0110200002	5 points welding
	T0110300001	5 points welding
	T0101100001	5 points welding
	V9901000001	3 points welding
	V9901000002	3 points welding
	V9901000003	3 points welding
	V9901100001	3 points welding
	V9901100002	3 points welding
	V9901200001	5 points welding
	V9901200002	5 points welding
	V9901200003	5 points welding
	V9910100001	5 points welding
	V9910100002	5 points welding



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Reissued:22-Feb-12

Model: Aries-P1.5/C1.5	Date: 27-Jan-12	No.: RM077061a
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	V9910100003	5 points welding
	V9910100004	5 points welding
	V9910100005	5 points welding
	V9910100006	5 points welding
	V9910100007	5 points welding
	V9910100008	5 points welding
	V9910100009	5 points welding
	V9910200001	5 points welding
	V9910300001	5 points welding
RAC	T0105800001	3 points welding
	V9905800025	3 points welding
	V9905800014	3 points welding
	V9905800012	3 points welding
	V9905800019	3 points welding
	V9905800001	3 points welding
	V9905800016	3 points welding
	V9905800022	3 points welding
	V9905800015	3 points welding
	V9905800023	3 points welding
	T0105800005	3 points welding
	T0105800006	3 points welding
	T0105800004	3 points welding
	V9905800004	3 points welding
	V9905800003	3 points welding
	V9905800021	3 points welding
	V9905800013	3 points welding
	V9905800002	3 points welding
	V9905800007	3 points welding
	V9905800017	3 points welding
	V9905800010	3 points welding
	T0105800003	3 points welding
	V9905800018	3 points welding
	V9905800009	3 points welding
	V9905800005	3 points welding
	V9905800008	3 points welding
	V9905800020	3 points welding
	V9905800011	3 points welding
	V9905800006	3 points welding
	V9905800027	3 points welding
	T0105800008	3 points welding
	V9905900002	3 points welding
	V9905800029	3 points welding
	V9905900006	3 points welding
	V9905900010	3 points welding
	V9905800031	3 points welding
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	T0105800007	3 points welding
	V9905800030	3 points welding
	V9905800028	3 points welding
	V9905900009	3 points welding
	V9905800026	3 points welding
	V9905800032	3 points welding
	V9905900005	3 points welding
	V9905800024	3 points welding
	V9905900004	3 points welding
	V9905900007	3 points welding
	V9905900003	3 points welding
	V9905900008	3 points welding
	V9905900017	3 points welding
	V9905900019	3 points welding
	V9905900016	3 points welding
	T0105900002	3 points welding
	T0105900004	3 points welding
	V9905900012	3 points welding
	T0105900001	3 points welding
	V9905900015	3 points welding
	V9905900014	3 points welding
	V9905900020	3 points welding
	V9905900013	3 points welding
	T0105900003	3 points welding
	V9905900011	3 points welding
	V9905900029	3 points welding
	V9905900024	3 points welding
	V9905900001	3 points welding
	V9905900028	3 points welding
	V9905900027	3 points welding
	V9905900021	3 points welding
	V9905900022	3 points welding
	V9905900026	3 points welding
	V9905900031	3 points welding
	T0105900005	3 points welding
	V9905900023	3 points welding
	V9905900032	3 points welding
	V9905900030	3 points welding
	V9905900025	3 points welding
	V9905900038	3 points welding
	V9905900034	3 points welding
	V9905900035	3 points welding
	V9905900041	3 points welding
	V9905900040	3 points welding
	V9906000001	3 points welding
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	V9906000026	3 points welding
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V9906000032   3 points welding	V9906000032	3 points welding

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V9906000034	3 points welding
V9906000033	3 points welding
T0106000006	3 points welding
T0106000007	3 points welding
T0106000002	3 points welding
V9906000030	3 points welding
V9906000035	3 points welding
T0114900001	5 points welding
T0114900002	5 points welding
V9914900013	5 points welding
V9906000036	5 points welding
T0114900005	5 points welding
V9914900025	5 points welding
V9906000043	5 points welding
V9914900002	5 points welding
V9914900028	5 points welding
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V9914900029	5 points welding
V9906000044	5 points welding
V9914900005	5 points welding
V9906000037	5 points welding
T0114900003	5 points welding
V9914900006	5 points welding
V9906000042	5 points welding
T0106000014	5 points welding
V9906000038	5 points welding
T0114900004	5 points welding
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V9914900001	5 points welding
T0106000016	5 points welding
T0106000015	5 points welding
T0106000013	5 points welding
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V9914900017	5 points welding
V9914900018	5 points welding
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V9914900021	5 points welding
V9914900019	5 points welding
T0114900006	5 points welding
V9914900016	5 points welding
V9914900027	5 points welding

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V9914900007	5 points welding
V9914900004	5 points welding
V9914900010	5 points welding
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V9915000001	5 points welding
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T0115000003	5 points welding
V9915000003	5 points welding
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T0115000004	5 points welding
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V9915000053	5 points welding
V9915000048	5 points welding



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V9915000054	5 points welding
V9915000050	5 points welding
V9915100028	5 points welding
V9915000049	5 points welding
V9915000052	5 points welding
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T0115100005	5 points welding
V9915100056	5 points welding
V9915100037	5 points welding



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V9915100034	5 points welding
V9915100057	5 points welding
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V9915100053	5 points welding
V9915100058	5 points welding
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V9915100051	5 points welding
V9915100050	5 points welding
T0115100028	5 points welding
V9915100064	5 points welding
T0115100020	5 points welding
T0115100024	5 points welding



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T0115100026         5 points welding           V9915100049         5 points welding           V9915100048         5 points welding           V9915100045         5 points welding           V9915100044         5 points welding           T0115100027         5 points welding           V9915100052         5 points welding           V9915200002         5 points welding           T0115100040         5 points welding           T0115100036         5 points welding           T0115100039         5 points welding           T0115100039         5 points welding           T0115100039         5 points welding           T0115100031         5 points welding           T0115100033         5 points welding           T0115100034         5 points welding           T0115100037         5 points welding           T0115200001         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200004         5 points welding		
V9915100042         5 points welding           V9915100045         5 points welding           V9915100041         5 points welding           T0115100027         5 points welding           V9915100044         5 points welding           T0115100027         5 points welding           V9915100052         5 points welding           V9915200002         5 points welding           T0115100036         5 points welding           T0115100039         5 points welding           T0115100031         5 points welding           T0115200002         5 points welding           T0115100034         5 points welding           T0115200001         5 points welding           T0115200003         5 points welding           V9915100066         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200003         5 points welding	T0115100026	5 points welding
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V9915100044         5 points welding           T0115100027         5 points welding           V9915100052         5 points welding           V9915200002         5 points welding           T0115100040         5 points welding           T0115100036         5 points welding           V9915100069         5 points welding           T0115100035         5 points welding           T0115100036         5 points welding           T0115100037         5 points welding           T0115100034         5 points welding           T0115100037         5 points welding           T0115200001         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915200006         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding	V9915100045	5 points welding
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T0115100036         5 points welding           V9915100069         5 points welding           T0115100039         5 points welding           T0115100038         5 points welding           T0115100038         5 points welding           T0115200002         5 points welding           T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915100068         5 points welding           V9915200000         5 points welding	V9915200002	5 points welding
V9915100069         5 points welding           T0115100039         5 points welding           T0115100038         5 points welding           T0115200002         5 points welding           T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200004         5 points welding	T0115100040	5 points welding
T0115100039 5 points welding T0115100038 5 points welding T0115200002 5 points welding T0115100034 5 points welding V9915200001 5 points welding T0115100037 5 points welding T0115200003 5 points welding T0115200004 5 points welding V9915100066 5 points welding V9915100067 5 points welding V9915200011 5 points welding V9915200012 5 points welding V9915200013 5 points welding V9915200013 5 points welding V9915200005 5 points welding V9915200006 5 points welding V9915200008 5 points welding V9915200008 5 points welding V9915200009 5 points welding V9915200009 5 points welding V9915200000 5 points welding T0115200000 5 points welding	T0115100036	5 points welding
T0115100035         5 points welding           T0115100038         5 points welding           T0115200002         5 points welding           T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200003         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200001         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           T0115200006         5 points welding           T01152000004         5 points welding	V9915100069	5 points welding
T0115100038         5 points welding           T0115200002         5 points welding           T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200001         5 points welding           V9915200001         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           V9915200004         5 points welding           T0115200006         5 points welding           T0115200007         5 points welding           V9915200014         5 points welding	T0115100039	5 points welding
T0115200002         5 points welding           T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V9915100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           T0115200006         5 points welding           T0115200007         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200015         5 points welding	T0115100035	5 points welding
T0115100034         5 points welding           V9915200001         5 points welding           T0115100037         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           V991510003         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V99152000015         5 points welding	T0115100038	5 points welding
V9915200001         5 points welding           T0115100037         5 points welding           T0115200004         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200009         5 points welding           T01152000004         5 points welding           V9915200014         5 points welding           V9915200015         5 points welding	T0115200002	5 points welding
T0115100037         5 points welding           T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           T0115200005         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200003         5 points welding           V9915200005         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	T0115100034	5 points welding
T0115200003         5 points welding           T0115200004         5 points welding           V9915100066         5 points welding           T0115200005         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200003         5 points welding           V9915100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200000         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200007         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V99152000015         5 points welding	V9915200001	5 points welding
T0115200004         5 points welding           V9915100066         5 points welding           T0115200005         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200009         5 points welding           T0115200001         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200015         5 points welding	T0115100037	5 points welding
V9915100066         5 points welding           T0115200005         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200005         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915200001         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200007         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200015         5 points welding	T0115200003	5 points welding
T0115200005         5 points welding           V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	T0115200004	5 points welding
V9915100067         5 points welding           V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           V9915200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915100066	5 points welding
V9915200011         5 points welding           V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           T0115200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding           V9915200001         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	T0115200005	5 points welding
V9915200012         5 points welding           V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           T0115200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200000         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915100067	5 points welding
V9915200013         5 points welding           V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           T0115200001         5 points welding           V9915200008         5 points welding           V9915200000         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200004         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200011	5 points welding
V9915200005         5 points welding           T0115100033         5 points welding           V9915100068         5 points welding           T0115200001         5 points welding           V9915200008         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915200010         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200012	5 points welding
T0115100033 5 points welding  V9915100068 5 points welding  T0115200001 5 points welding  V9915200008 5 points welding  V9915200006 5 points welding  V9915200009 5 points welding  V9915200010 5 points welding  V9915200003 5 points welding  V9915200003 5 points welding  T0115200007 5 points welding  T0115200006 5 points welding  T0115200006 5 points welding  T0115200006 5 points welding  V9915200014 5 points welding  V9915200014 5 points welding  V9915200004 5 points welding  V9915200004 5 points welding	V9915200013	5 points welding
V9915100068         5 points welding           T0115200001         5 points welding           V9915200008         5 points welding           V9915200006         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200005	5 points welding
T0115200001 5 points welding V9915200008 5 points welding V9915200006 5 points welding V9915200009 5 points welding V9915200010 5 points welding V9915100065 5 points welding V9915200003 5 points welding T0115200007 5 points welding T0115200006 5 points welding T0115200006 5 points welding T0115200009 5 points welding V9915200014 5 points welding V9915200014 5 points welding V9915200004 5 points welding V9915200015 5 points welding	T0115100033	5 points welding
V9915200008         5 points welding           V9915200006         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915100068	5 points welding
V9915200006         5 points welding           V9915200009         5 points welding           V9915200010         5 points welding           V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	T0115200001	5 points welding
V9915200009         5 points welding           V9915200010         5 points welding           V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200008	5 points welding
V9915200010         5 points welding           V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200006	5 points welding
V9915100065         5 points welding           V9915200003         5 points welding           T0115200007         5 points welding           T0115200006         5 points welding           T0115200009         5 points welding           V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	V9915200009	5 points welding
V9915200003 5 points welding T0115200007 5 points welding T0115200006 5 points welding T0115200009 5 points welding V9915200014 5 points welding V9915200004 5 points welding V9915200005 5 points welding	V9915200010	5 points welding
T0115200007 5 points welding T0115200006 5 points welding T0115200009 5 points welding V9915200014 5 points welding V9915200004 5 points welding V9915200015 5 points welding	V9915100065	5 points welding
T0115200006 5 points welding T0115200009 5 points welding V9915200014 5 points welding V9915200004 5 points welding V9915200015 5 points welding	V9915200003	5 points welding
T0115200009 5 points welding V9915200014 5 points welding V9915200004 5 points welding V9915200015 5 points welding	T0115200007	5 points welding
V9915200014         5 points welding           V9915200004         5 points welding           V9915200015         5 points welding	T0115200006	5 points welding
V9915200004 5 points welding V9915200015 5 points welding	T0115200009	5 points welding
V9915200015 5 points welding	V9915200014	5 points welding
	V9915200004	5 points welding
T0115200010 5 points welding	V9915200015	5 points welding
	T0115200010	5 points welding



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	V9915200017	5 points welding
	T0115200008	5 points welding
	T0115200011	5 points welding
	V9915200007	5 points welding
	V9915400035	5 points welding
	T0115300003	5 points welding
	T0115300005	5 points welding
	V9915300007	5 points welding
	V9915300008	5 points welding
	T0115300001	5 points welding
	V9915300009	5 points welding
	V9915300005	5 points welding
	V9915300006	5 points welding
	V9915300001	5 points welding
	V9915300003	5 points welding
	V9915300002	5 points welding
	V9915300010	5 points welding
	T0115300002	5 points welding
	T0115300006	5 points welding
	V9915300013	5 points welding
	V9915300012	5 points welding
	V9915300004	5 points welding
	V9915300015	5 points welding
	V9914900008	5 points welding
	T0115000008	5 points welding
	V9905800019	5 points welding
	V9914900013	5 points welding
	V9905800027	5 points welding
	V9906000014	5 points welding
	V9905900021	5 points welding
	T0115100025	5 points welding
	V9906000044	5 points welding
	T0115300003	5 points welding
ĺ	V9914900031	5 points welding
	V9915100052	5 points welding
RE	V9903400003	3 points welding
	V9903600008	3 points welding
	T0103400004	3 points welding
	V9903400001	3 points welding
	V9903600003	3 points welding
	V9903600007	3 points welding
	T0103400005	3 points welding
	V9903500002	3 points welding
	T0103400006	3 points welding
	V9903400002	3 points welding



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_	I. AIIES-F 1.5/G 1.3	)
	V9903600001	3 points welding
	V9903500004	3 points welding
	T0103400007	3 points welding
	T0103500001	3 points welding
	V9903600002	3 points welding
	V9903500003	3 points welding
	V9903500001	3 points welding
	T0103400002	3 points welding
	V9903500006	3 points welding
	V9903500009	3 points welding
	V9903500005	3 points welding
	T0103500003	3 points welding
	T0103400001	3 points welding
	T0103500002	3 points welding
	T0103600012	3 points welding
	V9903600016	3 points welding
	T0103600006	3 points welding
	T0103400003	3 points welding
	V9903500008	3 points welding
	V9903500007	3 points welding
	T0103600007	3 points welding
	T0103600013	3 points welding
	V9903500011	3 points welding
	V9903500010	3 points welding
	V9903600009	3 points welding
	T0103600004	3 points welding
	T0103600005	3 points welding
	V9903600018	3 points welding
	T0112500001	3 points welding
	V9912500001	3 points welding
	V9903600010	3 points welding
	V9903600004	3 points welding
	T0103600001	3 points welding
	V9912500003	3 points welding
	V9903600011	3 points welding
	T0103600003	3 points welding
	T0112500011	3 points welding
	T0112500002	3 points welding
	V9912500007	3 points welding
	V9903600005	3 points welding
	V9912500009	3 points welding
	V9912500010	3 points welding
	T0112500008	3 points welding
	T0103600002	3 points welding
	V9903600017	3 points welding



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71. Alles-F 1.5/C1.	,
V9912500002	3 points welding
V9903600006	3 points welding
V9903600012	3 points welding
T0112500005	3 points welding
T0112500013	3 points welding
T0112500012	3 points welding
V9912500008	3 points welding
V9912500005	3 points welding
V9903600015	3 points welding
T0103600008	3 points welding
V9903600014	3 points welding
T0103600010	3 points welding
T0112500003	3 points welding
T0112500004	3 points welding
V9912500004	3 points welding
T0103600011	3 points welding
V9903600013	3 points welding
T0112500006	3 points welding
V9912500006	3 points welding
T0103600009	3 points welding
V9912600001	3 points welding
V9912500013	3 points welding
T0112600003	3 points welding
T0112600014	3 points welding
T0112600013	3 points welding
V9912500016	3 points welding
T0112500016	3 points welding
V9912800003	3 points welding
V9912500017	3 points welding
T0112500007	3 points welding
V9912500014	3 points welding
V9912600009	3 points welding
T0112500014	3 points welding
T0112500010	3 points welding
T0112500009	3 points welding
V9912600012	3 points welding
V9912600011	3 points welding
V9912500012	3 points welding
V9912500019	3 points welding
V9912500015	3 points welding
V9912600010	3 points welding
T0112500019	3 points welding
V9912500011	3 points welding
T0112500017	3 points welding
T0112600002	3 points welding

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T0112600001	3 points welding
V9912500018	3 points welding
T0112500018	3 points welding
V9912600014	3 points welding
T0112600006	3 points welding
T0112600016	3 points welding
T0112600012	3 points welding
T0112600021	3 points welding
V9912600006	3 points welding
T0112600008	3 points welding
T0112600020	3 points welding
T0112600015	3 points welding
V9912700010	3 points welding
T0112600009	3 points welding
V9912600004	3 points welding
V9912600017	3 points welding
T0112600004	3 points welding
T0112600005	3 points welding
V9912600002	3 points welding
V9912600008	3 points welding
V9912600015	3 points welding
V9912600005	3 points welding
T0112600007	3 points welding
V9912600003	3 points welding
V9912600007	3 points welding
T0112600011	3 points welding
T0112600010	3 points welding
T0112600017	3 points welding
V9912600013	3 points welding
V9912600018	3 points welding
T0112600019	3 points welding
T0112600018	3 points welding
V9912600016	5 points welding
V9912700008	5 points welding
T0112600022	5 points welding
V9912700006	5 points welding
T0112700005	5 points welding
T0112700002	5 points welding
T0112700003	5 points welding
V9912700004	5 points welding
T0112700001	5 points welding
T0112700010	5 points welding
V9912600019	5 points welding
V9912700013	5 points welding
T0112700004	5 points welding



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V9912700005	5 points welding
V9912700002	5 points welding
V9912700007	5 points welding
V9912700003	5 points welding
V9912700009	5 points welding
V9912700001	5 points welding
T0112700016	5 points welding
T0112700007	5 points welding
T0112700009	5 points welding
T0112700015	5 points welding
V9912700011	5 points welding
T0112700006	5 points welding
T0112700012	5 points welding
T0112700008	5 points welding
T0112700013	5 points welding
V9912900005	5 points welding
V9912700015	5 points welding
V9912700012	5 points welding
T0112800005	5 points welding
T0112700011	5 points welding
T0112700014	5 points welding
V9912700014	5 points welding
T0112800009	5 points welding
V9912800006	5 points welding
T0112800006	5 points welding
V9912900008	5 points welding
V9912800007	5 points welding
T0112900007	5 points welding
T0112800003	5 points welding
V9912900009	5 points welding
V9912900006	5 points welding
T0112900005	5 points welding
V9912900007	5 points welding
T0112900004	5 points welding
T0112900006	5 points welding
T0112800004	5 points welding
T0112900011	5 points welding
V9912800001	5 points welding
T0112900008	5 points welding
V9912900013	5 points welding
V9913000001	5 points welding
T0112900012	5 points welding
T0112700019	5 points welding
V9912900010	5 points welding
T0112900010	5 points welding



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Model: Aries-P1.5/C1.5		 Date: 27-Jan-12	No.: RM077061a
T0112700018	5 points welding		
T0112900009	5 points welding		
T0112700020	5 points welding		
V9912900012	5 points welding		
T0112700017	5 points welding		
V9912700016	5 points welding		
T0112800001	5 points welding		
V9912900004	5 points welding		
V9912800002	5 points welding		
T0112800010	5 points welding		
T0112800002	5 points welding		
V9912800004	5 points welding		
V9912900002	5 points welding		
V9912800008	5 points welding		
T0112800011	5 points welding		
T0112800007	5 points welding		
T0112900003	5 points welding		
T0112900001	5 points welding		
T0112900002	5 points welding		
V9912900001	5 points welding		
V9912900003	5 points welding		
V9912800005	5 points welding		
T0112800008	5 points welding		

Rows highlighted in yellow represent machines in which the handle is welded at 3 points, which is prior to the change.

Some serial numbers appear more than once. That indicates that the handle has been replaced. The replaced handle is also the target of replacing.

Some of the handles were ordered from either ESPC, NSPC or ASPC; however, there was no record in SMS; therefore, RCL could not determine where that handle went. If there is any handle that has been replaced and is not in the list, those handles also need to be replaced.

### Technical Bulletin

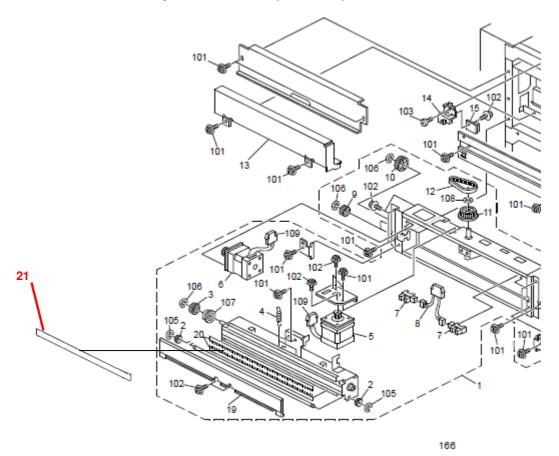
RICOH	I ec	hnical <b>B</b>	ulle	etin	PAGE: 1/2
Model: Aries-P1	.5		Date	e: 27-Jan-12	No.: RM077062
Subject: New Pa	art - Sheet for the Decurl l	Jnit	I	Prepared by: Sh	innosuke Sasaki
From: 1st PP Te	ch Service Sec., PP Tech	Service Dept.,			
Classification:	☐ Troubleshooting	□ Part info	ormati	on Actio	n required
	☐ Mechanical	☐ Electric	al	☐ Servi	ce manual revision
	☐ Paper path	☐ Transm	it/rece	ive Retro	fit information
	☐ Product Safety	□ Othor (	,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

This RTB has been issued to announce the release of the following new service part.

### 71.Paper Exit Section 13 (D095/M077)

New part	Description	Q'ty	Int	Page	Index	Note
number						
M0774706	SHEET:DECURA:MIDDLE	1	-	166	21	

#### 71.Paper Exit Section 13 (D095/M077)



### **Purpose**

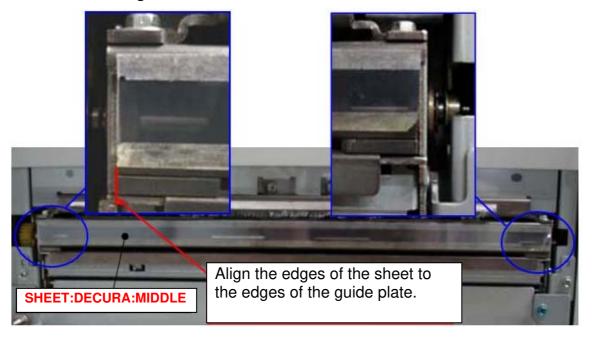
This part was added to prevent possible injuries when fingers accidentally get caught in the Decurl unit.

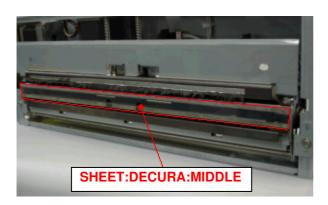


**PAGE: 2/2** 

Model: Aries-P1.5 Date: 27-Jan-12 No.: RM077062

### Note on attaching the sheet





## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.	5/C1.5		Dat	e: 27-Jan-	12	No.: RM077063
Subject: Parts Change – New Flip Gates			Prepared	d by: S. S	Sasaki	
From: 1st PP Tec	ch Service Sec., PP Tech Serv	ice Dept.,				
Classification:	Troubleshooting	□ Part info	orma	tion	Action	required
		☐ Electrica	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2	

Change: Material of the Flip Gates

Reason: To prevent toner from adhering to the gates, resulting in possible image quality

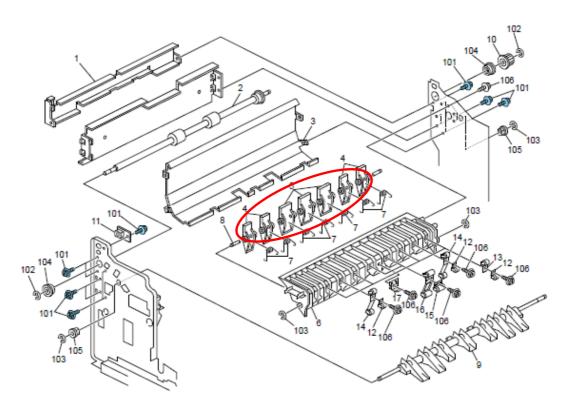
problems

65. Paper Exit Section 7 (D095/M077)

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
G1784712	M0774658	GATE:W19:REVERSE:UPPER	3	X/O As a	155	5	*1
G1784713	M0774659	GATE:W15:REVERSE:UPPER	4	set	155	4	*1

<sup>\*</sup>NOTE 1: Interchangeability is X/O as a set.

#### 65.Paper Exit Section 7 (D095/M077)



# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Dat	e: 13-Feb-	12	No.: RM077064
Subject: Parts Change – Fusing Unit Exit Guide Plates				Prepared	d by: S. S	Sasaki
From: 1st PP Ted	ch Service Sec., PP Tech Serv	ice Dept.,				
Classification:	Troubleshooting	□ Part information		tion	Action	n required
		☐ Electrica	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2	

Change: Shape of the fusing unit exit guide plates

Reason: To prevent JAM38

### 55.Fusing Unit 4 (D095/M077) 57.Fusing Unit 6 (D095/M077)

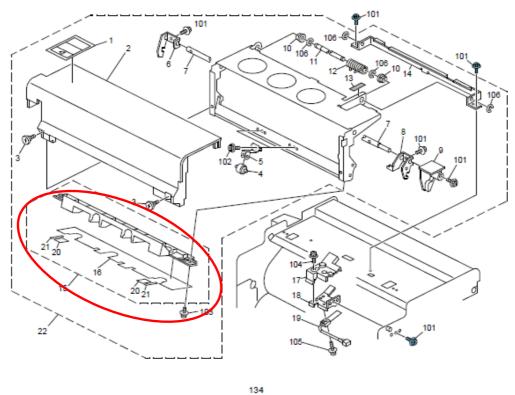
Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
M0774331	M0774333	GUIDE:PAPER EXIT SUB-UNIT: UPPER:ASS'Y	1		135	15	*1
M0774237	M0774265	GUIDE PLATE:FUSING EXIT: LOWER	1	X/O As a	139	3	*1
M0774238-	M0774238	GUIDE:FUSING EXIT:MIDDLE	9-4	set	139	5	*1
	M0774266	GUIDE:FUSING EXIT:SENSOR	4		139	20	*1

<sup>\*</sup>NOTE 1: Interchangeability is X/O as a set.

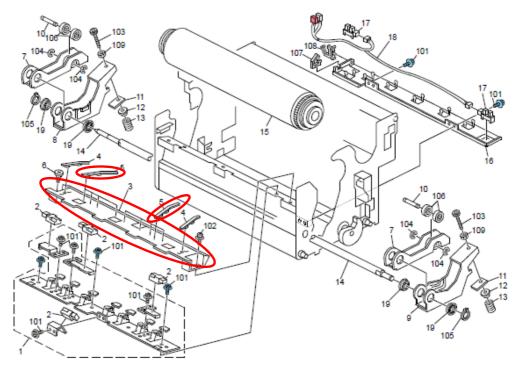
**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 13-Feb-12 No.: RM077064

### 55.Fusing Unit 4 (D095/M077)



#### 57.Fusing Unit 6 (D095/M077)



# Technical Bulletin

PA	GE:	1/1

Model: Aries P1.5/C1.5			Dat	e: 29-Feb-	-12	No.: RM077065
Subject: Part Changes - New ball bearings-				Prepared	d by: H. Ł	(awamura
From: PP Service Planning Department 1G						
Classification:	☐ Troubleshooting	□ Part inference     □	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		Service	e manual revision
	☐ Paper path	Transm	it/rec	eive	Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

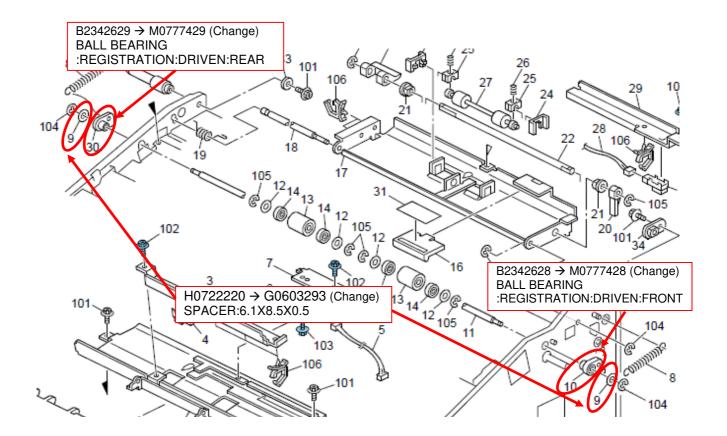
Change: New ball bearings

Reason: To prevent possible breakage of the ball bearings installed in the transfer timing

roller of the registration unit

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
B2342628	M0777428	BALL BEARING :REGISTRATION:DRIVEN:FRONT	1	X/O	63	10	Change
B2342629	M0777429	BALL BEARING :REGISTRATION:DRIVEN:REAR	1	X/O	63	30	Change
H0722220	G0603293	SPACER:6.1X8.5X0.5	2	X/O	63	9	Change

NOTE: When replacing the above parts, replace all 3 parts as a set.



## Technical Bulletin

**PAGE: 1/5** 

Reissued: 03-Jul-13

Model: Aries-P1.5/C1.5	Date: 29-Feb-12	No.: RM077066d
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#### **RTB Reissue**

The items in bold italics have been corrected or added.

Subject: Firmware Release Note: Paper Library AP			Prepared by: T. Miyamoto	
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	☐ Part informat	tion	☐ Action required
		Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries P1.5 and C1.5

MQP files and Media Lists are confidential information.

Aries P1.5

Version	Program No.	Availability of RFU
14	<i>M0776065</i>	Not available
13	M0776065	Not available
12	M0776065	Not available
11	M0776065	Not available
10	M0776065	Not available

### Aries C1.5

Version	Program No.	Availability of RFU
14	D0956164	Not available
13	D0956164	Not available
12	D0956164	Not available
11	D0956164	Not available
10	D0956164	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

# Technical Bulletin

**PAGE: 2/5** 

Reissued: 03-Jul-13

Model: Aries-P1.5/C1.5 Date: 29-Feb-12 No.: RM077066d

### Aries P1.5

Version	Modified Points or Symptom Corrected
14	<ul> <li>(1) Add 21 media</li> <li>(2) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".</li> <li>(3) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.</li> <li>(4) RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.</li> <li>(5) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".</li> <li>(6) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".</li> <li>(7) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".</li> <li>(8) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".</li> <li>(9) RE1001, RE1303: Corrected Production Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".</li> <li>(10)RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".</li> <li>(11)RE1312: Corrected RCL Control No. from RE1118 to RE1312.</li> <li>(12)RE1696: Deleted because RE1696 repeated with RE0022.</li> </ul>
13	<ol> <li>(1) Add 6 media</li> <li>(2) RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>(3) RE0996, RE0997: Corrected Media Type from Silk to Recycled (Silk)</li> <li>(4) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>(5) RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic</li> <li>(6) RA0030, RE0129, RE0130, RE0132, RE0133, RA0029: Corrected Media Type from Matt to Silk</li> <li>(7) Delete Ricoh Pro-graphic media from Paper lib.</li> </ol>

# Technical Bulletin

**PAGE: 3/5** 

Reissued: 03-Jul-13

Model: Aries-P1.5/C1.5	Date: 29-Feb-12	No.: RM077066d
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Version	Modified Points or Symptom Corrected
12	<ul> <li>(1) Add 59 media</li> <li>(2) RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium</li> <li>(3) RE1532 Corrected Media type from Gloss to Cast Coated and Production name from Bindakote Cover to Bindakote Cover Bianco</li> <li>(4) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1057, 1058, 1164, 1165, 1815: Correct the Manufacturer</li> <li>(5) RE1773, 1776, 1778: Correct Media Type to "Recycled" from "Recycled" (Matte)".</li> <li>(6) RE1152x, 1161x: Deleted because they were registered by mistake.</li> <li>(7) RE0997, RE0252: Corrected Media Type from Silk to Recycled (Silk)</li> </ul>
11	Add 32media RE1537: Correct the Paper thickness RE1702: Correct the Paper setting Type.
10	Add 53 media RE0033: Correct the paper thickness

### Aries C1.5

Version	Modified Points or Symptom Corrected					
14	(1) Add 21 media					
	(2) RE0022, RE0023, RE0024, RE0025: Corrected Production Name					
	from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".					
	(3) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.					
	(4) RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.					
	(5) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".					
	(6) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".					
	(7) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".					
	(8) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".					
	(9) RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".					
	(10)RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".					
	(11)RE1312: Corrected RCL Control No. from RE1118 to RE1312. (12)RE1696: Deleted because RE1696 repeated with RE0022.					
	•					

## Technical Bulletin

**PAGE: 4/5** 

Reissued: 03-Jul-13

Model: **Aries-P1.5/C1.5** Date: 29-Feb-12 No.: RM077066d

Version	Modified Points or Symptom Corrected
13	<ul> <li>(1) Add 6 media</li> <li>(2) RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>(3) RE0996, RE0997: Corrected Media Type from Silk to Recycled (Silk)</li> </ul>
	<ul> <li>(4) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>(5) RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic</li> </ul>
	(6) RA0030, RE0129, RE0130, RE0132, RE0133, RA0029: Corrected Media Type from Matt to Silk (7) Delete Ricoh Pro-graphic media from Paper lib.
12	<ul> <li>(1) Add 59 media</li> <li>(2) RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium</li> <li>(3) RE1532 Corrected Media type from Gloss to Cast Coated and Production name from Bindakote Cover to Bindakote Cover Bianco</li> <li>(4) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1057, 1058, 1164, 1165, 1815: Correct the Manufacturer</li> <li>(5) RE1773, 1776, 1778: Correct Media Type to "Recycled" from "Recycled' (Matte)".</li> <li>(6) RE1152x, 1161x: Deleted because they were registered by mistake.</li> <li>(7) RE0997, RE0252: Corrected Media Type from Silk to Recycled (Silk)</li> </ul>
11	Add 32media RE1537: Correct the Paper thickness RE1702: Correct the Paper setting Type.
10	Add 53 media RE0033: Correct the paper thickness

#### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

#### About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
A+	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.

### Technical Bulletin

**PAGE: 5/5** Reissued: 03-Jul-13

Model: Aries-P1.5/C1.5 Date: 29-Feb-12 No.: RM077066d Not suggested for use

### **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	А	A A	
В	В	А	В	Α
С	С	А	A	A

#### NOTE

- The Printer model and the Copier model apply different MQP files; no interchangeability. Install the MQP file according to the machine. The software is designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

### Paper Library Data Installation

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mgp" file into the upper SD card slot on the controller.
- Turn on the mainframe. 5.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.



**PAGE: 1/8** 

Reissued:07-Aug-12

Model: Aries-P1.5/C1.5	Date: 21-Mar-12	No.: RM077067a
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#### **RTB Reissue**

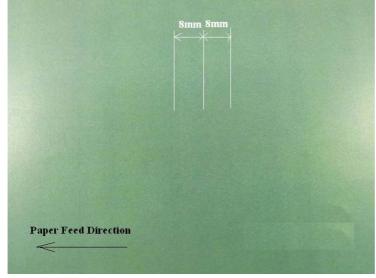
The items in **bold italics** were corrected or added.

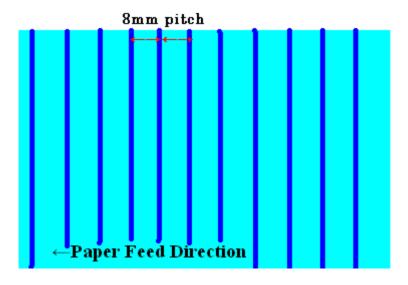
0 1 1			_		
Subject: Part information about drum drive gear			Prepared by: H. Kawamura		
From: 1st Tech Service Sect., PP Tech Service Dept.					
Classification:	☐ Troubleshooting	☐ Part information			
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	Other (	)	☐ Tier 2	

This RTB supersedes the information announced in RTB RM077058a. While RTB RM077058a instructs how to replace the "Drive Unit: Around The Photoconductor: Ass'y", the latest rework requires replacement of only the gear installed in the drive unit to troubleshoot 8mm pitch banding.

#### **SYMPTOM**

Banding appears at approx 8mm intervals across the entire page.







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Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

### **CAUSE**

The plastic piece incorporated with the sintered gear (GEAR: DEVELOPMENT ROLLER Z29) shrinks and breaks over time, resulting in a backlash which disables consistent revolution of the development roller. (See figures 1 & 2 below.)

Figure 1: Gears installed in the drum drive unit

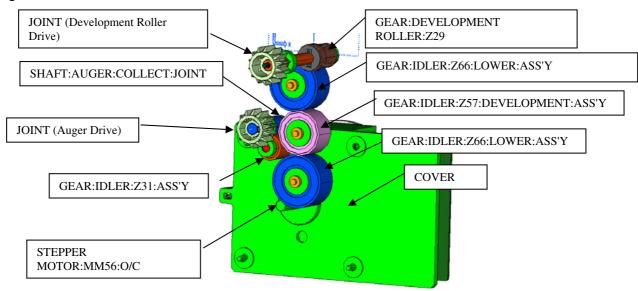
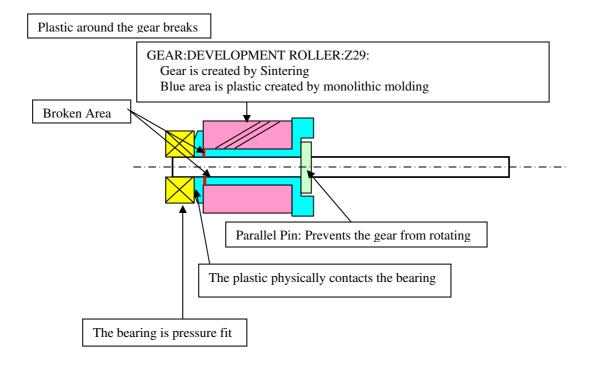


Figure 2: Cross-section of GEAR: DEVELOPMENT ROLLER Z29





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Reissued:07-Aug-12

Model: Aries-P1.5/C1.5	Date: 21-Mar-12	No.: RM077067a
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### **ACTION**

Replace the currently installed GEAR:DEVELOPMENT ROLLER Z29 with the following part:

### a) Gear assembly supplied Free of Charge

P/N	Description	Q'ty	Int	Page	Index
M0779904	MODIFICATION :GEAR:DEVELOPMENT ROLLER ASS'Y	4	0/0	175	26

#### **IMPORTANT**

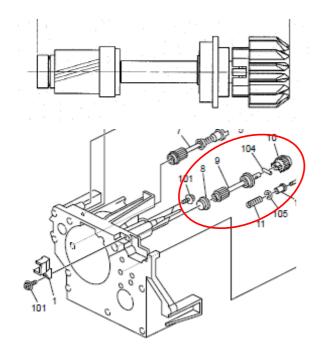
Please send to RCL 60~80% halftone samples in YMCK printed before and after replacing the above modified gears for every machine implementing the modification. RCL will refer to the quantity of the samples collected from the field in determining the quantity of modified gears supplied to the field free of charge.

If the above part runs out of stock, place an order for the following part, which is registered as a standard spare part.

<u>INOTE</u>: If the problem lies in the DRIVE UNIT:AROUND THE PHOTOCONDUCTOR: ASS'Y, replace the entire drive unit (M0771298).

### b) Gear assembly registered as standard service part

P/N	Description		Int	Page	Index
M0771297	DEVELOPMENT SLEEVE :JOINT :GEAR : ASS'Y	4	0/0	175	26



**PAGE: 4/8** 

Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

### Required parts and equipments

- Piece of cloth (to wipe off grease)
- A Pillips screwdriver approx 30 cm long
- MODIFICATION:GEAR:DEVELOPMENT ROLLER ASS'Y

### **Procedure**

- 1. Pull out the PCDU from the mainframe and cover the drum with paper to prevent the drum from exposure to light.
- 2. Remove the fly wheel. (screw x3)



3. Disconnect the 8 connectors and release 1 harness clamp.





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Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

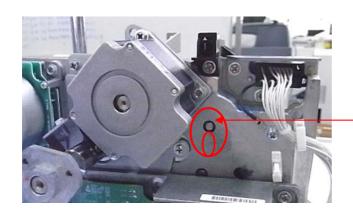
4. Remove the 3 screws.



\* A relatively long screwdriver is needed to remove these screws.



- 5. Pull out the drum drive unit.
- 6. Remove CASE:TERMINAL:DEVELOPMENT BIAS. (screw x1)



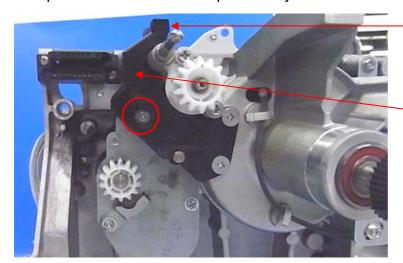
CASE:TERMINAL: DEVELOPMENT BIAS

**PAGE: 6/8** 

Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

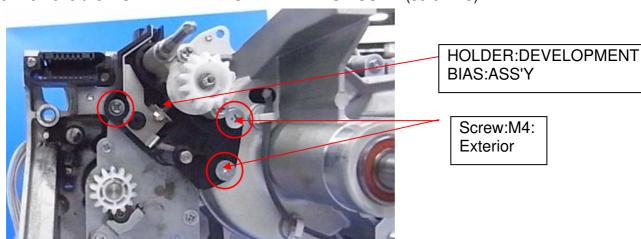
- 7. Remove the COVER:BIAS:DEVELOPMENT ROLLER. (screw x1, snap-fit x1)
- \* Keep the screw and the snap-fit. They will be used when reassembling the unit.



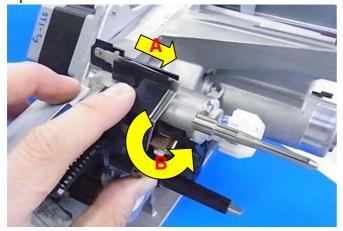
Snap fit at side

COVER:BIAS:DEVELOPMENT ROLLER

8. Remove the HOLDER:DEVELOPMENT VIAS:ASS'Y. (screw x3)



9. Remove the HOLDER:DEVELOPMENT BIAS:ASS'Y by slightly pulling it towards the direction indicated by A, and then, rotate it counterclockwise as indicated by B in the photo below.



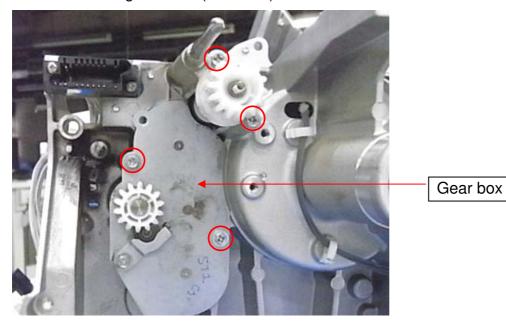


**PAGE: 7/8** 

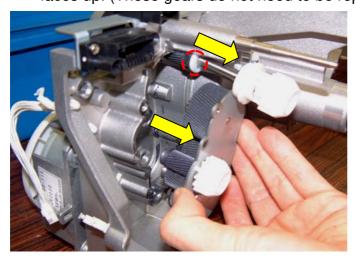
Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

10. Remove the gear box. (screw x4)



- 11. Pull out the gear box and the GEAR:DEVELOPMENT ROLLER:Z29 together.
  - \* To prevent the gears inside the gear box from falling out, hold the gear box so that it faces up. (These gears do not need to be replaced.)



The INSULATOR:REAR:BEARING, circled in red in the photo above, may be detached from the gear box together with the GEAR: DEVELOPMENT ROLLER: Z29. In that case, attach it back to the gear box.





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Reissued:07-Aug-12

Model: Aries-P1.5/C1.5 Date: 21-Mar-12 No.: RM077067a

12. Take approx 0.2g of grease from the gear box with a piece of cloth and apply it to the two areas circled in red.

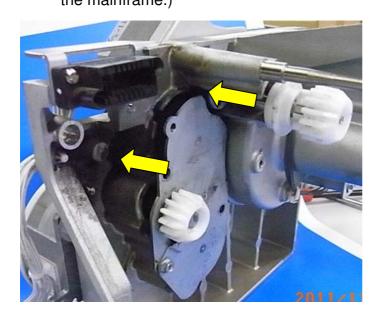
\* DO NOT apply other grease types.



Follow the procedure in reverse order to reassemble the drum drive unit.

NOTE: Before installing the gear box back to the mainframe, attach the

MODIFICATION:GEAR:DEVELOPMENT ROLLER ASS'Y to the gear box. (The gear assembly cannot be attached to the gear box after installing the gear box on the mainframe.)



### Technical Bulletin

**PAGE: 1/2** 

Reissued:30-Aug-13

Model: Aries-P1.5/C1.5 Date: 22-Mar-12 No.: RM077068	)68a
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#### **RTB Reissue**

The items in **bold italics** were added.

Subject: Part Changes –For vertical lines			Prepared by: H. Kawamura		
From: 1st PP Service Planning Sec., PP Service Planning					
Classification:	☐ Troubleshooting	□ Part informat	tion	☐ Action required	
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path ☐ Transmit/		eive	☐ Retrofit information	
	☐ Product Safety	Other (	)	☐ Tier 2	

Change: New BRUSH ROLLER: APPLY: ASS'Y

Reason: To prevent the image quality issue known as "Vertical lines" caused by excess

lubricant applied to the OPC drum

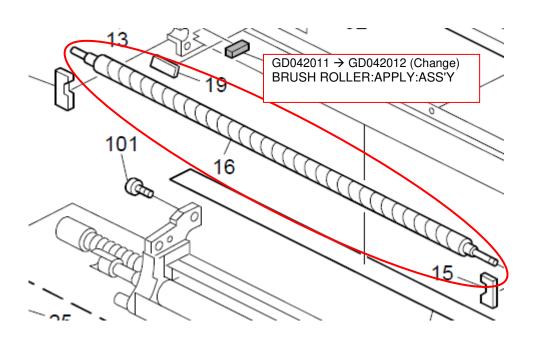
Action: If you encounter the above image quality issue, replace the brush roller with the

new brush roller described below.

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
GD042011	GD042012	BRUSH ROLLER:APPLY:ASS'Y	1	0/0	97	16	Change

#### NOTES:

- When replacing with the new brush roller (GD042012), make sure to remove the "paper clips", if installed, from the previous brush roller.
- The new brush roller should be replaced only for units with the drum cleaning unit registered with the p/n M0773600. This is because the modified drum cleaning unit (M0773601) has the new brush roller. (See the following page.)
- The new brush roller applies the optimum amount of lubricant, preventing vertical lines as a result of excess lubricant on the drum.





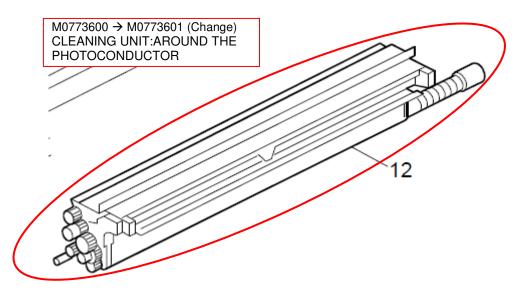
**PAGE: 2/2** 

Reissued:30-Aug-13

Model: Aries-P1.5/C1.5	Date: 22-Mar-12	No.: RM077068a
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If the drum cleaning unit needs to be replaced, replace with the new unit described below.

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
M0773600	M0773601	CLEANING UNIT: AROUND THE PHOTOCONDUCTOR	1	0/0	93	12	Change



NOTE: The new cleaning unit (M0773601) has the new brush roller GD042012).

### Technical Bulletin

**PAGE: 1/1** 

Reissued:17-Apr-12

Model: Aries-P1.5/C1.5	Date: 10-Apr-12	No.: RM077069a

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Manual Correction – LD Units			Prepared	d by: H. Kawamura
From: 1st Tech Service Sect., PP Tech Service Dept.				
Classification:	☐ Troubleshooting	☐ Part informat	tion	Action required
	☐ Mechanical	☐ Electrical		Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (	)	☐ Tier 2

This RTB is to inform the service manual correction about "LD Units" in "Replacement and Adjustment", page 368-373.

On page 368, two additional important notes have been added.

#### **LD Units**



- · An accidental static discharge could damage the laser diode board attached to the lens block unit.
- Touch a metal surface to discharge any static electricity from your hands.
- The polygon motor rotates at extremely high speed and continues to rotate after you switch the
  machine off. To avoid damaging the motor, never remove the polygon motor within three minutes of
  switching off the main power and disconnecting the power plug.
- · Do not touch any optical parts inside the LD unit.
- A moiré pattern may appear even if you followed the procedure in the service manual.
   If a moiré pattern appeared, replacement of the whole laser unit is required.\*1
- If LD unit(s) keep failing after replacing the LD unit(s), replacement of the whole laser unit is required.

\*1 Example of moiré Proper image



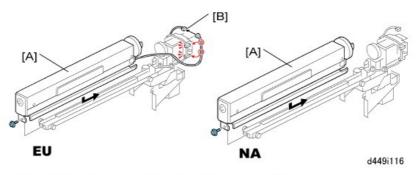
## Technical Bulletin

**PAGE: 1/1** 

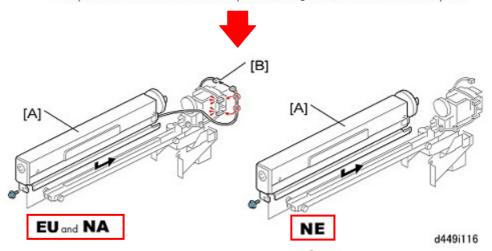
Model: Katana-C2 (Bellini-C4)			Dat	ate: 13-Apr-12 No.: RD059099		
Subject: Service Manual Correction (Booklet Finisher SR5020 Punch Unit)  Prepared by: J. Ohno						
From: PP Tech Service Dept., 1st PP Tech Service Sect.						
Classification:	☐ Troubleshooting	☐ Part inf	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		⊠ Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retro	fit information
	☐ Product Safety	Other (		)	☐ Tier2	

Please apply the following correction to your field service manual in the section:

- 1. Installation > Booklet Finisher SR5020 (D434-17)
  - > Punch Unit PU NA, EU, SC (D449-17, -27, -28) > Installation P.162



- 2. Attach the punch mechanism [A] to the rails of the punch unit (P x1).
  - If you are installing the punch unit for Europe, connect the harness [B] (□ x1, □ x2).
  - . The punch unit for North America has no punch switching motor, so this harness is not required.



- 2. Attach the punch mechanism [A] to the rails of the punch unit ( $\mathcal{F} \times 1$ ).
  - If you are installing the punch unit for Europe and North America, connect the harness [B]
  - The punch unit for North Europe has no punch switching motor, so this harness is not required.

In addition to the above, please be informed of the expected service life of the Booklet Finisher SR5020 Punch Unit.

Punch unit life: 1000k

## Technical Bulletin

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Reissued: 13-Nov-12

Model: Aries-P1.5/C1.5	Date: 23-May-12	No.: RM077070b
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The items in **bold italics** have been corrected.

Subject: Firmware Release Note: Paper Library NA			Prepared by: T. Miyamoto
From: 1st PP Tech Service Sect., PP Tech Service Dept.			
Classification:	☐ Troubleshooting	☐ Part information	Action required
	☐ Mechanical	☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receiv	e Retrofit information
	☐ Product Safety	Other (Firmwar)	e) Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries P1.5 and C1.5

MQP files and Media Lists are confidential information.

#### Aries P1.5

Version	Program No.	Availability of RFU
11	M0776063_R11	Not available
10	M0776063_R10	Not available
9	M0776063_R9	Not available

#### Aries C1.5

Version	Program No.	Availability of RFU
11	D0956163_R11	Not available
10	D0956163_R10	Not available
9	D0956163_R9	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

## Technical Bulletin

**PAGE: 2/3** 

Reissued: 13-Nov-12

Model: **Aries-P1.5/C1.5** Date: 23-May-12 No.: RM077070b

#### Aries P1.5

Version	Modified Points or Symptom Corrected
Rev.11	Add 30 media
Rev.10	Added 42 media RC1088: Changed Overall Rank from A to C due to NCR. RC2004, RC2005: Corrected the Production Name RC2004: Corrected the Media Type
Rev.9	Add 4 media RC0101: Correct the Paper Thickness RC1088 and 1131: Correct the Manufacture and Production name. RC1092, 1093, 1095, 1114, 1125, 1126 and 1127: Correct the Production name. RC1092 and 1114 Correct Media Type RC1097: Deleted because RC0104 is a same Media. RC1099: Deleted because RC0105 is a same Media.

#### Aries C1.5

Version	Modified Points or Symptom Corrected		
Rev.11	Add 30 media		
Rev.10	Added 42 media RC1088: Changed Overall Rank from A to C due to NCR. RC2004, RC2005: Corrected the Production Name RC2004: Corrected the Media Type		
Rev.9	Add 4 media RC0101: Correct the Paper Thickness RC1088 and 1131: Correct the Manufacture and Production name. RC1092, 1093, 1095, 1114, 1125, 1126 and 1127: Correct the Production name. RC1092 and 1114 Correct Media Type RC1097: Deleted because RC0104 is a same Media. RC1099: Deleted because RC0105 is a same Media.		

### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

### **About the MQP file**

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
<b>A</b> +	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.
С	Not suggested for use

### Technical Bulletin

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Reissued: 13-Nov-12

Model: Aries-P1.5/C1.5 Date: 23-May-12 No.: RM077070b

### **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	А	Α	Α	Α
В	В	А	В	А
С	С	А	А	А

#### **NOTE**

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

#### **Paper Library Data Installation**

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

## Technical Bulletin

PAGE: 1/5

Reissued: 24-Jul-13

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#### **RTB Reissue**

The items in bold italics have been added.

Subject: Firmware Release Note: Paper Library CH			Prepared by: T. Miyamoto			
From: 1st PP Tech Service Sect., PP Tech Service Dept.						
Classification:	assification: Troubleshooting Part informat		tion	Action required		
	☐ Mechanical	☐ Electrical		☐ Service manual revision		
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information		
	☐ Product Safety ☐ Other (Firmwa		vare)	☐ Tier 2		

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries P1.5 and C1.5

MQP files and Media Lists are confidential information.

#### Aries P1.5

Version	Program No.	Availability of RFU
Rev.4	M0776066_R4	Not available
Rev.3	M0776066	Not available

#### Aries C1.5

Version	Program No.	Availability of RFU
Rev.4	D0956166_R4	Not available
Rev.3	D0956166	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available": The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

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Reissued: 24-Jul-13

Model: Aries-P1.5/C1.5 Date: 28-May-12 No.: RM077071a

### Aries P1.5

Version	Modified Points or Symptom Corrected
4	(1) Add 86 media. (2) RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium. (3) RE1532: Corrected Media type from Gloss to Cast Coated and Production name from Bindakote Cover to Bindakote Cover Bianco. (4) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1058: Correct the Manufacturer. (5) RE0997: Corrected Media Type fro Silk to Recycled(Silk) (6) RE0998,RE0999: Corrected Media Type from Gloss to Recycled(Gloss) (7) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996. (8) RE1076: Corrected Media Type from Matt to Metallic. (9) RA0029, RA0030, RE0129, RE0130, RE0132, RE0133: Corrected Media Type from Matt to Silk. (10) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss". (11) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B. (12) RE0023B: Corrected RCL Control No. from RE1020 to RE0023B. (13) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton". (14) RE0022B, RE003B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss". (15) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk". (16) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper". (17) RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss". (18) RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk". (19) RE1312: Corrected RCL Control No. from RE1118 to RE1312. (20) RE1696: Deleted because RE1696 repeated with RE0022.
3	Add 133 media (including 18 Chinese media) RE1008, 1009, 1010, 1011, 1055: Correct the Manufacture RE0194, 0213, 0253, 0254, 0255, 0256, RE0294: Correct the Media Type RE1008, 1009, 1010, 1011: Correct the Production name and the Media Type RE1056: Correct the Production name, the Media Type and the Weight. RE0042, 0046, 0049, 1109: Correct Feed Performance rank. RE240, 241: Correct Paper thickness. RE0035, 0036, 0037: Add paper weight RE1007: Correct the Production name. RE0249, 0250, 0251 change to RE0999, 0998, 0997 RE0033: Correct the paper thickness

# Technical Bulletin

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Reissued: 24-Jul-13

Model: Aries-P1.5/C1.5 Date: 28-May-12 No.: RM077071a

### Aries C1.5

Version	Modified Points or Symptom Corrected
4	(1) Add 86 media. (2) RE1070: Corrected Production Name from Bianco Flash Premium to Biancoflash Premium. (3) RE1532: Corrected Media type from Gloss to Cast Coated and Production name from Bindakote Cover to Bindakote Cover Bianco. (4) RE1008, 1009, 1010, 1011, 1053, 1054, 1055, 1056, 1058: Correct the Manufacturer. (5) RE0997: Corrected Media Type fro Silk to Recycled(Silk) (6) RE0998,RE0999: Corrected Media Type from Gloss to Recycled(Gloss) (7) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996. (8) RE1076: Corrected Media Type from Matt to Metallic. (9) RA0029, RA0030, RE0129, RE0130, RE0132, RE0133: Corrected Media Type from Matt to Silk. (10) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss". (11) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B. (12) RE0023B: Corrected RCL Control No. from RE1020 to RE0022B. (13) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton". (14) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "Iprint Digital Gloss". (15) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk". (16) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper". (17) RE1001, RE1303: Corrected Production Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss". (18) RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iprint Digital Silk". (19) RE1312: Corrected RCL Control No. from RE1118 to RE1312. (20) RE1696: Deleted because RE1696 repeated with RE0022.
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Reissued: 24-Jul-13

Model: **Aries-P1.5/C1.5** Date: 28-May-12 No.: RM077071a

#### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

#### About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
A+	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.
С	Not suggested for use

#### **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	Α	Α	Α
В	В	Α	В	Α
С	С	А	А	Α

#### **NOTE**

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

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Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.

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Reissued: 24-Jul-13

Model: **Aries-P1.5/C1.5** Date: 28-May-12 No.: RM077071a

- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

### Technical Bulletin

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5	Date: 27-Jan-12	No.: RM077072d
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Additional procedures for removing excess developer and preventing toner scattering			Prepared by: T.Miyamoto	
From: 1st Tech Service Sect., PP Tech Service Dept.				
Classification:		☐ Part information		Action required
☐ Mechanical ☐ Electrical			☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
☐ Product Safety ☐ Other ( )		)	☐ Tier 2	

#### General

Continuous printing of low coverage images degrades the developer and disables complete developer removal, in which the development unit accumulates approximately 400g of developer that cannot be removed. A development unit containing old developer could cause toner scattering or locking of the development motor over time.

To prevent the above, it is recommended to carry out the following procedures in addition to the standard developer removal operation.

### Check procedure using "Tc down judgement sheet.xls"

Before carrying out the additional developer removal procedures (Procedures 1, 2, 3 **and** 4), do the check procedure using the Excel file "Tc down judgement sheet.xls" attached below to determine whether the additional procedures will be needed or not.

### Tc down judgment sheet



Open this sheet with excel and insert the required values.

- 1. Refer to the SMC printout or go into the SP mode and input the SP values in tables 1 and 3 in the "Tc down judgment sheet.xls".
- 2. If the check procedure results in "Condition 1", do "Toner Refresh Amount Adjustment" and Procedures 1, 2 and 3.
  - If the check procedure results in either "Condition 2" or "Condition 3", skip "Toner Refresh Amount" and do Procedures 1, 2 and 3.
  - If the result of the check procedure is none of the above, developer is to be replaced with the standard procedure.

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077072d

### -Toner Refresh Amount Adjustment-

Modify the toner refresh amount as shown in the table below.

			CD.		<b>D e f a u</b> K : % 5	Modific K:%5	Modific K:%5
			SP		C o l :% 2	C o l :% 3	C o 1% 5
3 - 7 (	0001	Toner	Refresh	Mode	12.5	12.5	12.5
	002	Toner	Refresh	Mode	6.0	9.4	12.5
	003	Toner	Refresh	Mode	6.0	9.4	12.5
	004	Toner	Refresh	Mode	6.0	9.4	12.5
	005	Toner	Refresh	Mode	12.5	12.5	12.5
	006	Toner	Refresh	Mode	6.0	9.4	12.5
	007	Toner	Refresh	Mode	6.0	9.4	12.5
	800	Toner	Refresh	Mode	6.0	9.4	12.5

3-701 009 Toner Refresh Mode Max Pattern Length 25

- First, do "Modification 1" and check if the desired results are obtained. Do "Modification 2" if further adjustment is needed.
- Note that the value for black remains at 5%.

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077072d

#### - Procedure 1 -

The goal of this procedure is to decrease the Tc (toner concentration) to allow proper removal of remaining developer and achieve the optimum ratio of toner against developer when initializing the new developer.

**IMPORTANT:** Make sure this "Procedure 1" is carried out before "Procedure 2".

1-1. Check the current Vt values in SP 3-001-001~004.

If the current Vt value is equal to or greater than 2.4V, complete the procedure. If the current Vt value is smaller than 2.4V, proceed to step 2.

Tabl	e 1:	Cu	r r	е	n t	V t
		SP				
3 - 0 0	001	I D	Sı	n :	V t	dis
	002	I D	Sı	n :	V t	dis
	003	I D	Sı	n :	V t	d i s
	004	I D	Sı	n :	V t	dis

1-2. Change the default (0: PID) to "1: No toner supply" in SP3-301-001~004.

**Table 2: Toner Supply Mode** 

		SP		Default	Change to
3-301	001	Tnr Supply DFU	K	0: PID	1: No toner supply
	002	Tnr Supply DFU	С	0: PID	1: No toner supply
	003	Tnr Supply DFU	М	0: PID	1: No toner supply
	004	Tnr Supply DFU	Υ	0: PID	1: No toner supply

1-3. Print full-page solid patterns for the affected color(s) by referring to table 3 below which shows the approximate required number of copies of the full-page solid pattern according to the Vt confirmed in step 1.

If more than one color is affected, specify 2 affected colors when printing the solid patterns to save time and paper, i.e. R (Y+M), G (Y+C), B (M+C).

- \* When printing the test pattern, black can also be mixed with the affected color, for instance, K+Y.
- \* Work time can be reduced by using the copy function for the Copier model, and printing the patterns from the Command Work Station using the calibration chart (which allows you to specify the number of copies) for the Printer model.

Table 3: Reference for required number of copies of the full-page solid pattern

Current Vt value (V)	Required number of copie the full-page solid pattern				
SP3-001-001~004	Long edge (A3, B4, DLT)	Short edge (A4, LT)			
2.2	13	26			
2.0	26	52			
1.8	39	79			
1.6	<b>52</b>	105			
1.4	<b>66</b>	131			

1-4. Set the toner supply mode SP (SP3-301-001~004; Table 2) back to the default "0: PID".

#### **IMPORTANT**

Make sure to set the toner supply mode (SP3-301-001~004) back to the default "0: PID" before completing the procedure, otherwise toner will not be supplied and this will cause problems.

### Technical Bulletin

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077072d

#### - Procedure 2 -

2-1. Execute the standard developer removal operation.

Procedure 2 (manual developer removal; 2-2 through 2-10) and all of Procedure 3 were deleted. These procedures are no longer needed due to the adoption of improved toner.

### - Procedure 4 -

#### Removing the TD sensor and cleaning the opening

Do this procedure if toner scattering is observed around the development unit as shown in the photo below, which will achieve higher security in preventing toner scattering.



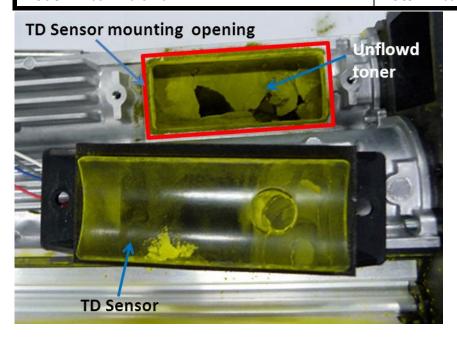
- 4-1. Take out the development unit and place it on a table upside-down.
- 4-2. Remove the TD sensor from the development unit. (screw x2)
- 4-3. Vacuum the toner adhered to the opening where the TD sensor was mounted. This is non-circulating toner that blocks the TD sensor and causes false detection of the toner concentration, resulting in an incorrect Vt.

# Technical Bulletin

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077072d



4-4. Put back the TD sensor and development units to complete the procedure.



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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5	Date: 27-Jan-12	No.: RM077072d
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#### **APPENDIX**

### **Adjustments for further security**

In order to achieve further security for toner scattering and development motor locking, modify the relative parameters in the SP mode after carrying out "Procedures 1~3".

Table: Notices and side effects concerning SP modification

SP m	odification	When NOT to implement the SP modification	Side effect
A) Increasing the toner refresh threshold	SP3-701-002~004 SP3-701-006~008 Default: 6.0 Modified: 9.4	-	Toner yield will decrease if average image coverage ratio is 4% or lower.
B) Increasing the Vtref lower limit	SP3-004-005~008  Default: 1.4  Modified: 2.0	Do NOT implement this SP modification if high quality is demanded for color (hue) reproduction as this modification will decrease image density. (*Note)	Image density will decrease if the ambient humidity is
C) Decreasing the target development gamma	SP3-561-010~012  Default: 1.5  Modified: 1.3	-	low.

**Important:** The above SP modifications should be carried out only for machines installed in an environment where the relative humidity is not too low.

See the following page for details on these SP modifications.

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Reissued: 4-Aug-15

Model: Aries-P1.5/C1.5 Date: 27-Jan-12 No.: RM077072d

#### A) Increasing the toner refresh threshold

1. Make sure that the value of SP3-701-009 (Toner refresh mode: Max Pattern Length) is 25. (If this SP is set to a value other than 25, change it to 25.)

3-701	009	Toner Refresh Mode: Max Pattern	25
		Length	

2. Apply the modified values indicated in the yellow areas in the table below for SP3-701-

001~008 (	1001~008 (Toner refresh mode: Image area ~ Image area thresh).					
		SP	Default K: 5%	Modified K: 5%		
			Col: 2.5%	Col: 3.8%		
3-701	001	Toner Refresh Mode: Image Area: K	12.5	12.5		
*Note	002	Toner Refresh Mode: Image Area: C	6.0	9.4		
	003	Toner Refresh Mode: Image Area: M	6.0	9.4		
	004	Toner Refresh Mode: Image Area: Y	6.0	9.4		
	005	Toner Refresh Mode: Image Area Thresh: K	12.5	12.5		
	006	Toner Refresh Mode: Image Area Thresh: K	6.0	9.4		
	007	Toner Refresh Mode: Image Area Thresh: K	6.0	9.4		
	800	Toner Refresh Mode: Image Area Thresh: K	6.0	9.4		

<sup>\*</sup> Note: SP3-701 sets the Vtref threshold for high humidity environment.

#### B) Increasing the Vtref lower limit

Apply the modified values indicated in the yellow areas in the table below for SP3-004-005~008 (Vtref lower limit).

		SP	Default	Modified
3-004	005	Vtref: Lower: K	1.4	2.0
	006	Vtref: Lower: C	1.4	2.0
	007	Vtref: Lower: M	1.4	2.0
	008	Vtref: Lower: Y	1.4	2.0

#### NOTE

If you encounter a high toner density error (SC364~SC367) as a result of modifying Vtref, check the Vt values applied in SP 3-001-001~004. Repeat Procedure 1 until Vt achieves a value greater than 2.0V, then reapply the modified Vtref values.

#### C) Decreasing the target development gamma

Apply the modified values indicated in the yellow areas in the table below for SP3-561-010~012 (Development gamma initial value).

		SP	Default	Modified
3-561	010	Dev gamma: Initial value: C	1.5	1.3
	011	Dev gamma: Initial value: M	1.5	1.3
	012	Dev gamma: Initial value: Y	1.5	1.3

## Technical Bulletin

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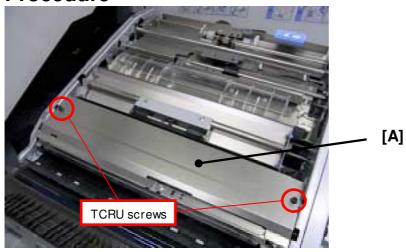
Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1				te: 06-Jun-12 No.: RM07		No.: RM077073	
Subject: Procedure for Adjusting the CIS LED upon Replacement of the CIS Unit					Prepared by: J. Kobayashi		
From: PP Tech S	ervice Dept., 1st PP Tech Serv	vice Sect.					
Classification:	☐ Troubleshooting	☐ Part inf	orma	ition		required	
	☐ Mechanical	☐ Electric	al	Service manual revision		ce manual revision	
	☐ Paper path ☐ Transmit/rec		ceive Retrofit information		fit information		
	☐ Product Safety	Other (Addit Information)			⊠ Tier 2		

This RTB has been issued to announce the CIS LED adjustment procedure which is required when replacing the CIS unit.

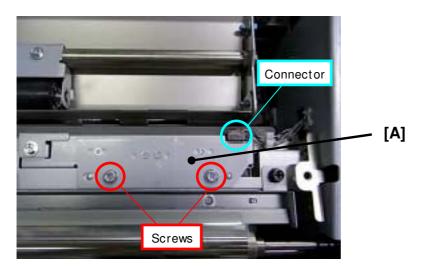
Please add this procedure to your field service manual in the section:

4. Replacement and Adjustments > Paper Registration > CIS Unit

### **Procedure**



1. Remove the cover [A]. (TCRU screw x 2)



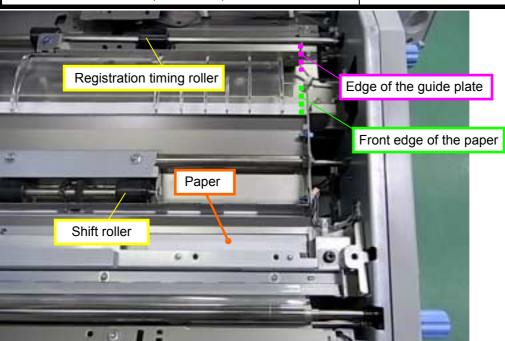
2. Remove the CIS unit [A]. (screw x2, connector x1)

Date: 06-Jun-12

**PAGE: 2/3** 

No.: RM077073

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

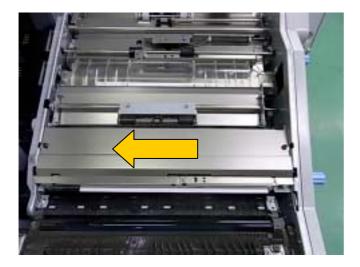


- 3. Insert one sheet of plain white paper in the paper path so that the front edge of the paper aligns with the edge of the registration timing roller guide plate.

  Use either of the following paper:
  - \* Hammermill Fore MP White (20lb) LT
  - \* Data Copy Everyday Printing (80g/m²) A4

#### Note

Make sure that the paper covers the entire area beneath the CIS.



4. Install the new CIS unit, attach the cover, and push the right drawer back into the machine.



Date: 06-Jun-12 No.: RM077073

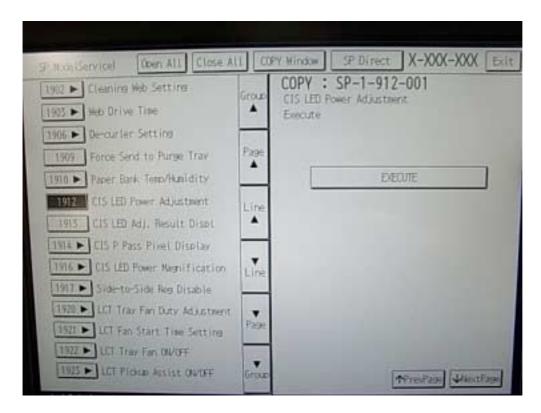
**PAGE: 3/3** 

5. Turn on the machine power.

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

#### **Note**

Jam001 will be initiated when the machine is turned on in this state but disregard this jam.



- 6. Enter the SP mode and execute SP1-912-001.
- 7. Exit the SP mode and remove the paper to complete the procedure.

#### Note

If Jam98 is exhibited after completing the CIS LED adjustment, follow the troubleshooting instructions for Jam098.

# Technical Bulletin

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					ſ	
Model: Aries P1.	5 / C1.5		Date: 07-Jun-12			No.: RM077074
Subject: Correct	ion on Perfect Binder (GB500	00)'s suppo	rted	Prenare	d by: H	Kawamura
_	nickness for signature	, , , , , , , ,		repare	a by. 11.	Rawamara
From: 1st PP Ted	ch Service Section, PP Tech Se	ervice Dep.				
Classification:	☐ Troubleshooting	☐ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electric	al		⊠ Servic	e manual revision
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	it information
	☐ Product Safety	Other (		)	☐ Tier2	

Please apply the following correction to your service manual in the section:

Appendices > 1. Appendix: Specification > Option Specifications > Perfect Binder (D391) > Perfect Binder (D391)

#### Perfect Binder (D391)

Paper Positioning	Center aligned	
Delivery	Face-down	
Cincia The Leave	10 to 200 sheets (	· · · · · · · · · · · · · · · · · · ·
Signature Thickness		(81 to 105 g/m <sup>2</sup> )
	Max. thickness: Up	o to 23 mm (0.9 in.)
	Signature	Width: 182 to 228.6 mm
	Signatore	Length: 257 to 320 mm
Paper Size		Width: 257 to 330.2 mm
	Cover	Length: 364 to 487.7 mm
p 71:1	Signature	64 to 163 g/m <sup>2</sup>
Paper Thickness	Cover	90 to 300 g/m <sup>2</sup>
	Width	139.7 mm to 216 mm

Incorrect: 64 to 163gsm

Correct: 64 to 105gsm \*

\* 106 to 163gsm paper is available for slip sheets, however, limited to 10 sheets.

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### Technical Bulletin

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Reissued: 28th-Sep-12

Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5	Date: 06-Dec-10	No.: RG178128c
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Notes on	Handling PCDUs to prevent d	Prepared by: H. Kawamura			
From: PPBG Ser	vice Planning Dept.				
Classification:		☐ Part information	n Action required		
	☐ Mechanical	☐ Electrical	☐ Service manual revision		
	☐ Paper path	☐ Transmit/recei	ve Retrofit information		
	☐ Product Safety	Other ( )	☐ Tier 2		

This RTB has been issued to announce the correct handling procedure of the PCDU\* to prevent scratches on the drum, which occurs when the PG\* is narrower at the front side of the drum.

NOTE

- \* PCDU includes the photoconductive drums and the development units.
- \* PG is the gap between the drum and the development rollers

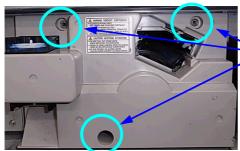
### 1. Primary Considerations When Handling the PCDU

Take note of the information in the following section to avoid the problems listed below.

- 1) Different density between left and right sides on a page
- 2) Toner adhesion to the development rollers
- 3) Scratches on the drums resulting from toner adhesion to the development rollers
- 4) Toner clumps caused by narrowed PG

### 1-1. Confirming Attachment of the Inner Cover

The Inner Cover must always be fastened with the 3 screws circled in blue in the photo below when in operation. Note that these screws not only function to hold the cover but fix the PCDU to the mainframe.



Confirm complete fastening of the 3 screws.



Never operate the machine without the Inner Cover or the screws.

The development unit will be positioned incorrectly when operated without the Inner Cover and the screws, causing scratches on the drum surface and uneven image density.

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Reissued: 28th-Sep-12

Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5 Date: 06-Dec-10 No.: RG178128c

#### 1-2. Confirming Correct Installation of the Developer Unit

- Proper engagement of the drum internal and drum drive external gears -

Make sure the development unit is correctly installed by checking the appearance of the knob and the screw holes.

When the development unit is correctly installed...







The surface of the knob and the adjacent area (black-colored) is almost flush, as shown in the left photo. Also, the screw holes for attaching the inner cover should be clearly visible as shown in the center and right photos.

When the development unit is incorrectly installed...







The surface of the knob is clearly protruding against the adjacent area (black-colored) and the screw holes are sunk in and are not clearly visible, as shown in the photos above. In this case, the unit is bounced back towards the front side because the drum internal and drum drive external gears are not properly engaged as shown below.









### Technical Bulletin

Reissued: 28th-Sep-12

Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5 Date: 06-Dec-10 No.: RG178128c

If the development unit is not correctly installed, pull out the PCDU and slightly reposition the drum so that the internal and external gears are engaged properly.





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Do not attempt to forcefully fasten the (cross-shaped) drawer stop knob by shoving in the unit. Doing so will NOT help install the unit completely but will only damage the teeth of the internal gear.





When the gears are not engaged properly, the drum cleaning unit pushes the drum towards the direction in which the PG is narrowed. Printing in this condition will cause toner to adhere to the development rollers and generate scratches on the drum surface.

The following SCs may occur if the drum surface has been scratched and reveals the aluminum substrate.

SC error name	Color	SC code
	K	320
Davolanment hiss: high valtage arror	С	321
Development bias: high voltage error	М	322
	Υ	323

If the above SC occurs and heavy scratches are observed on the drum surface, replace the drum with a new one.

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Reissued: 28th-Sep-12

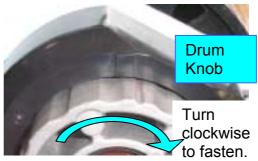
Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5 Date: 06-Dec-10 No.: RG178128c

### 2. Correct Procedures for Fastening the Drum Knob

Take note of the information in the following section to avoid the problems listed below.

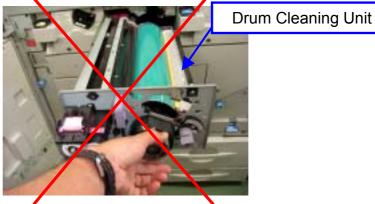
- 1) Different density between left and right sides on a page
- 2) Toner adhesion to the development rollers
- 3) Scratches on the drums resulting from toner adhesion to the development rollers
- 4) Toner clumps caused by narrowed PG
- Always pull out the development unit and remove the drum cleaner when fastening the drum knob.
- Never attempt to further fasten the drum knob when the drum cleaning unit is installed.





Do NOT fasten the drum knob when the development unit is installed. Do NOT fasten the drum knob when the drum cleaning unit is installed.





If the drum knob is loosened with the drum cleaning unit installed, make sure to remove the drum cleaning unit, and then fasten the knob.

Fastening the drum knob with the drum cleaning unit installed will cause the drum cleaning unit to apply pressure to the drum and narrow the PG at the front side.

# Technical Bulletin

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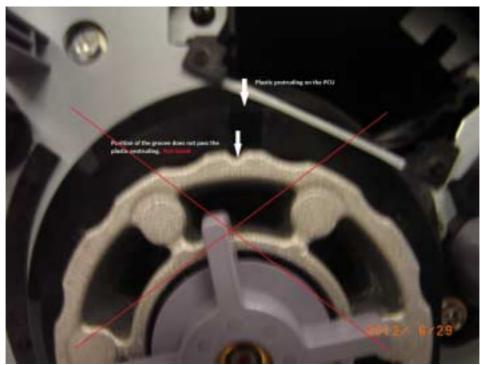
Reissued: 28th-Sep-12

Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5 Date: 06-Dec-10 No.: RG178128c

Tighten the Drum Knob so that the groove on the Drum Knob goes past the plastic protrusion on the PCDU as shown in the photo below.



**Correct Drum Knob Position** 



**Incorrect Drum Knob Position** 

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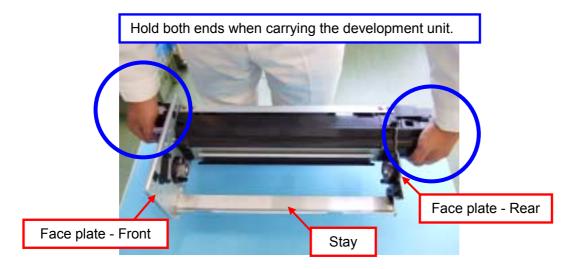
Reissued: 28th-Sep-12

Model: AG-P1/C1, AGL-P1/C1, Aries-P1.5/C1.5 Date: 06-Dec-10 No.: RG178128c

### 3. Handling the Development Unit

Take note of the information in the following section to avoid the problems listed below.

- 1) Variation in image density
- 2) Different density between left and right sides on a page
- 3) Toner adhesion to the development rollers
- 4) Scratches on the drums resulting from toner adhesion to the development rollers
- 5) Toner clumps caused by narrowed PG
- Always hold the prescribed locations when handling the development unit.
- Never apply external pressure to the front and rear plates and the stay.

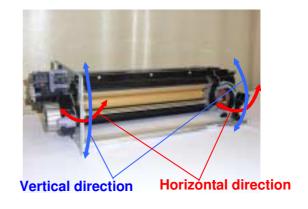


Do not grip the face plates or the stay.





Applying external pressure will deform the front and rear plates in vertical and horizontal directions, resulting in fluctuation of the PG.



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Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1	Date: 01-Oct-12	No.: RM077075c
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: New se	rvice part: External Power Sup	Prepared by: Junji Kobayashi			
From: PP Tech Service Dept., 1st PP Tech Service Sect.					
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	☐ Part informat☐ Electrical☐ Transmit/rec☐ Other (		☐ Action required ☐ Service manual revision ☐ Retrofit information ☐ Tier 2	

#### General

This bulletin provides information on the External Power Supply Unit exclusive to the Aries-P1.5/C1.5 and Aegis-P1/C1. The external PSU, which activates the exhaust fans located behind the PCDU, was registered as a service part to counter uneven density issues (dark bands) caused by ozone accumulation that occurs under specific conditions. (See 'Cause' on the following page.)

#### Part information

Please add the following part to your Aries-P1.5/C1.5 and Aegis-P1/C1 parts catalog.

Part number	Description	Page	Index	Note
M0772500	Service Parts: Power Supply Unit	87	17	Add
				For
				ProC900
M0772500	Service Parts: Power Supply Unit	93	20	Add
				For
				ProC901



M0772500 Service Part: Power Supply Unit

AC power cable included - NA 125V

- EU 250V



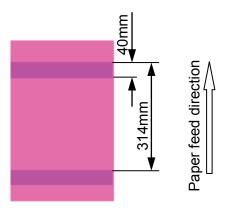
PAGE: 2/11

Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

#### **Symptom**

40mm wide dark bands appear at 314mm intervals



#### Cause

Normally, the exhaust fans behind the PCDU that operate for a prescribed time after completing a job could ventilate the ozone in approximately two hours. However, when the machine is run under most, if not all, of the following conditions, ozone emission increases and causes ozone to accumulate easily.

- Charge Corona exceeds 100K
- The machine is operated in a low temperature/low humidity environment, and the correction values are applied to the charge corona unit according to the environment
- The machine is left unused overnight in a low temperature/humidity environment with its power turned off

Dark Bands could appear on the first job in the morning when meeting the above conditions.

#### **Solution**

<u>First step:</u> Set the machine so that the exhaust fans continue to operate while the machine power is turned on. (You may want to ask for customer approval when applying this setting to the SP.)

How to activate the exhaust fans

- 1. From the control panel, go to [User Tools] [System Settings] [Timer Settings], and set the Panel Off Timer to "Off".
- 2. Change the settings for the ozone and developer unit fans in the following SPs: SP1-940-03, -04; default 56 (=60min)  $\rightarrow$  1270 (=21 hours)
- 3. Change the low power mode fuser temp in the following SPs: SP1-202-01, -02; default 110 (=110 degrees C)  $\rightarrow$  0 (=0 degree C)



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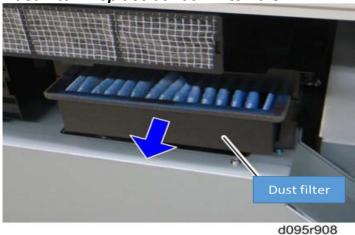
Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

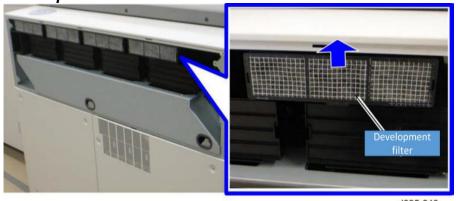
NOTE: Make sure the Dust, Development and Ozone filters are replaced at the prescribed PM intervals.

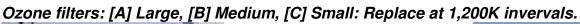
Clogged filters will decrease the air current from the fans and prevent complete removal of corona products.

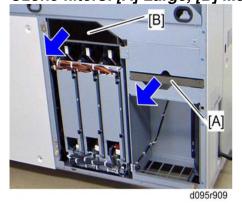
Dust filter: Replace at 400K intervals.

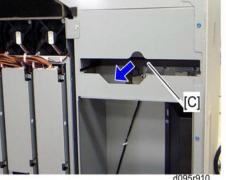


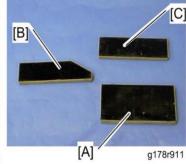
Development filter: Clean with a vacuum at 400K intervals.













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Reissued:04-Apr-14

<u>Second step:</u> If the above is not accepted by the customer due to extra power consumption, ask for customer approval and install the external power supply unit.

### **Notes on Using the External PSU**

- When using the external PSU, confirm that the LED is lit before turning on the main power. If the main power is turned on while the LED is not lit, this will result in an SC.
- The LED will not light up if the breaker switch is turned off or if the timer is set to off.
- Refer to the last section of this document for instructions on how to switch supply source between Pro C900 / Pro C901 and the external PSU.

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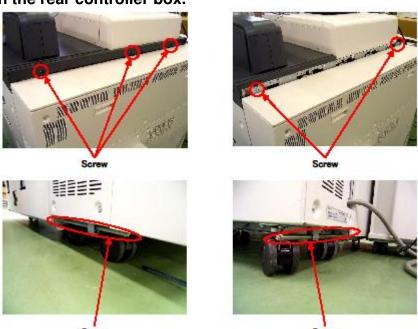
Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

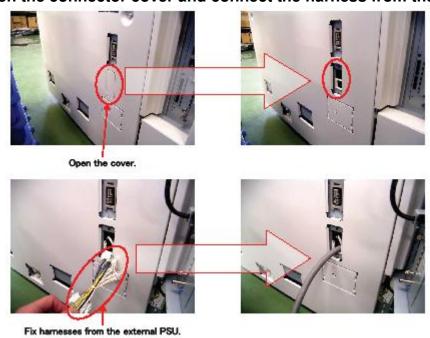
### How to Install the External PSU

**Caution:** Make sure the external PSU and main power are turned off before carrying out the following procedure.

#### 1. Open the rear controller box.



### 2. Open the connector cover and connect the harness from the external PSU.



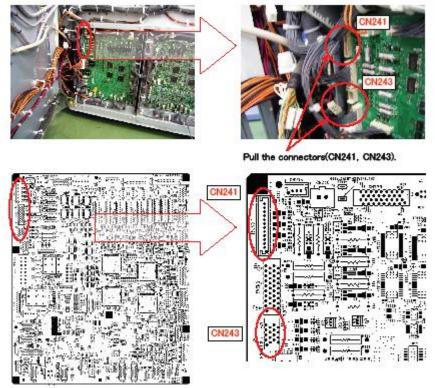


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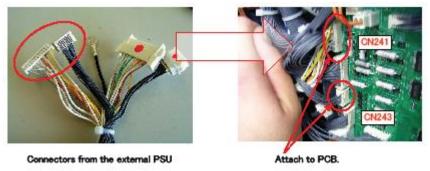
Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

3. Disconnect the fan connectors from the IOB (CN241/CN243).



- 4. Relay the harnesses from the external PSU.
- 4-1. Connect the two connectors from the external PSU circled in red to CN241 and CN243.



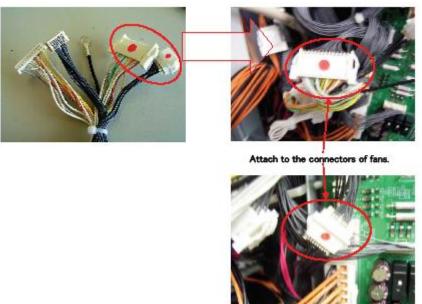


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Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1	Date: 01-Oct-12	No.: RM077075c
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### 4-2. Connect the two connectors circled in red to the fan connectors.





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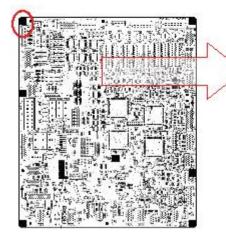
Model: Aries-P1.5/C1.5, AG-P1/C1	Date: 01-Oct-12	No.: RM077075c
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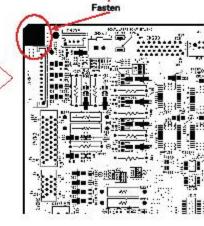
# 4-3. Connect the ground cable.











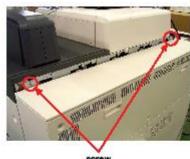


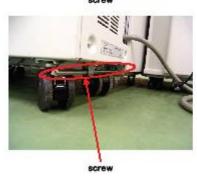
**PAGE: 9/11** 

Reissued:04-Apr-14

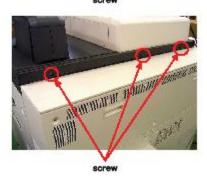
Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

#### 5. Close the rear controller box.









### 6. Connect the power cable to the external PSU.



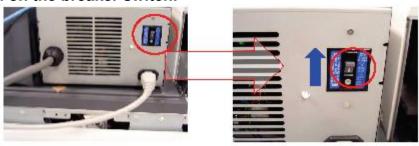


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Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

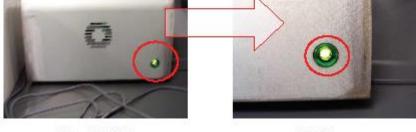
#### 7. Turn on the breaker switch.



Back side of PSU



Breaker ON



Front side of PSU

LED lights up



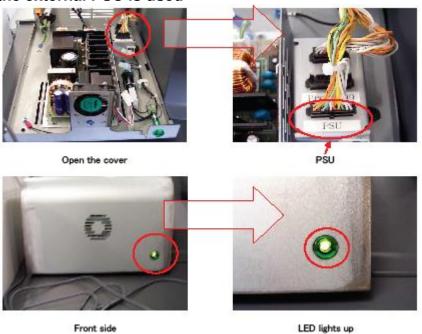
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### Reissued:04-Apr-14

Model: Aries-P1.5/C1.5, AG-P1/C1 Date: 01-Oct-12 No.: RM077075c

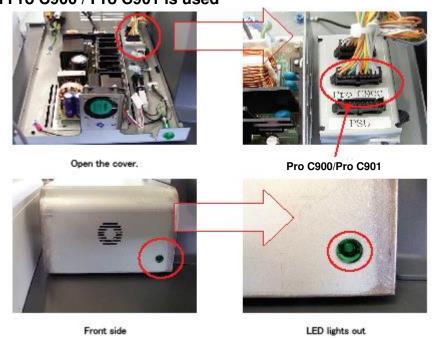
### Switching Supply Source Between Pro C900 / Pro C901 and the External PSU

#### When the external PSU is used



The LED will light up by default when the external PSU is connected.

#### When Pro C900 / Pro C901 is used



# Technical Bulletin

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Model: Aries-P1.	.5/C1.5, AG-P1/C1	e: 01-Oct-	12	No.: RM077076		
	of Failure - Adjustment #0218 of for Skilled Operators	nt	Prepared	d by: Hide	etoshi Kawamura	
From: PP Tech S	ervice Dept., 1st PP Tech Serv					
Classification:	Troubleshooting	☐ Part info	orma	tion		required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
	☐ Paper path	eive	☐ Retrof	fit information		
	☐ Product Safety	$\square$ Other (		)	⊠ Tier 2	

#### General

"0218: Adjust Maximum Image Density" of the Adjustment Setting for Skilled Operators menu was found with a failure as described in 'Symptom' below. Until a solution becomes available, it is requested to field technicians and users to refrain from applying this adjustment. As a workaround, adjust the maximum toner amount in the SP mode as this will substitute the effect generated by "0218: Adjust Maximum Image Density."

### **Symptom**

While adjustment made in "0218: Adjust Maximum Image Density" changes the target value for process control in order to achieve the target image density, once process control is executed during a job, the system will ignore the adjustment made in "0218" and return to the default process control target value.

#### Cause

Software bug

#### Solution

Bug fix: TBD

#### Workaround

1. Set the value for "0218: Adjust Maximum Image Density" to "0".

2. Apply the following SP setting.

SP	Color	Default	-5	-4	-3	-2	-1	+1	+2	+3	+4	+5
3-531-	Bk	0.476	0.376	0.396	0.416	0.436	0.456	0.496	0.516	0.536	0.556	0.576
001												
3-531-	С											
002												
3-531-	М											
003												
3-531-	Υ											
004												

Important: DO NOT apply a value higher than 0.576.

3. Execute process control (SP 3820-002) for the above SP modification to take effect.

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Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077)	Date: 8-Nov-2012	No.: RM077077b
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#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Troubleshooting "Mottled Effect"		Prepared by: J. Kobayashi		
From: 1 <sup>st</sup> PP Tech Service Sec., PP Tech Service Dept.				
Classification:		Part informat	tion	Action required
	☐ Mechanical	Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (	)	☐ Tier2

#### **SYMPTOM**

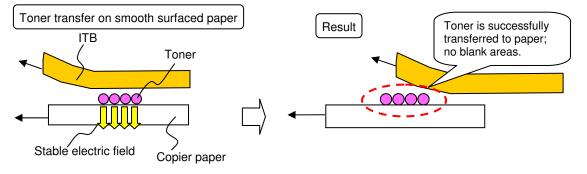
Inconsistent image density; mottled effect, blurred image

#### **CAUSE / SOLUTION / SIDE EFFECT**

Cause	Solution		Side effect	
Unsmooth paper surface	Image	Calibration	None	
causes unstable electric field in the toner transfer process.	processing	Screening setting	Reduced image resolution	
Toner degradation	Engine	Toner refresh amount  Toner yield will decrease if average coverage is 4% or lower		
	setting	ACS switch setting	Productivity will be slightly decreased after switching the print mode.	

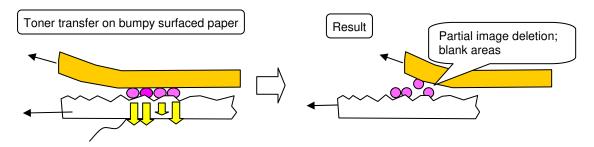
#### Cause in detail

- Unsmooth paper surface; unstable electric field -



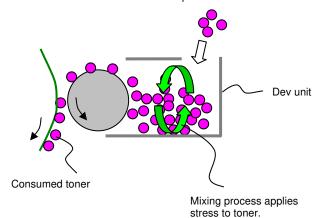
ICAI **B**UIIetin Page: 2/15

Reissued:16-Oct-12



#### -Toner degradation-

Toner is supplied proportionately to its consumption rate.



Average coverage is 4% or lower.

Toner stays in the dev unit for an extended time and is applied with a lot of stress in the mixing process.

Change in the toner characteristics reduces the transferability.

Results in density inconsistency; mottled effect

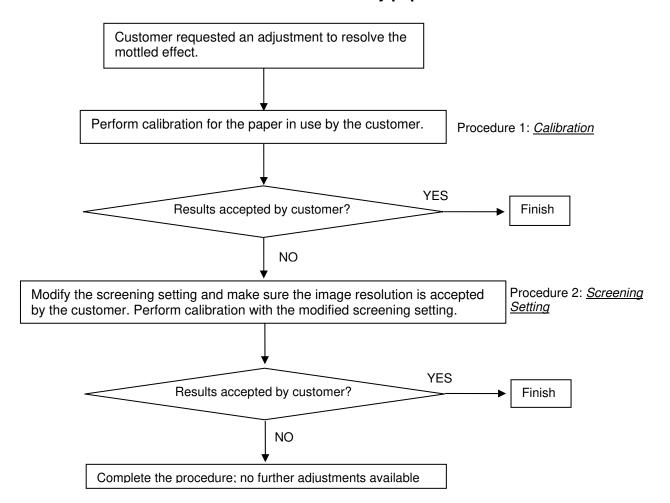


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Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

#### Solution flowchart for mottled effect caused by paper with an unsmooth surface





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#### Reissued:16-Oct-12

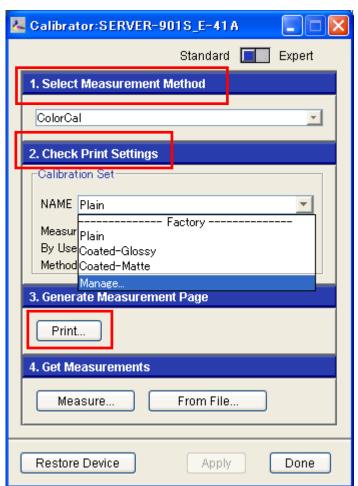
Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

#### Procedure 1: Calibration

1-1. In Command Work Station > Job Center, select Calibrate.



1-2. In the Calibrator dialog box, select the measurement method, check the print settings, and click "Print".



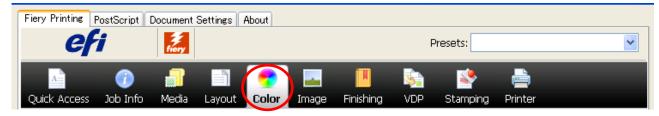


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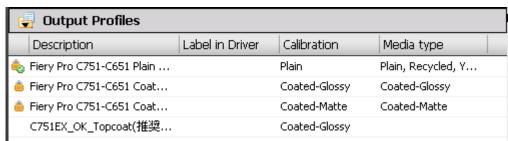
Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

- 1-3. Click "Measure" to get the measurements.
- 1-4. In the printer driver setting, select the Color tab.



- 1-5. Select standard or expert, and the paper type from the following 3 default options: Plain, Gloss, or Matte.
- NOTE: The above steps 1-1 ~ 1-3 (calibration in Command Workstation) and 1-4 ~ 1-5 (output profile selection in printer driver) must be performed as a set because calibration performed in Command Workstation is reflected only to the corresponding paper type selected in the printer driver. To confirm the output profiles associated with the calibrations performed, go to Command Workstation > Device Center > Resource > Profile > Output Profiles.



1-6. Run a test print and check with your customer if the results are accepted. If accepted, complete the procedure. However, if unaccepted, do the next "Screening Setting" procedure.



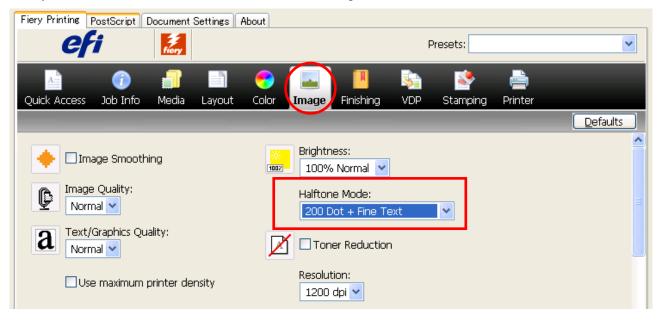
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#### Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077)	Date: 8-Nov-2012	No.: RM077077b
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### Procedure 2: Screen Setting

- 2-1. In the printer driver setting, select the Image tab.
- 2-2. Select several screening settings from the Halftone Mode drop-down list and run test prints to determine the most effective setting.



NOTE: The lower the screening setting, the higher the effect for mottled images with a trade-off in generating grainy images. It is recommended to test the effect by gradually increasing the setting from 150 Dot to 200 Dot.

	Mottled Effect	Screening Setting	Image quality
Step 1	Good	150 Dot	Grainy
Step 2	<b>│</b>	175 Line	<b>†</b>
Step 3		175 Dot	
	<b>↓</b>	200 Line	<b>↓</b>
Step 4	Bad	200 Dot	Fine

IMPORTANT: Make sure your customer accepts the graininess as a result of the screening setting applied.

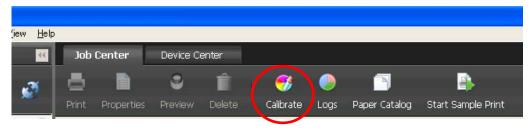


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Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-3. In Command Work Station > Job Center tab, select Calibrate.



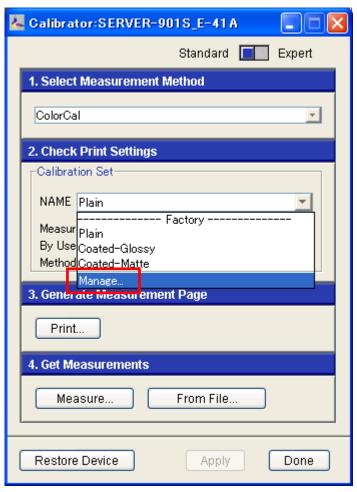


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Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-4. In the Calibrator dialog box, select Manage from the drop-down list 'NAME'.



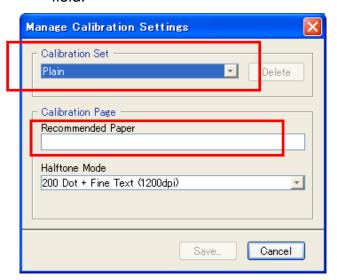
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Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-5. In the Manage Calibration Settings dialog box, select the paper type in use and type in a description, for example, paper type and dot/line value in the Recommended Paper field.



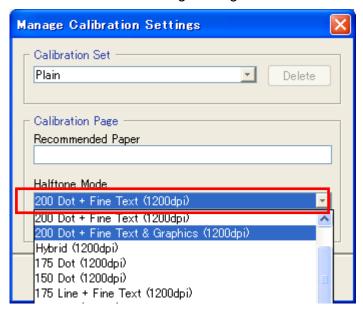


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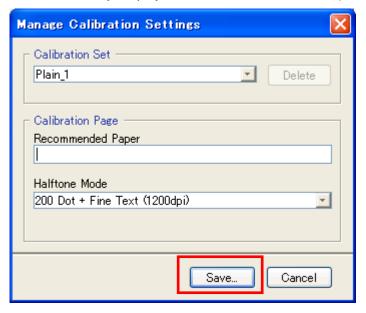
Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-6. Select the screening setting determined in step 2-2.



2-7. Click Save. (A number may be appended for the calibration set name but it is not necessary to pay attention to this number.)



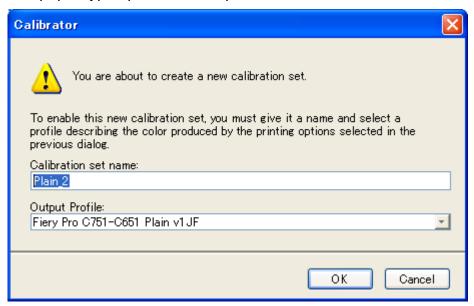


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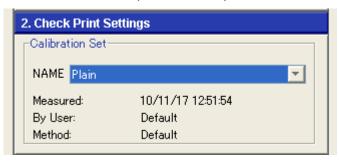
Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-8. In the field calibration set name, type in the description specified in step 2-5 for Recommended Paper. Also, make sure that the output profile corresponds with the paper type specified in step 2-5.



2-9. Make sure that the NAME in the calibrator dialog box reflects the calibration set created in the previous steps.



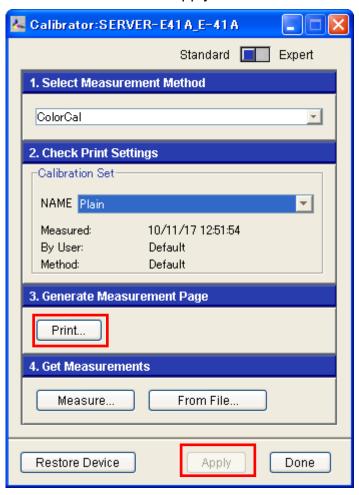


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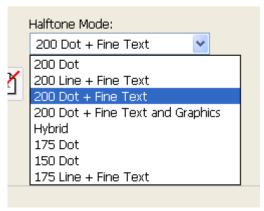
Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

2-10. Click Print. Click Apply after the calibration completes.



- 2-11. Apply printer driver settings (see steps 1-1 ~ 1-4 in Procedure 1: Calibration) and select the profile that was calibrated.
- 2-12. Select the calibrated screening setting from the printer driver (Fiery Printing > Image). Print and check the image quality.





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Reissued:16-Oct-12

### Solution caused by toner degradation

### **Procedure 1: Toner Refresh Amount Adjustment**

Modify the following SP to increase the toner refresh amount.

1-1. Make sure that the current value in SP3-701-009 (Max Pattern Length) is "25".

	3-701-009	Toner Refresh Mode: Max Pattern Length	[0 to 25 / <b>25</b> / 1 mm]
--	-----------	--	------------------------------

1-2. Modify the SP values indicated in red in the following table.

		Default	Modified
Toner Refresh Mode DFU		K: 5%	5%
		Color: 2.5%	3.8%
3-701-001	Image Area: K	12.5	12.5
3-701-002	Image Area: C	6.0	9.4
3-701-003	Image Area: M	6.0	9.4
3-701-004	Image Area: Y	6.0	9.4
3-701-005	Image Area Thresh: K	12.5	12.5
3-701-006	Image Area Thresh: C	6.0	9.4
3-701-007	Image Area Thresh: M	6.0	9.4
3-701-008	Image Area Thresh: Y	6.0	9.4

NO

**TE 1:** Make sure the same value is applied for C, M, and Y.

NOTE 2: Toner yield will decrease for devices with an average coverage of 4% or lower.

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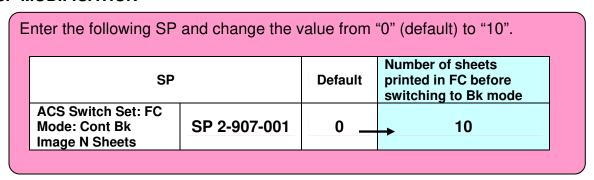
**PAGE: 14/15** Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

#### Procedure 2: ACS Switch Set Modification

Modify the following SP to minimize the idling operation time of Y, M and C development units, if color images show more mottled effects compared to monochrome images.

#### SP MODIFICATION



#### Why Y, M and C?

Y, M and C development units tend to idle more than the Bk development unit. This is because, by default, these units are designed to continuously run idle even when the printing mode switches to mono-chrome from full-color. Y, M and C development units remain inactive only if printed in mono-chrome mode throughout the entire operation, from startup to stand-by.

#### SIDE EFFECT

Productivity will slightly decrease because it will take approximately 5 seconds to switch from FC mode to mono-chrome mode, and approximately 7 seconds in the

Also, it will take an extra 2~3 minutes to perform Process Control, if turning on the machine power or resuming operation after a long pause in a low temperature environment.

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Reissued:16-Oct-12

Model: Aries-C1.5 (D095) / Aries-P1/.5(M077) Date: 8-Nov-2012 No.: RM077077b

#### Procedure 3: Manual Toner Refreshing

While Procedures 1 and 2 are SP modifications to prevent problem occurrences, the following is a troubleshooting procedure to resolve a problem that is present and caused by toner degradation.

- 3-1. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu so that old toner/developer are removed and do not clog the doctor gap.
- 3-2. Run the customer job.

Are the results accepted by the customer?

Yes: Finish

No: Repeat the above step, because the development unit still contains degraded toner.

3-3. Replace the developer of the affected color by referring to the procedures described in RTB RM077072a, if mottled effects are still observed after repeating the above steps twice.

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Reissued: 09-Nov-12

Model: Aries-C1.5/P1.5, AG-C1/P1, AGL-C1/P1,	Date: 11-May-06	No.: RB234014o
B-C3/C3.5/C4, DDP		

## **RTB Reissue**

The items in bold italics have been added.

Subject: Controller firmware (Finisher)			Prepared by: J. Ohno		
From: 1st PP Ted	ch Service Sect.,PP Tech Serv	ice Dept.			
Classification:	Troubleshooting	☐ Part informat	tion	Action required	
		☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2	

This RTB has been issued to announce the firmware release information for the Finisher.

Version	Program No.	Effective Date	Availability of RFU
02.050:64	B8305102V	December 2012 production	Not available
02.040:63	B8305102T	January 2012 production	Not available
02.030:62	B8305102S	March 2011 production	Not available
2.000:61	B8305102R	October 2010 production	Not available
1.900:60	B8305102Q	January 2010 production	Not available
1.820:59	B8305102P	Aug 2009 production	Not available
1.800:58	B8305102N	June 2009 production	Not available
1.600	B8305102M	March 2009 production	Not available
1.500	B8305102L	January 2009 production	Not available
1.420:51	B8305102K	August 2008 production	Not available
1.400:50	B8305102J	July 2008 production	Not available
1.310:48	B8305102H	May 2008 production	Not available
1.160	B8305102G	April 2007 production	Not available
1.140	B8305102F	November 2006 production	Not available
1.100	B8305102E	June 2006 production	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
02.050:64	Symptoms corrected:
	Jogging performance of the shift tray is poor when printing A5 SEF.
02.040:63	Specification Changes: A span of 250msec to withhold the OFF signal was newly prescribed as a specification of the GBC Stream Punch.
02.030:62	Specification Change: With the Booklet Maker BK5010, it enables saddle-stitch of custom size. Currently, this function is available only when connected to CREO.
	<ul> <li>Symptoms Corrected:</li> <li>The error occurs when making one booklet with the Boolket Maker BK5010.</li> <li>The jam occurs when copy/print with switching the punch-hole type. This occur when we use main machine(110cpm or 135 cpm)/SR5000 with decurl unit.</li> </ul>

<sup>&</sup>quot;Available": The firmware can be updated via RFU or SD card.



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Reissued: 09-Nov-12

Model: Aries-C1.5/P1.5, AG-C1/P1, AGL-C1/P1, Date: 11-May-06 No.: RB2340140 B-C3/C3.5/C4, DDP

	/C3.3/C4, DDF
Version	Modified Points or Symptom Corrected
2.000:61	<ul> <li>Specification Change</li> <li>Process Speed Setting (Low) on the Pro C901/C901S is supported.</li> <li>Z-fold staple job is supported for 8K paper size (267 × 390mm applied in China) on the RICOH Pro 907/1107/1357.</li> <li>Initialization behavior of the exit guide plate rollers have been changed to rotate the drive rollers to prevent the drive rollers from adhering to the driven rollers.</li> <li>Symptoms Corrected:</li> </ul>
	<ul> <li>Jam 116 occurs when switching from proof mode to staple mode while the stapler is in the position for staple refill.</li> <li>With the Booklet Maker BK5010 installed the control panel remains to indicate jam status even after clearing the jam.</li> </ul>
1.900:60	<ul> <li>Modified Points:</li> <li>Countermeasure against the machine cannot print when SC750 is occurring.</li> <li>Countermeasure against the machine cannot print when SC721 is occurring.</li> </ul>
	SC750 Cause After the SR5000 send the "tray rising" command, it did not send "stop rising tray" command. The engine was waiting to receive the "stop rising tray" command; therefore, it did not start printing
	Measure When JAM and SC occurred on tray lift motor, while sending the "tray rising" command, SR5000 will also send "stop tray rising" command, in order to start printing.
	SC721 Cause After the SR5000 send the "wait" command, it did not send "wait cancel" command. The engine was waiting to receive the "wait cancel" command; therefore, it did not start printing
	Measure If the staple jogger motor is not at the home position when standby poison check occurred, "request default the position flag" will be set; however, when JAM or SC occurred on stable jogger motor, changed to "request default the position flag" will not be set.
	When checking whether there are staples, if the stapler is not at the home position," move to the home position" signal was released but, for ver. 1.900:60, when JAM or SC occurred in stapler motor, it does not sent the "move to the home position" signal.
1.820:59	<ul><li>Symptoms Corrected:</li><li>1. The shift tray does not descend nor ascend even when the emergency stop button is pressed.</li></ul>



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Reissued: 09-Nov-12

Model: Aries-C1.5/P1.5, AG-C1/P1, AGL-C1/P1,	Date: 11-May-06	No.: RB234014o
B-C3/C3.5/C4, DDP		

Version	Modified Points or Symptom Corrected
	2. The machine stalls at a "printing in process" status in a jam where the paper is not exit to the shift tray.  This symptom occurs only when installing the Katana-C2 and the EFI controller.
	<note> Please apply firmware V1.820 or later for a configuration consisted of the Katana-C2 and the EFI controller.</note>
1.800:58	Symptom Corrected: - Jam115 when changing from Standard size to Non-standard size.  Other changes: - Moving distance of initialization has been changed to "2mm after sensor turn-
	off".
1.600	<note> Please apply Version (V1.600) onward when applying Plockmatic/GBC on the Aegis.</note>
	<ol> <li>Symptom Corrected:</li> <li>During Plockmatic connection, JAM115 occurs when operating manual stapling.</li> <li>During Plockmatic connection, indication of "out of staples" does not disappear even when staples are added after commanding a saddle-stitch job, in which the VICTORIA-E is powered in a "out of staples" status.</li> <li>During Plockmatic connection, when commanding saddle-stitch of more than 2 sheets consisted of a single print using         <ul> <li>12x18 sheet, job completion is not correctly informed in order to start the 2nd stapling function, and results in a "still copying" status.</li> </ul> </li> <li>During GBC connection, sheets that are not assigned to be punched are punched.</li> </ol>
	Changes made: When operating saddle-stitch of more than 16 sheets at Plockmatic connection, a the width of the exit guide plate opening will be set to 5mm. b the shutting timing of the exit guide plate will be when 20mm of the leading edge goes through.



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Reissued: 09-Nov-12

Model: Aries-C1.5/P1.5, AG-C1/P1, AGL-C1/P1, Date: 11-May-06 No.: RB2340140 B-C3/C3.5/C4, DDP

Version	Modified Points or Symptom Corrected
1.500	Symptom Corrected:
	<ol> <li>Operation stops and will not recover when "stop" button on VICTORIA-E_LED is pressed during stacker exit.</li> <li>Deactivate request cannot be cancelled at Plockmatic connection.</li> <li>Deactivate request cannot be cancelled at GBC connection.</li> </ol>
	4. Under the condition of having no staples, jam occurs when staple function is
	released after its operation has been stopped.  5. In Aegis-P1, paper cannot be fed when Plockmatic is connected; indicator shows "full" in shift tray.
	Other changes:
	Under staple-mode, single sheet of paper ejected to the shift tray will not be stapled.
	Although display differs in version-up Finisher Version (1.500:53) and SP mode Version (1.500:52), there is no problem as long as the SP mode Version is set to "1.500".
1.420:51	Changes: Support for Aegis-C1/P1.
1.400:50	Symptom Corrected:
	• When the SP adjustment value for the Jogger is set to +1.5mm, the Jogger
	gradually widens and results in misaligned sheets.
1.310:48	Symptom Corrected:  1. When a jam occurs at the GBC, the number of sheets of recovery is different.  (The 1st sheet is omitted.)
	Other changes:
	Support for Plockmatic SRA3 size.
1.160	Symptom corrected:  1. JAM 230 sometimes occurs, and the VICTORIA does not send its self-status to machine.  2. Sometimes the VICTORIA cannot align the paper correctly when stapling.
	3. If GBC punch is selected during a copy job already set for 3-hole punching, the paper is punched by both the VICTORIA and the GBC punch unit.
1.140	Symptom corrected:  1. The machine stalls and displays "Copying" if the top sheet on the shift tray is removed after the tray is full.  Note: When this occurs, copies cannot be made.
	<ol> <li>The machine displays SC625 instead of a "jam" message when an exit jam occurs with stapled paper.</li> </ol>
	3. Sometimes, the punch motor does not turn ON.
	4. The last sheet of a staple job is not stapled correctly.
	Conditions: 2 sheets/set, A4 LEF  5. Jam 111
	6. The shift tray does not shift (stacking only) after an exit jam at the shift tray is

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Reissued: 09-Nov-12

Model: **Aries-C1.5/P1.5, AG-C1/P1, AGL-C1/P1,** Date: 11-May-06 No.: RB2340140 B-C3/C3.5/C4, DDP

Version	Modified Points or Symptom Corrected
	cleared.
	7. SC625 occurs after a staple jam is cleared.
	Conditions: The staple jam occurs when the operator opens the door during staple stacking.
	8. The machine displays "Copying"if the previous job used mixed-sizes and was cancelled.
	9. A error with the jogger fences occurs when using Z-fold stapling mode.
1.100	Latest Firmware Version

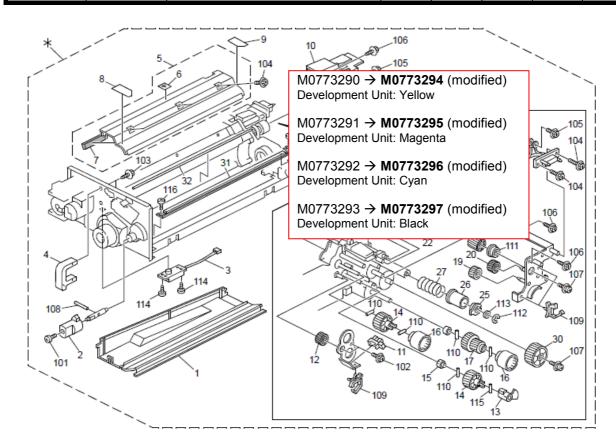
**PAGE: 1/2** 

Model: Aries-P1.5/C1.5, AG-P1/C1			te: 14-Nov	-12	No.: RM077078		
Subject: Release note: modified development unit				Prepared by: Hidetoshi Kawamura			
From: PP Tech Service Dept., 1st PP Tech Service Sect.							
Classification:	☐ Troubleshooting	□ Part info	orma	tion	Action	required	
	☐ Mechanical	☐ Electrical			☐ Service manual rev		
	☐ Paper path	☐ Transmit/rec		receive		fit information	
	☐ Product Safety	Other (		)	☐ Tier 2		

This RTB has been issued to announce the release of the new development units. The doctor gap of the modified development units is adjusted to achieve the optimum developer/toner mixture mass per area effective for the image quality issue known as "fuzzy lines".

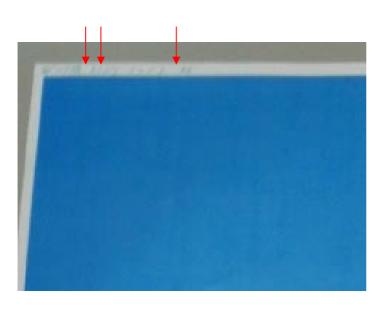
## **Part Information**

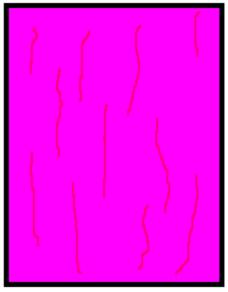
Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
M0773290	M0773294	Development Unit: Yellow	1	O/O	95	*	Change
M0773291	M0773295	Development Unit: Magenta	1	0/0	95	*	Change
M0773292	M0773296	Development Unit: Cyan	1	O/O	95	*	Change
M0773293	M0773297	Development Unit: Black	1	O/O	95	*	Change



**PAGE: 2/2** 

## **Explanation of Fuzzy Lines**



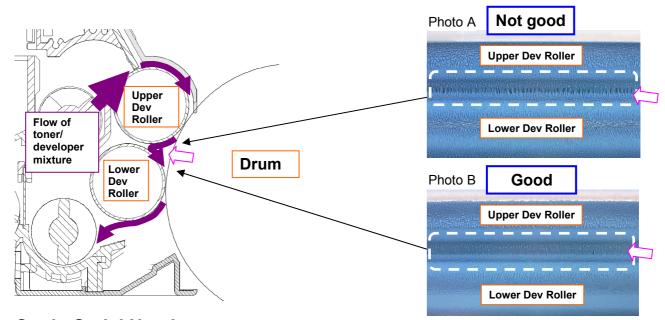


The symptom known as "fuzzy lines" is a result of insufficient supply of toner/developer mixture to the drum surface via the development rollers.

Photos A and B below show the slit between the upper and lower development rollers viewed from the drum.

Photo A: The "fuzzy" condition of the toner/developer mixture is reflected directly to the output, generating the fuzzy lines.

Photo B: The mixture is solid and generates proper output.



## **Cut in Serial Numbers**

From June 2012 production V9910600001 ~

T0106000001 ~

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5			Dat	e: 20-Nov-	·12	No.: RM077079
Subject: Preventing SC36x (Low toner density)				Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	☐ Troubleshooting	☐ Part informa		tion		required
	☐ Mechanical	☐ Electrical			☐ Service manual re	
	☐ Paper path	☐ Transmit/red		eive	Retrof	fit information
	☐ Product Safety	Other (		)	⊠ Tier 2	

## **SYMPTOM**

SC36x (Low toner density), Low image density, Breakage of the sub-hopper shaft

## **CAUSE**

Toner supply from the sub-hopper to the development unit is obstructed by toner clumps that form in the path connecting the two components (red circle in Photo 1), and generates excess load on the sub-hopper shaft with a possibility of breaking the shaft (Photo 2).

Photo 1

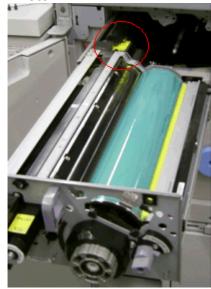


Photo 2





**PAGE: 2/2** 

Model: Aries-P1.5 Date: 20-Nov-12 No.: RM077079

## **WORKAROUND**

Check for toner clumps in the toner supply path between the sub-hopper and the development unit (circled in red in the photos below), and if found, remove the clumps with a vacuum cleaner.





## When to check

- 1) For units that have exhibited any of the aforementioned symptoms, carry out the check procedure on every visit
- 2) For units that have not exhibited any of the aforementioned symptoms, carry out the check procedure on the next PM visit.

# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5		Date: 11-Dec-12		-12	No.: RM077080	
Subject: JAM170 (SR5020 booklet unit exit sensor paper jam) Prepared by: T.					d by: T. N	/liyamoto
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	Troubleshooting	☐ Part info	orma	tion		required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
☐ Paper path ☐ Transmit		it/rec	eive	☐ Retrof	fit information	
	☐ Product Safety	Other (		)	⊠ Tier 2	

#### **SYMPTOM**

JAM170 (SR5020 booklet unit exit sensor detects a paper jam) occurs when staple jobs are run alternately between two different paper sizes that have the same width (main scan direction) but different length (sub scan direction), for example, A3 and A4.

Occurrence rate: 100%

JAM170 occurs when all of the following conditions are met:

- 1) Staple jobs of different paper sizes are run continuously in printer mode.
- 2) The two paper types have the same width (main scan) but different length (sub scan).
- 3) The same stapling position is applied to alternate jobs.

#### **CAUSE**

Firmware bug; when the paper changes, the system is not given enough time to move the leading edge stopper (located in the booklet finisher) to the proper position.

## **SOLUTION**

Firmware fix (release schedule TBD)

## **WORKAROUND**

Until the fixed firmware becomes available, work around the problem by carrying out either of the following procedures:

- 1) Run the jobs separately by paper size.
- 2) Specify a different stapling position for each paper size.

# Technical Bulletin

**PAGE: 1/5** 

Model: Aries-P1.5		Dat	Date: 28-Dec-12		No.: RM077081	
Subject: Cleaning to prevent toner offset on printed paper			Prepared	d by: T. M	/liyamoto	
From: 1st PP Ted	ch Service Sec., PP Tech Servi	ice Dept.,				
Classification:		☐ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electrica	al		Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	Retrof	fit information
	☐ Product Safety	Other (		)	⊠ Tier 2	

## **SYMPTOM**

Toner offset on printed paper

## **CAUSE**

Toner adhered to the fusing exit guide assembly and/or the de-curl unit is offset to the printed paper. Toner offset is more likely to occur when the fusing temperature is set low.

## **SOLUTION**

- 1) Clean the fusing exit guide assembly
- 2) Clean the de-curl unit

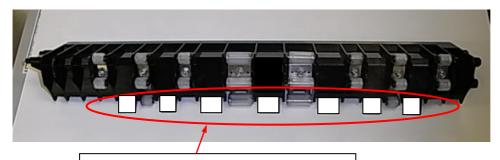
See the following pages for details on the cleaning procedure.

PAGE: 2/5

Model: Aries-P1.5 Date: 28-Dec-12 No.: RM077081

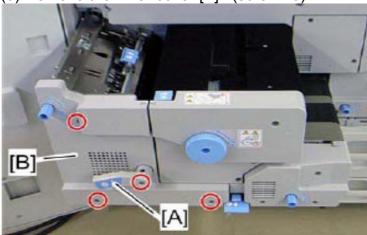
## Cleaning the fusing exit guide assembly

Disassemble as described below to check for toner adhesion at the tip of the paper exit guide assembly. If toner adhesion is confirmed, clean with alcohol.



Check for toner adhesion on these tips.

- (1) Pull out the paper exit unit.
- (2) Remove the lock lever [A]. (screw x1)
- (3) Remove the inner cover [B]. (screw x3)



(4) Open the upper paper guide.

**PAGE: 3/5** 

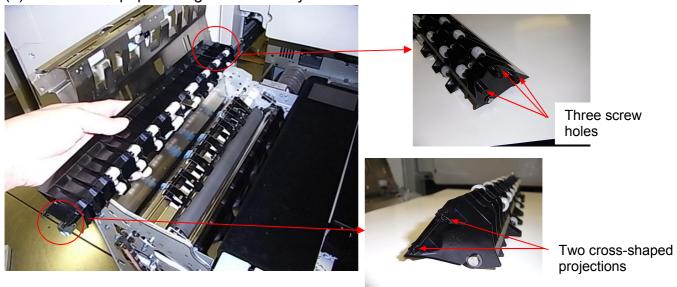
Date: 28-Dec-12 Model: Aries-P1.5 No.: RM077081

(5) Remove screw "1" at the front side and the small plate.(6) Remove screws "2, 3 & 4" at the rear side.





(7) Remove the paper exit guide assembly.



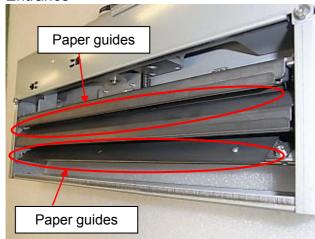
**PAGE: 4/5** 

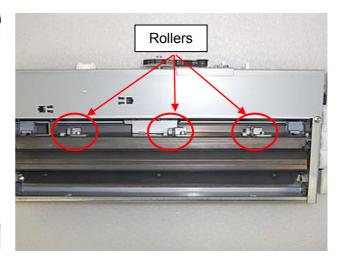
Model: Aries-P1.5 Date: 28-Dec-12 No.: RM077081

## Cleaning the de-curl unit

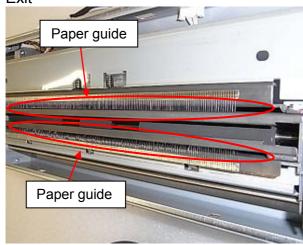
Remove the de-curl unit by following the procedure described below to check for toner adhesion on its guide plates and rollers. If toner adhesion is confirmed, clean with alcohol.

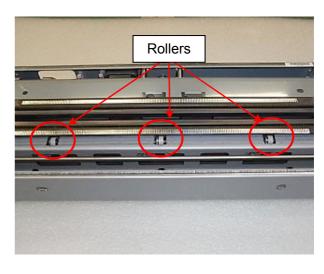
## **Entrance**





## Exit





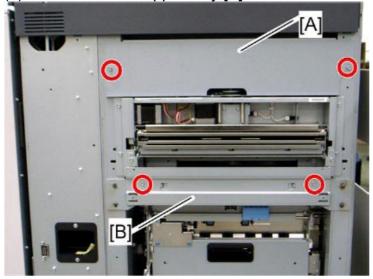
**PAGE: 5/5** 

Model: Aries-P1.5 Date: 28-Dec-12 No.: RM077081

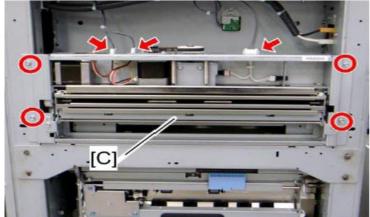




(2) Remove the left upper stay [A] and the left middle stay [B]. (screw x4)



(3) Remove the de-curl unit [C]. (connector x3, screw x4)



Classification:

Model: Aries-P1.5

# Technical Bulletin

Other (

☐ Transmit/receive

)

	Date	e: 23-Jan-13	No.: RM077082
g Pin	F	Prepared by: T.	Miyamoto
ce Dept.,			
□ Part information		on Action	n required
☐ Electrical		☐ Servi	ce manual revision

☐ Retrofit information

☐ Tier 2

**PAGE: 1/1** 

Change: The heat roller adjusting pin was added as an individual service part.

**Reason:** To meet requests received from the field.

Subject: New service part - Heat Roller Adjusting Pin From: 1st PP Tech Service Sec., PP Tech Service Dept., ☐ Troubleshooting

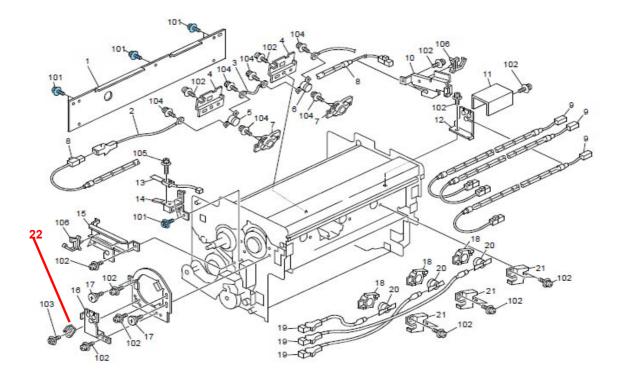
☐ Paper path

☐ Product Safety

## 54. Fusing Unit 3 (D095/M077)

New part number	Description	Q'ty	Int	Page	Index	Note
M0774414	PIN:ADJUSTING PIN:HEAT ROLLER:PEEN	1	1	133	22	

## 54.Fusing Unit 3 (D095/M077)



# Technical Bulletin

**PAGE: 1/5** 

Reissued: 03-Jul-13

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077083b
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### **RTB Reissue**

The items in bold italics have been corrected or added

The Remo III bella Ramoe Have been contested of added.				
Subject: Firmware Release Note: Paper Library AP			Prepare	d by: T. Miyamoto
From: 1st PP Tech Service Sect., PP Tech Service Dept.				
Classification:	Troubleshooting	☐ Part informat	tion	☐ Action required
		Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries Plus P1.5 and Plus C1.5

MQP files and Media Lists are confidential information.

## Aries Plus P1.5

Version	Program No.	Availability of RFU
3	M0776075_R3	Not available
2	M0776075_R2	Not available
1	M0776075_R1	Not available

## Aries Plus C1.5

Version	Program No.	Availability of RFU
3	D0956175_R3	Not available
2	D0956175_R2	Not available
1	D0956175_R1	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

# Technical Bulletin

**PAGE: 2/5** 

Reissued: 03-Jul-13

Model: **Aries-Plus-P1.5/C1.5** Date: 01-Mar-13 No.: RM077083b

Aries Plus P1.5

Version	Modified Points or Symptom Corrected
3	<ol> <li>Add 28 media</li> <li>RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".</li> <li>RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.</li> <li>RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.</li> <li>RE0023B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".</li> <li>RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".</li> <li>RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".</li> <li>RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".</li> <li>RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".</li> <li>RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".</li> <li>RE1312: Corrected RCL Control No. from RE1118 to RE1312.</li> </ol>
2	<ul> <li>(12)RE1696: Deleted because RE1696 repeated with RE0022.</li> <li>(1) Add 6 media</li> <li>(2) RE0996, RE0997, RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>(3) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>(4) RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metaric</li> <li>(5) RA0000, RE0100, RE01000, RE0100, RE0100, RE0</li></ul>
	<ul> <li>(5) RA0030, RE0129, RE0130, RE0132, RE0133, RA0029: Corrected Media Type from Matt to Silk</li> <li>(6) RE0059A, RE0060A, RE0313A, RE0314A, RE0315A, RE0061A, RE0317A, RE1303A, RE1696A, RE0023A, RE0024A, RE1308A, RE1309A, RE1059A, RE1598A: Delete Ricoh Pro-graphic media.</li> </ul>

# Technical Bulletin

**PAGE: 3/5** 

Reissued: 03-Jul-13

Aries Plus C1.5

Version	Modified Points or Symptom Corrected
Version 3	Modified Points or Symptom Corrected  (1) Add 28 media (2) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".  (3) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.  (4) RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.  (5) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".
	<ul> <li>(6) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".</li> <li>(7) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".</li> <li>(8) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".</li> <li>(9) RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".</li> <li>(10)RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".</li> <li>(11)RE1312: Corrected RCL Control No. from RE1118 to RE1312.</li> <li>(12)RE1696: Deleted because RE1696 repeated with RE0022.</li> </ul>
2	<ul> <li>(1) Add 6 media</li> <li>(2) RE0996, RE0997, RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss)</li> <li>(3) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996</li> <li>(4) RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metaric</li> <li>(5) RA0030, RE0129, RE0130, RE0132, RE0133, RA0029: Corrected Media Type from Matt to Silk</li> <li>(6) RE0059A, RE0060A, RE0313A, RE0314A, RE0315A, RE0061A, RE0317A, RE1303A, RE1696A, RE0023A, RE0024A, RE1308A, RE1309A, RE1059A, RE1598A: Delete Ricoh Pro-graphic media.</li> </ul>
1	Initial release

## **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

# Technical Bulletin

**PAGE: 4/5** 

Reissued: 03-Jul-13

## About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
<b>A</b> +	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.
С	Not suggested for use

## **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
A	Α	А	Α	Α
В	В	А	В	Α
С	С	А	А	А

## **NOTE**

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

## Paper Library Data Installation

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.

# Technical Bulletin

**PAGE: 5/5** 

Reissued: 03-Jul-13

Model: **Aries-Plus-P1.5/C1.5** Date: 01-Mar-13 No.: RM077083b

- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

# Technical Bulletin

**PAGE: 1/6** 

Reissued: 24-Oct-14

Model: Aries-1 13-1 1.3/01.3	Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077084d
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### **RTB Reissue**

The items in **bold italics** have been corrected.

Subject: Firmwa	re Release Note: Paper Library	Prepare	d by: T. Miyamoto	
From: 1st PP Ted	ch Service Sect., PP Tech Serv			
Classification:	☐ Troubleshooting	☐ Part informat	tion	☐ Action required
	☐ Mechanical	☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	⊠ Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries Plus P1.5 and Plus C1.5

MQP files and Media Lists are confidential information.

## Aries Plus P1.5

Version	Program No.	Availability of RFU
5	M0776074_R5	Not available
4	M0776074_R4	Not available
3	M0776074_R3	Not available
2	M0776074_R2	Not available
1	M0776074_R1	Not available

## Aries Plus C1.5

Version	Program No.	Availability of RFU
5	D0956174_R5	Not available
4	D0956174_R4	Not available
3	D0956174_R3	Not available
2	D0956174_R2	Not available
1	D0956174_R1	Not available

Note: Definition of Availability of RFU via @Remote

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

# Technical Bulletin

**PAGE: 2/6** 

Reissued: 24-Oct-14

Model: **Aries-Plus-P1.5/C1.5** Date: 01-Mar-13 No.: RM077084d

## Aries Plus P1.5

Version	Modified Points or Symptom Corrected
5	(1) Add 14 Media (RE1312, RE2057, RE2058, RE2063, RE2099, RE2100, RE2118, RE2119, RE2124, RE2125, RE2146, RE2212, RE2217, RE2220)
	(2) RE1303, RE1303A, RE1303B: Corrected Fusing temp. from 165 to 155, Overall rank from B to A, Image Quality rank from B to A+ and add Notes on paper curl.
	(3) RE0022: Corrected Fusing temp. from 155 to 160 and Overall rank from B to A.
	(4) RE0022A: Corrected Fusing temp. from 170 to 160 and IQ rank from A+ to A.
	(5) RE0022B: Corrected Grain direction from Long to Short, Fusing temp. from 170 to 160 and IQ rank from A+ to A.
	(6) RE0023, RE0023A: Corrected IQ rank from A to A+.
	(7) RE0023B: Corrected Grain direction from Long to Short and Fusing temp. from 165 to 160.
	(8) RE0024, RE0024A, RE0024B: Corrected Fusing temp. from 175 to 170 and IQ rank from A to A+.
	(9) RE1059: Corrected Product name from Digi Finesse Premium Silk to UPM DIGI Finesse Premium Silk and Fusing temp. from 165 to 160.
	(10) RE1059A, RE1059B: Corrected Fusing temp. from 165 to 160.
	(11) RE1308: Corrected Product name from Digi Finesse Premium Silk to UPM DIGI Finesse Premium Silk and Fusing temp. from 150 to 155.
	(12) RE1308A, RE1308B: Corrected Fusing temp. from 150 to 155.
	(13) RE1309: Corrected Product name from Digi Finesse Premium Silk to UPM DIGI Finesse Premium Silk.
	(14) RE1312A: Corrected Fusing temp. from 175 to 170.
	(15) RE1312B: Corrected RCL Control No. from RE1312 to RE1312B.
	(16) RE1598: Corrected Product name from Digi Finesse Premium Silk to UPM DIGI Finesse Premium Silk, Fusing temp. from 190 to 170, Grain direction from Unknown to Short, Overall rank from B to
	A, IQ rank from B to A+ and IP rank from B to A.
	(17) RE1598A: Corrected Fusing temp. from 190 to 170, Grain
	direction from Unknown to Short, Overall rank from B to A,
	IQ rank from B to A+ and IP rank from B to A.
	(18) RE1598B: Corrected Fusing temp. from 190 to 170, Overall rank from B to A, IQ rank from B to A+ and IP rank from B to A.
4	(1)Add 8 media

# Technical **B**ulletin

**PAGE: 3/6** 

Reissued: 24-Oct-14

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077084d
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Version	Modified Points or Symptom Corrected
3	<ol> <li>Add 21 media</li> <li>RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".</li> <li>RE0022A: Corrected RCL Control Number from "Ricoh Pro-Graphic Gloss (RE1696A)" to RE0022A.</li> <li>RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.</li> <li>RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.</li> <li>RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".</li> <li>RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".</li> <li>RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".</li> <li>RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".</li> <li>RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".</li> <li>RE1006: Corrected Production Name from "Iprint Digital" to "Iprint Digital Silk".</li> <li>RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".</li> <li>RE1312: Corrected RCL Control No. from RE1118 to RE1312.</li> <li>RE1696: Deleted because RE1696 repeated with RE0022.</li> </ol>
2	Add 6 media RE0996, RE0997, RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996 RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic
1	Initial release

## Aries Plus C1.5

Version	Modified Points or Symptom Corrected

**PAGE: 4/6** 

Reissued: 24-Oct-14

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077084d
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Wodol. Alles	
Version	Modified Points or Symptom Corrected
5	(1) Add 14 Media (RE1312, RE2057, RE2058, RE2063, RE2099, RE2100,
	RE2118, RE2119, RE2124, RE2125, RE2146, RE2212, RE2217,
	RE2220)
	(2) RE1303, RE1303A, RE1303B: Corrected Fusing temp. from 165 to
	155, Overall rank from B to A, Image Quality rank from B to
	A+ and add Notes on paper curl.
	(3) RE0022: Corrected Fusing temp. from 155 to 160 and Overall
	rank from B to A.
	(4) RE0022A: Corrected Fusing temp. from 170 to 160 and IQ rank
	from A+ to A.
	(5) RE0022B: Corrected Grain direction from Long to Short, Fusing
	temp. from 170 to 160 and IQ rank from A+ to A.
	(6) RE0023, RE0023A: Corrected IQ rank from A to A+.
	(7) RE0023B: Corrected Grain direction from Long to Short and
	Fusing temp. from 165 to 160.
	(8) RE0024, RE0024A, RE0024B: Corrected Fusing temp. from 175 to
	170 and IQ rank from A to A+.
	(9) RE1059: Corrected Product name from Digi Finesse Premium Silk
	to UPM DIGI Finesse Premium Silk and Fusing temp. from 165 to
	160.
	(10) RE1059A, RE1059B: Corrected Fusing temp. from 165 to 160.
	(11) RE1308: Corrected Product name from Digi Finesse Premium Silk
	to UPM DIGI Finesse Premium Silk and Fusing temp. from 150 to
	155.
	(12) RE1308A, RE1308B: Corrected Fusing temp. from 150 to 155.
	(13) RE1309: Corrected Product name from Digi Finesse Premium Silk
	to UPM DIGI Finesse Premium Silk.
	(14) RE1312A: Corrected Fusing temp. from 175 to 170.
	(15) RE1312B: Corrected RCL Control No. from RE1312 to RE1312B.
	(16) RE1598: Corrected Product name from Digi Finesse Premium Silk
	to UPM DIGI Finesse Premium Silk, Fusing temp. from 190 to 170,
	Grain direction from Unknown to Short, Overall rank from B to
	A, IQ rank from B to A+ and IP rank from B to A.
	(17) RE1598A: Corrected Fusing temp. from 190 to 170, Grain
	direction from Unknown to Short, Overall rank from B to A,
	IQ rank from B to A+ and IP rank from B to A.
	(18) RE1598B: Corrected Fusing temp. from 190 to 170, Overall rank
	from B to A, IQ rank from B to A+ and IP rank from B to A.
4	(1) Add 8 media
<u> </u>	

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Reissued: 24-Oct-14

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077084d
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Version	Modified Points or Symptom Corrected
Version 3	Modified Points or Symptom Corrected  (2) Add 21 media (3) RE0022, RE0023, RE0024, RE0025: Corrected Production Name from "UPM DIGI Fine" to "UPM DIGI Finesse gloss".  (4) RE0022A: Corrected RCL Control Number from "Ricoh Pro-Graphic Gloss (RE1696A)" to RE0022A.  (5) RE0022B: Corrected RCL Control No. from RE1020 to RE0022B.  (6) RE0023B: Corrected RCL Control No. from RE1021 to RE0023B.  (7) RE0022B, RE0023B, RE1006, RE1312: Corrected Manufacturer from "Iprint" to "Antalis McNaughton".  (8) RE0022B, RE0023B: Corrected Production Name from "Iprint Digital" to "iPrint Digital Gloss".  (9) RE0129, RE0130, RE0132, RE0133: Corrected Media Type from "Matt" to "Silk".  (10) RE0141-RE0145: Corrected Manufacturer from "M-real" to "Sappi Fine Paper".  (11) RE1001, RE1303: Corrected Productioon Name from "Digi Finesse gloss" to "UPM DIGI Finesse gloss".  (12) RE1006: Corrected Production Name from "Iprint Digital" to "Iprint Digital Silk".  (13) RE1006, RE1312: Corrected Production Name from "Iprint Digital" to "iPrint Digital Silk".  (14) RE1312: Corrected RCL Control No. from RE1118 to RE1312.
2	(15) RE1696: Deleted because RE1696 repeated with RE0022.  Add 6 media
	RE0996, RE0997, RE0998, RE0999: Corrected Media Type from Gloss to Recycled (Gloss) RE0996: Corrected RCL Control Number from "Arjowiggins Satimat green 300 (RE0252)" to RE0996 RE1075, RE1076, RE1953: Corrected Media Type from Matt to Metallic
1	Initial release

## **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

## **About the MQP file**

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
A+	Better than the product Spec.(Only Image Quality)
Α	Result is good without any remarks.
В	There is remark for use. Customer should know the remark for use.
С	Not suggested for use



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Reissued: 24-Oct-14

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077084d
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## **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	Α	Α	А
В	В	А	В	А
С	С	А	А	А

## **NOTE**

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

## **Paper Library Data Installation**

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-Plus-P1.5/C1.5	Date: 01-Mar-13	No.: RM077085
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Subject: Firmware Release Note: Paper Library NA		Prepared by: T. Miyamoto	
From: 1st PP Ted	ch Service Sect., PP Tech Serv	vice Dept.	
Classification:	☐ Troubleshooting	☐ Part information	Action required
		☐ Electrical	☐ Service manual revision
	☐ Paper path	☐ Transmit/receiv	e Retrofit information
	☐ Product Safety		e) Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries P1.5 and C1.5

MQP files and Media Lists are confidential information.

#### Aries Plus P1.5

Version	Program No.	Availability of RFU
1	M0776073_R1	Not available

#### Aries Plus C1.5

Version	Program No.	Availability of RFU
1	D0956173_R1	Not available

Note: Definition of Availability of RFU via @Remote

#### Aries Plus P1.5

Version	Modified Points or Symptom Corrected
1	Initial release

#### Aries Plus C1.5

Version	Modified Points or Symptom Corrected	
1	Initial release	

### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

### About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

Rank	Description
A+	Better than the product Spec.(Only Image Quality)

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

# Technical Bulletin

**PAGE: 2/2** 

Model: Aries-Plus-P1.5/C1.5 Date:		Date: 01-Mar-13	No.: RM077085	
Α	Result is good without any remarks.			
В	B There is remark for use. Customer should know the remark for use.			
С	Not suggested for use			

## **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	Α	Α	Α
В	В	А	В	Α
С	С	А	А	А

## NOTE

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

## **Paper Library Data Installation**

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.



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## Reissued:05-Mar-14

Model: Aries-P1.5/C1.5	Date: 01-Mar-13	No.: RM077086c

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Preventing SC32x and 39x			Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	Classification: ☐ Troubleshooting ☐ Part informat		ion		
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	☐ Other (	)	☐ Tier 2	

This bulletin has been issued to supplement the information announced in RTB RM077072.

## SYMPTOM

- SC324~327; development motor lock (KCMY)
- SC396~399; drum lock (KCMY)
- SC320~323 (Development bias: high voltage error: KCMY) caused by excessive scratches on the drum surface (See "Reference" on the following page.)

## **CAUSE**

The development unit is constantly overloaded with developer due to a clogged aperture disabling disposal of excess developer.

## **ACTION**

Remove the clogged developer from the aperture by following the procedure described below.

- 1. Pull out the PCDU from the mainframe. (Photo 1, 2)
- 2. Hold a screwdriver backwards and tap the area with the grip of the screwdriver circled in yellow in Photo 2.

<u>IMPORTANT:</u> Work carefully to avoid damage to the drum with the screwdriver.

Photo 1



Photo 2



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## Reissued:05-Mar-14

Model: Aries-P1.5/C1.5 Date: 01-Mar-13 No.: RM077086c

## Photo 3

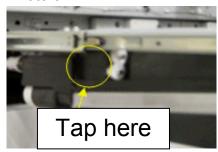
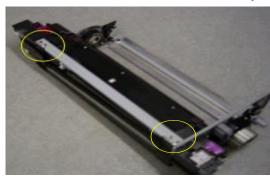


Photo 4



## How to check if the aperture is clogged or not

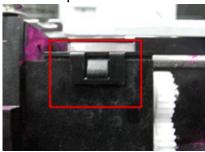
- 1. Remove the development unit from the mainframe and place it on a table.
- 2. Loosen the 4 screws circled in yellow.



3. Slightly lift up the guide rail as you move it in the direction indicated with the arrow.



4. Release the hook (indicated in red in the left photo) and remove the cover to disclose the aperture.



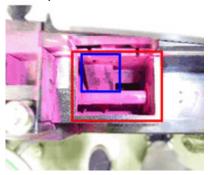


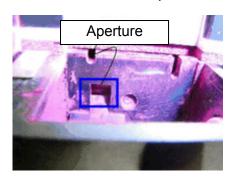
**PAGE: 3/5** 

## Reissued:05-Mar-14

Model: Aries-P1.5/C1.5 Date: 01-Mar-13 No.: RM077086c

5. Check if the aperture (indicated in blue) is clearly visible as in the photos below. Disposal of excess developer is disabled when this aperture is clogged.





## When to do the procedure

- EM
- PM

According to information obtained from the field, toner clogging could occur in 1 week if the print volume is high.

Therefore, if allowed, it is recommended to carry out the check on a weekly basis.

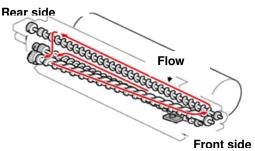
#### Reference

Drum scratches / Bias error caused by toner clumps at the rear side of the unit

Due to the nature of the developer flow inside the development unit, excess developer in the unit causes toner to accumulate at the rear side (lower auger) of the development roller.

Toner accumulation results in forming toner clumps that scratch the surface of the drum.

Excessively scratched drum could cause SC 320~323 (Development bias: high voltage error: KCMY).





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Reissued:05-Mar-14

Model: Aries-P1.5/C1.5	Date: 01-Mar-13	No.: RM077086c
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## Recommended actions to prevent & resolve SC39x

Update the Engine Firmware to version 1.009:16 or later.

In a system forced termination, developer accumulates at the nip between the dev roller and drum, because the dev roller and drum stop suddenly. This generates excess load on the drum rotation in the recovery operation. (See "Cause No.4 and 5" in Table 3 on the next page.)

The new f/w (Ver1.009:16) pre-rotates the dev roller in the recovery operation to remove the developer accumulating in the nip between the dev roller and drum in advance, which prevents abnormal drum rotation (SC39x).

Table 1

Version	Program No.	Implementation to production	RFU availability
1.009:16	M0775253B	Jan 2014	Unavailable
1.008:16	M0775253A	Jan 2013	Unavailable
1.007 16	M0775253	Jun 2012	Unavailable
1.006:16	M0775252E	Jul 2011	Unavailable
1.005:16	M0775252D	May 2011	Unavailable
1.004:16	M0775252C	Apr 2011	Unavailable
1.003:16	M0775252B	Feb 2011	Unavailable
1.000A:16	M0775252A	1st mass production	Unavailable

<sup>&</sup>quot;Available": The firmware can be updated via RFU or SD card.
"Unavailable": The firmware can only be updated via SD card.

## Table 2

Version	Modified Points or Symptom Corrected
1.009 :16	Specification changes:  1. To meet the Energy Star Ver2.0 standards, ITB alignment control values are no longer stored on the NVRAM during monochrome printing.  2. Higher reliability against SC39x (drum-lock); machine warm-up following a forced termination is performed after activating the development motor.  3. Higher reliability against Jam 170 when alternately running A3/DLT and A4/LT staple jobs.  NOTE  When applying this firmware, make sure to upgrade the firmware for SR5020 to Ver.3.19 (P/N:D4345620N) or newer.



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Reissued:05-Mar-14

Model: Aries-P1.5/C1.5 Date: 01-Mar-13 No.: RM077086c

## Table 3

Cause	No.	Symptom	Action	Note
	1	SC39x after power-on	Power Off-On	Symptom occurs only immediately after machine power-on.
High friction between the drum and cleaning blade	2	Stopper seal on the cleaning unit is twisted and/or loose.	Correct the sealing. If the seal cannot be corrected, replace the cleaning unit.	Loose seal causes higher friction.
	3	SC39x immediately after installing a new drum	Lubricate the drum.	Insufficient lubricant causes higher friction.
Compressed developer between the dev roller and drum as a result	4	SC39x following a Jam037	Manually rotate the dev roller (clockwise viewed from front) to remove the compressed developer.	Jam037 (fusing unit) is a system forced termination status; highly likely to cause compressed developer between the components.
of system forced termination	5	SC39x as a result of opening the front doors before a complete machine stop	Same as above	No front door open while machine is working.
Excess developer in the development unit	6	Excess developer on dev roller	Completely remove the developer from the development unit and replace with brand new developer.	<ul> <li>Incomplete         developer         replacement causes         the developer to         increase in the unit.</li> <li>See RM077072 for         details on how to         completely clear out         the developer from         the unit.</li> </ul>
Toner blocking in the drum cleaning unit	7	Toner clogged between the brush roller and toner collection coil	Replace the old drum cleaning unit (M0773601) with the new unit (M0773602)	See RTB RM077102.



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Reissued:09-May-13

Model: Aries-P1.5/C1.5	Date: 06-Mar-13	No.: RM077087a

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Upgrade to Pro C901 Graphic Arts +			Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	☐ Troubleshooting	□ Part information			
	☐ Mechanical	☐ Electrical		☐ Service manual revision	
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information	
	☐ Product Safety	Other (	)	☐ Tier 2	

This RTB has been issued to announce the requirements for upgrading the Pro C901 Graphic Arts Edition to the Pro C901 Graphic Arts +.

## The following are the requirements for the above upgrade:

- 1. ProC901 needs to be run by a Fiery E-42 or E-82 controller
  - Note 1: E-41/E-81 cannot be upgraded to E-42/E-82
  - Note 2: An announcement will follow for the upgrade procedure on ProC901 Graphic Arts + for units run by a Creo C-81 controller.
- 2. Installation of ALL countermeasure parts released for image quality issues (See the following pages for details.)
- **3.** Changing the max supported paper weight from 300gsm to 350gsm via f/w upgrade and SP modification (See the following pages for details.)
- **4.** Usage of the new toner bottle and SP modification (See the following pages for details.)

### **NOTE**

The rating plate will not change for the upgraded units because the plates can only be attached at the factories (Katsuta, REI, RPL).

### **IMPORTANT**

Make sure to keep records of the customer names and mainframe s/n for the units that completed the upgrade.



Reissued:09-May-13

Model: Aries-P1.5/C1.5 Date: 06-Mar-13 No.: RM077087a

Countermeasure parts required for the upgrade to ProC901 Graphic Arts +

		incusure parts required for						
No	Issues Names	Description (Part/Unit)	P/N	·	uantity	Production Cut-In Timing	RTB No.	Note
_				PCDU	Machine	Tilling		Firmware
				Y×2			RM077033	version-up
				M×2				is
1	Shock Jitter	FLY WHEEL:DRUM:T2	M0771294	C×2	8	From 2012/July		required. Changing SP
				K×2				settings are required.
		DEVELOPMENT UNIT: Y	M0773294	Y×1	Please			
2	Fuzzy	DEVELOPMENT UNIT: M	M0773295	M×1	replace	From	RM077078	
	Line	DEVELOPMENT UNIT: C	M0773296	C×1		2012/Aprii		
		DEVELOPMENT UNIT: K	M0773297	K×1				
			M0773601	Y×1	4		RM077068	
3	In Track Line			M×1		From 2012/Jan		
	Line	THETEGORISCION		C×1 K×1				
				Y×1				Please
		MODIFICATION :GEAR:DEVELOPMENT		M×1		From		use
4	Banding	ROLLER ASS'Y	M0771297	C×1	4 2	2012/Jan	RM077058a	M0771297 instead of
				K×1				M0779904
5	Scratched Image when feeding thick paper	GUIDE PLATE:INTERMEDIATE TRANSFER:AX:ASS'Y	M0776514		1	From 2011/Dec	RM077057a	
6	Prevent Waste Toner to overflow	CLEANING UNIT:INTERMEDIATE TRANSFER:ASS'Y	M0776570		1	From 2011/Dec	N/A	

## **NOTE**

Make sure the following SP values are modified for units added with the Flywheels (M0771294) to counter Shock-jitter.

- SP2-992-001= 0 (Default) => 0.5 (Changed value)
- SP2-993-001= 0 (Default) => 1 (Changed value)

## NOTE

Firmware update will not overwrite the values in SP2-992-001 and SP2-993-001. Modified SP values will not be changed.

The above countermeasure parts do not have to be procured for the following units:

- Mass production units shipped from RPS Katsuta
- Units completed of the modification rework at REI/RPL
- Units completed of the modification rework by CE

See the following pages for a list of s/n of the units for which the upgrade was completed.

**PAGE: 2/6** 



**PAGE: 3/6** 

Reissued:09-May-13

Model: Aries-P1.5/C1.5 Date: 06-Mar-13 No.: RM077087a

### Cut-in S/N of units for which the upgrade to ProC901 Graphic Arts + is completed

	Image Quality	Parts	RTB	Region	Procuction site		Parts Included at	RFW	/O RK			
	Issue	Farts	KIB	rregion			on RPS Katsuta					
				RAC	Model Name	Pro C901 (Printer)	Pro C901 S(Copier)	ProC901(Printer)	ProC901S(Copier)			
				Rework:REI	EDP Code	404350	404353	40 43 50	4043503			
					Product Code Serial Number	M07757 T0125800001~	D09557 V9925800001~	M07757 N/A	D09557 N/A			
					EDP Code	404351	404354	404351	404354			
					Product Code	M07767	D09567	M07767	D09567			
1	Shock Jitter	FLY WHEEL: DRUM:T2	RM077033	<b>RE</b> Rework:RAP	Serial Number	T0123500003 ~ T0123500007 T0123600001 ~ T0123600004 T0123600006 ~	V9923500005 ~ V9923600002 V9923600007 ~	T011340003 T012320005~ T012320007 T0123300001 T0123300004 T0123400001~ T0123400004 T0123500001 T0123500002	V9922600012 V9923000001 V9923300010~ V9923300018 V9923400001~ V9923500001~ V9923500004 V9923600003~ V9923600005			
					EDP Code	404352	404355					
				RA	Product Code	M07729	D09529					
					Serial Number	T0120700001~	V9920700001~					
				RAC	EDP Code	404350	404353	40 43 50	4043503			
				Rework:REI	Product Code Serial Number	M07757 T0125700001~	D09557 V9925700010~	M07757 N/A	D09557 N/A			
					EDP Code	404351	404354	404351	404354			
				e-	Product Code	M07767	D09567	M07767	D09567			
2	Fuzzy Line	DEVELOPM ENT UNIT	RM077078	<b>RE</b> Rework:RAP	Serial Number	T0123600001 ~ T0123600004 T0123600006 ~	V9923600001 V9923600002 V9923600007~	N/A	N/A			
					EDP Code	404352	404355					
				RA	Product Code	M07729	D09529					
					Serial Number	T0120400001~	V9 92 0 50 00 01 ~					
					EDP Code	404350	404353	40 43 50	4043503			
								Product Code	M07757	D09557	M07757	D 09 55 7
											<b>RAC</b> Rework:REI	Serial Number
					EDP Code	404351	404354	404351	404354			
					Product Code	M07767	D09567	M07767	D 09 56 7			
3	In Track Line	CLEANING UNIT AROU ND THE PHOTOCO NDUCTOR	RM0 77 06 8	<b>RE</b> Rework:RAP	Serial Number	T0123500003~ T0123500007 T0123600001~ T0123600004 T0123600006~	V9923500005 ~ V9923600002 V9923600007 ~	T0113400003 T0113600009 T0122500001 T0122500002 T0122700012 ~ T0122700012 ~ T0122800001 ~ T0122800001 ~ T0122900001 T0122900001 T0123000006 T0123100001 ~ T0123100009 T0123200001 ~ T0123300001 T0123300002 T0123300004 T0123400001 ~ T0123400001 ~ T0123500001 T0123500001 T0123500001	V9913200015 V991360007 V9913600011 V9922500001 V9922800001 V9922800001 V9922800001 V9922800001 V9922800001 V9922800001 V99223000001 V9923000001 V9923100003 V9923100003 V9923100001 V9923100001 V9923300001 V9923300001 V9923300001 V9923300001 V9923300001 V9923300001 V9923300001 V9923300001 V9923400007 V9923400007 V9923400007 V9923500004 V9923500004 V9923500005			
3		UNIT AROU ND THE PHOTOCO	RM0 77 06 8		Serial Number	T0123500007 T0123600001~ T0123600004	V9923600002	T0113600009 T0122500001 T0122500002 T0122700012 ~ T0122800003 T0122800001 T0122900001 T0122900001 T0123000001 ~ T0123000001 ~ T0123100001 ~ T0123200001 T0123300001 T0123300001 T0123300001 T0123300001 T0123300001 T0123400001 ~ T0123400001 T0123400004 T0123400004 T0123400001 T0123500001 T0123500001	V9913600007 V9913600011 V9922500001 V9922500001 V99222700007 ~ V9922800001 ~ V99228000005 V9922800001 ~ V9923000001 ~ V9923000001 ~ V9923100003 ~ V9923100003 ~ V9923100001 ~ V992300001 ~ V992300001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923400001 ~ V9923400001 ~ V9923400000 ~ V9923400000 ~ V9923400000 ~ V99235000001 ~ V99235000004 ~ V99235000004 ~ V99235000004 ~			
3		UNIT AROU ND THE PHOTOCO	RM0 77 06 8			T0123500007 T0123600001 ~ T0123600004 T0123600006 ~	V9923600002 V9923600007~	T0113600009 T0122500001 T0122500002 T0122700012 ~ T0122800003 T0122800001 T0122900001 T0122900001 T0123000001 ~ T0123000001 ~ T0123100001 ~ T0123200001 T0123300001 T0123300001 T0123300001 T0123300001 T0123300001 T0123400001 ~ T0123400001 T0123400004 T0123400004 T0123400001 T0123500001 T0123500001	V9913600007 V9913600011 V9922500001 V9922500001 V99222700007 ~ V9922800001 ~ V99228000005 V9922800001 ~ V9923000001 ~ V9923000001 ~ V9923100003 ~ V9923100003 ~ V9923100001 ~ V992300001 ~ V992300001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923100001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923400001 ~ V9923400001 ~ V9923400000 ~ V9923400000 ~ V9923400000 ~ V99235000001 ~ V99235000004 ~ V99235000004 ~ V99235000004 ~			



**PAGE: 4/6** 

Reissued:09-May-13

Model: Aries-P1.5/C1.5 Date: 06-Mar-13 No.: RM077087a

					EDP Code	404350	404353	40 43 50	4043503									
				RAC	Product Code	M07757	D09557	M07757	D09557									
				Rework:REI	Serial Number	T0125300001~ T0125500002	V9925000013 V9925000014 V9925000016	T0125500003~	V9925300004~									
					EDP Code	404351	404354	404351	404354									
					Product Code	M07767	D09567	M07767	D09567									
4	Banding	MODIFICAT ION:GEARD EVELOPME NT ROLLER ASSY	RM0 77 06 7 a	<b>RE</b> Rework:RAP	Serial Number	T0123500003 ~ T0123500001 ~ T0123600004 T0123600006 ~	V9923500005~ V9923600002 V9923600007~	T0113600009 T0122500001 T0122500001 T0122500002 T0122700012 ~ T0122800001 ~ T0122800004 T0122900001 T0122900001 T0122900001 ~ T0123000010 ~ T0123100009 T0123100001 ~ T0123200001 ~ T0123300001 ~ T0123300001 ~ T0123400001 ~ T0123400001 ~ T0123500001 ~	V9922500001 V9922600012 V992270007 ~ V9922700010 V9922800001 ~ V9922800001 ~ V9922900001 ~ V992300001 ~ V9923100013 V9923100013 V992310001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923300001 ~ V9923400001 ~ V9923400001 ~ V9923500001 ~ V9923500001 ~ V9923500001 ~ V9923500001 ~ V9923500000 ~ V9923600000 ~ V9923600000 ~									
					EDP Code	404352	404355											
												RA	RA	Product Code	M07729	D09529	_	/
					Serial Number	T0120200001~	V9920500001 ~											
					EDP Code	404350	404353	40 43 50	4043503									
				RAC	Product Code	M07757	D09557	M07757	D09557									
	Scratched	GUIDE PLATE:											Rework:REI	Serial Number	T0125700001 ~ T0125700005 T0125800001 ~	V9925700010 V9925700011 V9925800001~	N/A	N/A
5	Image when feeding thick	ATE	RM077057a		EDP Code	404351	404354	404351	404354									
	paper	TRANSFER:		<b>RE</b> Rework:RAP	Product Code	M07767	D09567	M07767	D09567									
		AX:ASS'Y		I TO WOLK I VAL	Serial Number	T0123600009	V9923600001	N/A	N/A									
					EDP Code	404352	404355											
				RA	Product Code	M07729	D09529											
					Serial Number	T0120400001~	V9920500001 ~											
					EDP Code	404350	404353	404350	4043503									
				RAC	Product Code	M07757	D09557	M07757	D09557									
	CLEANING		Rework:REI	Serial Number	T0125600002~	V9925600007∼	N/A	N/A										
	Prevent	UNIT:INTER		D-	EDP Code	404351	404354	404351	404354									
6	Waste Toner to overflow	MEDIATE TRANSFER:	N/A	<b>RE</b> Rework:RAP	Product Code	M07767	D09567	M07767	D09567									
	CO O VOI IIOW	ASS'Y								Serial Number	T0123600009	V9923600001	N/A	N/A				
					EDP Code	404352	404355											
							1						RA	Product Code	M07729	D09529		
1					Serial Number	T0120400001~	V9920500001~											



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Reissued:09-May-13

Model: Aries-P1.5/C1.5 Date: 06-Mar-13 No.: RM077087a

#### Changing max supported paper weight from 300gsm to 350gsm

- 1. Upgrade to the following Engine/Web/System firmware as a set.
  - \* Note that the firmware for Printer and Copier models is different.

Model	Module	Version
Aries C1.5	System	2.00
	Web	1.04
	Engine	1.008:16
Aries P1.5	System	2.00
	Web	1.04
	Engine	1.008:16

2. After upgrading to the above firmware, modify the following SP value.

SP5-986-00

 $0 \rightarrow 1$ 

0: Paper weight 7 up to 300 gsm

1: Paper weight 7 up to 350 gsm

#### Usage of the new toner bottle

Install the new toner bottle and modify the following two SP values:

SP3-411-001  $3 \rightarrow 6$ SP3-411-002  $3 \rightarrow 6$ 

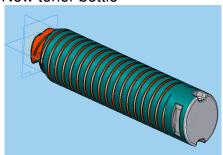
The above SP modification increases the threshold for near-end alert, i.e., the amount of remaining toner is less when near-end is notified.

Current toner bottle











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Reissued:09-May-13

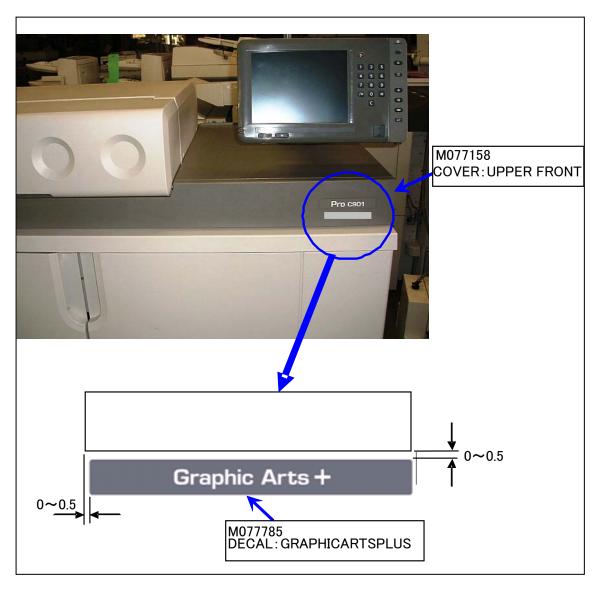
Model: Aries-P1.5/C1.5 Date: 06-Mar-13 No.: RM077087a

Attaching DECAL: GRAPHIC ARTS PLUS to the Front Cover

To complete the upgrade to Pro C901 Plus, attach the Graphic Arts Plus Decal (M0777856) to the upper-right hand corner of the front cover as shown below.

#### Procedure

- 1. Wipe the space under "Pro C901" with alcohol.
- 2. Attach the decal (M0777856) to the upper-right hand corner of the front cover (M0771585).
- 3. Make sure the decal is attached firmly.



### Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5 Date					·13	No.: RM077088	
Subject: JAM170 (SR5020 booklet unit exit sensor paper jam) Prepared by: T. Miyamoto							
From: 1st PP Ted	ch Service Sec., PP Tech Servi	ce Dept.,					
Classification:	Troubleshooting	☐ Part info	orma	tion		n required	
		☐ Electric	al		☐ Service	ce manual revision	
	☐ Paper path	Transm	it/rec	eive	Retrof	fit information	
	☐ Product Safety	Other (		)	⊠ Tier 2		

#### **SYMPTOM**

JAM170 (SR5020 booklet unit exit sensor detects a paper jam) occurs when staple jobs are run alternately between two different paper types that have the same width (main scan direction) but different length (sub scan direction), for example, A3 and A4.

Occurrence rate: 100%

JAM170 occurs when all of the following conditions are met:

- 1) Staple jobs of different paper sizes are run continuously in printer mode.
- 2) The two paper types have the same width (main scan) but different length (sub scan).
- 3) The same stapling position is applied to the alternating jobs.

#### **CAUSE**

Firmware bug; when the paper changes, the system is not given enough time to move the leading edge stopper (located in the booklet finisher) to the proper position.

#### **SOLUTION**

Firmware fix (release schedule TBD)

#### **WORKAROUND**

Until the fixed firmware becomes available, work around the problem by carrying out either of the following procedures:

- 1) Run the jobs separately by paper size.
- 2) Specify a different stapling position for each paper size.

**PAGE: 1/3** 

Model: Aries-P1.5					13	No.: RM077089
Subject: New se	rvice part: STRIPPER PLATI	'Y	Prepare	d by: T. N	Miyamoto	
From: 1st PP Ted	ch Service Sec., PP Tech Serv	rice Dept.,				
Classification:	Troubleshooting	⊠ Part inf	orma	tion	☐ Action	n required
	☐ Mechanical	☐ Electric	al		☐ Service	ce manual revision
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

Change: A new fusing unit stripper plate was added as an individual service part.

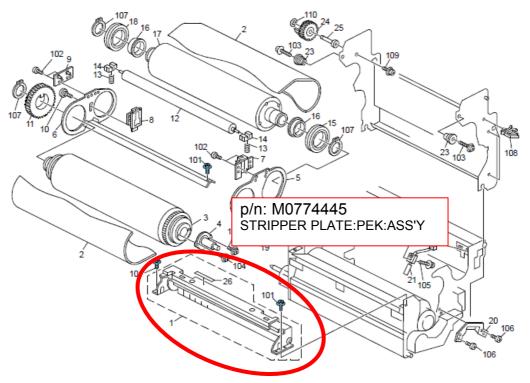
Reason: Higher durability; to prevent breakage of the stripper plate caused by paper jams.

P/N	Description	Q'ty	Int	Page	Index	Note
M0774445	STRIPPER PLATE:PEK:ASS'Y	1	ı	137	1	Add

**NOTE:** This new stripper plate DOES NOT have to be procured for all MIF. Only replace as necessary in accordance with your customer's machine usage conditions.

**IMPORTANT:** The new stripper plate has the following side effect. Chances of generating glossy lines/streaks are higher compared with the original stripper plate (p/n: M0774491). If this side effect is confirmed with the new stripper plate, change the machine settings as described in the following pages.

#### 56.Fusing Unit 5 (D095/M077)





**PAGE: 2/3** 

Model: Aries-P1.5 Date: 04-Apr-13 No.: RM077089

#### How to prevent glossy lines/streaks with the new stripper plate

Decrease the fusing temperature by following the procedure below:

- 1. Press the "User Tools" button and enter the ID and password. (Photo 1)
- 2. Press the "Paper Setting" button. (Photo 2)

Photo 1



Photo 2



- 3. Select "Custom Paper". (Photo 3)
- 4. Select from the list the paper that requires fusing temperature adjustment. (Photo 4)

Photo 3

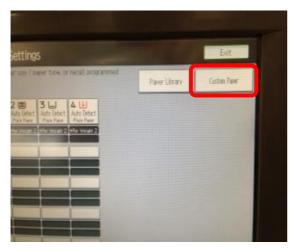
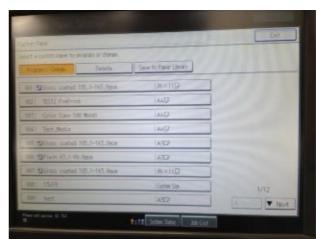


Photo 4





Model: Aries-P1.5

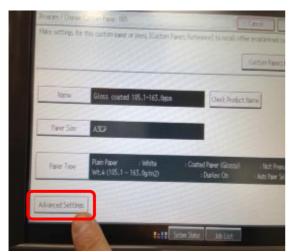
## Technical Bulletin

Date: 04-Apr-13 No.: RM077089

**PAGE: 3/3** 

- 5. Select "Advanced Setting". (Photo 5)
- 6. Select "Fusing Heat Roller Temperature Adj" and change the fusing temperature with the "+" and "-" buttons. It is recommended to decrease the temperature about 10 degrees from the default temperature. (Photos 6 & 7)

Photo 5 Photo 6



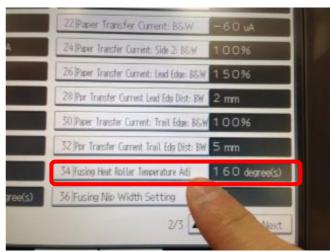


Photo 7



#### **Tips**

- If glossy lines/streaks do not disappear even after decreasing the temperature about 10 degrees, decrease the temperature more. However, if this results in insufficient fusing, increase the temperature in 5-degree increments and check that no glossy lines/streaks are observed on the printouts.
- 2) It is recommended to note the original (default) fusing temp before making any changes as you may have to switch back to the original stripper plate (p/n: M0774491) if the glossy lines/streaks generated with the new stripper plate (p/n: M0774445) cannot be resolved.

# Technical Bulletin

PAGE:	1/2

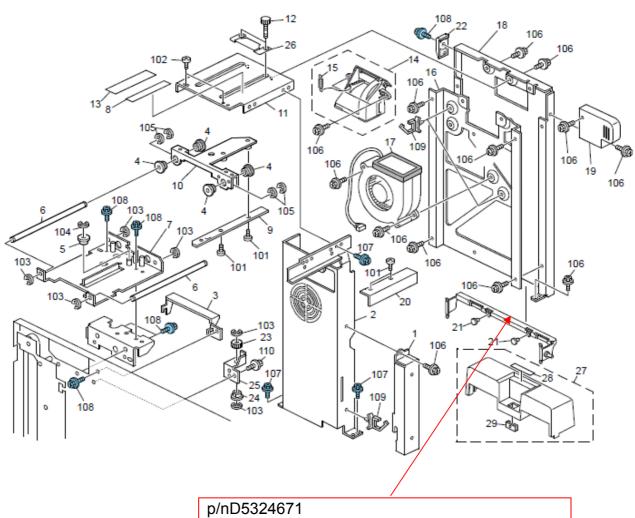
Model: Aries-P1.5 Date					13	No.: RM077090
Subject: New service part - TRAY BOTTOM PLATE PIN					by: T. I	Miyamoto
From: 1st PP Ted	ch Service Sec., PP Tech Servi	ce Dept.,				
Classification:	Troubleshooting	□ Part info	ormat	tion	☐ Action	required
		☐ Electrica	al		☐ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	$\square$ Other (		)	☐ Tier 2	

Change: The Tray bottom plate pins were added as an individual service part.

Reason: To meet requests received from the field.

### 54. Fusing Unit 3 (D095/M077)

New part number	Description	Q'ty	Int	Page	Index	Note
D5324631	TRAY BOTTOM	2		273	16	
	PLATE:AUXILIARY:REAR:PEEN					
D5324671	TRAY BOTTOM	2	-	273	17	
	PLATE:AUXILIARY:FRONT:PEEN					

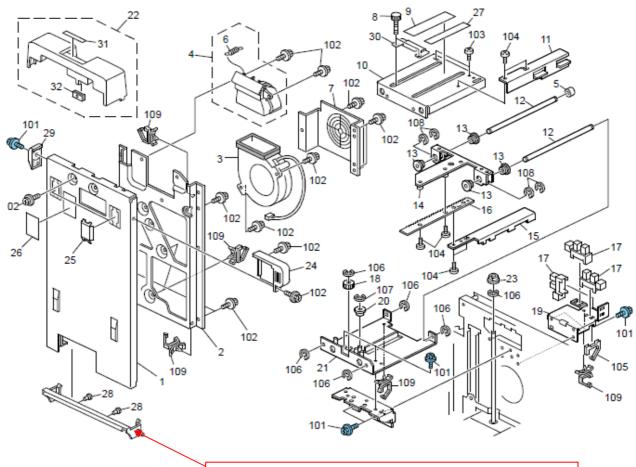


TRAY BOTTOM PLATE:AUXILIARY:FRONT:PEEN



**PAGE: 2/2** 

Model: Aries-P1.5 Date: 18-Apr-13 No.: RM077090



p/nD5324631 TRAY BOTTOM PLATE:AUXILIARY:REAR:PEEN

### Technical Bulletin

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|--|

Subject: Firmwar	re Release Note: Paper Library	Prepared by: T. Miyamoto		
From: 1st PP Ted	ch Service Sect., PP Tech Serv			
Classification:	☐ Troubleshooting	☐ Part informat	tion	Action required
		☐ Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	Other (Firmv	vare)	☐ Tier 2

This RTB has been issued to announce the release of the data files (xxx.mqp) and the Media List used for the Paper Library on the Aries Plus P1.5 and Plus C1.5

MQP files and Media Lists are confidential information.

#### Aries Plus P1.5

Version	Program No.	Availability of RFU
1	M0776076_R1	Not available

#### Aries Plus C1.5

Version	Program No.	Availability of RFU
1	D0956176_R1	Not available

Note: Definition of Availability of RFU via @Remote

#### Aries Plus P1.5

Version	Modified Points or Symptom Corrected
1	New release

#### Aries Plus C1.5

Version	Modified Points or Symptom Corrected
1	New release

#### **About the Media List**

Media has been evaluated under 4 categories of "Image Quality", "Image Permanence", "Feed Performance" and "Others", which are ranked in 3 levels except for "Image Quality" evaluated in 4 levels. The lowest rank marked among the 4 evaluation categories is applied to the overall evaluation rank for each media.

#### About the MQP file

The MQP file only contains data for media ranked 'A' and 'B' in overall evaluation. Installing the MQP file into the Taurus-P1 will enable application of the media from the Paper Library.

<sup>&</sup>quot;Available" The firmware can be updated via RFU or SD card.

<sup>&</sup>quot;Not available": The firmware can only be updated via SD card.

## Technical Bulletin

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Model: A	Model: Aries-Plus-P1.5/C1.5 Date: 24-Apr-13 No.:					
Rank	Description					
A+	Better than the product Spec.(Only Image Quality)					
Α	Result is good without any remarks.					
В	There is remark for use. Customer should know the remark for use.					
С	Not suggested for use					

#### **Example of media evaluation results:**

Overall Rank	Image Quality	Image Permanence	Feed Performance	Others
Α	Α	Α	Α	Α
В	В	А	В	А
С	С	А	А	А

#### **NOTE**

- The Printer model and the Copier model apply different MQP files; no
  interchangeability. Install the MQP file according to the machine. The software is
  designed to reject the installation if the MQP file does not correspond with the machine.
- The MQP file does not incorporate region restriction. Reinstall the file if installed with the file of an incorrect region.
- The MQP file name must be renamed upon installation. Refer to 'Installation Procedure: Paper Library' described on the following page.

#### **Paper Library Data Installation**

Follow this procedure to install the Paper Library data.

- 1. Create a folder on the SD card, and name the folder "mqp".
- 2. Copy the MQP file onto the "mqp" folder, and then rename the copied file "library.mqp".
- 3. Make sure the mainframe is turned off.
- 4. Insert the SD card containing the "library.mqp" file into the upper SD card slot on the controller.
- 5. Turn on the mainframe.
- 6. Enter SP5-711-001, and then press "Execute" on the control panel.
- 7. Press "Execute" again on the control panel.
- 8. Wait for the message "Completed" to appear, and then Press "OK". Exit the SP mode.
- 9. Turn off the mainframe, and then remove the SD card from the controller.



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Reissued:23-Oct-13

Model: Aries-P1.5/C1.5	Date: 7-May-13	No.: RM077092a

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: P/N of Fusing Belt Polisher			Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	☐ Troubleshooting ☐ Mechanical ☐ Paper path ☐ Product Safety	☐ Part informat☐ Electrical☐ Transmit/rec☐ Other (			

Change: The fusing belt polisher was added as a new service part.

**Reason:** To prevent the copy quality issue known as "vertical line" as a result of paper edges nicking the fusing belt.

New P/N	Description	Q'ty	Int	Page	Index	Note
M0774287	WEB:POLISH:FUSING:ASS'Y	1				Add
M0774288	WEB:POLISH:FUSING	1	-			Add

#### M0774287 WEB:POLISH:FUSING:ASS'Y



M0774288 WEB:POLISH:FUSING



NOTE: It is recommended to replace the web (M0774288) after each polish; 1 web per 1 fusing belt.

See the following pages for the procedures on how to polish and replace the web.

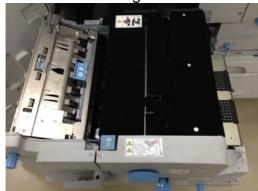
**PAGE: 2/5** 

Reissued:23-Oct-13

Model: Aries-P1.5/C1.5 Date: 7-May-13 No.: RM077092a

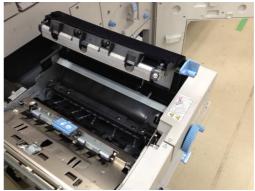
### How to polish the fusing belt

1. Pull out the fusing unit from the mainframe.

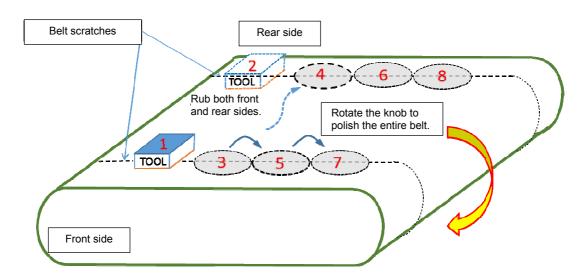


2. Open the top cover of the fusing unit.





3. Rub M0774287 WEB:POLISH:FUSING:ASS'Y against the fusing belt to smoothen the scratches and rotate the knob clockwise so that the entire belt can be polished. *Rub approximately 30 times for each location, although this will depend on the condition of the scratches.* 



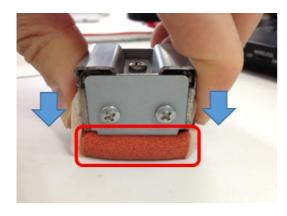


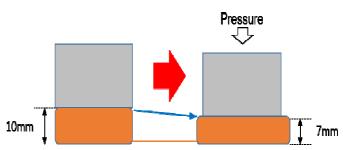
**PAGE: 3/5** 

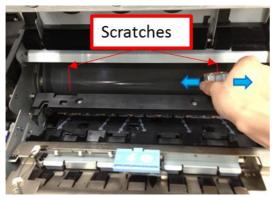
Reissued:23-Oct-13

Model: Aries-P1.5/C1.5 Date: 7-May-13 No.: RM077092a

NOTE: See photos and diagrams below for a reference on the appropriate amount of pressure that should be applied when polishing the belt.









- 4. After polishing the fusing belt, put back the fusing unit.
- 5. Print out sample copies to check if vertical lines appear or not.

#### **NOTE**

Make sure to polish front and rear (operator and non-operator) sides of the fusing belt, because belt scratches are generated by both front and rear edges of paper.

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Reissued:23-Oct-13

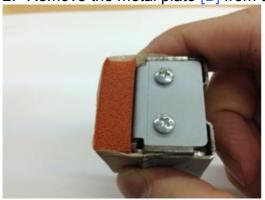
Model: Aries-P1.5/C1.5 Date: 7-May-13 No.: RM077092a

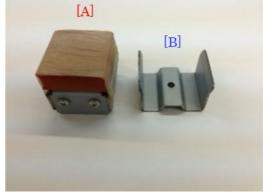
### How to exchange the web

1. Remove the screw on the bottom side of the tool with a screwdriver.

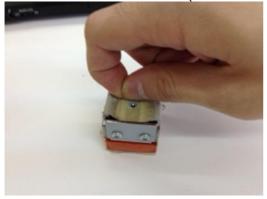


2. Remove the metal plate [B] from the tool [A].





3. Peel off the used web (M0774288 WEB:POLISH:FUSING).



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Reissued:23-Oct-13

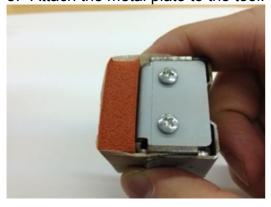
Model: Aries-P1.5/C1.5 Date: 7-May-13 No.: RM077092a

4. Peel off the seals on both ends of the new web and wrap the web around the tool.





5. Attach the metal plate to the tool.



6. Fasten the bottom screw to complete the procedure.



# Technical Bulletin

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Model: Aries-P1.	Model: Aries-P1.5/C1.5			te: 20-May	-13	No.: RM077093		
Subject: New service part HOLDER:SLIDERAIL:DEVELOPMENT UNIT				Prepared by: T. Miyamoto				
From: 1st PP Tech Service Sec., PP Tech Service Dept.,								
Classification:	Troubleshooting	□ Part info	orma	tion	☐ Action	required		
	☐ Mechanical	☐ Electric	al		☐ Service	ce manual revision		
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information		
	☐ Product Safety	$\square$ Other (		)	☐ Tier 2			

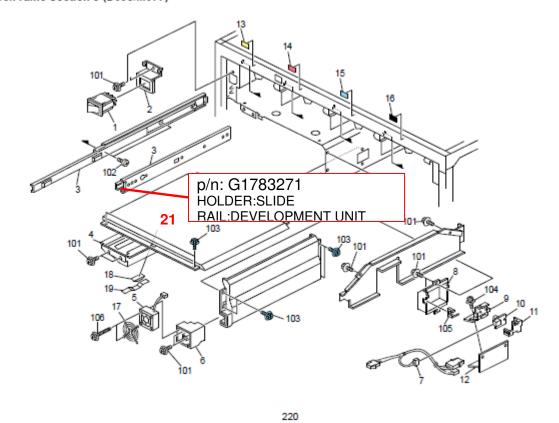
**Change:** The following part was added as an individual service part.

**Reason:** To meet requests received from the field.

### 98. Frame Section 3 (D095/M077)

New part number	Description	Q'ty	Int	Page	Index	Note
G1783271	HOLDER:SLIDE RAIL:DEVELOPMENT UNIT	4		221	21	Add

#### 98.Frame Section 3 (D095/M077)



G1783271 (HOLDER: SLIDE RAIL: DEVELOPMENT UNIT) is not illustrated in the parts catalog. See the photo shown on the following page.

**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 20-May-13 No.: RM077093

#### **G1783271 HOLDER:SLIDE RAIL:DEVELOPMENT UNIT**



The newly registered HOLDER: SLIDE RAIL: DEVELOPMENT UNIT (p/n G1783271) is the part that covers the slide rail (p/n G1781139) and has direct contact with the PCDU. The holder appears grey in the above photo.

## Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.	5		Date: 24-May-13			No.: RM077094
Subject: New ser	Subject: New service part- Multi Bypass Tray (B833)			Prepared	d by: T. N	Miyamoto
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	Troubleshooting	□ Part info	orma	tion	☐ Action	n required
	☐ Mechanical	☐ Electric	al		Service	ce manual revision
☐ Paper path ☐ Transi		☐ Transm	ıit/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

**Change:** The following parts of the Multi Bypass Tray (B833) were added as individual service parts.

Reason: These parts were missing from the Multi Bypass Tray (B833) parts catalog.

### Multi Bypass Tray BY5000 (B833)

### 8. Frame Section (B833)

Part number	Description	Q'ty	Int	Page	Index	Note
B8332562	COOLING UNIT:ASS'Y	1		17	16	Add
AX640158	FAN MOTOR MM60/15MM:24V	1		17	17	Add
B8331168	STAY:COOLING UNIT	1		17	18	Add
04514020N	TAPPING SCREW - M4X20	2		17	107	Add
11050511	HARNESS CLAMP – LWS-0306ZC	1	-	17	108	Add

AX640158 (Index: 17) 04514020N (Index: 107)

8. Frame Section (B833)

B8332562 (Index: 16) B8331168 (Index: 18) 11050511 (Index: 108)

## Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Dat	ate: 09-Jul-13		No.: RM077095
Subject: Minimizing Idling of Development Units			Prepared by: T. Miyamoto			
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:		☐ Part info	orma	nation 🖂 Action		n required
	☐ Mechanical	☐ Electric	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

#### **GENERAL**

This bulletin provides information on the developer mixture degradation that occurs in the Y, M and C development units, which is caused by the idling operation of these units. If poor image quality is confirmed as a result of degraded developer mixture, modify the SP setting as described below, which will minimize the idling operation of the Y, M and C development units.

#### Why is this important?

- Idling of the development unit (= no toner consumption) affects the characteristics of both toner and carrier and degrades the developer mixture, resulting in poor image quality.
- Poor image quality leads to customer dissatisfaction as well as high service costs generated from frequent developer replacements.
- Developer yield is highly dependent on the drive distance of the components in the development unit. Idling without consuming any toner not only degrades the developer, but will also shorten the life of the developer.

#### Why Y, M and C?

Y, M and C development units tend to idle more than the Bk development unit. This is because, by default, these units are designed to continuously run idle even when the printing mode switches to mono-chrome from full-color. Y, M and C development units remain inactive only if printed in mono-chrome mode throughout the entire operation, from startup to stand-by.

#### **SP MODIFICATION**

To minimize the idling operation of Y, M and C development units, modify the following SP value as described below.

Enter the following SP and change the value from "0" (default) to "10".							
	SP		Default	Number of sheets printed in FC before switching to Bk mode			
	ACS Switch Set: FC Mode: Cont Bk Image N Sheets	SP 2-907-001	0 -	→ 10			



**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 09-Jul-13 No.: RM077095

#### SIDE EFFECT

Productivity will slightly decrease because it will take approximately 5 seconds to switch from FC mode to mono-chrome mode, and approximately 7 seconds in the reverse order. Also, it will take an extra 2~3 minutes to perform Process Control if turning on the machine power or resuming operation after a long pause in a low temperature environment.

# Technical Bulletin

**PAGE: 1/1** 

Model: Aries-P1.5			Dat	Date: 19-Jul-13		No.: RM077096
Subject: New service part - BALL BEARING: REGISTRATION: DRIVEN: FRONT				Prepared	d by: T. I	Miyamoto
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:	☐ Troubleshooting	□ Part info	orma	tion	Action	n required
	☐ Mechanical	☐ Electric	cal		☐ Service	ce manual revision
	☐ Paper path ☐ Transmit/re		it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	'

**Change:** The following part was added as an individual service part.

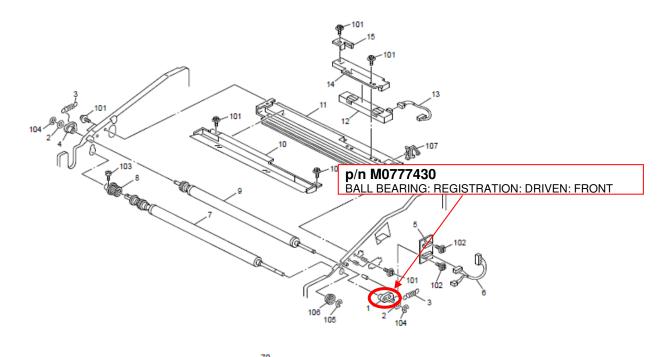
Reason: To prevent breakage of the ball bearing that supports the registration roller at the

front side of the machine

#### 23. Paper Registration 8 (D095/M077)

New P/N	Description	Q'ty	Int	Page	Index	Note
M0777430	BALLBEARING:REGISTRATION:DRIVEN: FRONT	1	ı	71	1	Add

#### 23.Paper Registration 8 (D095/M077)



#### Note:

The newly registered ball bearing is only used for this location. Make sure to use the ball bearing of the old type for all other locations.

## Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5			Dat	te: 22-Jul-13		No.: RM077097
Subject: Preventing toner offset on paper edges				Prepared by: H. Kawamura		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,						
Classification:		☐ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electrical			☐ Service	ce manual revision
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	⊠ Tier 2	

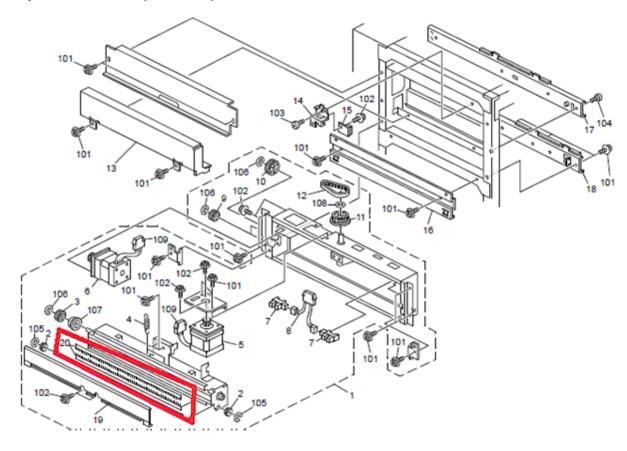
#### **GENERAL**

This bulletin provides procedures on how to prevent toner from off-setting to the edges of paper —a symptom more noticeable when the printouts are stacked— as a result of a dirty paper exit unit.

#### **PROCEDURE**

- 1. Disassemble the de-curler unit and clean the rollers inside.
- 2. If the problem persists, replace the discharge brushes (indicated in red below) in the de-curler unit.

71.Paper Exit Section 13 (D095/M077)

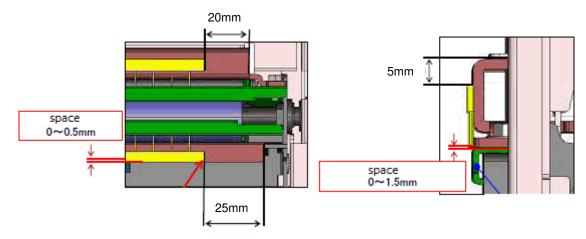


**PAGE: 2/2** 

Model: Aries-P1.5/C1.5 Date: 22-Jul-13 No.: RM077097

### Tips on replacing the discharge brush

The yellow rectangles represent the discharge brushes. For the best effect, install the discharge brushes in the positions shown below.



### Technical Bulletin

**PAGE: 1/3** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1 Date			te: 29-Nov-13		No.: RM077098	
Subject: Summa - Toner	Prepared I	oy: J. K	obayashi			
From: PP Tech Service Dept., 1st PP Tech Service Sect.						
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informa Electrical Transmit/rec		eive	Servic	required e manual revision it information

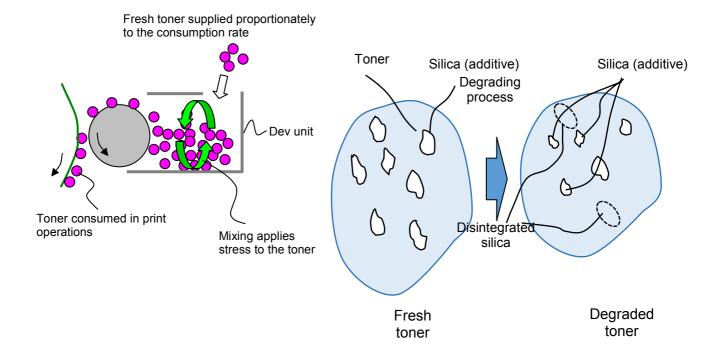
#### General

This bulletin summarizes the information announced in previously released RTBs for image quality problems originating in the development unit and provides an explanation of the differences between toner degradation and developer degradation along with the correct actions required to avoid unneeded developer replacements, which in fact, often take place without successful results due to misunderstanding toner degradation and developer degradation.

### How does toner degrade?

Toner degrades when fresh toner is not supplied to the development unit due to its low consumption rate, which is caused by the following 3 factors:

- Low image coverage ratio
- Idling of C, M, Y development units when printing in B/W mode
- Idling of the mainframe while optional devices are in operation



**PAGE: 2/3** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1 Date: 29-Nov-13 No.: RM077098

### What are the major problems caused by toner degradation?

Developer will last for its prescribed PM yield of 1200Kp.

Do not replace the developer when encountering the following problems as these problems are caused by toner degradation, not developer degradation.

Symptom	Cause	Solution	RTB
a) Scratched image	<ul> <li>Change in the charge applied to the toner affects the development capacity and transferability.</li> <li>Toner transfer conditions for LE and TE are set incorrectly.</li> </ul>	<ul> <li>Replace with fresh toner.</li> <li>Optimize the paper settings with Advanced setting in Paper Library</li> </ul>	●RM077077b ●RM077032a
b) Uneven density	<ul> <li>Change in the charge applied to the toner affects the development capacity and transferability.</li> </ul>	<ul> <li>Replace with fresh toner.</li> <li>User adjustment #0220         Adjust Density         Difference Across Feed         Direction     </li> </ul>	<ul><li>RM077077b</li><li>Adjustment Settings for Skilled Operators</li></ul>
c) Mottled effect	<ul> <li>Transferability reduces under the following conditions:</li> <li>Printing in FC following a long B/W job</li> <li>Paper conditions</li> </ul>	<ul> <li>Replace with fresh toner for C,M,Y</li> <li>Use a different paper</li> <li>Optimize controller settings</li> </ul>	●RM077077b ●RM077095
d) Toner scattering	<ul> <li>Low toner fluidity in the development unit (= high toner concentration) disables the sensor to properly detect the toner amount.</li> <li>* Incorrect initial developer installation is also a possible cause.</li> </ul>	Confirm proper developer replacement     Replace with fresh toner	●RM077072c ●RM077077b
e) Clogged doctor gap	<ul> <li>Low toner fluidity in the development unit (= high toner concentration) causes toner clumps to form that clog the doctor gap.</li> </ul>	● Clean the doctor gap  ■ Remove toner clumps	●RM077031b

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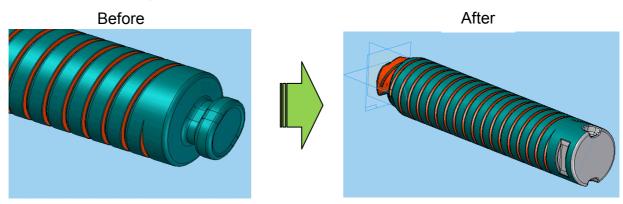
### Improvements brought from the new toner

Wax contained in the toner was changed to a new wax with higher heat resistivity and tolerance for degradation. Application of this new toner has made improvements for the following:

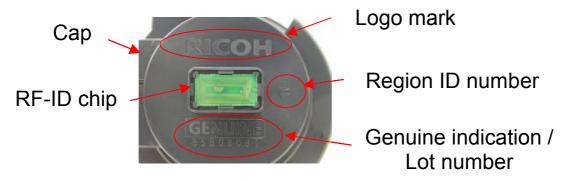
- SC36x (toner density errors) as a result of clogged sub-hopper, which occurs when heat resistivity and fluidity of the toner reduces under high temperature environment.
- Toner scattering as a result of low toner fluidity in the dev unit (= high toner concentration), disabling proper toner detection.
- Dirty background as a result of toner overflowing from the drum cleaning and ITB cleaning units.

#### New toner bottle

In line with the new toner, the toner bottle was modified.



The lot number of the toner bottle is on the bottom cap.



#### Lot number information

Toner bottles of the following s/n or later contain the new toner:

	Black	Cyan	Magenta	Yellow
RAC	30108222 ~	30327921 ~	30128021 ~	30148121 ~
RE	3B0317-05 ~	3B0557-02 ~	3B0267-02 ~	3B0257-08 ~
RA	25835901 ~	25835501 ~	25834001 ~	25835901 ~

## Technical Bulletin

**PAGE: 1/6** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1 Date			e: 29-Nov-13		No.: RM077099		
Subject: Summary of OPC drum related problems					Prepared by: J. Kobayashi		
From: PP Tech Service Dept., 1st PP Tech Service Sect.							
Classification:	<ul><li>☑ Troubleshooting</li><li>☑ Mechanical</li><li>☑ Paper path</li><li>☑ Product Safety</li></ul>	Part inf Electric Transm Other (	al		Servi	n required ce manual revision fit information	

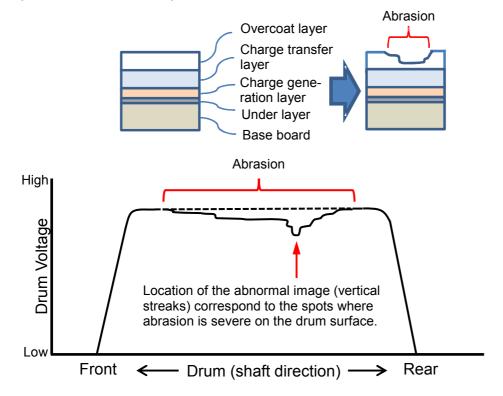
#### General

This bulletin summarizes the information announced in previously released RTBs for image quality problems originating in the OPC drum. Details are described on how the drum wears along with the recommended actions to avoid unnecessary drum replacements when encountering problems originating in other components. It is important to take note that images are affected at a 314 mm interval (= drum circumference), if the image quality problem is caused by drum scratches.

#### How do drum scratches occur?

### Cause 1: Drum scratches caused by cleaning components

Contact between the cleaning components and OPC drum in the repeated cleaning operation wears the drum surface over time. As shown in the illustration below, the drum used for Aries consists of 5 layers. While the topmost overcoat layer is hard and durable, the charge transfer and charge generation layers are much more delicate. Once the overcoat layer is removed through abrasion, the two layers beneath will wear out very quickly, resulting in abnormal images. This however will not occur for 2,400kp, which is the prescribed drum life, provided that the machine is used under normal conditions.



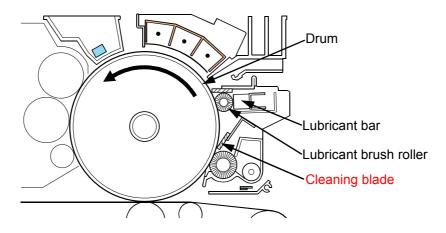
**PAGE: 2/6** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

Date: 29-Nov-13 No.: RM077099

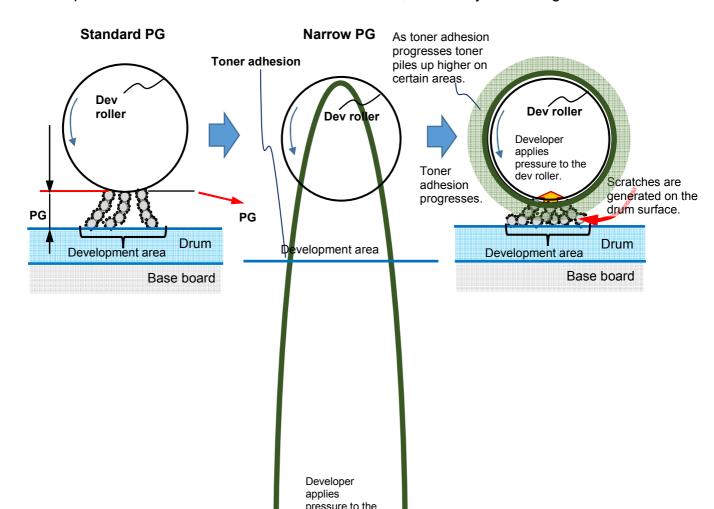
#### Cause 2: Drum scratches caused by insufficient lubrication

If the drum surface is not sufficiently lubricated, excess friction between the drum and cleaning blade could cause the cleaning bade to flip (or bend) and scratch the drum.



#### Cause 3: Drum scratches caused by narrow PG

Another factor that causes drum scratches is a narrow PG (potential gap), in which the gap between the development roller and drum is narrower than the specification. In this condition, stress is applied to the developer in the development process because the developer is forced to move through a narrow gap, generating excess electrical current along with heat and pressure. As a result, developer adheres to the surface of the development roller and toner accumulation continues, eventually scratching the drum.



# Solution to drum scratch problems <u>Drum scratches caused by cleaning components</u>

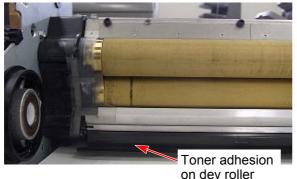
Replace with a new drum.

#### **Drum scratches caused by insufficient lubrication**

Replace with a new drum. Make sure to lubricate the new drum before installing.

#### Drum scratches caused by narrow PG

- A narrow PG could be caused by an incompletely fastened drum knob. Refer to the following RTB for the proper drum knob fastening procedure.
  - > RG178128d (pages 5~9)
- Check that the drum is properly installed.
  - > RG178128d (page 4)
- Remove the toner adhered to the surface of the development roller.
  - > RG178128d





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 Do #208 "Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu.

NOTE: The developer DOES NOT have to be replaced.

If the DG (doctor gap) is clogged with toner, remove the clogged toner with a piece of paper, then do #208 "Execute Toner Refreshing" again.

Date: 29-Nov-13

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No.: RM077099

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

### Image quality problems caused by the OPC drum

#### Symptom 1

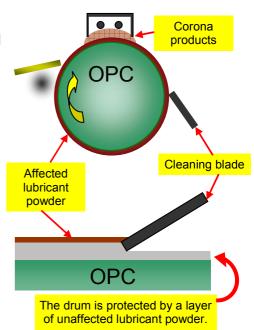
Images appear unclear and fuzzy when running the machine in a high temperature and high humidity operational environment.

#### Cause

In a high temperature/humidity environment, corona products cause the lubricant powder to decompose and ionize, which combines with moisture. In this condition, the drum surface resistivity is reduced and dots are not aligned as expected to properly develop the electrostatic image.

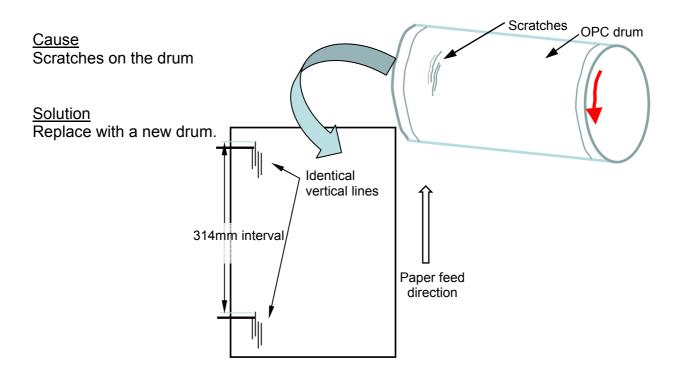
#### **Solution**

Do #203 "Execute Photoconductor Refreshing" of the Adjustment Settings for Skilled Operators to remove the affected lubricant powder (decomposed and ionized), which stays only on the surface layer.



#### Symptom 2

Vertical lines appear at a 314 mm interval (= drum circumference).





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#### Symptom 3

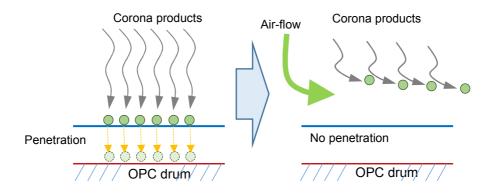
Image density appears uneven, and darker compared to the surrounding area, when running the machine in a low temperature and low humidity environment.

#### Cause

Corona products penetrate the drum surface layer and change the charge characteristics.

#### Solution

Keep the exhaust fans running continuously to completely get rid of corona products from the system by modifying the settings below.



- 1. Enter User Tools → System Settings → Timer Setting, and set the Timer Setting to OFF.
- 2. SP1-940-03: Ozone fan timer setting (default: 56min) Change this value to "1270" min.
  - SP1-940-04: Development fan timer setting (default: 56min)

Change this value to "1270" min.

SP1-202-01: Heating roller temperature in low power mode (default: 110 degrees C) Change this value to "0" degrees C.

<sup>\*</sup> See RTB RM077075a for details.

Date: 29-Nov-13 No.: RM077099

**PAGE: 6/6** 

### Problems that are NOT caused by the OPC drum

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

Drums should NOT be replaced to resolve the problems described in the table below.

Symptom	Cause	Solution	RTB
a) SC396~ SC399	• Most of these SCs are caused by drum motor lock as a result of stuck waste toner in the development gap between the development roller and OPC drum, which occurs when the drum rotation suddenly stops in an abnormal state.	<ul> <li>Power cycle the machine a few times.</li> <li>Manually turn the development roller with your hands to remove stuck waste toner.</li> </ul>	●RM077086a
b) Uneven density randomly	• Change in the charge applied to the toner affects the development capacity and transferability. Possible causing factors are: low PV per job, high ratio of text, high usage rate of finishing options, high ratio of B/W print jobs, which apply stress to the color toners.	<ul> <li>Enable ACS to prevent idling of CMY units.</li> <li>Increase the amount of toner exhausted in the toner refresh mode.</li> </ul>	●RM077095 ●RM077077b
c) Vertical streaks	<ul> <li>If the streaks do not appear at 314mm intervals (= drum circumference), the problem is caused by either of the following:</li> <li>Dirty charge unit caused by toner scattering</li> <li>Change in charge level caused by unevenly lubricated drum surface</li> </ul>	<ul> <li>Replace with new toner.</li> <li>Remove toner clumps.</li> <li>Positively replace parts at the prescribed PM yield.</li> </ul>	●RM077031b
d) Horizontal bands	<ul> <li>If the streaks do not appear at 314mm intervals (= drum circumference), the bands should be considered as "shock-jitter/banding".</li> </ul>	● Do troubleshooting procedures for "shock-jitter/banding".	●RM077019g
e) Dirty printout	<ul> <li>Low toner fluidity causes contamination inside the machine results in the following:</li> <li>Toner scattering around the development unit</li> <li>Degradation of waste toner collection in the ITB unit</li> </ul>	<ul><li>Replace with new toner.</li><li>Remove toner clumps</li></ul>	<ul> <li>RM077072c</li> <li>RM077098</li> <li>New toner bottle contains new toner from certain Lot Nos.</li> </ul>
f) Dirty backgroun d	● Low toner fluidity in the development unit disables the sensor to properly detect the amount of toner in the unit. As a result, the sensor detects extremely high toner concentration.	<ul><li>Replace with new toner.</li><li>Remove toner clumps.</li></ul>	●RM077072c ●RM077098

Notes: Please refer to RTB RM077098 for how to find a Lot. No. on a new toner bottle.



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Reissued:04-Mar-14

Model: Aries-P1.5/C1.5	Date: 11-Dec-13	No.: RM077100a

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: SD card for SMC data download			Prepared by: T. Miyamoto		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,					
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li></ul>	☐ Part informate ☐ Electrical ☐ Transmit/rec		<ul><li>☐ Action required</li><li>☐ Service manual revision</li><li>☐ Retrofit information</li></ul>	
	☐ Product Safety	Other (	)	☐ Tier 2	

**Change:** The following part was added as an individual service part.

**Reason:** The newly registered service part is an SD card for downloading SMC data from the machine.

New P/N	Description	Q'ty	Int	Page	Index	Note
M0779509	ELECTRICAL SMC TOOL	1	ı	377	9	Add

#### NOTE

- The above SD card can be used for ProC901/901S and ProC651EX/751EX/ProC751.
- Information announced in this bulletin is specifically for ProC901/901S. Refer to RTB #RD074115 for information on this SD card for ProC651EX/751EX/ProC751.

### Advantage of the SD card

SMC data can be sent to RCL for investigation more easily compared to the conventional method where the SMC data is printed out, scanned and converted to a PDF file.

### **SMC** analysis file

An Excel file for analyzing the SMC data downloaded from the machine with the SD card needs to be downloaded from TechMail or GKM web site (answer ID:183778)

Download this Excel file onto your PC.

See the following pages for details on how to use this SMC analysis file.



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Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

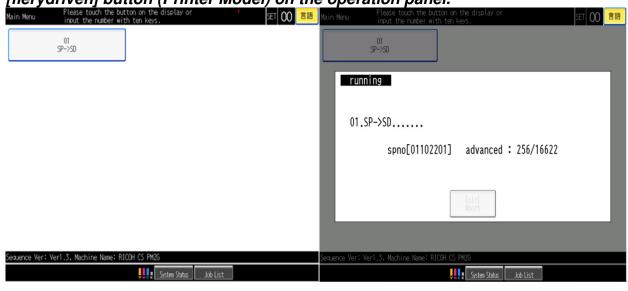
#### How to download SMC data from the machine to the SD card

- 1. Insert the SD card (M0779509) into the SD card slot #2 on the rear side of the machine.
- 2. Turn on the machine.



3. Touch "01 SP->SD" on the operation panel and wait approximately 1 minute for the download process to complete.

If the screen does not appear, press the [Program] button (Copier Model) or the [fierydriven] button (Printer Model) on the operation panel.





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Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

4. When successfully downloaded, the operation panel displays "Completed". Then, touch "[Start] Confirm".



5. Turn off the machine and remove the SD card from the SD card slot.



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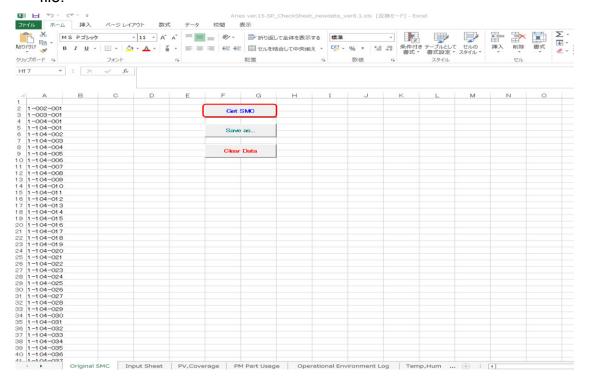
Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

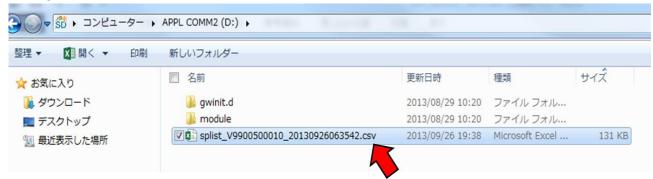
### How to use the SMC analysis file

NOTE: Make sure to download the SMC analysis file (see the first page of this bulletin) to your PC before performing the following procedure

- Insert the SD card containing the SMC data file (csv) into your PC.
- 2. Open the SMC analysis file (xls).
- 3. Click "Get SMC" to input the SMC data contained in the SD card to the SMC analysis file.



Locate the SMC data file (csv) you wish to analyze in your PC and double click on the file.



The file is saved with the date the SMC data was downloaded from the machine.

# Technical Bulletin

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Asterisks (\*) indicate the items that are not set to the default value.

### Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

5. Select the "Input Sheet" tab and make sure that the SMC data is input into the file.

	A	B	C	E	G	Н	
1		Serial Number		Date	Month	Year	
2		V9900500010	SMC obtained date	11	06	2013	_
3	SP No. ▼	SP name Large categories	SP name Small categories	Value <b>▼</b>	Default 🔻	Non-Default (*)	₹]
4	1-002-001	Side-to-Side Regist Adjustment	Main-scan	0.0	0.0	T.	Т
5	1-003-001	Paper Buckle Adjustment	Plain Paper	7	6	*	>
6	1-004-001	Leading Edge Regist Adjustment	Sub-scan	-0.3	0.0	*	]
7	1-104-001	Fusing Temp Control 2	Custom Paper 001	160	150	*	
8	1-104-002	Fusing Temp Control 2	Custom Paper 002	165	150	*	
9	1-104-003	Fusing Temp Control 2	Custom Paper 003	155	150	*	]
10	1-104-004	Fusing Temp Control 2	Custom Paper 004	155	150	*	
-11	1-104-005	Fusing Temp Control 2	Custom Paper 005	160	150	*	]
12	1-104-006	Fusing Temp Control 2	Custom Paper 006	150	150		]
13	1-104-007	Fusing Temp Control 2	Custom Paper 007	160	150	*	_
14	1-104-008	Fusing Temp Control 2	Custom Paper 008	140	150	*	]
15	1-104-009	Fusing Temp Control 2	Custom Paper 009	175	150	*	]
16	1-104-010	Fusing Temp Control 2	Custom Paper 010	140	150	*	_
17	1-104-011	Fusing Temp Control 2	Custom Paper 011	150	150		]
18	1-104-012	Fusing Temp Control 2	Custom Paper 012	140	150	*	_
19	1-104-013	Fusing Temp Control 2	Custom Paper 013	150	150		_
20	1-104-014	Fusing Temp Control 2	Custom Paper 014	165	150	*	]
21	1-104-015	Fusing Temp Control 2	Custom Paper 015	150	150		_
22	1-104-016	Fusing Temp Control 2	Custom Paper 016	150	150		_
23	1-104-017	Fusing Temp Control 2	Custom Paper 017	165	150	*	_
24	1-104-018	Fusing Temp Control 2	Custom Paper 018	165	150	*	_
25	1-104-019	Fusing Temp Control 2	Custom Paper 019	155	150	*	
	1-104-020	Fusing Temp Control 2	Custom Paper 020	145	150	*	_
23	14 184 -034-4	ginal SMC (Input Sheet PV,Covera	m Paper 021	165	150	*	]
H	◆ ▶ N \ Ori	gnal SMC <u>Linput Sheet</u> PV,Covera	<b>9</b> ₽ / F				-1

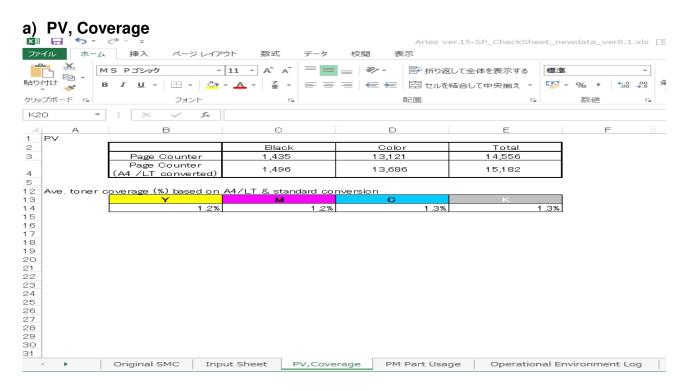
**PAGE: 6/9** 

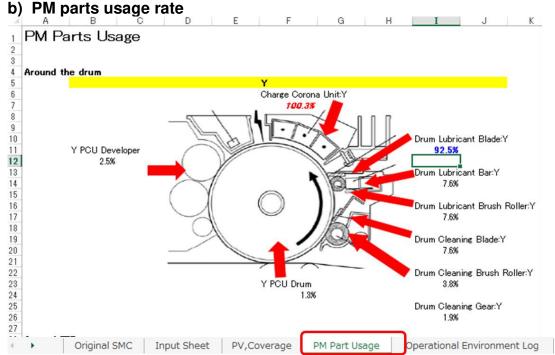
#### Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

#### SMC analysis file

Following are the 7 spreadsheets "a" ~ "g" in the SMC analysis file, which contain charts and illustrations so that machine conditions can be verified at a glance.





When PM parts reach 90~100% of the yield, usage rates turn into Blue. When PM parts exceed the yield, usage rates turn into Red.

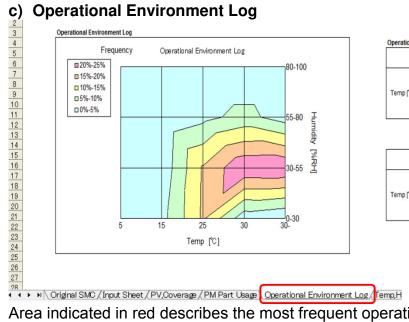


**PAGE: 7/9** 

#### Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 No.: RM077100a Date: 11-Dec-13

### c) Operational Environment Log



		Humidity [%RH]					
		30	55	80	100		
	5	0	0	0	0		
	15	1878	863	393	0		
Temp [°C]	25	9216	9062	2041	0		
	30	985	14109	3881	0		
	30-	0	14283	1496	0		

58207 m

PCU

28

50

13.62

Temperature

Relative Humidity

Absolute Humidity

Environ: Recent

			Humidit	ty [%RH]	
		0-30	30-55	55-80	80-100
	0-5	0%	0%	0%	0%
1	5-15	3%	1%	1%	0%
Temp [C]	15-25	16%	16%	4%	0%
	25-30	2%	24%	7%	0%
Ì	30-	0%	25%	3%	0%

Area indicated in red describes the most frequent operational environment the machine is run.

### d) Temperature/humidity around the PCU

u j		illiaity t	oa i i a		C . C	C 1 00
3						
4 5		PCU				
5	Temperature	29				
6	Relative Humidity	50				
7	Absolute Humidity	14.39				
8	Environ: Recent	МН				
9						
10						
11						
12			( Y )	( 2,	1	
13					/	
14		160	0	•		
15		(6)				
16						Ľ
17					- 1	
18					,	١
19						L
20						
21						
22						
23						
24						
25						
26						
27						

<sup>\*</sup> Temp/humidity sensors are installed only in the PCU for Y and K stations.

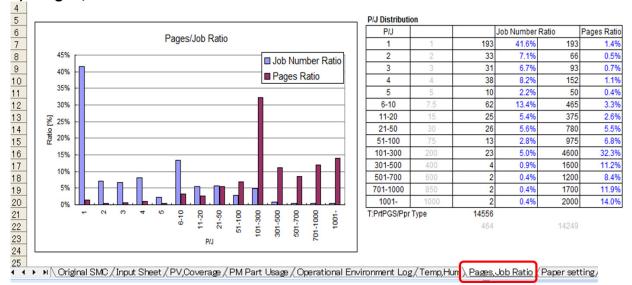


**PAGE: 8/9** 

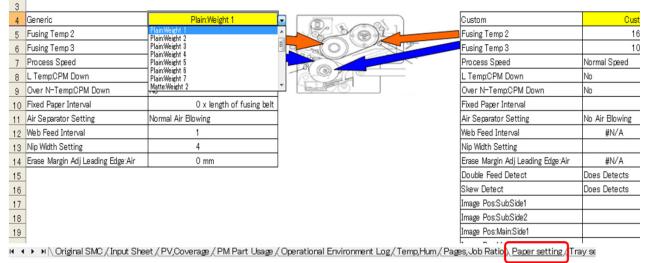
#### Reissued:04-Mar-14

Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a

#### e) Pages, Job ratio



#### f) Paper settings



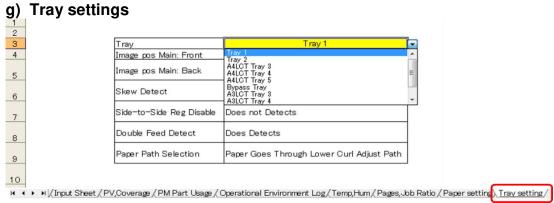
Click on the yellow cell to select the paper from the drop-down list. Settings for both generic and custom papers can be viewed.



**PAGE: 9/9** 

#### Reissued:04-Mar-14

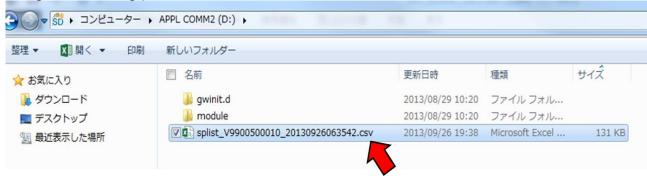
Model: Aries-P1.5/C1.5 Date: 11-Dec-13 No.: RM077100a



Click on the yellow cell to select the tray from the drop-down list.

### How to send SMC data to RCL for problem investigation

When escalating problems for investigation, save the CSV file containing the SMC data using the following procedure.



- 1. Right-click on the file and type in the customer name at the beginning of the file name, before "splist V99~".
- 2. Add an underscore "\_" after the customer name, and then save.

DO NOT apply changes to the "splistV00~" portion of the file name.



# Technical Bulletin

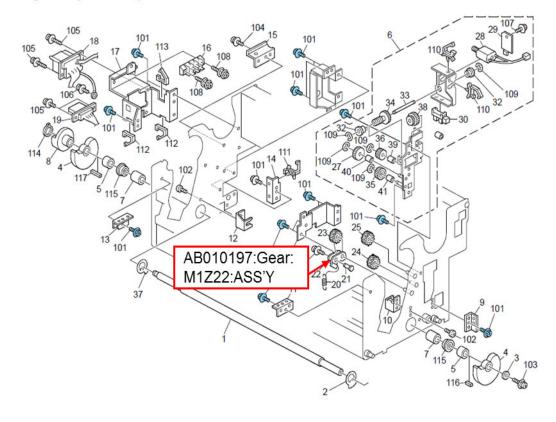
PAGE:	1/2
-------	-----

Model: Aries-P1.5 Date:					·13	No.: RM077101
Subject: Missing Part number in Aries Fusing unit					d by: T. N	<i>l</i> iyamoto
From: 1st Tech Service Sect., PP Tech Service Dept.						
Classification:	☐ Troubleshooting	□ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electric	al		Service	e manual revision
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

The following gear assembly in the fusing unit was added as a new service part.

Old p/n	New p/n	Description	Q'ty	Int	Page	Index	Note
-	AB010197	GEAR:M1Z22:ASS'Y	1	ı	141	42	Add

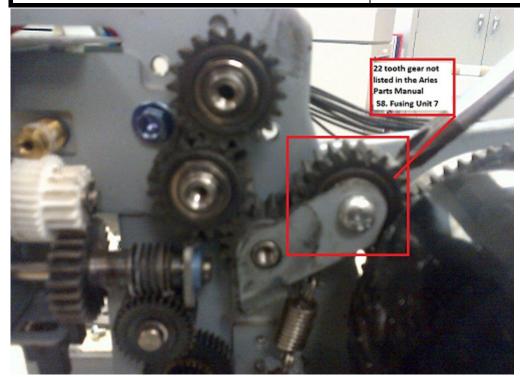
#### 58.Fusing Unit 7 (D095/M077)



# Technical Bulletin

**PAGE: 2/2** 

Model: **Aries-P1.5** Date: 12-Dec-13 No.: RM077101



**PAGE: 1/2** 

Model: Aries P1.	5/C1 5		Dat	:e: 20-Dec	13	No.: RM077102
Model. Alles F 1.	3/01.5		Dai	.c. 20-Dec	-13	110 RIVIO77 102
•	ormation- DRUM CLEANING L TINGPLATE	JNIT and		Prepared	d by: T.M	iyamoto
From: PP Service Planning Department 1G						
Classification:	☐ Troubleshooting	⊠ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	it information
	☐ Product Safety	Other (		)	☐ Tier 2	

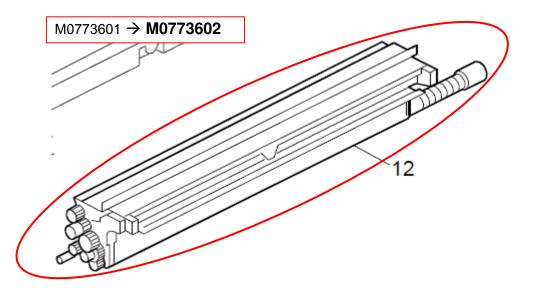
Change: New drum cleaning unit

**Reason:** To prevent SC39x (drum lock) caused by a toner blockage between the cleaning brush and the toner collection coil

Following are the improvements made to the new drum cleaning unit (M0773602) installed with a new agitator (M0773674).

- Higher performance of the agitator prevents toner from overflowing and generating printouts stained with toner.
- Higher performance of the agitator prevents toner clumps from forming at the aperture, which can break the gear or completely disable the drum cleaning operation.

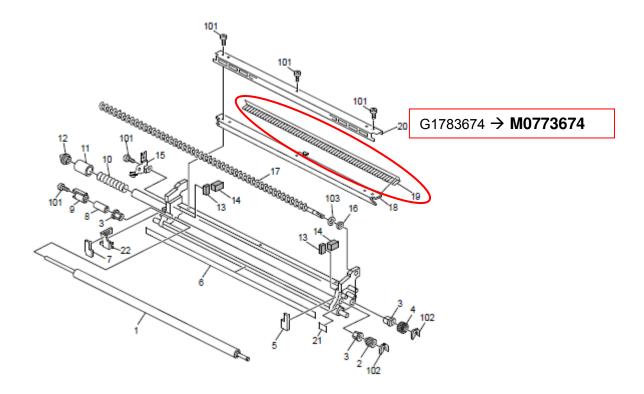
Old P/N	New P/N	Description	Q'ty	Int	Page	Index	Note
M0773601	M0773602	CLEANING UNIT: AROUND THE PHOTOCONDUCTOR	1	0/0	93	12	Change



**PAGE: 2/2** 

Model: Aries P1.5/C1.5 Date: 20-Dec-13 No.: RM077102

Old Part Number	New Part Number	Description	Q'ty	Int	Page	Index	Note
G1783674	M0773674	VIBRATINGPLATE: TONER COLLECTION COIL	1	X/O	99	19	Change



#### NOTE:

- Replace the drum cleaning unit by ordering the modified drum cleaning unit (p/n: M0773602). DO NOT procure the agitator (p/n: M0773674) individually as it is assembled at the factory with a special tool and cannot be installed in the field.
- After installing the modified drum cleaning unit (p/n: M0773602), replace the PM parts contained in the unit individually as in the standard process.



**PAGE: 1/2** 

#### Reissued:08-Jan-14

Model. Aries-P1.5/C1.5   Date. 25-Dec-13   No.: RM07/103a	Model: Aries-P1.5/C1.5	Date: 25-Dec-13	No.: RM077103a
---	------------------------	-----------------	----------------

#### **RTB Reissue**

The items in **bold italics** were corrected or added.

Subject: Troubleshooting "Shadow Effect"				d by: T. Miyamoto
From: 1st PP Tec	h Service Sec., PP Tech Serv			
Classification:		☐ Part informat	tion	Action required
	☐ Mechanical	Electrical		☐ Service manual revision
	☐ Paper path	☐ Transmit/rec	eive	☐ Retrofit information
	☐ Product Safety	☐ Other (	)	☐ Tier 2

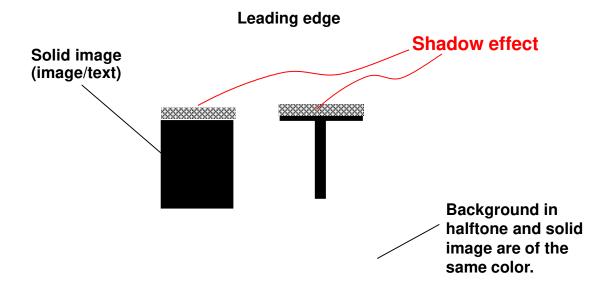
This bulletin is targeted only to Aries-P1.5/C1.5. DO NOT apply the following workaround to AG-P1/C1, AGL-P1/C1.

#### General

This bulletin provides information on how to work around the image quality issue known as "shadow effect", which is an expected result of the current machine specifications. However, to meet high customer demand, we request the field to carry out the workaround described in this bulletin as necessary.

#### **Symptom**

If a solid image is printed over a halftone background image and the images are of the same color, the leading edge of the solid image appears darker, generating a "shadow" effect. The symptom is more likely to occur in Black.



Tailing edge



**PAGE: 2/2** 

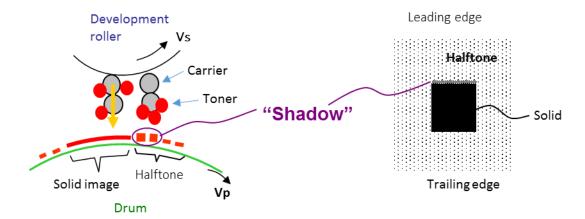
Reissued:08-Jan-14

Model: Aries-P1.5/C1.5	Date: 25-Dec-13	No.: RM077103a
------------------------	-----------------	----------------

#### Cause

In the development process, toner is pulled from the surface of the development roller and transferred to the photoconductive drum. However, because the rotation speed of the development roller (Vs) is faster than the rotation speed of the drum (Vp), toner for the solid image is not transferred accurately to the drum, slightly exceeding the optimum position and causes the density of the background image adjacent to the leading edge of the solid image to become higher.

Note: The lower the toner charge level, the higher the risk.



#### Workaround

There are two workarounds for this symptom. Note the side effects for each workaround.

Workaround	Side effect
Adjust the screening pattern. e.g. 200dot → 175dot or 150dot	Low resolution
Modify the development gamma (capacity) in the following SP for the color that requires adjustment. SP3-561-009 ~ 012 (Dev gamma: Disp/Set Actual value)	
Default 1.5 → <b>1.3</b>	
IMPORTANT Make sure to do the following after the above SP modification.	Mottled effect
Execute SP3-820-002 (Manual ProCon Exe Density Adj)  4 times in a row.  (SP3-820-002 is necessary only when SP3-561-009 ~ 012 is modified.)	
This will increase the toner charge level and enable higher toner transfer precision.	

# Technical Bulletin

Model: Aries P1.5/C1.5, Aegis C1/P1 Da			Dat	e: 05-Feb	-14	No.: RM077104
Subject: Part Information- DRUM Knob fastening tool			Prepared	d by: T.M	liyamoto	
From: PP Service	e Planning Department 1G					
Classification:	☐ Troubleshooting	□ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	⊠ Tier 2	

The following part was added as an individual service part.

Reason: To prevent drum scratching caused by narrower PG.

Fastening the drum knob incompletely will cause the drum cleaning unit to apply pressure to the drum and narrow the PG at the front side. Then, developer piled up on the mag roller will scratch the drum.

This tool assists the tightening drum knob completely, because the drum knob might be incompletely tightened when it is done without the tool.

New P/N	Description	Q'ty	Int	Page	Index	Note
D1792445	KNOB:TORQUE LIMITER MECHANICAL CLUTCH:ASS'Y	1	-	377	10	Add



Add **D1792445** 

**PAGE: 1/3** 

### NOTE:

#### (Precondition)

When you install the drum and fasten the drum knob with the tool, the Drum Cleaning Unit should not be installed on the PCDU.

If the drum knob is loosened with the drum cleaning unit installed, make sure to remove the drum cleaning unit, and then fasten the knob.

Model: Aries P1.5/C1.5, Aegis C1/P1

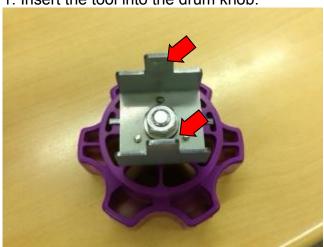
Date: 05-Feb-14

No.: RM077104

Fastening the drum knob with the drum cleaning unit installed will cause the drum cleaning unit to apply pressure to the drum and narrow the PG at the front side.

#### Procedure to fasten the drum knob with the tool

1. Insert the tool into the drum knob.





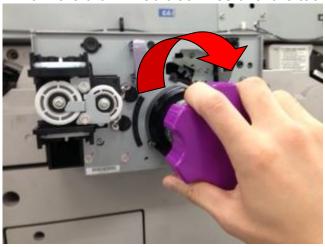


Date: 05-Feb-14

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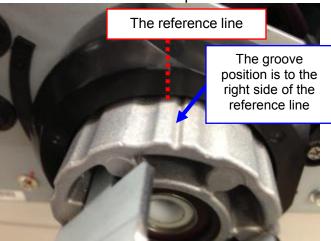
No.: RM077104

2. Turn the drum knob clockwise until the tool runs idle.



3. Confirm the drum knob position.

Model: Aries P1.5/C1.5, Aegis C1/P1



(Detailed information of the correct drum knob position is included in RG178128d)

# Technical Bulletin

**PAGE: 1/2** 

Model: Aries P1.5/C1.5, AegisP1/C1 Da			Dat	e: 07-Feb	-14	No.: RM077105
Subject: White lii	ne caused by incorrect insertio	n of the dus	t	Prepared	d by: T.M	iyamoto
From: PP Service	e Planning Department 1G					
Classification:	□ Troubleshooting	□ Part info	orma	tion	☐ Action	required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

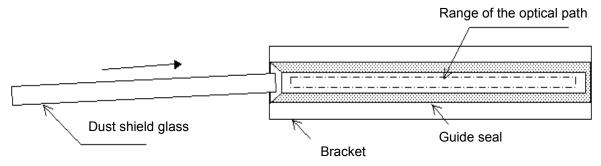
#### **SYMPTOM**

White line, that appears specifically after cleaning the dust shield glass in the laser unit

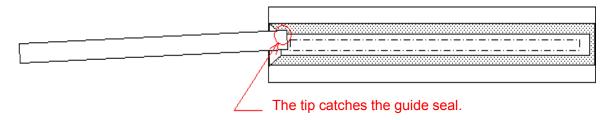
#### **CAUSE**

After cleaning the dust shield glass and sliding it back into the laser unit, it is falsely inserted at an angle, causing the guide seal attached inside the bracket to peel off. The guide seal removed and squashed inside the bracket blocks the laser, resulting in the white line.

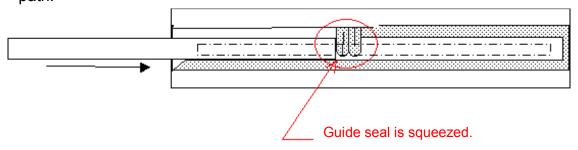
1. The dust shield glass is inserted into the bracket at an angle.



2. The tip of the dust shield glass catches the guide seal.



3. The guide seal is peeled off and squeezed inside, creating a blockage in the optical path.





**PAGE: 2/2** 

Model: Aries P1.5/C1.5, AegisP1/C1 Date: 07-Feb-14 No.: RM077105

#### PREVENTIVE MEASURE

Take note of the following 2 points when cleaning the dust shield glass to prevent the guide seal from peeling off.

- · When inserting the dust shield glass into the bracket, insert it straight, not at an angle.
- Insert the dust shield glass into the bracket gently and make sure the tip of the glass is not catching the guide seal. If you feel the glass is caught, pull it out and slide it in again. Repeat the procedure until you confirm proper insertion.

#### What to do when the guide seal has been peeled off from the bracket

<u>Temporary solution</u>: Cut the peeled off portion of the guide seal, then insert the shield glass.

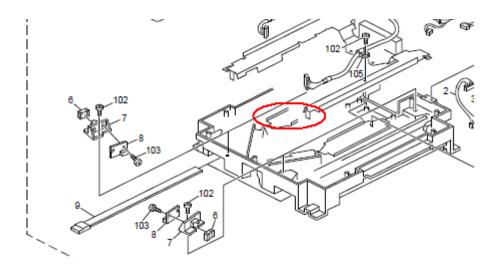
<u>Permanent solution</u>: Procure new brackets. (Brackets have been newly registered as service parts.)

### For Yellow and Cyan

New p/n	Description
G1782091	PROTECTION:SHIELD GLASS:LEFT:ASS'Y

### For Magenta and Black

New p/n	Description
G1782092	PROTECTION:SHIELD GLASS:RIGHT:ASS'Y



# Technical Bulletin

**PAGE: 1/2** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1 Dat			e: 07-Feb-	14	No.: RM077106	
Subject: Troubleshooting skew correction error (SC270,271 and 272)			Prepared	by: T. M	iyamoto	
From: PP Tech Service Dept., 1st PP Tech Service Sect.						
Classification:		☐ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		☐ Service	e manual revision
	☐ Paper path	☐ Transmit/red		eive	☐ Retrof	fit information
	☐ Product Safety	☐ Other (		)	⊠ Tier 2	

#### **SYMPTOM**

SC270: Skew correction error Y SC271: Skew correction error M SC272: Skew correction error C

#### **CAUSE**

The value in SP2-104-001  $\sim$  003 (Skew Adjustment Display) exceeds the upper limit and locks the skew correction motor.

### **SOLUTION**

When encountering SC270 or SC271 or SC272, do the following procedure before replacing the laser unit.

1. Do the following SP to initialize the skew adjustment values.

SP2-117-001	Resets the skew adjustment value for the C skew correction motor
SP2-117-002	Resets the skew adjustment value for the M skew correction motor
SP2-117-003	Resets the skew adjustment value for the Y skew correction motor

2. Confirm the adjustment values are all reset to "0" in the following SP.

SP2-104-001	Displays the C skew adjustment value against Bk
SP2-104-002	Displays the M skew adjustment value against Bk
SP2-104-003	Displays the Y skew adjustment value against Bk

- 3. Execute MUSIC (S2-153-001; MUSIC Condition Settings 1 Manual Execute: Mode a)
- 4. Execute MUSIC again. (MUSIC needs to be executed twice in succession.)
- 5. Check if the skew amount results in the range "+15 micro m  $\sim$  -15 micro m" in the following SP.

SP2-181-011	Skew amount C
SP2-181-027	Skew amount M
SP2-181-043	Skew amount Y



**PAGE: 2/2** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

Date: 07-Feb-14 No.: RM077106

6. If the results do not fall within the range, execute MUSIC again and check the results.

7. If the skew amount is still beyond the range, replace the laser unit and/or IOB1 to complete the procedure.

Possible cause of the problem: Defective skew correction motor or IOB1.

# Technical Bulletin

**PAGE: 1/75** 

Reissued:21-Apr-14

Model: Aries-P1.5/C1.5	Date: 10-Mar-14	No.: RM077107b
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### RTB Reissue

The items in **bold italics** were corrected or added.

Subject: Troubleshooting to prevent PQ problem			Prepared by: J. Kobayashi	
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informa Electrical Transmit/rec Other (		<ul><li>☐ Action required</li><li>☐ Service manual revision</li><li>☐ Retrofit information</li><li>☐ Tier 2</li></ul>

This bulletin is re-edited with the RTBs which were previously issued, and is carried out when you encounter quality issues.

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2. SC396 – SC399	.9
3. Uneven density & Mottled effects  Solution flowchart caused by unsmooth surface paper  Solution caused by toner degradation	.12
4. Vertical streaksLine No.1: White lines caused by ITB	
Line No.2: White lines caused by Dust Shield Glass	
Line No.3: Color lines caused by Corona Charger	
Line No.4: Color lines caused by OPC Drum	
Line No.5: White lines caused by Development Unit	
(Clogged doctor gap)	
5. Horizontal bands	
5-1. 40mm wide dark bands appear in 314mm pitch	
5-2. Shock jitter and other banding	
No. 1 Shock-jitter at ITB (PTR originated)	
No. 2 Shock-jitter at OPC (PTR originated)	
No. 3 Shock-jitter at PTR (Fusing unit entrance originated)	
No. 4 Banding at 85mm TE (Shock at PTR when paper exits PTR) No. 5 1.8mm pitch Banding	
No. 6 2.5mm pitch Banding	
No. 7 5mm pitch Banding	
No. 8 10mm pitch Banding	
No. 9 56mm pitch Banding	
No. 10 8mm pitch Banding	
P	

# **T**echnical **B**ulletin

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Reissued:21-Apr-14

Model: Aries-P1.5/C1.5	Date: 10-Mar-14	No.: RM077107b
6. Toner scattering/Dirty printout/Dirty back	kground	54
Proper developer replacement		55
Remove toner clumps		66
Removing the TD sensor and cleaning t	he opening	66
Removing the toner clumps inside the c		
Replace with fresh toner	•	

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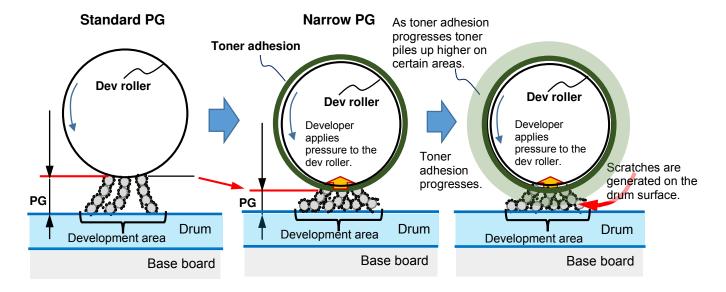
Reissued:21-Apr-14

Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

### Drum scratches caused by narrow PG

Excerpt from RTB RM077099

Drum scratches occur because the PG (potential gap; gap between the development roller and drum) is narrower than the specification. In this condition, stress is applied to the developer in the development process because the developer is forced to move through a narrow gap, generating excess electrical current along with heat and pressure. As a result, developer adheres to the surface of the development roller and toner continues to build up, eventually scratching the drum.



### Correct way to fasten the drum knob

Excerpt from "Correct Procedure for Fastening the Drum Knob" RTB RG178128d See RTB RG178128d for details.

- Always pull out the developer unit and remove the drum cleaning unit when fastening the drum knob.
- Never attempt to further fasten the drum knob when the drum cleaning unit is installed.

This is important in preventing the following problems:

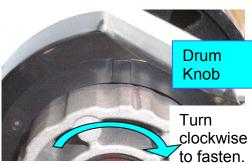
- 1) Inconsistent density between left and right sides on a page
- 2) Toner adheres to the development rollers
- 3) Drum scratches caused by development rollers adhered with toner
- 4) Toner clumps caused by narrow PG



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Do NOT fasten the drum knob when the developer unit is installed. Do NOT fasten the drum knob when the drum cleaning unit is installed.





**Drum Cleaning Unit** 

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If the drum knob is loosened with the drum cleaning unit installed, make sure to remove the drum cleaning unit, and then fasten the knob.

Fastening the drum knob with the drum cleaning unit installed will cause the drum cleaning unit to apply pressure to the drum and narrow the PG at the front side.

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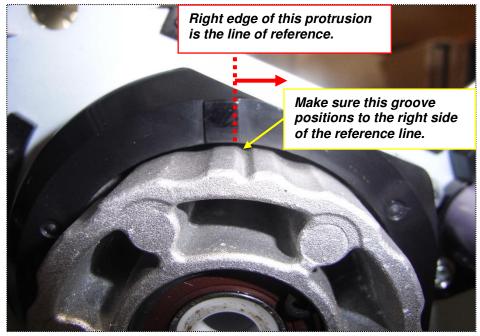
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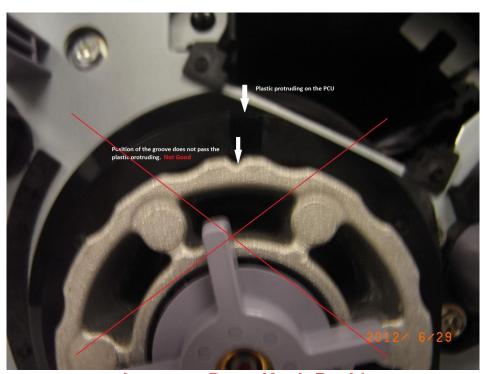
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Tighten the Drum Knob so that the groove on the Drum Knob positions to the right side of the plastic protrusion on the PCDU as shown in the photo below.

Note: Turn the drum knob until it stops and cannot be further tightened.



**Correct Drum Knob Position** 



**Incorrect Drum Knob Position** 



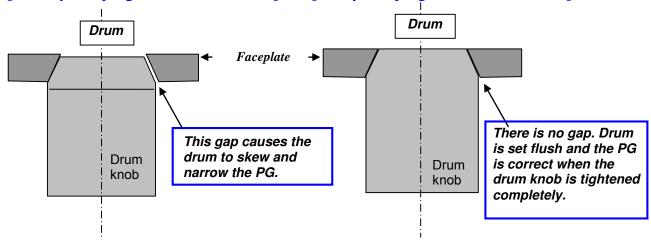
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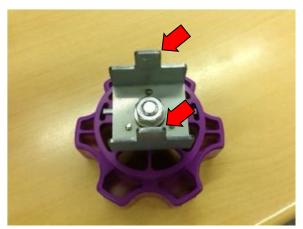
Diagrams describing the drum knob position

### [Incompletely tightened drum knob] [Completely tightened drum knob]



#### Procedure for fastening the drum knob with the "Drum Knob Tool"

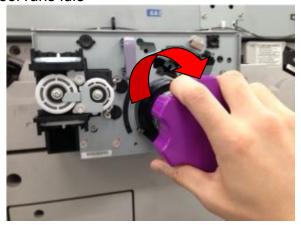
1. Attach the tool to the drum knob





2. Turn the drum knob clockwise until the tool runs idle







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### Removing toner from Mg sleeve to prevent drum scratches

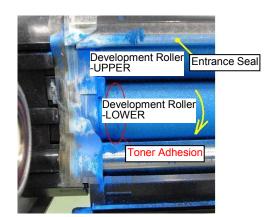
If the drum knob is not fastened completely, the PG becomes narrow and causes drum scratches. Do the following procedure to remove toner adhered to the Mg sleeves.

# Step 1. Stick packing tape against the surface of the development rollers to remove toner.

- 1-1. Remove old developer from the unit.
- 1-2. Pull out the developer unit and remove the drum cleaning unit and OPC drum.
- 1-3. Rotate the development rollers downwards using your fingers until the developer is completely poured out.

#### Note

- Be careful not to pull the top cover entrance seal when rotating the development rollers.
- Working with hand gloves is recommended to prevent oil on your fingers from adhering to the rollers. Make sure to thoroughly wash your hands in advance if gloves are not in hand.



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1-4. Stick the packing tape against the surface of the development rollers and peel off the toner. Repeat this procedure. (Vacuuming the toner in advance will make this process easier.)





#### NOTE

- Make sure the packing tape adhesives do not adhere to the development rollers.
- NEVER apply solvent to remove toner from the development rollers. Solvent will dissolve the toner, which will then adhere to the development rollers even more strongly.
- Make sure to completely remove toner adhered to the development rollers. Toner will build up on toner particles remaining on the development roller.



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Step 2. Set the drum and the drum cleaning unit, and install the developer unit in the mainframe.

Scratches on the drum should correspond to the toner adhesion confirmed on the development rollers. Replace with a new drum, if the drum is scratched.

**Notes on Fastening the Drum Knob** (Reference P.4 "2. Correct Procedures for Fastening the Drum Knob")

- Make sure the drum cleaning unit is not installed when setting the drum and fastening the knob.
- Turn the drum knob clockwise and confirm complete fastening.
- DO NOT 'loosen → fasten' the drum knob after installing the cleaning unit. Doing so will reduce the PG at the front side.
- Step 3. Pour in the developer mixture and execute Process Control (SP 3-820-002).
- Step 4. Print out 2 full-bleed solids (on A4/LT-Portrait) for the affected color.
- Step 5. Check if the density differs between the front and rear sides of the full-bleed solid.
- If density differs between the front and rear sides, do Step 6.

#### Step 6. Check if the development rollers are adhered with toner after the test print.

- 6-1. Print 1000 pages of low pixel density images; approx. 5% density.
- 6-2. Pull out the development unit, and check for any scratches on the drum surface.
- 6-3. Remove the drum cleaning unit and the drum, and check for any toner adhesion on the development rollers.

#### If the development rollers are not adhered with toner:

- a. And if the front and rear sides appear in the same density, the drum has no problem and can be used.
  - → Toner adhesion is probably caused by 'incorrect fastening of the drum knob'.
- b. And if the front side appears denser than the rear, print another 4000 pages. If toner adhesion does not recur, the drum has no problem and can be used.
  - → Toner adhesion is probably caused by 'incorrect fastening of the drum knob'.

If the development rollers are adhered with toner, PG may be exceeding the specification.

\* RCL requests you to send the affected development unit to RPS-Katsuta for investigation.



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#### 2. SC396 - SC399

Excerpt from RTB RM077086c

#### Recommended actions to prevent & resolve SC396 – SC399.

Update the Engine firmware to Version 1.009:16 or later.

In a system forced termination, developer mixture accumulates at the nip between the dev roller and drum, because the dev roller and drum stop suddenly. This generates excess load on the drum rotation in the recovery operation. (See "Cause No.4 and 5" in the table on the next page.)

The new f/w (Ver1.009:16) pre-rotates the dev roller in the recovery operation to remove the developer mixture accumulating in the nip between the dev roller and drum, which prevents abnormal drum rotation (SC39x).

Version	Program No.	Implementation to production	RFU availability
1.009:16	M0775253B	Jan 2014	Unavailable
1.008:16	M0775253A	Jan 2013	Unavailable
1.007 16	M0775253	Jun 2012	Unavailable
1.006:16	M0775252E	Jul 2011	Unavailable
1.005:16	M0775252D	May 2011	Unavailable
1.004:16	M0775252C	Apr 2011	Unavailable
1.003:16	M0775252B	Feb 2011	Unavailable
1.000A:16	M0775252A	1st mass production	Unavailable

<sup>&</sup>quot;Available" : The firmware can be updated via RFU or SD card. "Unavailable" : The firmware can only be updated via SD card.

Version	Modified Points or Symptom Corrected
1.009 :16	<ul> <li>Specification changes:</li> <li>1. To meet the Energy Star Ver2.0 standards, ITB alignment control values are no longer stored on the NVRAM during monochrome printing.</li> <li>2. Higher reliability against SC39x (drum-lock); machine warm-up following a forced termination is performed after activating the development motor.</li> <li>3. Higher reliability against Jam 170 when alternately running A3/DLT and A4/LT staple jobs.</li> <li>NOTE</li> <li>When applying this firmware, make sure to upgrade the firmware for SR5020 to Ver.3.19 (P/N: D4345620N) or newer.</li> </ul>

Cause	No.	Symptom	Action	Note
High friction between the	1	SC39x after power-on	Power Off-On	Symptom occurs only immediately after machine power-on.
drum and cleaning blade	2	Stopper seal on the cleaning unit is twisted and/or loose.	Correct the sealing. If the seal cannot be	Loose seal causes higher friction.

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			corrected, replace the cleaning unit.		
	3	SC39x immediately after installing a new drum	Lu	bricate the drum.	Insufficient lubricant causes higher friction.
Compressed developer mixture between the dev roller and	4	SC39x following a Jam037	Manually rotate the dev roller (clockwise viewed from front) to remove the compressed developer mixture.		Jam037 (fusing unit) is a system forced termination status; highly possible of causing compressed developer mixture between the components.
drum as a result of system forced termination	5	SC39x as a result of opening the front doors before a complete machine stop	Sa	me as above	No front door open required during machine worked.
Excess developer mixture in the development unit	6	Excess developer mixture on dev roller	the fro uni bra	mpletely remove e developer mixture m the development it and replace with a and new developer xture.	<ul> <li>Incomplete         developer mixture         replacement causes         the developer         mixture to increase         in the unit.</li> <li>See RM077072 for         details on how to         completely clear out         the developer         mixture from the         unit.</li> </ul>
Toner blocking in the drum cleaning unit	7	Toner clogged between the brush roller and toner collection coil	cle (M	place the old drum aning unit 0773601) with the w unit (M0773602)	See RTB RM077102.



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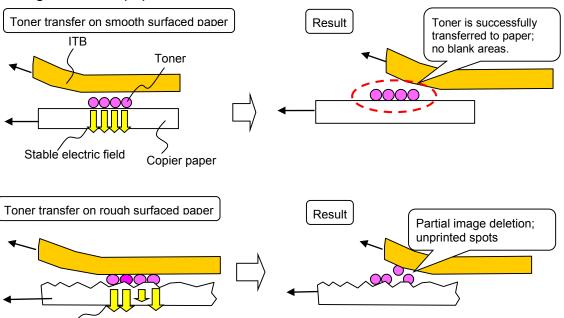
### 3. Troubleshooting uneven density & mottled effect

Excerpt from RTB RM077077b

Cause	Solution		Side effect	
Paper with rough surface causes unstable electric field	Image	Calibration	None	
in the toner transfer process.	processing	Screening setting	Reduced image resolution	
	Engine setting	Toner refresh amount	Toner yield will decrease if average coverage is 4% or lower	
Toner degradation		ACS switch setting	Productivity will slightly decreased by switching the print mode.	

#### In detail

- Rough surfaced paper; unstable electric field -



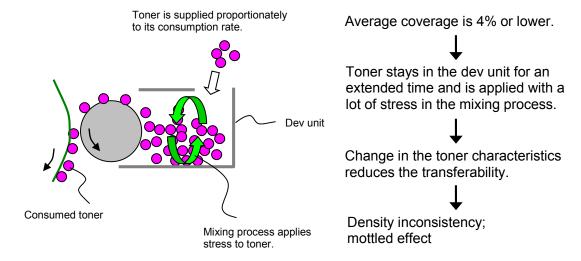


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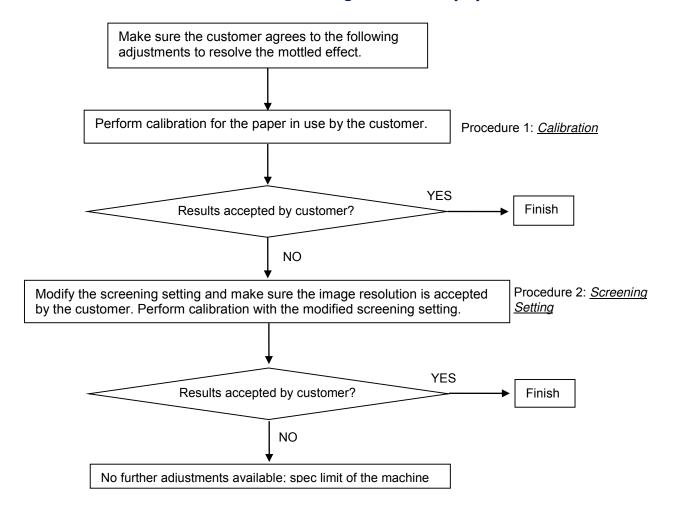
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#### -Toner degradation-



### Flowchart for mottled effect on rough surfaced paper





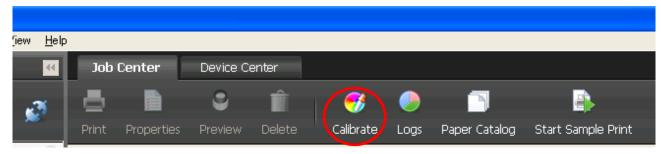
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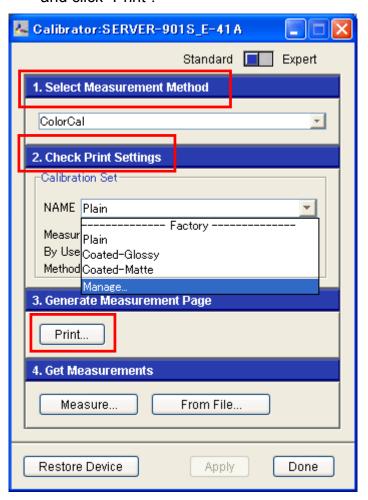
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

### **Procedure 1: Calibration**

1-1. In Command Work Station > Job Center, select Calibrate.



1-2. In the Calibrator dialog box, select the measurement method, check the print settings, and click "Print".



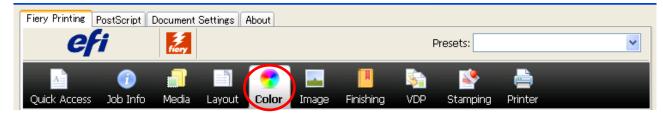


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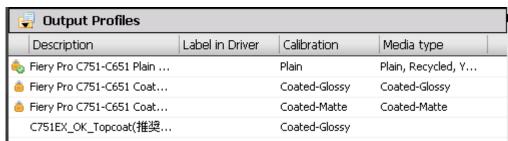
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- 1-3. Click "Measure" to get the measurements.
- 1-4. In the printer driver setting, select the Color tab.



- 1-5. Select standard or expert, and the paper type from the following 3 default options: Plain, Gloss, or Matte.
- NOTE: The above steps 1-1 ~ 1-3 (calibration in Command Workstation) and 1-4 ~ 1-5 (output profile selection in printer driver) must be performed as a set as calibration performed in Command Workstation is reflected only to the corresponding paper type selected in the printer driver. To confirm the output profiles associated with the calibrations performed, go to Command Workstation > Device Center > Resource > Profile > Output Profiles.



1-6. Run a test print and check with your customer if the results are accepted. If accepted, complete the procedure. However, if unaccepted, do the next "Screening Setting" procedure.

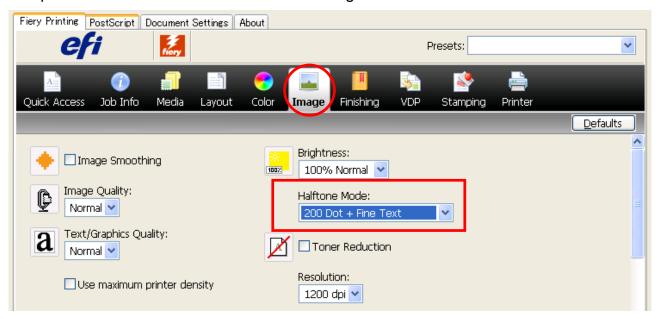
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### **Procedure 2: Screen Setting**

- 2-1. In the printer driver setting, select the Image tab.
- 2-2. Select several screening settings from the Halftone Mode drop-down list and run test prints to determine the most effective setting.

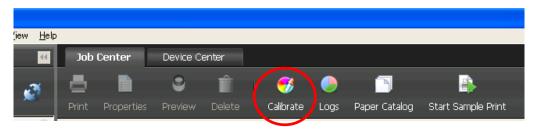


NOTE: The lower the screening setting, the higher the effect for mottled images with a trade-off in generating grainy images. It is recommended to test the effect by gradually increasing the setting from 150 Dot to 200 Dot.

	Mottled Effect	Screening Setting	Image quality
Step 1	Good	150 Dot	Grainy
Step 2	1 1	175 Line	<b>†</b>
Step 3		175 Dot	
		200 Line	<b>↓</b>
Step 4	Bad	200 Dot	Fine

IMPORTANT: Make sure your customer accepts the graininess as a result of the screening setting applied.

2-3. In Command Work Station > Job Center tab, select Calibrate.



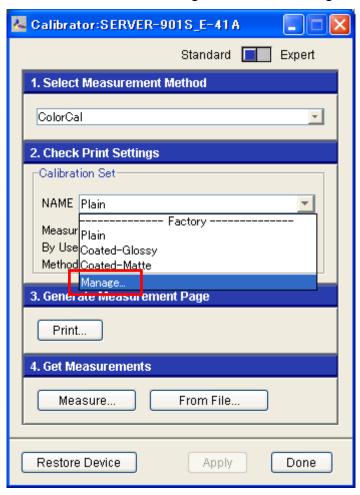


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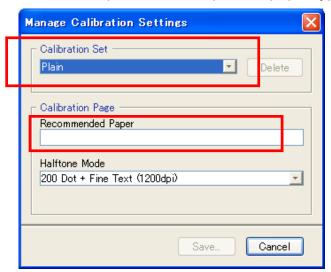
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2-4. In the Calibrator dialog box, select Manage from the drop-down list NAME.



2-5. In the Manage Calibration Settings dialog box, select the paper type in use and type in a description, for example, the paper type and dot/line value in Recommended Paper.



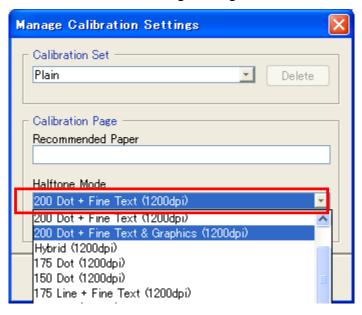


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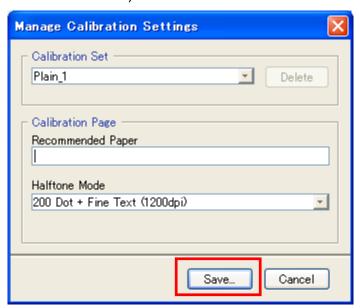
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2-6. Select the screening setting determined in step 2-2.



2-7. Click Save. (A number may be appended for the calibration set name, but disregard this number.)



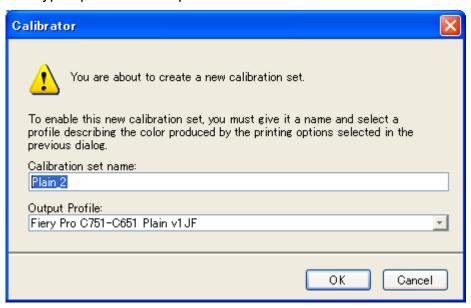


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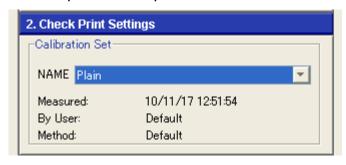
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2-8. In the field calibration set name, type in the description specified in step 2-5 for Recommended Paper. Also, confirm the output profile corresponds with the paper type specified in step 2-5.



2-9. Confirm the NAME in the calibrator dialog box reflects the calibration set created in the previous steps.



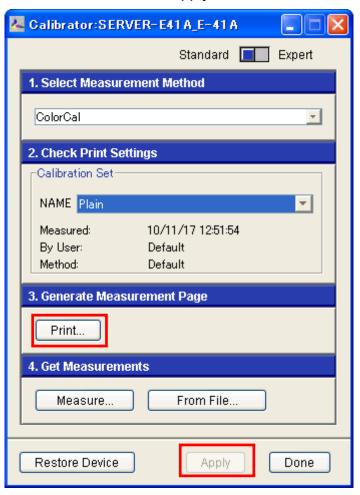


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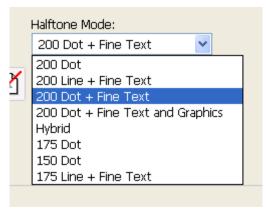
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2-10. Click Print. Click Apply after the calibration completes.



- 2-11. Apply printer driver settings (See steps 1-1 ~ 1-4 in Procedure 1: Calibration) and select the profile that was calibrated.
- 2-12. Select the calibrated screening setting from the printer driver (Fiery Printing > Image). Print and confirm the image quality.





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## **Troubleshooting toner degradation**

## **Procedure 1: Toner refresh adjustment**

Modify the following SP to increase the toner refresh amount.

1-1. Confirm the current value in SP3-701-009 (Max Pattern Length) is "25".

3-701-009 Toner Refresh Mode: Max Pattern Length [0 to 25 / <b>25</b> / 1
---

1-2. Modify the SP values indicated in red in the following table.

		Default	Modified
Toner Refresh Mode DFU		K: 5%	K: 5%
		Color: 2.5%	Color: 3.8%
3-701-001	Image Area: K	12.5	12.5
3-701-002	Image Area: C	6.0	9.4
3-701-003	Image Area: M	6.0	9.4
3-701-004	Image Area: Y	6.0	9.4
3-701-005	Image Area Thresh: K	12.5	12.5
3-701-006	Image Area Thresh: C	6.0	9.4
3-701-007	Image Area Thresh: M	6.0	9.4
3-701-008	Image Area Thresh: Y	6.0	9.4

**NOTE 1:** Make sure the values for C, M and Y are the same.

**NOTE 2:** Toner yield will decrease on devices with 4% or lower average coverage.



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### Procedure 2: Modifying the ACS switch setting

Modify the following SP to minimize the idling operation time of Y, M and C developer units, if color images show more mottled effects compared to monochrome images.

#### SP MODIFICATION

Enter the following SP and change the value from "0" (default) to "10".						
	SP		Default	Number of sheets printed in FC before switching to Bk mode		
	ACS Switch Set: FC Mode: Cont Bk Image N Sheets	SP 2-907-001	0	10		

### Why Y, M and C?

Y, M and C development units tend to idle more than the Bk development unit. This is because, by default, these units are designed to continuously run idle even when the printing mode switches to mono-chrome from full-color. Y, M and C development units remain inactive only if printed in mono-chrome mode throughout the entire operation, from startup to stand-by.

#### SIDE EFFECT

Productivity will slightly decrease because it will take approximately 5 seconds to switch from FC mode to mono-chrome mode, and approximately 7 seconds in the reverse order.

Also, it will take an extra 2~3 minutes to perform Process Control, if turning on the machine power or resuming operation after a long pause in low temperature environment.

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### Procedure 3: Manual toner refreshing

While Procedures 1 and 2 are SP modifications to prevent problem occurrences, the following is a troubleshooting procedure to resolve a problem that is present and caused by toner degradation.

- 3-1. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu so that old toner/developer is removed and do not clog the doctor gap.
- 3-2. Run the customer job.

Are the results accepted by the customer?

Yes: Finish

No: Repeat the above step, because the developer unit still contains degraded toner.

3-3. Replace the developer mixture of the affected color by referring to the procedures described in RTB RM077072a, if mottled effects are still observed after repeating the above steps twice.



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### 4. Vertical streaks

Excerpt from RTB RM077031b

Troubleshooting procedures for the following 5 types of Vertical Lines (white and color):

No1. White lines caused by ITB

No2. White lines caused by Dust Shield Glass No3. Color lines caused by Corona Charger

No4. Color lines caused by Drum Cleaning Unit or OPC Drum

No5. White lines caused by Development Unit; Clogged doctor gap

#### Overview of the workflow:

1. Do the lines appear at the same location for all 4 colors?

YES: Do troubleshooting procedure for "Lines No.1."

NO: Go to the next step.

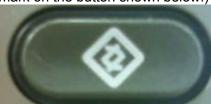
2. Clean the dust shield glass and check the results with the customer job.

Are the results accepted by the customer?

YES: Finish (See "Lines No2".)

NO: Go to the next step

3. Press "User tools" on the operation panel, select "Maintenance" and execute "Color Registration." (Note that "User tools" is not indicated on the panel for EU machines. Look for the mark on the button shown below.)



Are the results accepted by the customer or better than before?

YES: See troubleshooting procedures for "Lines No3."

NO: Go to the next step.

- 4. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 5. Do "No.203 Execute Photoconductor Refreshing" in the Adjustment Settings for Skilled Operators Menu for the affected color and check the results with the customer job. Are the results accepted by the customer?

YES: Finish (See "Lines No4".)

NO: Go to the next step.

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6. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu for the affected color and check the results with the customer job.

Are the results accepted by the customer?

YES: Finish (See "Lines No4".)

NO: Go to the next step.

7. Clean the "doctor gap" of the development unit of the affected color and check the results with the customer job.

Are the results accepted by the customer?

YES: Finish (See "Lines No5".)

NO: Go to the next step.

8. Replace the developer mixture of the affected color by referring to the procedures described in RTB RM077072a.



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### **Troubleshooting procedures in detail**

Line No.1: White lines caused by ITB



#### Cause

Lubricant powder on the ITB is not evenly spread out, causing poor transfer in areas with less lubricant.

#### Procedures

1. Is the belt cleaning unit exceeding its service life?

YES: Replace the belt cleaning unit.

NO: Go to the next step.

2. Press "User tools" on the operation panel, select "Maintenance" and execute "Color registration."

Are the results accepted by the customer?

YES: Finish

NO: Go to the next step.

3. Do "No.202 ITB Manual Lubrication" in Adjustment Settings for Skilled Operators Menu. Make sure the cleaning blade and lubricant blade are retracted from the ITB before lubrication.

Are the results accepted by the customer?

YES: Finish

NO: Repeat the above. If the lubrication does not resolve the problem, replace the ITB Cleaning Unit.



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### Line No.2: White lines caused by dust shield glass

### Cause

Light exposed to the drum is insufficient due to an unclean dust shield glass.

### Procedure

1. Clean the dust shield glass.

### Line No.3: Color lines caused by corona charger

### Cause

Charge level is insufficient due to an unclean corona charger.

#### Procedure

1. Press the "User tools" button on the Panel, select "Maintenance" and do "Color Registration." (Note that "User tools" is not indicated on the panel for EU machines. Look for the mark on the button shown below.)



- 2. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 3. Swap the corona charger of the affected color with another charger of a different color.
- 4. Again, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color. Do the vertical lines appear in a different color after swapping the charger?
  - YES: Replace the charger of the affected color confirmed in step 2 with a new charger to complete the procedure.
  - NO: Do the troubleshooting procedures for "Line No.4."

IMPORTANT: Make sure to put the corona chargers back to their original stations to prevent PM counter error.



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Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

### Line No.4: Color lines caused by OPC drum

### Cause

Lubricant powder on the OPC drum is not evenly spread out, causing poor transfer in areas with less lubricant.

### **Procedures**

- 1. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 2. Do "No 203 Execute Photoconductor Refreshing" in Adjustment Settings for Skilled Operators Menu for the affected color.
- 3. Do "No 208 Execute Toner Refreshing" in Adjustment Settings for Skilled Operators Menu for the affected color.

Are the results confirmed with the customer job accepted by the customer?

Yes: Finish

No: Go to the next step.

- 4. Swap the drum cleaning unit of the affected color with another unit of a different color.
- 5. Again, print 3 sheets of the halftone pattern (SP2-106-002-16).
  - Do the vertical lines appear in a different color after swapping the drum cleaning unit?
    - YES: Replace the drum cleaning unit of the affected color confirmed in step 1 with a new drum cleaning unit to complete the procedure.

NO: Go to the next step.

- 6. Swap the drum of the affected color confirmed in step 1 with another drum of a different color.
- 7. Again, print 3 sheets of the halftone pattern (SP2-106-002-16).
  - Do the vertical lines appear in a different color after swapping the drum?
    - YES: Replace the drum of the affected color to complete the procedure.
    - NO: Do the troubleshooting procedures for "Line No.5."

IMPORTANT: Make sure to put the drum cleaning unit and OPC drum back to their original stations to prevent PM counter error.



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Reissued:21-Apr-14

Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

Line No.5: White lines caused by Development Unit (Clogged doctor gap)

### Cause

a) Edge of the mylar attached to M0773457 (index #5 in Figure1 on the next page) is torn and split, and is contacting the development roller. Due to this contact, toner supply is blocked and sufficient amount of toner is not transferred to the drum.

Note that M0773457 is attached with 2 different types of mylars. One has a round edge and the other a straight and flat edge. (See the bottom photo on the next page.)

b) Developer mixture is accumulated at the doctor gap, causing insufficient toner transfer to the OPC drum



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#### Procedure

- 1. To identify the color causing the lines, print 3 sheets of the halftone pattern (SP2-106-002-16) in each color.
- 2. Check if the edge of the mylar attached to M0773457 is torn or not. If torn, replace M0773457 and print a halftone pattern in the color causing the line. Confirm the line has disappeared to complete the procedure. If the mylar is not torn, do the next step.

Figure 1 (Index #5: p/n M0773457 Cover:Upper:Development Unit:Ass'y)

35.PCDU 2 (D095/M077)

36.PCDU 2 (D095/M077)

36.PCDU 2 (D095/M077)

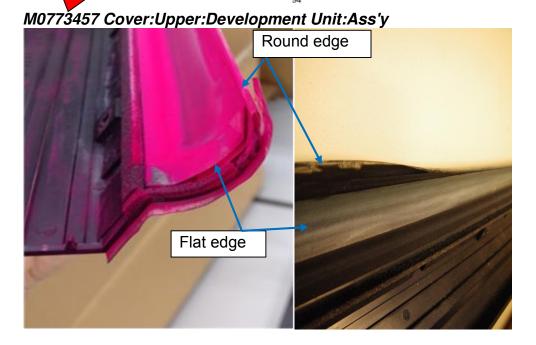
37.D09

38.D09

39.D09

30.D09

30.D0





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- 3. Clean the doctor gap in the following procedure.
  - a) Remove the PCDU from the mainframe.
  - b) Remove the drum cleaning unit and OPC Drum.
  - c) Remove the development unit upper cover. (screw x3)



d) Rotate the development roller downward until you confirm the upper development roller is clear of developer mixture.



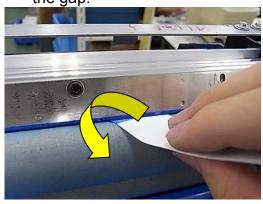


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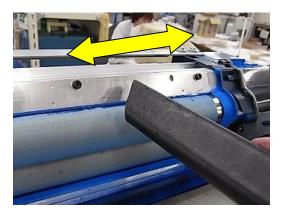
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e) Slide in a piece of paper in the doctor gap to remove developer mixture stuck in the gap.



f) Use a vacuum cleaner to remove the remaining particles. IMPORTANT: Work carefully to avoid damage to the development rollers.



- g) Follow the above step in reverse order to put back the development unit.
- 4. Do "No.208 Execute Toner Refreshing" in the Adjustment Settings for Skilled Operators Menu so that clumps of toner/developer are removed and do not clog the doctor gap.
- 5. Run the customer job.

Are the results accepted by the customer?

Yes: Finish

No: Repeat steps 2 and 3 because the developer unit still contains clumps of toner/developer.

6. Replace the developer mixture of the affected color by referring to the procedures described in RTB RM077072a, if the doctor gap is still clogged even after repeating steps 2~4 twice.



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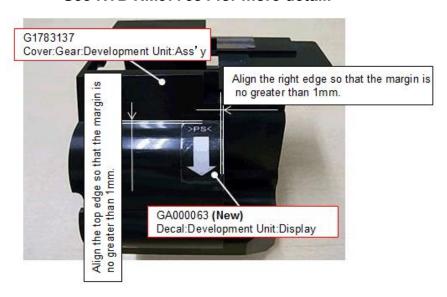
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

Notes 1: To prevent recurrence of White Lines originating in the color developer units, Cyan, Magenta and Yellow, modify the value set in SP 2-907-001 (ACS Switch Set) to 10. Higher toner consumption will prevent degradation of toner and developer and maintain better flow of the mixture in the unit. See RTB RM077095 for details.

Note 2: Rotating the development roller in the opposite direction may wear the mylar and entrance seal of the development unit and cause adverse effects.

Rotate the development roller only in the direction indicated with the seal.

See RTB RM077054 for more detail.



Note 3: If the machine continues to run with a torn Mylar, toner will adhere to the development roller. In such case, do the procedure described on pages 11 ~ 13 of RTB RG178128d.



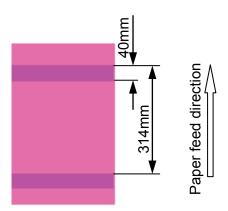
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### 5. Horizontal bands

## 5-1. 40mm wide dark bands appear in 314mm pitch



Excerpt from RTB RM077099

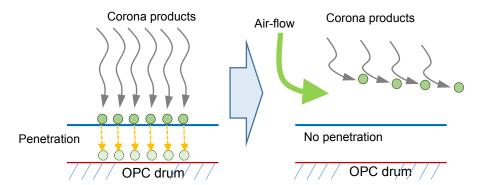
Image density appears uneven, darker compared to the surrounding area, when running the machine in low temperature and low humidity environment.

### Cause

Corona products penetrate the drum surface layer and changes the charge characteristics.

### Solution

Keep the exhaust fans running continuously to completely get rid of corona products from the system by modifying the settings below.



- 1. Enter User Tools → System Settings → Timer Setting, and set the Timer Setting to OFF.
- 2. SP1-940-03: Ozone fan timer setting (default: 56min) Change this value to "1270" min.
  - SP1-940-04: Development fan timer setting (default: 56min)

Change this value to "1270" min.

SP1-202-01: Heating roller temperature in low power mode (default: 110 degrees C) Change this value to "0" degrees C.



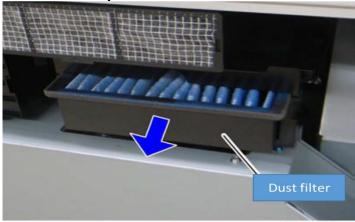
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NOTE: Make sure the Dust, Development and Ozone filters are replaced at the prescribed PM intervals.

> Clogged filters will decrease the air current from the fans and disable complete removal of corona products.

Dust filter: Replace at 400K interval.

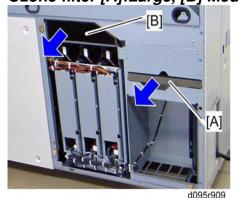


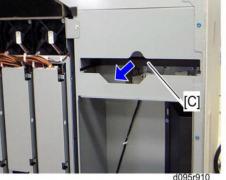
d095r908

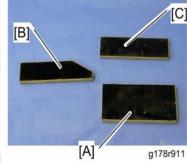
### Development filter: Clean with vacuum at 400K interval.



## Ozone filter [A]:Large, [B] Medium, [C] Small: Repace at 1,200K inverval.







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If the above is not accepted by the customer due to extra power consumption, ask for customer approval and install the external power supply unit.

This part is excerpted from RTB RM077075b.

### Part information

Please add the following part to your Aries-P1.5/C1.5 and Aegis-P1/C1 parts catalog.

Part number	Description	Page	Index	Note
M0772500	Service Parts: Power Supply Unit	87	17	Add
				For
				ProC900
M0772500	Service Parts: Power Supply Unit	93	20	Add
				For
				ProC901



M0772500 Service Part: Power Supply Unit

AC power cable included - NA 125V

- EU 250V

## **Notes on Using the External PSU**

- When using the external PSU, confirm that the LED is lit before turning on the main power. If the main power is turned on while the LED is not lit, this will result in SC.
- LED will not light up if the breaker switch is turned off or if the timer is set to off.
- Refer to the last section of this document for instructions on how to switch supply means between Pro C900 / Pro C901 and the external PSU.

Please refer the RTB RM077075b for External PSU installation in detail.



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## 5-2. Shock jitter and other Banding

Excerpt from RTB RM077019g

Definition

Banding: Bands that appear in main scan direction in a certain pitch

Shock-jitter: Bands that appear in main scan direction on the same place of a page from

2nd page and on

Troubleshooting procedures are provided for the following 9 types of banding:

No.1 Shock-jitter at ITB (PTR originated) Shock-jitter at OPC (PTR originated) No.2 Shock-jitter at PTR (Fusing unit entrance originated) No.3 Banding at 85mm TE (Shock at PTR when paper exits PTR) No.4 No.5 1.8mm Pitch Banding 2.5mm Pitch Banding No.6 5mm Pitch Banding No.7 No.8 10mm Pitch Banding No.9 56mm Pitch Banding 8mm Pitch Banding No.10

The following table summarizes the *10* types of banding/shock-jitter. See each section for more details.

Number	Symptom	Action	Side effect
No.1	Shock-jitter at	Actions for No.1 & No.2 to	<ul> <li>Possible toner</li> </ul>
	ITB	be performed as a set.	scattering or poor
		1. Update the firmware to the	transfer
		following versions:	<ul><li>Low productivity</li></ul>
		a) Web Support	<ul> <li>Blisters could appear</li> </ul>
		p/n D0956083	
		Version 1.03	
		b) Engine	
		p/n D0955252	1
		Version 1.007:16	1
		c) System/Copy	
		p/n D0956081	
		Version 1.05	
		2. Add the modified fly wheel	1
		3. Adjust the image transfer	1
		current.	
		Black: 55uA → 70uA	1
		Cyan: 50uA → 70uA	
		Magenta: 50uA → 70uA	1
		Yellow: 55uA → 70uA	
		4. Reduce the process speed	
		from normal to low.	
		5. Change the paper interval.	

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	ries-P1.5/C1.5	Da	ate: 10-Mar-14	No.: RM077107b
No.2	Shock-jitter at OPC	Actions for No.1 & No be performed as a set (See actions describe No.1.)	t.	Low productivity
No.3	PTR vibration due to Shock at Fusing Unit Entrance	<ol> <li>Adjust the paper feet speed to +/- 0.2% at the current speed.</li> <li>Adjust the paper tracurrent to -10uA.</li> <li>Apply paper with gracross direction</li> </ol>	gainst nsfer	Possible Banding at 85mm TE (No.4) Possible 5mm pitch banding (No.7) Possible change in image length White spots could appear
No.4	Banding at 85mm TE (Shock at PTR when paper exits PTR)	Adjust the paper feet speed to +/- 0.2% a the current speed.		Possible Shock-jitter at PTR (No.3) Possible 5mm pitch banding (No.7) Possible change in image length
No.5	1.8mm Pitch Banding	Change the dither p     to Dot	eattern •	Possible density unevenness Possible Moire
No.6	2.5mm Pitch Banding	Change the dither p     to Line	attern	Possible 1.8mm pitch banding
No.7	5mm Pitch Banding	Reduce the paper for speed to -0.1% or -0 from the current speed to -0.1% or -0.1%	0.2%	Possible Banding at 85mm TE (No.4) Possible change in image length
No.8	10mm Pitch Banding	Remove the modified fl wheel.	y	Possible shock-jitter at OPC (No.2)
No.9	56mm Pitch Banding	Replace the drum clear unit.	ning No	ne
No.10	8mm Pitch Banding	Replace the develope assembly.	r gear No	ne

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### No1. Shock-jitter at ITB

#### <u>Cause</u>

ITB vibrates due to the shock generated when the leading edge enters the PTR nip.

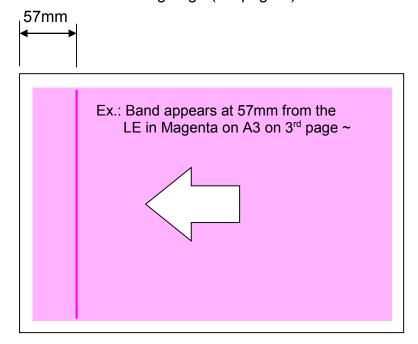
### Location of the band by color and paper size

#### Δ4

- Y: 166mm from leading edge (5<sup>th</sup> page ~)
- M: 208mm from leading edge (4th page ~)
- C: Does not occur
- K: 1mm from leading edge (3rd page ~)

### А3

- Y: 307mm from leading edge (3rd page ~)
- M: 57mm from leading edge (3<sup>rd</sup> page ~)
- C: 321mm from leading edge (2<sup>nd</sup> page ~)
- K: 71mm from leading edge (2<sup>nd</sup> page ~)



### SRA3

- Y: 191mm from leading edge (3<sup>rd</sup> page ~)
- M: Does not occur
- C: 263mm from leading edge (2<sup>nd</sup> page ~)
- K: 13mm from leading edge (2<sup>nd</sup> page ~)

### 8.5" x 11"

- Y: 166mm from leading edge (5<sup>th</sup> page ~)
- M: 208mm from leading edge (4th page ~)
- C: Does not occur
- K: 1mm from leading edge (3rd page ~)

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8.5" x 14"

Y: 20mm from leading edge (4<sup>th</sup> page ~)

M: 208mm from leading edge (3<sup>rd</sup> page ~)

C: Does not occur

K: 147mm from leading edge (2<sup>nd</sup> page ~)

11" x 17"

Y: 307mm from leading edge (3<sup>rd</sup> page ~)

M: 57mm from leading edge (3<sup>rd</sup> page ~)

C: 321mm from leading edge (2<sup>nd</sup> page ~)

K: 71mm from leading edge (2<sup>nd</sup> page ~)

12" x 18"

Y: 191mm from leading edge (3rd page ~)

M: Does not occur

C: 263mm from leading edge (2<sup>nd</sup> page ~)

K: 13mm from leading edge (2<sup>nd</sup> page ~)

13" x 19"

Y: 191mm from leading edge (3rd page ~)

M: Does not occur

C: 263mm from leading edge (2<sup>nd</sup> page ~)

K: 13mm from leading edge (2<sup>nd</sup> page ~)

### <u>Action</u>

See "Action" described in the following section "No.2 Shock-jitter at OPC".



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## No.2 Shock-jitter at OPC

<u>Cause</u>

OPC vibrates due to the shock generated when the leading edge enters the PTR nip.

### Location of band by color and paper size

**A4** 

Y: 26mm from leading edge (6th page ~)

M: 68mm from leading edge (5<sup>th</sup> page ~)

C: 111mm from leading edge (4th page ~)

K: 153mm from leading edge (3rd page ~)

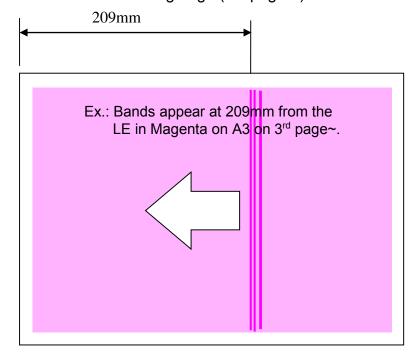
A3

Y: Does not occur

M: 209mm from leading edge (3<sup>rd</sup> page ~)

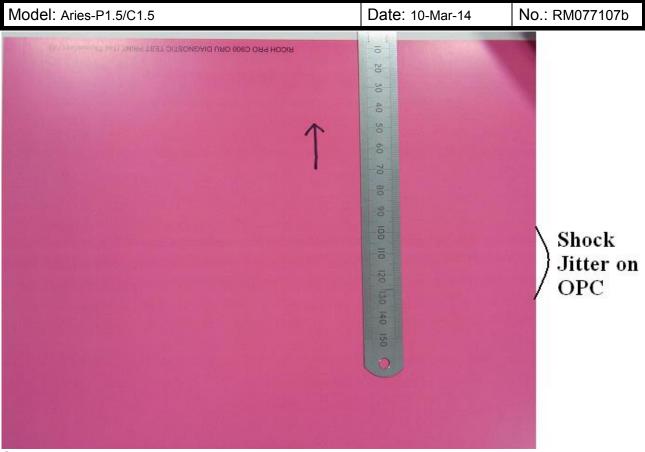
C: Does not occur

K: 223mm from leading edge (2<sup>nd</sup> page ~)



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#### SRA3

- Y: 343mm from leading edge (3<sup>rd</sup> page ~)
- M: 93mm from leading edge (3<sup>rd</sup> page ~)
- C: 415mm from leading edge (2<sup>nd</sup> page ~)
- K: 165mm from leading edge (2<sup>nd</sup> page ~)

#### 8.5"x11"

- Y: 26mm from leading edge (6<sup>th</sup> page ~)
- M: 68mm from leading edge (5<sup>th</sup> page ~)
- C: 111mm from leading edge (4th page ~)
- K: 153mm from leading edge (3rd page ~)

#### 8.5"x14"

- Y: 172mm from leading edge (4<sup>th</sup> page ~)
- M: Does not occur
- C: 111mm from leading edge (3<sup>rd</sup> page ~)
- K: 299mm from leading edge (2<sup>nd</sup> page ~)

### 11"x17"

- Y: Does not occurred
- M: 209mm from leading edge (3<sup>rd</sup> page ~)
- C: Does not occur
- K: 223mm from leading edge (2<sup>nd</sup> page ~)

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12"x18"

Y: 343mm from leading edge (3<sup>rd</sup> page ~)

M: 93mm from leading edge (3<sup>rd</sup> page ~)

C: 415mm from leading edge (2<sup>nd</sup> page ~)

K: 165mm from leading edge (2<sup>nd</sup> page ~)

13"x19"

Y: 343mm from leading edge (3<sup>rd</sup> page ~)

M: 93mm from leading edge (3<sup>rd</sup> page ~)

C: 415mm from leading edge (2<sup>nd</sup> page ~)

K: 165mm from leading edge (2<sup>nd</sup> page ~)

#### Action

1. Install 2 modified fly wheels (P/N: M0771294) in between the mainframe and the default fly wheel so that a total of 3 fly wheels are installed per station. Fix the fly wheels with TAPPING SCREW:4X12 (P/N: 04514012N) (x3). See "Installing the Modified Fly Wheels" for detailed procedure.

2. Apply the following firmware versions.

	Part number	Version
Web Support	D0956083	1.03
Engine	D0955253	1.007:16
System/Copy	D0956081	1.05

3. Change the following SP values:

SP	Modified	Default	Remarks
SP2-992-001	0.5	0	Drum process speed increases 0.5% and levels with the ITB rotation speed. As a result, the main scan starting point shifts approx 0.75mm to the leading edge on both sides of the paper. Image position must be readjusted in the Adjustment Settings for Skilled Operators menu to compensate the shift.
SP2-993-001	1	0	Cut-off frequency for drum revolution control is reduced from 30Hz to 13Hz to prevent resonance vibration.

4. Enter the Adjustment Settings for Skilled Operators menu and adjust the main scan starting point in "0101: Adjust Image Position With Feed Direction" for both front and back sides to compensate the image position shift as a result of the SP modification in the previous step.

If the results are accepted by the customer, complete the procedure. If the results are unaccepted by the customer, do the following step.

5. Register the paper in use to the Paper Library.

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6. Increase the transfer current for all stations in the Advanced Settings as follows.

-No 18: Image Transfer Current: FC: Black
-No 19: Image Transfer Current: FC: Cyan
-No 20: Image Transfer Current: FC: Magenta
-No 21: Image Transfer Current: FC: Yellow

55uA → 70uA
50uA → 70uA
55uA → 70uA

Note the possible side effect "a" when applying the above setting.

If the results are accepted by the customer, complete the procedure.

If the results are unaccepted by the customer and/or exhibits No.2 Shock-jitter at OPC, do the following step.

- 7. Set the transfer current values back to the default for all 4 stations.
- 8. Modify the Advanced Settings "No 14: Process Speed Setting" from High → Low, to reduce the amount of shock generated at the PTR nip.

Note the possible side effect "b" when applying the above setting.

If the results are accepted by the customer, complete the procedure. If the results are unaccepted by the customer, do the following step.

- 9. Set the process speed back to "High" in Advanced Settings "No 14: Process Speed Setting".
- 10. In Advanced Settings, adjust "No 37: Paper Feed Interval Setting" to move the band to a position less noticeable on the printouts.

Note the possible side effects "c" and "d" when applying the above setting.

Increase the value in 0.1 increments to move the banding/shock-jitter toward the leading edge. Banding/shock-jitter exhibited on 2<sup>nd</sup> page and on will move 46mm toward the leading edge, and those exhibited on 3<sup>rd</sup> page and on will move 92mm toward the leading edge.

For more detail, see the appendix.

Make sure to retrieve the default value in the Advanced Settings if no improvements are confirmed.

#### Side effects

- a) Possible toner scattering of poor transfer
- b) Productivity will reduce to approximately 78%
- c) Productivity will reduce as follows:
  - "No 37: Paper Feed Interval Setting"
    - 0.1 → Approx 90% productivity
    - 0.2 → Approx 85% productivity
    - 0.3 → Approx 80% productivity
- d) Possible occurrences of "Blister"



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Installing the Modified Fly Wheels

### Required parts:

- Fly wheel (P/N M0771294) 8 pcs per machine; 2 pcs per station
- TAPPING SCREW: 4X12 (P/N: 04514012N) 12 pcs per machine; 3 pcs per station

1. Open the Back Unit



2. Remove the fly wheel.



Fly wheel

- 3. Insert 2 modified Fly Wheels in between the originally installed fly wheel and the mainframe, and fix them with the TAPPING SCREW:4X12 (P/N: 04514012N). (x3 per station)
- 4. Repeat the above for all stations.

Note: After installing 2 modified fly wheels, the originally installed fly wheel should be visible when viewed from the non-operator side of the unit.

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### **Simplified Paper Feed Interval Setting**

Apply the simplified paper feed interval setting by referring to the table below. The values are described for each paper size and color, which allows the shock-jitters to occur not on the sheets but in between the sheets. This however will require customer acceptance as the productivity will be reduced. Reduced productivity as a result of this modification is also described in the bottom table.

		Paper size ( mm )			Paper size ( inch )				
		A4	A3	SRA3	11 x 8.5	8.5 x 14	11 x 17	12 x 18	13 x 19
2) A lease and Cattle and	Bk	0.0	0.2	0.1	0.0	0.4	0.2	0.1	0.1
2) Advanced Settings; #37 Paper Feed Interval to set	C	0.0	0.7	0.6	0.0	0.0	0.7	0.6	0.6
ITR*1 Shock Jitter off position	M	0.2	0.1	0.0	0.2	0.3	0.1	0.0	0.0
11K Shock Jitter on position	Y	0.1	0.4	0.3	0.1	0.0	0.4	0.2	0.2
<< as reference >>				_		_			
	Bk	100	85	92	100	70	85	92	92
Productivity (%)	C	100	67	67	100	100	67	67	67
	M	76	91	100	76	76	91	100	100
	Y	86	74	81	86	90	74	86	86

<sup>\*1 :</sup> Image Transfer Roller

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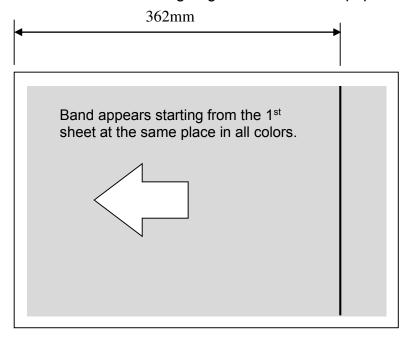
### No.3 Shock-jitter at PTR

<u>Cause</u>

PTR vibrates due to the shock generated when the leading edge enters the fusing unit.

### Location of the band by color and paper size

362mm from the leading edge in all colors and paper sizes



#### Action

- 1. Register the paper in use to the Paper Library.
- 2. In Advanced Settings, adjust No15: Paper Transfer Feed Speed Adjustment to a value +/- 0.2% against the current value.

Note the possible side effects "a", "b", and "c" when applying the above setting.

If the results are accepted by the customer, complete the procedure. If the results are unaccepted by the customer, do the following step.

- 3. Set the paper transfer feed speed back to the default value.
- 4. Set the paper transfer current to **-10uA** for the following in Advanced Setting:

No 22: Paper Transfer Current: B&W Current Setting No 23: Paper Transfer Current: FC Current Setting

If the results are accepted by the customer, complete the procedure. If the results are unaccepted by the customer, do the following step.

Note the possible side effect "d" when applying the above setting.

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- 5. Set the paper transfer current back to the default value.
- 6. Apply a different paper that has its grain in cross direction.

### Side effect

- a) Possible banding at 85mm trailing edge (No.4)
- b) Possible 5mm pitch banding (No.7)
- c) Possible change in image length
- d) White spots could be generated due to insufficient paper transfer current



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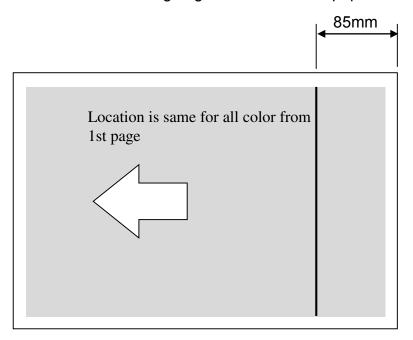
# No.4 Banding at 85mm TE (due to the shock generated when the trailing exits the PTR)

Cause

Change in the image transfer properties when the trailing edge exits the registration gate

### Location of the band by color and paper size

85mm from the trailing edge in all colors and paper sizes



#### Action

- 1. Register the paper in use to the Paper Library.
- 2. In Advanced Settings, adjust No15: Paper Transfer Feed Speed Adjustment to a value +/- 0.2% against the current value.

Note the possible side effects "a", "b", and "c" when applying the above setting.

If the results are accepted by the customer, complete the procedure.

If the results are unaccepted by the customer, set the paper transfer speed back to the default.

#### Side effect

- a) Possible PTR vibration due to Shock at Fusing Unit Entrance (No.3)
- b) Possible 5mm pitch banding (No.7)
- c) Possible change in image length

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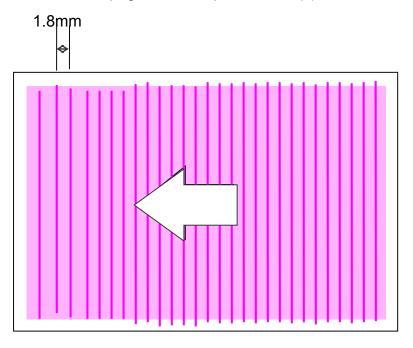
## No.5 1.8mm Pitch Banding

#### <u>Cause</u>

- If the bands appear in every color, the problem is originating in the ITB drive motor/ gear.
- If the bands appear in certain color(s), the problem is originating in the drum drive motor/gear of the affected color.

### Location of the band by color and paper size

Across the entire page in all or specific color(s)



### **Action**

### Change the Dither to "dot".

- a. 200Dot + Fine Text & Graphic
- b. 150 Dot
- c. 175 Dot

Among the above options a~c, select the one that least generates the possible side effects.

### Side effect

The above a-c corresponds with the following side-effects a-c.

- a. Possible density inconsistency
- b. Possible density inconsistency
- c. Possible moiré



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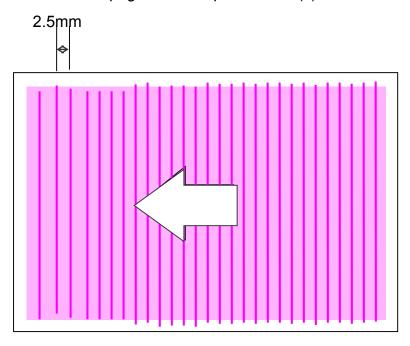
### No.6 2.5mm Pitch Banding

<u>Cause</u>

The problem is originating in the development roller gear of the affected color.

### Location of the band by color and paper size

Across the entire page in all or specific color(s)



#### Action

### Change the Dither to "line"

a. 175 Line + Fine text

b. 200 Line + fine text

Select the setting that less causes the side effect.

#### Side effect

The above a & b correspond with the following side-effects a & b.

- a. Possible 1.8 mm pitch banding (No5. 1.8mm Pitch Banding)
- b. Possible 1.8 mm pitch banding (No5. 1.8mm Pitch Banding)



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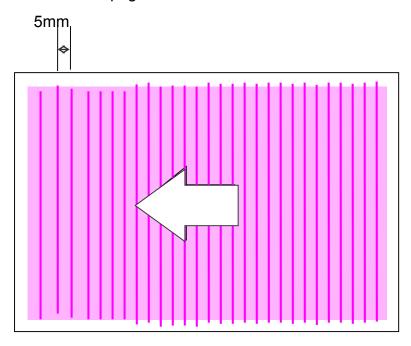
### No.7 5mm Pitch Banding

<u>Cause</u>

PTR Roller Gear

### Location of the band by color and paper size

Across the entire page



#### Action

- 1. Register the paper in use to the Paper Library.
- 2. In Advanced Settings **No15: Paper Transfer Feed Speed Adjustment**, reduce the paper feed speed to -0.1% or -0.2% from the current speed.

If the results are accepted by the customer, complete the procedure.

If the results are unaccepted by the customer, set the paper transfer speed back to the default.

#### Side effect

Modifying the paper feeding speed could cause the following side effects.

- a. Trailing 85mm banding (No4)
- b. Change in image length



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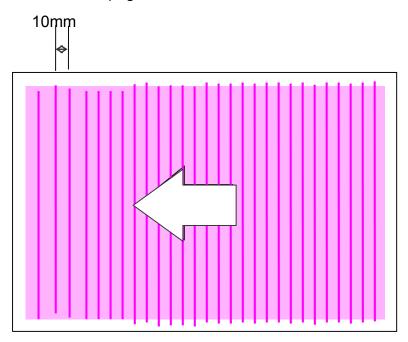
## No.8 10mm Pitch Banding

### Cause

Addition of the two modified fly wheels causes the fly wheels to resonate with either the PTR drive assembly or the Drum drive assembly.

## Location of the band by color and paper size

Across the entire page



### Action

Remove one of the two modified fly wheels (P/N: M0771294), and fix the original fly wheel and the modified fly wheel with TAPPING SCREW:4X12.

Repeat the procedure for all stations.

Note: The originally installed fly wheel should be visible when viewed from the nonoperator side of the unit as the modified fly wheel is installed between the original fly wheel and the mainframe.

If the results are accepted by the customer, complete the procedure.

If the results are unaccepted by the customer, remove the modified fly wheel so that only the original fly wheel is installed for each station.

#### Side effect

a) Possible Shock-jitter at OPC (No.2)



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### No.9 56mm Pitch Banding

#### Cause

Drum cleaning brush is damaged because the machine has been left unused for an extended period.

### Location of the band by color and paper size

Across the entire page in specific color(s)

#### Action

Replace the drum cleaning unit.

#### Side effect

None

### No.10 8mm Pitch Banding

### **Cause**

Breakage of the plastic piece assembled to the development roller gear.

#### Location of the band by color and paper size

Across the entire page in specific color(s)

### <u>Action</u>

Replace the developer gear assembly.

### Side effect

None

See RTB RM07767a for details.



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### 6. Toner scattering / dirty printout / dirty background

Excerpt from RTB RM077098 and RM07799

DO NOT replace the developer and OPC drum when encountering the following problems as these problems are caused by toner degradation. Implement the solutions described in the table below.

Symptom	Cause	Solution	RTB
a) Toner scattering	<ul> <li>Low toner fluidity in the development unit (= high toner concentration) disables the sensor to properly detect the toner amount.</li> <li>* Incorrect initial developer installation is also a possible cause.</li> </ul>	Confirm proper developer replacement     Replace with fresh toner	●RM077072c ●RM077077b
b) Dirty printout	<ul> <li>Low toner fluidity causes contamination inside the machine results in the below:</li> <li>➤ Toner scattering around the development unit</li> <li>➤ Degradation of waste toner collection in the ITB unit</li> </ul>	● Replace with new toner.  ● Remove toner clumps	<ul> <li>RM077072c</li> <li>RM077098</li> <li>New toner bottle contains new toner from certain Lot No</li> </ul>
c) Dirty background	<ul> <li>Low toner fluidity in the development unit disables the sensor to properly detect the amount of toner in the unit.</li> <li>As a result, the sensor detects extremely high toner concentration.</li> </ul>	<ul><li>Replace with new toner.</li><li>Remove toner clumps.</li></ul>	●RM077072c ●RM077098



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### Complete steps for developer replacement

Excerpt from RTB RM077072c

Continuous printing of low coverage images degrades the developer and disables complete operation of the developer removal, in which the development unit accumulates approximately 400g of developer that cannot be removed. Development unit containing old developer could cause toner scattering or locking of the development motor over time. To prevent the above, it is recommended to carry out the following procedures in addition to the standard developer removal operation.

### Check procedure using "Tc down judgement sheet.xls"

Before carrying out the additional developer removal procedures (Procedure 1, 2, 3 **and 4**), do the check procedure using the Excel file "Tc down judgement sheet.xls" attached below to determine whether the additional procedures will be needed or not.

### Tc down judgment sheet



- 1. Refer to the SMC printout or go into the SP mode and input the SP values in tables 1 and 3 in the "Tc down judgment sheet.xls".
- 2. If the check procedure results in "Condition 1", do "Toner Refresh Amount Adjustment" and Procedures 1, 2 and 3.
  - If the check procedure results in either "Condition 2" or "Condition 3", skip "Toner Refresh Amount" and do Procedures 1, 2 and 3.
  - If the result of the check procedure is none of the above, developer is to be replaced in the standard procedure.

#### -Toner Refresh Amount Adjustment-

Modify the toner refresh amount as described in the table below.

			Default	Modification 1	Modification 2
			K: 5%	K: 5%	K: 5%
		SP	Col: 2.5%	Col: 3.8%	Col: 5%
3-701	001	Toner Refresh Mode Humid Image Thresh:K	12.5	12.5	12.5
	002	Toner Refresh Mode Humid Image Thresh:C	6.0	9.4	12.5
	003	Toner Refresh Mode Humid Image Thresh:M	6.0	9.4	12.5
	004	Toner Refresh Mode Humid Image Thresh:Y	6.0	9.4	12.5
	005	Toner Refresh Mode Image Area Thresh:K	12.5	12.5	12.5
	006	Toner Refresh Mode Image Area Thresh:C	6.0	9.4	12.5
	007	Toner Refresh Mode Image Area Thresh:M	6.0	9.4	12.5
	800	Toner Refresh Mode Image Area Thresh:Y	6.0	9.4	12.5

	3-701	009	Toner Refresh Mode Max Pattern Length	25
--	-------	-----	---------------------------------------	----

- First, do "Modification 1" and check if desired results are obtained. Do "Modification 2"
  if further adjustment is needed.
- Note that the value for Black remains at 5%.

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#### - Procedure 1 -

The goal of this procedure is to decrease the Tc (toner concentration) to allow proper removal of remaining developer and achieve optimum ratio of toner against developer when initializing the new developer.

**IMPORTANT:** Make sure this "Procedure 1" is carried out before "Procedure 2".

1-1. Check the current Vt values in SP 3-001-001~004.

If the current Vt value is equal to or greater than 2.4V, complete the procedure. If the current Vt value is smaller than 2.4V, proceed to step 2.

**Table 1: Current Vt Value Display** 

		· u.u.o = .op.u.y	
		SP	
3-001	001	ID Sn: Vt display	Current val: K
	002	ID Sn: Vt display	Current val: C
	003	ID Sn: Vt display	Current val: M
	004	ID Sn: Vt display	Current val: Y

1-2. Change the default (0: PID) to "1: No toner supply" in SP3-301-001~004.

**Table 2: Toner Supply Mode** 

		SP		Default	Change to
3-301	001	Tnr Supply DFU	K	0: PID	1: No toner supply
	002	Tnr Supply DFU	С	0: PID	1: No toner supply
	003	Tnr Supply DFU	М	0: PID	1: No toner supply
	004	Tnr Supply DFU	Υ	0: PID	1: No toner supply

1-3. Print full-page solid patterns for the affected color(s) by referring to table 3 below which describes the approximate required number of copies of the full-page solid pattern according to the Vt confirmed in step 1.

If more than one color is affected, specify 2 affected colors when printing the solid patterns to save time and paper, i.e. R (Y+M), G (Y+C), B (M+C).

- \* When printing the test pattern, black can also be mixed with the affected color, for instance, K+Y.
- \* Work time can be reduced by using the copy function for the Copier model, and printing the patterns from the Command Work Station using the calibration chart (which allows to specify number of copies) for the Printer model.

Table 3: Reference for required number of copies of the full-page solid pattern

Current Vt value (V)	Required number of copies of the full-page solid pattern			
SP3-001-001~004	Long edge (A3, B4, DLT)	Short edge (A4, LT)		
2.2	13	<b>26</b>		
2.0	26	<b>52</b>		
1.8	39	79		
1.6	<b>52</b>	105		
1.4	66	131		

1-4. Set the toner supply mode SP (SP3-301-001~004; Table 2) back to the default "0: PID".

#### **IMPORTANT**

Make sure to set the toner supply mode (SP3-301-001~004) back to the default "0: PID" before completing the procedure, otherwise toner will not be supplied and cause problems.

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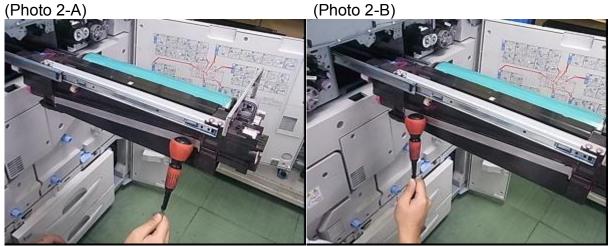
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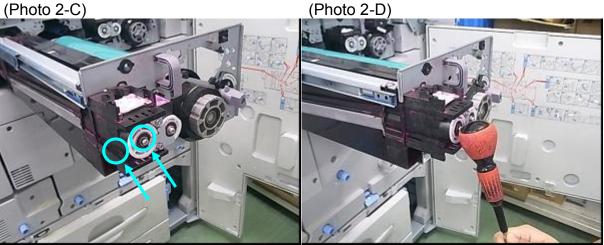
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### - Procedure 2 -

- 2-1. Execute the standard developer removal operation.
- 2-2. Pull out the development unit and hit the die-casted rear plate of the development unit with the grip of a screwdriver. (Hit several locations from the front to rear about 3 times respectively to drop the old developer stuck inside the unit.)



Similarly, hit the 2 screws fixing the Agitation auger and the Development auger about 5 times respectively (to drop the old developer adhered to the augers).



Re-execute the developer removal operation. (Specify a different color to validate the operation.)

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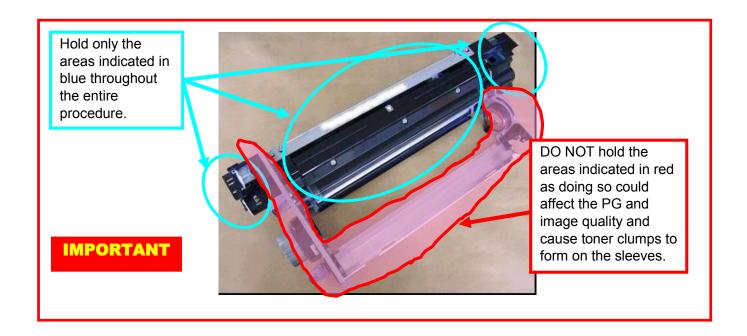
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- 2-3. Spread a large sheet of paper (for example packing paper) on a table to prepare removal of old developer.
- 2-4. Pull out the development unit and hold it so that the toner supply port faces down as shown in the photo below. Hold both ends of the unit.







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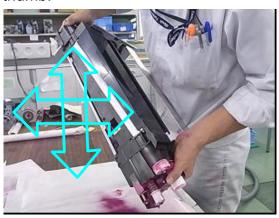
2-5. Keep the development unit tilted and slide the white case with your thumb to remove old developer from the supply port.





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2-6. Shake the unit vertically and horizontally, and rotate the Agitation auger with your thumb.







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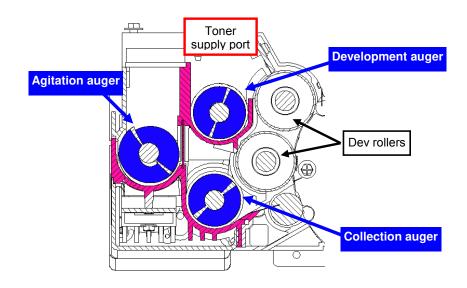
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#### Reference

Developer tends to accumulate in the gap between the rollers and casings (indicated in pink in the cross-section diagram below), and once accumulated, it cannot be easily removed in the standard developer removal procedure, thus this additional procedure is required.

The reason for tilting the unit as you remove old developer is due to the composition of the 3 augers as shown below. Developer stuck around the Development and Collection augers is removed rather easily as these augers position under the toner supply port whereas the Agitation auger does not. Tilting and shaking the unit helps the developer stuck around the Agitation auger to fall towards the toner supply port.



Toner supply port

### Agitation auger

This auger does not position under the same line as where the toner supply port positions. This is why the unit should be tilted to allow loose developer to fall in the direction indicated with the red arrow towards the toner supply port.

### **Development/Collection augers**

Because these 2 augers are located under the same line as where the toner supply port positions, old developer stuck around these rollers is removed rather easily.

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2-7. After confirming no further loose developer pouring from the unit, place the unit in the normal orientation and turn the development rollers (Mag rollers) to convey the developer adhered to the Mag rollers to the Development auger. Keep turning the Mag rollers until the Mag rollers are clear of old developer.

\* You may remove the gear covers as shown below to turn the Mag rollers more easily.





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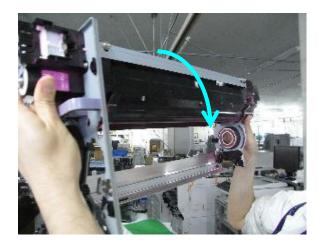
2-8. Repeat steps 2-5 and 2-6 to completely clear out the old developer.



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2-9. Hold the dev unit as shown in the photo below and turn the Mag roller half to 1 full rotation to convey the developer onto the Mag roller.





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2-10. Repeat steps 2-5 to 2-9 until the amount of loose developer on the Mag roller appears as in the photo below.



#### **NOTE**

- After removing older developer, the development unit should weigh no more than 7,900 grams. If a scale is available on-site, you may want to weigh the dev unit to ensure correct developer removal.
- Loose developer will continue to appear on the surface of the Mag roller if you keep rotating the Mag roller. Do not keep rotating the Mag roller, but complete the procedure as soon as you confirm that the remaining amount of loose developer is as shown in the photo above.



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#### - Procedure 3 -

When old developer cannot properly exit the development unit due to a clog in the aperture, the amount of developer in the unit increases and could cause SC32x or SC39x as a result of excess load on the development motor.

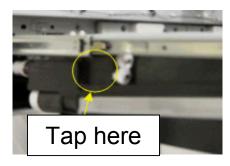
The goal of this procedure is to clean the aperture after removing old developer from the dev unit to prevent SC32x and SC39x.

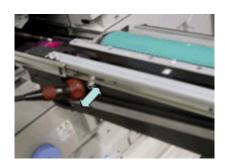
- 3-1. Pull out the PCDU.
- 3-2. Hold a screwdriver upside-down and hit the area circled in yellow with the grip of the screwdriver.

IMPORTANT: Work carefully to avoid damages to the drum with the screwdriver.

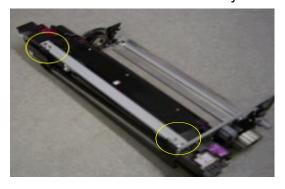








- 3-3. Remove the development unit from the mainframe and place it on a table.
- 3-4. Loosen the 4 screws circled in yellow. Screws do not have to be removed.



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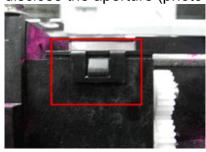
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3-5. Slightly lift up the guide rail as you slide it towards the direction indicated with the blue arrow.

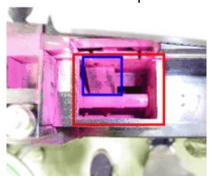


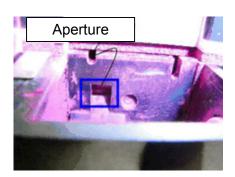
3-6. Release the snap-fit (squared in red in the bottom left photo) and remove the cover to disclose the aperture (photo bottom right).





3-7. Check if the aperture (indicated in blue in the photos below) is clearly visible. If the aperture is clogged, clean the area squared in red in the bottom left photo. If a vacuum cleaner is not in hand, hold the unit so that the aperture faces down and remove old developer from the unit.





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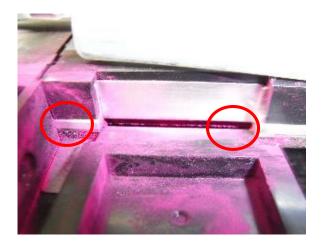
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3-8. Confirm that the aperture is clean and put back the cover, snap-fit and guide rail. When placing back the cover make sure the two tips of the cover slide under the metal plate.



3-9. Install the development unit and PCDU to complete the procedure.



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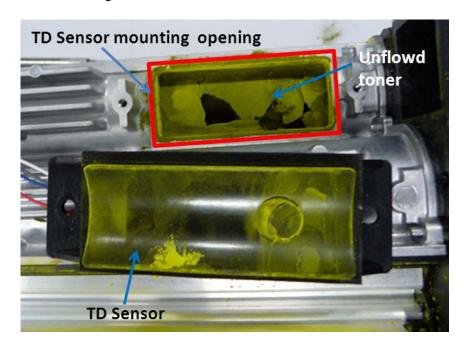
### Removing toner clumps stuck in the development unit

### Removing the TD sensor and cleaning the opening

Do this procedure, if toner scattering is observed around the development unit as shown in the photo below.



- 4-1. Take out the development unit and place it on a table upside-down.
- 4-2. Remove the TD sensor from the development unit. (screw x2)
- 4-3. Vacuum the toner adhered to the opening where the TD sensor was mounted. This toner blocks the TD sensor and causes false detection of the toner concentration, resulting in incorrect Vt.



4-4. Put back the TD sensor and development units to complete the procedure.

Do the procedures described in "Troubleshooting toner degradation" of **3. Uneven density & Mottled effects** in Page 19.

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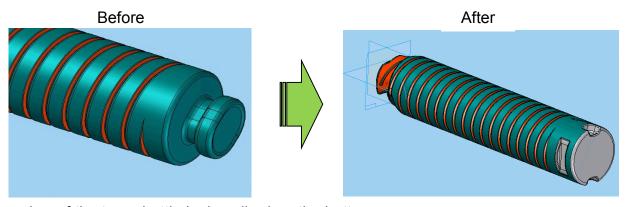
### Replacing with fresh toner

Wax contained in the toner was changed to a new wax with higher heat resistivity and tolerance for degradation. Application of this new toner has made improvements for the following:

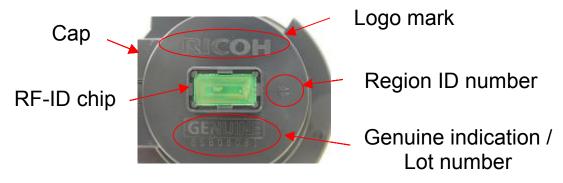
- SC36x (toner density errors) as a result of clogged sub-hopper, which occurs when heat resistivity and fluidity of the toner reduces under high temperature environment.
- Toner scattering as a result of low toner fluidity in the dev unit (= high toner concentration), disabling proper toner detection.
- Dirty background as a result of toner overflowing from the drum cleaning and ITB cleaning units.

#### **New toner bottle**

In line with the new toner, the toner bottle was modified.



Lot number of the toner bottle is described on the bottom cap.



#### Lot number information

Toner bottles of the following s/n or later contain the new toner:

	Black	Cyan	Magenta	Yellow
RAC	30108222 ~	30327921 ~	30128021 ~	30148121 ~
RE	3B0317-05 ~	3B0557-02 ~	3B0267-02 ~	3B0257-08 ~
RA	25835901 ~	25835501 ~	25834001 ~	25835901 ~



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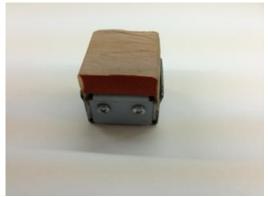
### 7. Gloss lines (vertical lines) caused by belt scratches

Excerpt from RTB RM077092a

Use the polisher to smoothen the scratches on the fusing belt caused by paper edges. This will prevent "vertical lines".

New P/N	Description	Q'ty	Int	Page	Index	Note
M0774287	WEB:POLISH:FUSING:ASS'Y	1				Add
M0774288	WEB:POLISH:FUSING	1	-			Add

#### M0774287 WEB:POLISH:FUSING:ASS'Y



### M0774288 WEB:POLISH:FUSING



NOTE: It is recommended to replace the web (M0774288) after each polish; 1 web per 1 fusing belt.

### How to polish the fusing belt

1. Pull out the fusing unit from the mainframe.



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Reissued:21-Apr-14

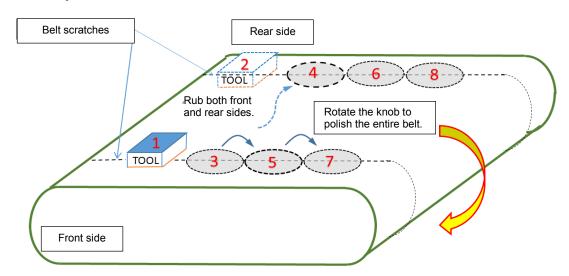
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

2. Open the top cover of the fusing unit.





3. Rub the polishing tool (p/n: M0774287 WEB:POLISH:FUSING:ASS'Y) against the fusing belt to smoothen the scratches and rotate the knob clockwise so that the entire belt can be polished. *Rub approximately 30 times for each location, although this will depend on the condition of the scratches.* 

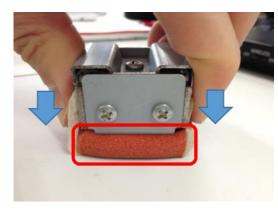


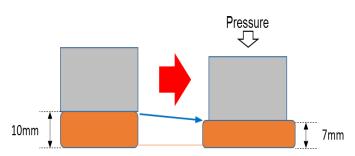


Reissued:21-Apr-14

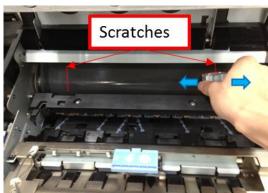
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

NOTE: See photo and diagram below for reference on the appropriate amount of pressure that should be applied when polishing the belt.





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- 4. After polishing the fusing belt, put back the fusing unit.
- 5. Print out sample copies to check if vertical lines appear or not.

#### **NOTE**

Make sure to polish the belt scratches caused by front (operator) and rear (non-operator) edges of the paper.



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Reissued:21-Apr-14

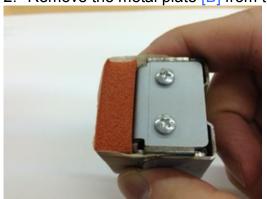
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

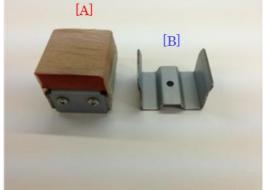
### How to replace the web

1. Remove the screw on the bottom side of the tool with a screwdriver.

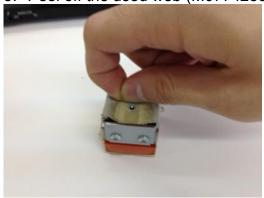


2. Remove the metal plate [B] from the tool [A].





3. Peel off the used web (M0774288 WEB:POLISH:FUSING).





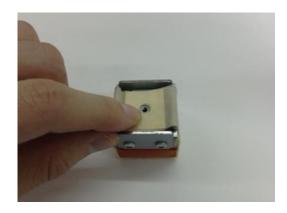
**PAGE: 72/75** 

Reissued:21-Apr-14

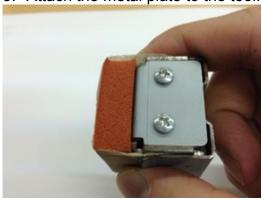
Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

4. Peel off the seals on both ends of the new web and wrap the web around the tool.





5. Attach the metal plate to the tool.



6. Fasten the bottom screw to complete the procedure.



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Reissued:21-Apr-14

Model: Aries-P1.5/C1.5	Date: 10-Mar-14	No.: RM077107b
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### 8. Damaged fusing stripper plate caused by paper jams

Excerpt from RTB RM077089

Replace with the new Stripper Plate (p/n: M0774445), if the machine has experienced paper jams in the fusing unit with the original Stripper Plate (p/n: M0774491). Otherwise, continue to use the original stripper plate.

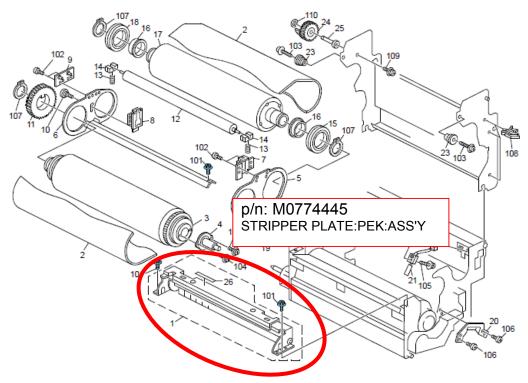
The new stripper plate was developed for higher durability, to prevent breakages caused by paper jams.

P/N	Description	Q'ty	Int	Page	Index	Note
M0774445	STRIPPER PLATE:PEK:ASS'Y	1	1	137	1	Add

**NOTE:** The new stripper plate DOES NOT have to be procured for all MIF. Only replace as necessary according to your customer's machine usage conditions.

**IMPORTANT:** The new stripper plate has the following side effect. Chances of generating gloss lines/streaks are higher compared with the original stripper plate (p/n: M0774491). If this side effect is confirmed with the new stripper plate, change the machine settings as described in the following pages.

#### 56.Fusing Unit 5 (D095/M077)





**PAGE: 74/75** 

Reissued:21-Apr-14

Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

### How to prevent gloss lines/streaks with the new stripper plate

Decrease the fusing temperature by following the procedure below:

- 1. Press "User Tools" and enter the ID and password. (Photo 1)
- 2. Press "Paper Setting". (Photo 2)

Photo 1



Photo 2



- 3. Select "Custom Paper". (Photo 3)
- 4. Select the paper that needs to be adjusted of the fusing temp from the list. (Photo 4)

Photo 3

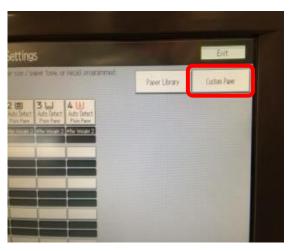
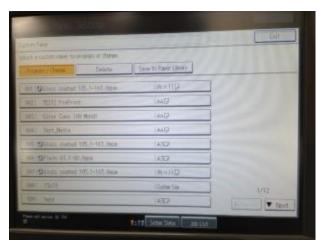


Photo 4





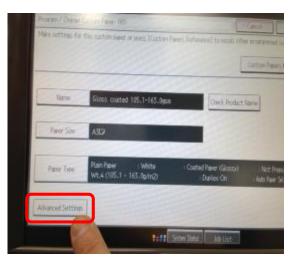
**PAGE: 75/75** 

Reissued:21-Apr-14

Model: Aries-P1.5/C1.5 Date: 10-Mar-14 No.: RM077107b

- 5. Select "Advanced Setting". (Photo 5)
- 6. Select "Fusing Heat Roller Temperature Adj" and change the fusing temperature with the "+" and "-" buttons. Decrease the temperature about 10 degrees from the default temperature. (Photos 6 & 7)

Photo 5 Photo 6



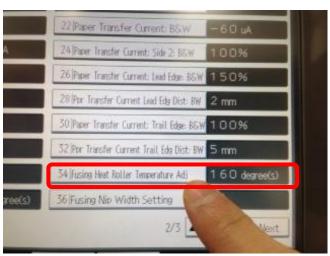


Photo 7



#### **Tips**

- If gloss lines/streaks do not disappear even after decreasing the temperature, further decrease the temperature. However, if resulting in insufficient fusing, increase the temperature 5 degrees and check if gloss lines/streaks are observed on the printouts.
- 2) Take notes of the original (default) fusing temp before making any changes because you may have to switch back to the original stripper plate (p/n: M0774491), if gloss lines/streaks with the new stripper plate (p/n: M0774445) cannot be resolved.

K	н		) P	-

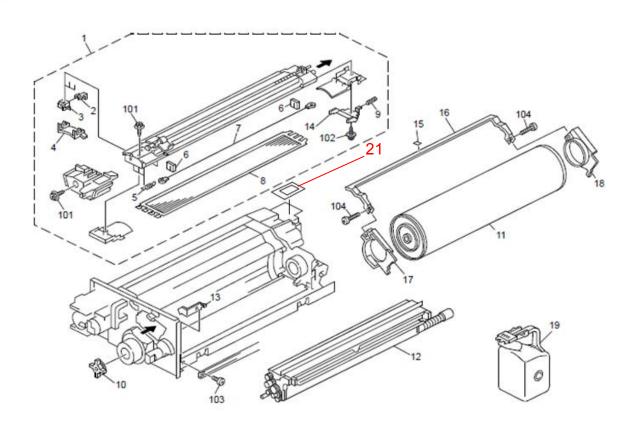
**PAGE: 1/1** 

Model: Aries P1.5/C1.5			Dat	te: 11-Mar-14		No.: RM077108
Subject: Part info	ormation for frame section3			Prepare	d by: Hird	oaki H Matsui
From: 1st Tech s	ervice Sect., PP Tech Service	e Dept.				
Classification:	Troubleshooting	□ Part inf	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		Service	ce manual revision
	☐ Paper path	☐ Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	☐ Other (		)	☐ Tier 2	

Please add the following part to the 34. PCDU 1 Section

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
-	G1783475	SPONGE:COUPLING:TONER SUPPLY:DEVELOPMENT UNIT	1	1	93	21	New Index

### 34.PCDU 1 (D095/M077)



### RICOH

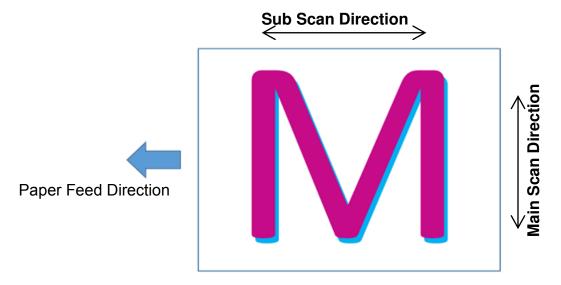
## Technical Bulletin

**PAGE: 1/4** 

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1 Date			ate: 19-Mar-14		No.: RM077109			
Subject: Troubleshooting color misalignment					Prepared by: T. Miyamoto/Hiroaki H			
From: PP Tech Se	ervice Dept., 1st PP Tech Serv	rice Sect.		Matsui				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part info Electrica Transm Other (	al		Service	n required ce manual revision fit information		

### **SYMPTOM**

Color misalignment in Main and/or Sub scan direction even after executing MUSIC



### CAUSE

Laser beam is not emitted to the correct position on the drum due to the change in size of the image creation related components (laser unit, drum and ITB) as a result of change in temperature and humidity in and around the machine.

### **SOLUTION**

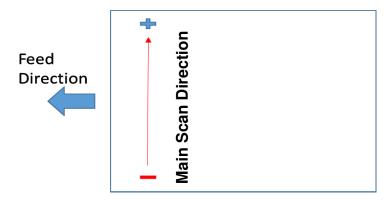
Adjust the laser emitting position for each color (Cyan, Magenta and Yellow) according to the following procedure.

**NOTE:** Black is the reference for all other colors and does not have to be adjusted.

**PAGE: 2/4** 

### Adjustment procedure for Main Scan direction

- 1. Execute MUSIC and print the affected job.
- 2. Measure the amount of misalignment for C, M and Y (in millimeters or micrometers or inches) in the Main Scan direction using a magnifier.



3. Use the Excel file embedded in the Appendix of this RTB to convert the measurements into the number of dots and sub dots. Input the resulting values into the following SP.

Color	Main scan registration						
С	SP2-191-004 (dot)	SP2-191-007 (sub dot)					
M	SP2-191-005 (dot)	SP2-191-008 (sub dot)					
Y	SP2-191-006 (dot)	SP2-191-009 (sub dot)					

- 4. Execute MUSIC.
- 5. Print the affected job and check the results with the magnifier.
- 6. Repeat steps 2 through 5 until the colors align.

#### **IMPORTANT:**

Make sure to reset the SP values to '0' (default) after printing the affected job.

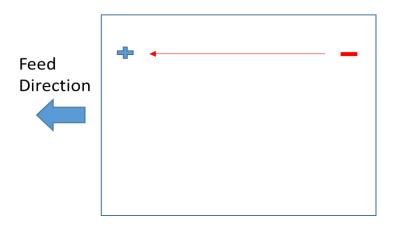
 This adjustment should be performed temporarily only for jobs that require adjustments based on customer request. The effect is temporary because the image creation process is constantly affected by the operational environment as mentioned in 'CAUSE'.

**PAGE: 3/4** 

### Adjustment procedure for Sub Scan direction

- 1. Execute MUSIC and print the affected job.
- 2. Measure the amount of misalignment (in millimeter or micrometer or inch) in Sub Scan direction using a magnifier for C, M and Y.





3. Use the Excel file embedded in the Appendix of this RTB to convert the measurements into number of dots and sub dots. Input the values derived to the following SP.

Color	Sub scan registration
С	SP2-101-017 (micrometer)
M	SP2-101-018 (micrometer)
Y	SP2-101-019 (micrometer)

- 4. Print the affected job and check the results with the magnifier.
- 5. Repeat steps 2 through 4 until the colors align.

#### NOTE:

Executing MUSIC resets the SP values to '0' (default).

#### **IMPORTANT:**

Make sure to reset the SP values to '0' (default) after printing the affected job.

 This adjustment should be performed temporarily only for jobs that require adjustments based on customer request. The effect is temporal because the image creation process is constantly affected by the operational environment as mentioned in 'CAUSE'.



Date: 19-Mar-14

PAGE: 4/4

No.: RM077109

Model: Aries-P1.5/C1.5, AG-P1/C1, AGL-P1/C1

#### Example

Following is an example of adjusting a misalignment of 25 micrometers in both Main and Sub Scan directions in Cyan.

Dot/sub dot to micrometer conversion rate:

1 Dot = 21.16 micrometers 1 Sub dot = 1.3 micrometers

1. Main Scan direction

SP2-191-004 'Line Position Adj. Offset C Main Regist' (dot)

→ + 1 dot (= 21.16 micrometers)

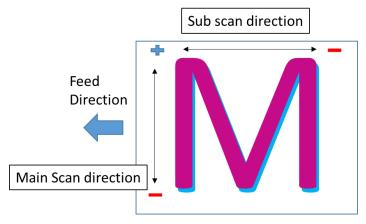
SP2-191-007 'Line Position Adj. Offset C Main Regist' (sub dot)

→ + 3 sub dots (= 3.9 micrometers)

2. Sub Scan direction

SP2-101-017 'Color Interval Registration Adjustment Sub Scan:Bk-C:Drum Motor Adj'

→ + 25 micrometers



Main Scan direction: + 1dot and 3 sub dot

Sub Scan direction: + 25um

#### APPENDIX

Double-click to open the embedded Excel file below. Adjustment value is calculated automatically by inputting the value of misalignment measured with the magnifier.



RM077109 - length of misalignment.xls

K	ı	U	Н

**PAGE: 1/1** 

Model: AG-P1/C1			Date: 25-Mar-14		14	No.: RM077110
Subject: New p/n of the Energy Star decal in Frame section 3				Prepared	d by: Hiro	oaki H Matsui
From: 1st Tech s	ervice Sect., PP Tech Service	Dept.				
Classification:	Troubleshooting	□ Part info	orma	tion	Action	required
	☐ Mechanical	☐ Electric	al		☐ Service	ce manual revision
	☐ Paper path	Transm	it/rec	eive	☐ Retrof	fit information
	☐ Product Safety	Other (		)	☐ Tier 2	

Please add the following information to your parts catalog.

Old part number	New part number	Description	Q'ty	Int	Page	Index	Note
AA001477	M0771676	DECAL:ENERGY-STAR	1	X/O	27	32	See below

#### NOTE:

- 1. Material of this decal has been changed due to the change in product environment regulations.
- 2. This new decal should be attached to **D095-58,-59 -65** models **ONLY** in accordance with the revised ENERGY STAR regulations.

### RICOH

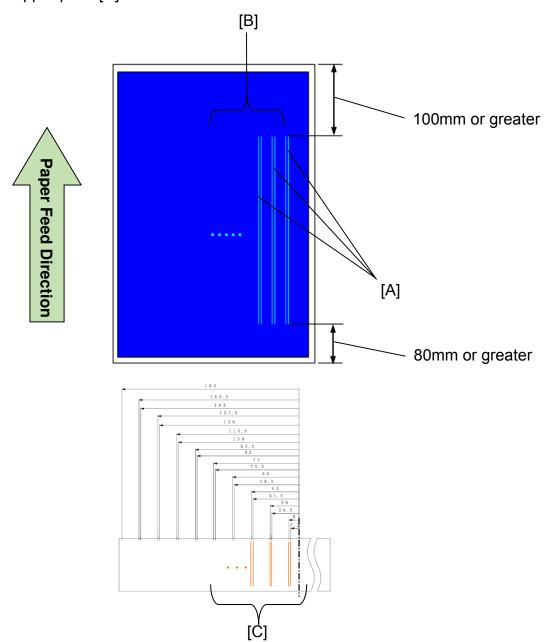
# Technical Bulletin

<b>PAGE: 1/9</b>
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Model: Aries-P1.5/C1.5 Date		ate	: 18-Apr-1	4	No.: RM077111	
Subject: Troubleshooting 3 types of glossy sreaks				Prepared	by: Hiro	aki H Matsui
From: PP Tech Ser	rvice Dept., 1st PP Tech Service	Sect.				
Classification:	☐ Mechanical	Part infor Electrical Transmit Other (	I		Servi	n required ice manual revision ofit information 2

### **SYMPTOM 1**

Glossy streaks [A] appear along the paper feed direction in an area between 100mm from the leading edge and 80mm from the trailing at an interval [B] which corresponds to the fusing stripper plate [C].



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Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **CAUSE of Symptom 1**

Paper (blue) is pulled at both ends between the switchback unit [J] and fusing unit [H] and is scratched by the stripper plate [C] at location [E].

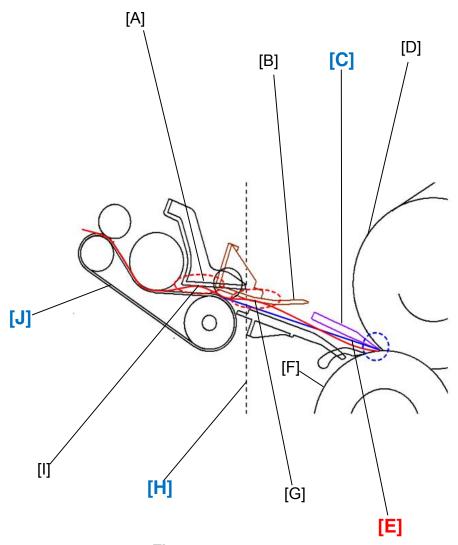


Fig 1. Problem mechanism

- [A]: Cooling belt entrance guide plate
- [B]: Upper exit guide plate
- [C]: Stripper plate
- [D]: Hot roller
- [E]: Paper under the stripper plate
- [F]: Pressure roller
- [G]: Upper exit guide plate
- [H]: Fusing unit
- [I]: Paper under the cooling belt entrance guide plate.
- [J]: Switchback unit

### **RICOH**

## Technical Bulletin

**PAGE: 3/9** 

Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **SOLUTION for Symptom 1**

1. Do the streaks appear within 30min of printing after turning on the machine power?

Yes : Do step 2. No : Do step 3.

2. Set SP1107-034 (Idle Time: After Reload) to 20 (default: 7) to complete the procedure.

**NOTE:** This SP modification is intended to decrease the fusing line speed until the pressure roller temperature becomes stable after turning on the machine power.

3. Enter the Advanced Setting Menu and increase the fusing speed 0.5% in #16: Fusing Feed Speed Adj.

(For example, if the current value is 0%, enter "0.5%" to increase the speed 0.5%).

4. Is the value set in #16: Fusing Feed Speed 1% or lower?

Yes : Do step 5. No : Do step 6.

5. Print the affected image and check if the results are accepted by the customer.

Yes: Finish.

No : Repeat step 3. Note that "1.5%" is the upper limit of the fusing speed. If

results are not accepted even when the fusing speed is set to 1.5%, the procedure is complete. No further adjustments are available because of the

machine specs.

6. Enter the Advanced Setting Menu and specify the line speed according to the paper weight/type in #16: Fusing Feed Speed Adj. by referring to Table 1 below.

Table 1: Fusing feed speed adjustment

Thickness	\\\\ai\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Fu	sing feed spe	ed
THICKHESS	Weight (g/m²)	Non-coated	Matte-coated	Gloss-coated
Thick 2	64~80.0	0.0%	0.0%	0.0%
Thick 3	80.1~105.0	0.0%	0.0%	0.0%
Thick 4	105.1~163.0	-0.3%	-0.3%	-0.5%
Thick 5	163.1~220.0	-0.7%	-0.7%	-0.6%
Thick 6	220.1~256.0	-0.9%	-0.9%	-0.8%
Thick 7	256.1~300.0	-1.2%	-1.2%	-0.9%

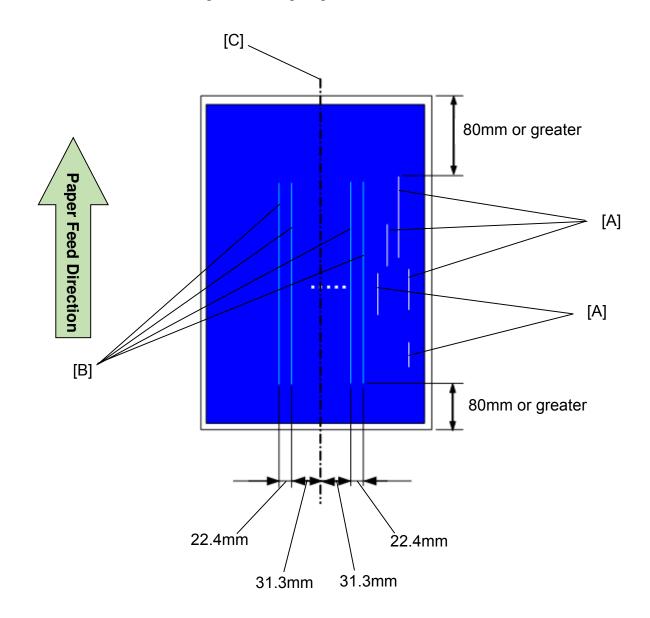
The procedure is finished if the results are not accepted even after doing the above. No further adjustments because of the machine specs.

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Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **SYMPTOM 2**

- 2-a. Glossy streaks [A] appear along the paper feed direction in an area between 80mm from the leading and trailing edges. Locations of the streaks are random in the feed direction.
- 2-b. Four glossy streaks [B] appear along the paper feed direction in an area between 80mm from the leading and trailing edges.



**PAGE: 5/9** 

Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **CAUSE of Symptom 2**

Paper (red) is deflected when passed from the fusing unit to the switchback unit and contacts the upper exit guide plate [B] at location [G].

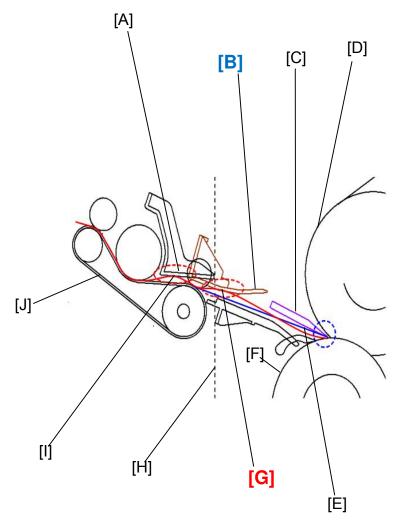


Fig 2. Problem mechanism

- [A]: Cooling belt entrance guide plate
- [B]: Upper exit guide plate
- [C]: Stripper plate
- [D]: Hot roller
- [E]: Paper under the stripper plate
- [F]: Pressure roller
- [G]: Paper under the upper exit guide plate
- [H]: Fusing unit
- [I]: Paper under the cooling belt entrance guide plate.
- [J]: Switchback unit



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Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **SOLUTION for Symptom 2**

1. Enter the Advanced Setting Menu and specify the line speed according to the paper weight/type in #16: Fusing Feed Speed Adj. by referring to Table 1 below.

Table 1: Fusing feed speed adjustment

Thickness	Weight (g/m²)	Fusing feed speed		
		Non-coated	Matte-coated	Gloss-coated
Thick 2	64~80.0	0.0%	0.0%	0.0%
Thick 3	80.1~105.0	0.0%	0.0%	0.0%
Thick 4	105.1~163.0	-0.3%	-0.3%	-0.5%
Thick 5	163.1~220.0	-0.7%	-0.7%	-0.6%
Thick 6	220.1~256.0	-0.9%	-0.9%	-0.8%
Thick 7	256.1~300.0	-1.2%	-1.2%	-0.9%

2. Is the value set in #16: Fusing Feed Speed -1.5% or higher? (For example, -1%, -0.5%, etc.)

Yes: Do step 3.

No : Finished. No further adjustments available because of the machine specs.

3. Print the affected image and check if the results are accepted by the customer.

Yes: Do step 4. No: Do step 5.

4. Set SP1107-034 (Idle Time: After Reload) to 20 (default: 7) to complete the procedure.

**NOTE:** This SP modification is intended to decrease the fusing line speed until the pressure roller temperature becomes stable after turning on the machine power.

5. Enter the Advanced Setting Menu and decrease the fusing speed 0.5% in #16: Fusing Feed Speed Adj to improve fuseability. (For example, if the current value is -1%, enter "-1.5%" to decrease the speed 0.5%).

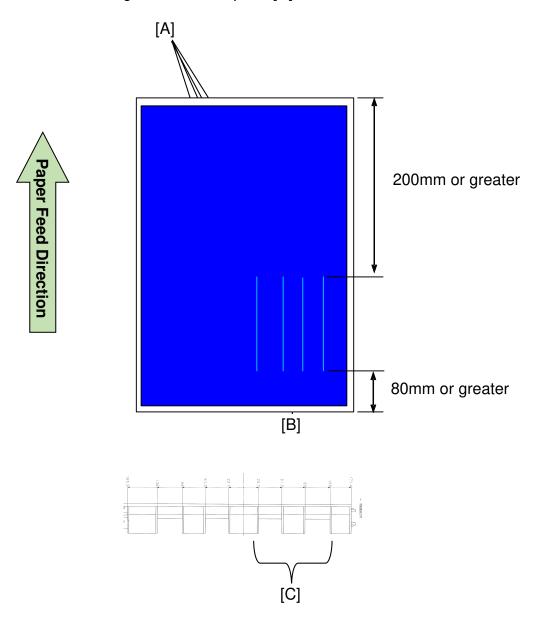
Then repeat step 2 and complete the procedure at either step 2 or 4. Note that "-1.5%" is the lower limit of the fusing speed.

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Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **SYMPTOM 3**

Glossy streaks [A] appear along the paper feed direction in an area between 200mm from the leading edge and 80mm from the trailing edge at an interval [B] which corresponds to the ribs on the cooling belt entrance plate [C].



**PAGE: 8/9** 

Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **CAUSE of Symptom 3**

Paper (red) is deflected when passed from the fusing unit to the switchback unit and contacts the cooling belt entrance guide plate [A] and upper exit guide plate [B] at 2 locations [I] and [G].

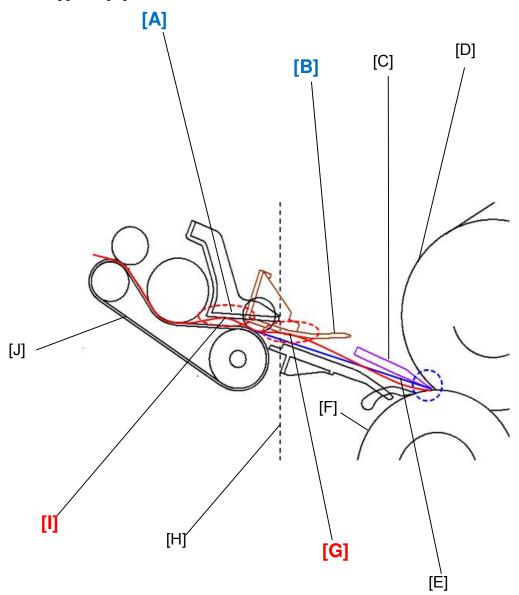


Fig 3. Problem mechanism

- [A]: Cooling belt entrance guide plate
- [B]: Upper exit guide plate
- [C]: Stripper plate
- [D]: Hot roller
- [E]: Paper under the stripper plate
- [F]: Pressure roller
- [G]: Paper under the upper exit guide plate
- [H]: Fusing unit
- [I]: Paper under the cooling belt entrance guide plate.
- [J]: Switchback unit

**PAGE: 9/9** 

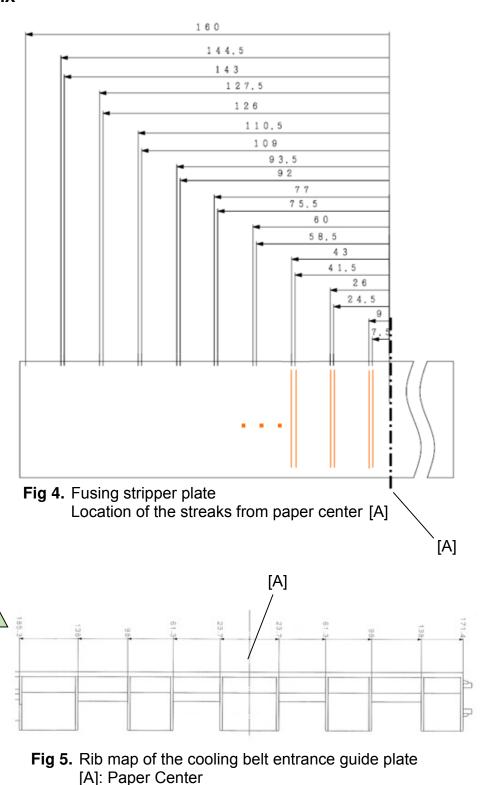
Model: Aries-P1.5/C1.5 Date: 18-Apr-14 No.: RM077111

### **SOLUTION for Symptom 3**

Same as the solution for symptom 2.

### **APPENDIX**

**Paper Feed Direction** 



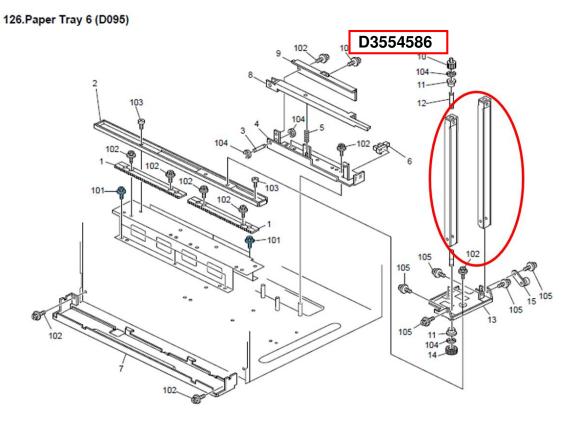
# Technical **B**ulletin

**PAGE: 1/1** 

Model: Aries P1.5/C1.5, AG P1/C1, LCIT5020			Date: 22-Apr-14		No.: RM077112	
Subject: Part Info	Prepared by: T.Miyamoto			Miyamoto		
From: PP Service	Planning Department 1G					
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	☐ Part inf☐ Electric☐ Transm☐ Other (	al		☐ Servi	on required ice manual revision ofit information 2

Please add the following part to your parts catalog.

Model	P/N	Description	Q'ty	Int	Page	Index	Note
Aries P1.5/C1.5			1	-	277	16	Add
AG P1/C1	D3554586	STAY:END FENCE	1	-	277	17	Add
LCIT5020			1	-	17	17	Add



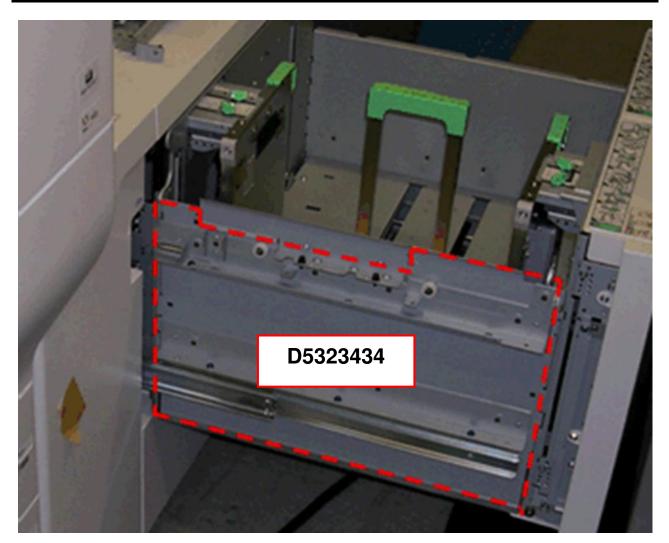
# Technical **B**ulletin

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Model: Aries P1.5/C1.5, Date:			e: 22-Apr-1	4	No.: RM077113	
Subject: Part Information- DRUM STAY:PAPER FEED: WELDING			Prepare	d by: T.N	Miyamoto	
From: PP Service	Planning Department 1G					
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	□ Part informate     □ Electrical     □ Transmit/rec     □ Other (			Servi	n required ice manual revision ofit information 2

Please add the following part to your parts catalog.

Old P/N	New P/N	Description	Q'ty	Int	Page	Index	Note
-	D5323434	DRUMSTAY:PAPER FEED: WELDING	1	1	267	26	Add



# Technical Bulletin

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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077)	Date: 17-Jun-14	No.: RM077114a
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### **RTB Reissue**

This RTB has been updated. Please refer to RTB No. RGnene078.

Subject: NICE Ver.2.0 Instruction Manual			Prepared by: Hiroshi Inenaga,		
From: 1st PP Tech Service Sec., PP Tech Service Dept.,				Akihiro Tajima	
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part informated Part informate		<ul><li>☑ Action required</li><li>☐ Service manual revision</li><li>☐ Retrofit information</li><li>☑ Tier 2</li></ul>	

This is an instruction manual for NICE Ver.2.0.

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	PC requirement	
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Model: Aries-C1.5/P1.5 (D095/M077)	Date: 17-Jun-14	No.: RM077114a
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### 1. Introduction

#### 1.1 Outline

#### What is 'NICE'?

NICE stands for " $\underline{N}$ umerical  $\underline{I}$ mage  $\underline{C}$ onsistency  $\underline{E}$ valuation method" and is a software application purposed for troubleshooting the following image quality issues:

- Front and back registration misalignment
- FR (front to rear) density inconsistency
- Banding
- Shock-jitter

### What is needed for the NICE?

- NICE SD card (software application for engine control)
- NICE software application for PC
- Calibration chart
- Windows PC
- Scanner (embedded on copier models)

Required items	Functions
NICE SD card (software application for engine)	<ul> <li>Prints out test charts</li> <li>Drives the embedded scanner (copier model)</li> <li>Reads, writes and executes the engine SP</li> <li>Generates tiff formatted files from scanned images</li> </ul>
NICE software application for PC	<ul><li>Analyses the scanned image and visualizes the problem through numeric conversions</li><li>Calculates the correction values</li></ul>
Embedded scanner on copier models	- Scans the test charts

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Service parts

Item	Model	P/N	Parts description
	Pro C901/Pro C901S	M0779518	SD-CARD:NICE:ARIES:ASS'Y
NICE SD card	Pro C651EX/Pro C751/Pro C751EX	M0779511	SD-CARD:NICE:TAURUS:ASS'Y
NICE SD Card	Pro C5100S/Pro C5110S	N/0770517	SD-CARD:NICE:CHARIS:ASS'Y
	MP C6502/MP C8002	WIU779317	SD-CARD.NICE.CHARIS.ASS 1
Calibration chart	Common for all models	D0749671	NICE CALIBRATION CHART

Item	Image quality problem	PC application	Installer file name
	FR density inconsistency	Image View FR	NICE ImageView FR V2.0 installer.7z
PC		IQ Evaluation	NICE-IQevaluation-V.2.0.7z
applications	Banding	Banding Analyzer	Setup_NEW_COLOR_BANDING _ANALYZER.7z
	Shock jitter	SJ Finder	NICE SJ Finder V2.0 installer.7z

PC applications

PC applications can be downloaded from GKM website.

> answer ID: 188118

#### **NOTE**

 '7z' files: You can unzip '7z' files by using '7zipFileManager'. http://www.7-zip.org/

### 1.2 Supported models

- Pro C901, Pro C901S (including Graphic Arts +)
- Pro C651Ex, Pro C751, Pro C751Ex
- Pro C5100S, Pro C5110S
- MP C6502 and MP C8002

### 1.3 PC requirement

- Microsoft Windows 7 OS (\* NICE was developed using Windows 7.)
- RAM: 2GB or more
- C-drive disc space: 10GB or more (recommended)
- SD card slot



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 Microsoft Excel 2010 or 2013 (\* NICE was developed using MS Excel 2010 & 2013.)

#### 2. How to activate NICE

#### 2.1 Procedure

- 1. Turn off the machine power.
- 2. Insert the NICE SD card into the service slot on the GW controller box.
- 3. Turn on the machine power.
- 4. Confirm the operation panel displays the NICE main menu screen.

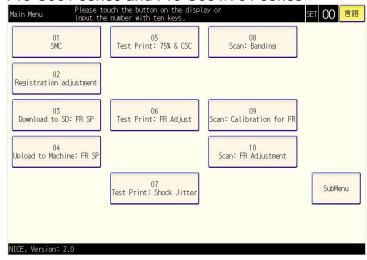
#### **NOTE**

- If the NICE main menu screen does not appear after doing the above, press the 'Program' key on copier models, 'Printer' or 'Fiery (driven)' key on printer models.
- NICE SD card must be inserted into the service slot on the controller box, NOT the slot on the operation panel.
- Make sure to turn off the machine power before removing the SD card from the card slot on the controller box.
- When removing the SD card from the PC right click on the SD card in Explorer and select 'Eject.'

#### **NICE Menu Screen**

#### Main menu screen

Pro C901 series and Pro C651/751 series





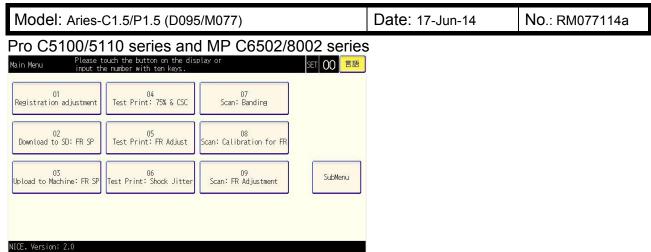
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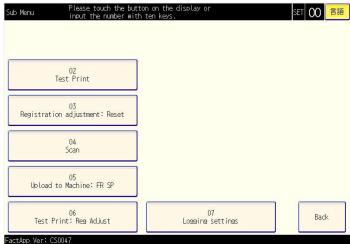
Reissued: 6-Jun-15



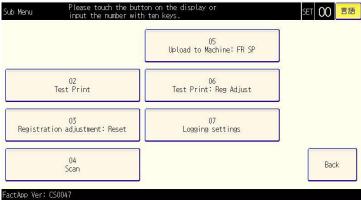
#### Sub menu screen

To display the sub menu screen, press the 'SubMenu' button at the lower right of the main menu screen.

### Pro C901 series and Pro C651/751 series



### Pro C5100/5110 series and MP C6502/8002 series



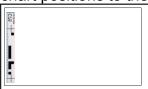
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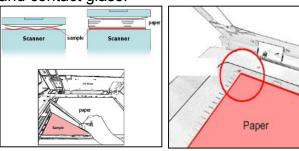
Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

### 2.2 Common procedure for scanning test charts

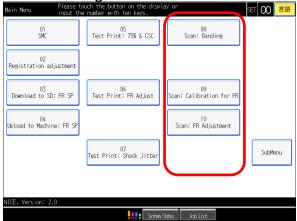
1. Clean the contact glass and place the test chart so that the barcode printed on the chart positions to the left.



2. For secure contact between the contact glass and chart, put approximately 20 sheets of paper on top of the chart. Make sure to match the corners of the paper and contact glass.



3. Press the Scan button for the adjustment required followed by the Start key. The scanned image will be saved as a tiff file on the SD card.



#### **NOTE**

If you are working on a printer model and cannot scan the test chart, you may use the scanner embedded on a copier model. Take note that the serial number of the scanned and saved tiff file name will be of the copier, not of the printer.

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### 3. NICE Software Applications

### 3.1 SMC Tool

The SMC Tool application contained in the NICE SD card is the same as 'ELECTRICAL SMC TOOL' (P/N: M0779509). See the following RTBs for details.

- Pro C901/Pro C901S ...... RTB #RM077100b
- Pro C651EX/Pro C751/Pro C751EX.....RTB #RD074115b

**NOTE:** SMC Tool application is not included in SD-CARD: NICE: CHARIS: ASS'Y (p/n: M0779517).

### 3.2 Front and Back Registration Adjustment

### 3.2.1 Objective

For faster and easier adjustments compared to adjustments using the Skilled Operators menu

### 3.2.2 Method

Model	Adjustments	Method
Pro C901 Series	Registration	Adjusts the center point of the image of the back side to match with the front side
Pro C651/751 Series	Registration	Adjusts the leading edge of the front side to match with the back side
FIO COST//ST Series	Magnification	Adjusts the image size of the front side to match with the back side
Pro C5100/5110 Series	Registration	Adjusts the leading edge of the front side to match with the back side
Fio Co tou/of to Selles	Magnification	Adjusts the image size of the back side to match with the front side

### 3.2.3 Requirements (and Limitations)

- Papers applied with Custom Paper Settings
- Papers of the following sizes: SRA3, A3, 13" x 19", 12" x 18", 11" x 17", 315mm x 450mm, 318mm x 469mm
- Reference side (front or back) is specified for each model as follows:
  - Pro C901 ..... Front side
  - Pro C651/751 ..... Back side
  - Pro C5100/5110 .....: Front side
- Image skew must be corrected in advance.
- MP C6502/8002 does not support this application.

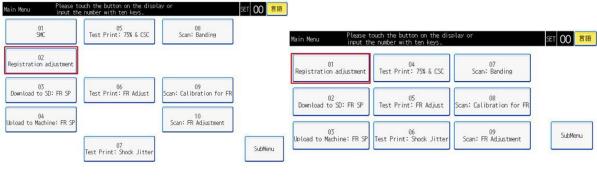


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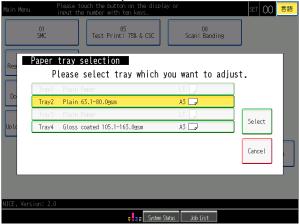
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#### 3.2.4 Procedure

1) Press 'Registration adjustment' on the main menu screen.



2) Press 'Select' to print out the test charts.



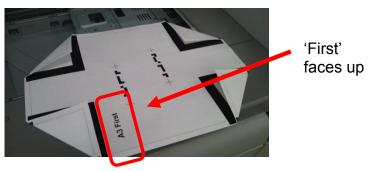
3 sheets of the following chart will be printed in duplex along with a few blank sheets.



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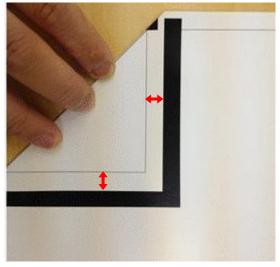
3) Place the chart on a table so that the side indicated 'First' faces up and fold the 4 corners along the dotted lines as shown below. Do the same for the remaining 2 charts.



4) Place the chart on the contact glass so that the side indicated 'Second' faces up.



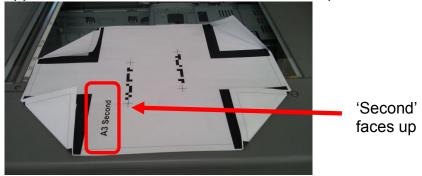
5) Scan the first side of all 3 charts. The software application contained in the NICE SD card reads the distance between the trim lines and folded on all 4 corners from the scanned data.



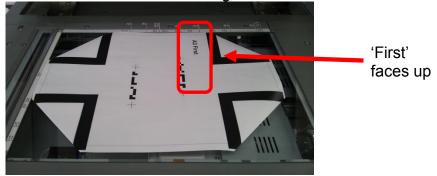
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6) On the table, fold the 4 corners in the opposite direction so that the corners appear on the side indicated 'Second' faces up. Do the same for all 3 charts.



7) Place the chart on the contact glass so that the side indicated 'First' faces up.



- 8) Scan the second side of all 3 charts. With the measurements obtained in steps 6 and 8, SP values for front and back registration are corrected.
- 9) Print out the trimming chart to check the results.

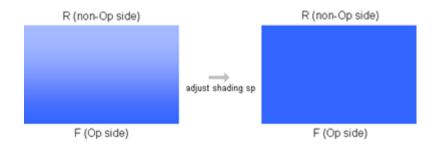
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### 3.3 FR density adjustment

Software application 'Image View FR' contained in the NICE SD card calculates and corrects the shading value in main scan direction and applies the corrections to the engine (SP).

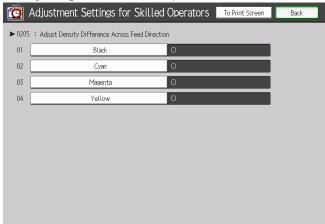


### 3.3.1 Preparation

#### **IMPORTANT**

Take note of all of the below before running the Image View FR application.

 First, check if the uneven density can be corrected in Adjustment Settings for Skilled Operators #0205 for Pro C651/751, Pro C5100/5110, #0220 for Pro C901, SP2-113-001~004 for MP C6502/8002. (Note that adjustments made in this menu take effect only after power cycling the machine.)



If no improvement is confirmed after doing the above, set the value(s) back to '0' and turn off/on the main power.

- Replace parts exceeding life, if any.
- Clean the dust shield glass of the laser unit.
- Clean the charge roller unit in Adjustment Settings for Skilled Operators #0302 for Pro C651/751, #0210 for Pro C901.
- Clean the doctor gap.
- Unzip 'installer zip file:NICE Image View FR V2.\*.zip' and run 'set up .exe'. DO NOT apply changes to the file directory.



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Prepare A3 or DLT size paper.

### 3.3.2 Adjustment procedure: Scanner calibration

NICE ver.2.0 has been added with a new scanner calibration function for higher FR density adjustment precision.

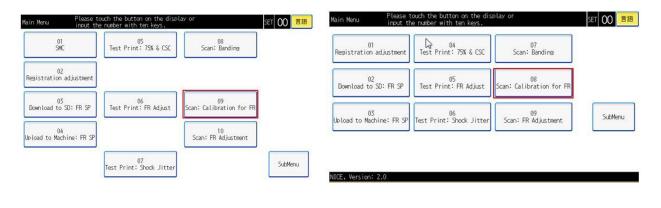
- **1.** Place a blank piece of A3/DLT paper on the contact glass. (See 2.3 'Common procedure for scanning test charts' for the correct scanning procedure.)
- 2. Insert the NICE SD card into the service slot on the controller box and press 'Scan: Calibration for FR' on the main NICE menu screen.
- **3.** Remove the blank piece of paper from the contact glass.

#### **IMPORTANT**

The blank paper must be of the same paper used for printing test charts.

#### NOTE

- Calibration data will be stored in the SD card.
- Scanner calibration is required only once for multiple FR density adjustments performed on the same day on the same machine.
- Following paper types are not recommended: Colored paper, textured paper, cast coated paper (Adjustment precision may decrease.)



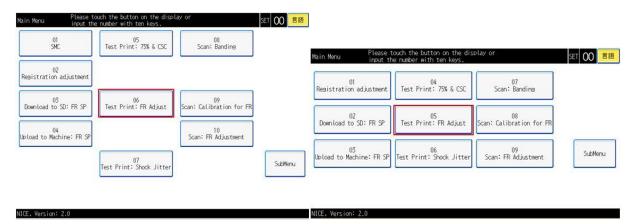


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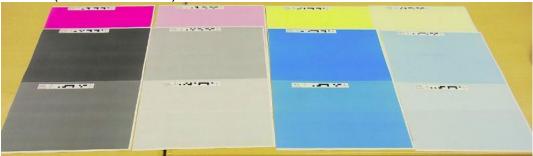
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#### 3.3.3 Procedure

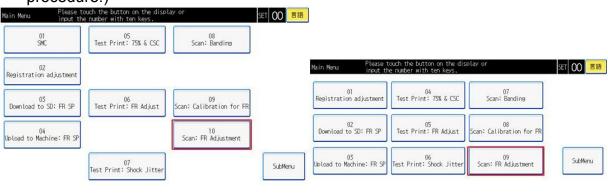
- 1. Insert the NICE SD card into the service slot on the controller box.
- Press 'Test Print: FR Adjust' on the main menu screen.
   NOTE: This test chart can only be printed on A3 or DLT paper.



75%/60% (75U/60L) and 30%/15% (30U/15L) halftone charts will be printed in CMYK (total of 8 sheets).



 Place the 75U/60L and 30U/15L charts of the affected color on the contact glass and press 'Scan: FR Adjustment' to scan these charts. (See 2.3 'Common procedure for scanning test charts' for the correct scanning procedure.)



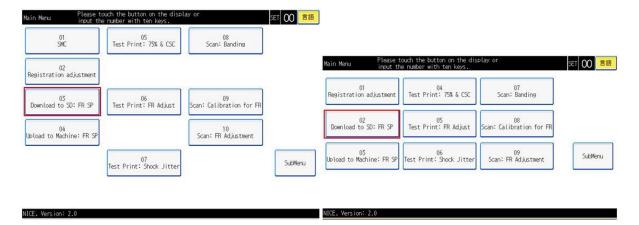
ICE, Version: 2.0

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4. Press 'Download to SD: FR SP' to copy the engine SP data onto the SD card. SP data (SP2152-\*\*\*) will be saved as a csv file on the SD card.



- 5. Turn off the main power and remove the SD card from the card slot and insert the SD card into your PC.
- 6. Start up the 'Image View FR' and click 'START.'



7. Select the machine type and paper size (A3 or DLT).



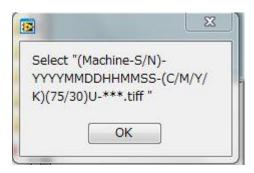


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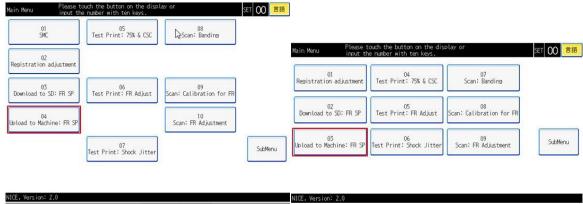
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8. Click 'START' and select the tiff files (75/30U tiff files) requiring the adjustment and csv file (s/n\_shading\_before.csv) saved on the SD card in step 4.



- 9. Wait until the calculation process completes.
  - File 's/n\_shading\_after\_75/60/30/15.csv' will be saved on the SD card, which contains the modified shading SP value.
  - The original csv file will be renamed as 'yyyymmdd\_hhmm\_s/n\_shading\_xbefore.csv.'
- 10. Remove the SD card from the PC and insert it into the service slot on the controller box.
- 11. Turn on the main power and press 'Upload to Machine: FR SP' on the main menu screen.



- 12. Turn the machine power off/on for the modified SP values to take effect.
- 13. Repeat the above steps until the desired results are obtained.



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#### <Notes>

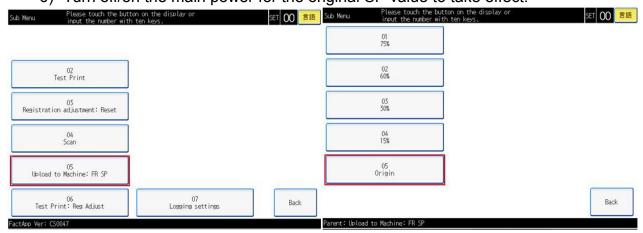
◆ File names before/after 'Image View FR' adjustments

	File name BEFORE adjustment	File name AFTER adjustment	Notes
SP data BEFORE adjustment	(S/N)_shading_befor e.csv	yymmdd_hhmm_(S/N) _shading_xbefore.csv	
		(S/N)_shading_after_7 5.csv	For Pro C901 and Pro C651/751, press 'Upload to Machine: FR SP' on the main menu screen.
SP data AFTER		(S/N)_shading_after_6 0.csv	For Pro C7100/7100 and MP C6502/8002, press 'Upload to Machine: FR SP' on the main menu screen.
adjustment		(S/N)_shading_after_3 0.csv	Press 'Upload to Machine: FR SP' on the main menu screen for all models.
		(S/N)_shading_after_1 5.csv	Press 'Upload to Machine: FR SP' on the sub menu screen for all models.

- How to retrieve the original SP value
  - 1) Select the 'x-before' file you wish to retrieve the original SP value for.
  - 2) Replace the portion 'xbefore' with 'origin' so that the file is renamed as (S/N)\_shading\_origin.csv.

(It is necessary to remove 'yymmdd\_hhmm' .)

- 3) Insert the SD card into the service slot on the controller box.
- 4) Open the sub menu screen and press 'Upload to Machine: FR SP.'
- 5) Press 'Origin.'
- 6) Turn off/on the main power for the original SP value to take effect.



- ◆ How to apply the modified SP value calculated from the highlight-tone test chart
  - 1) Open the sub menu screen and press 'Upload to Machine: FR SP.'
  - 2) Press either '30%' or '15%.'
  - 3) Turn off/on the main power for the modified SP value to take effect.



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### 3.4 Banding analysis

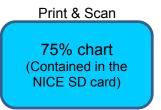
### 3.4.1 Objective

Banding analysis is purposed to identify and list the parts/units that are suspected to be causing the banding.

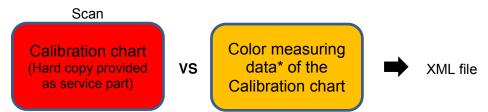
**NOTE:** Banding Analyzer and IQ Evaluation used for banding analysis DO NOT modify nor correct any of the machine settings.

#### 3.4.2 Overview

Banding analysis is performed in the following procedure.



Defines the current condition of the machine from the scan results.



 Results of the scanned calibration chart are compared against the color measuring data of the calibration chart (\*: Color measuring data is contained in the Banding Analyzer application) to generate an XML file, which defines the color shading calibration values.



 Banding Analyzer displays the parts/units that should be inspected in the order of effectiveness on the PC screen.

#### **IMPORTANT**

Make sure the paper, print parameters and machine conditions (settings) should be same always.

For achieving same machine condition, it is recommended to execute 'Process Setup' or 'Manual ProCon (Density Adjustment) 'at the time of every analysis.



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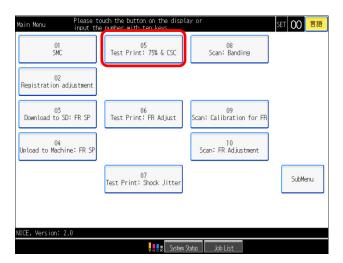
#### 3.4.2 Procedure

- 1. Insert the NICE SD card into the SD card slot on the controller box and wait for the NICE main menu screen to appear.
- 2. Place the NICE Calibration Chart (p/n: D0749671) on the contact glass and press 'Scan: Banding' to scan the calibration chart.

**NOTE:** See section 2.2 'Common procedure for scanning test charts' for the correct scanning procedure.



Then, on the operation panel, press 'Test Print: 75%&CSC' to print out the 75% charts.



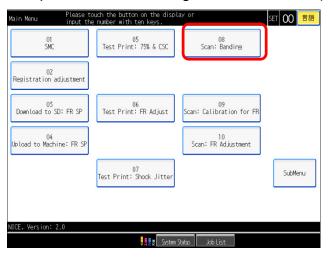
**NOTE:** 75% charts (Bk,C,M,Y,R,G,B) and CSC chart (similar pattern as calibration chart) will be printed out.



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4. Place the 75% chart(s) for the color(s) requiring analysis on the contact glass. And press 'Scan: Banding' to scan the chart(s).



#### NOTE:

- 75% charts (Bk,C,M,Y): Using for analysis
- 75% charts (R,G,B): Using for visual checking
- CSC chart: Using for investigation by design section only
- 5. Remove the SD card from main frame and insert into the SD card slot on the PC. Launch the PC application 'IQ Evaluation' and click START.

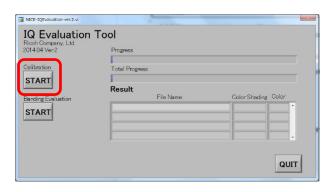




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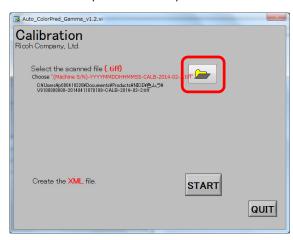
Reissued: 6-Jun-15

6. In the main window under Calibration, click START to display the Calibration window.



7. In the Calibration window, click the folder and select the Calibration Chart scanned and saved in step 2.

File name: (Machine S/N)-YYYYMMDDHHMMSS-CALB-2014-02-2.tiff





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8. Click START to start the calibration.

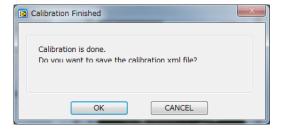




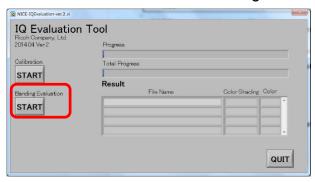
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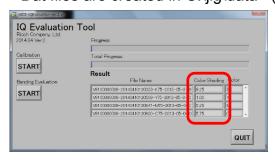
9. Several windows will appear during the calibration process. After the calibration completes, press OK in the following window and select the folder you wish to save the XML file, which contains the color shading correction values calculated from the calibration results.



10. In the main window under Banding Evaluation, click START.



- 11. Select the 75% chart scanned and saved in step 4. File name: (Machine S/N)-YYYYMMDDHHMMSS-(CMYK)75-yyyymm-0-(0)~(4).tiff
- 12. Select the XML file saved in step 9. Evaluation will start automatically. When the evaluation completes, the color shading values of each color will appear as in below. Higher the color shading value, worse the banding level. Dat files are created in C:\ijig\data (default) or a selected folder.

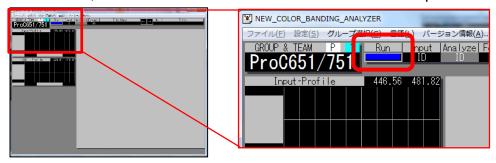


**NOTE:** Color shading values should be used for monitor banding level in same condition.

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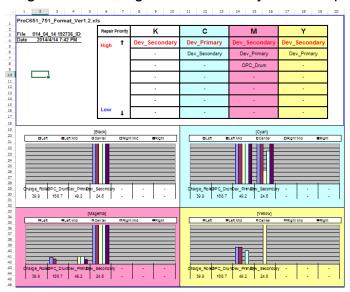
Reissued: 6-Jun-15

- 13. Wait for the Banding Analyzer window to appear. Select the product model from Menu → Group → Products.
- 14. Click Run, then select and save the dat file created in step 12.



15. Excel will launch automatically after the calculation completes to display the parts/units that should be inspected to resolve bands in the order of effectiveness.

Higher the bar, higher the necessity of the inspection.



**NOTE:** When the Banding Analyzer does not automatically start, please select from  $\rightarrow$  Start  $\rightarrow$  All Programs  $\rightarrow$  NICE  $\rightarrow$  Banding Analyzer.



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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

### 3.5 Shock-jitter Finder

The Shock-jitter Finder is a PC application that helps identify the problem causing the Shock-jitter.

Launch the Shock-jitter Finder on your PC and specify the following information:

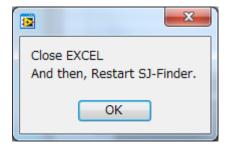
- Product model
- Simplex or Duplex
- Print speed
- Paper size and feed direction SEF or LEF
- Productivity (Required only if CPM has been modified)
- Color mode
- Page and position showing the symptom



Troubleshooting instructions are available for items indicated with an asterisk '\*'.

#### **NOTE**

- See Appendix for Print speed and Productivity.
- The following error message will appear, if Microsoft Excel is active when launching the Shock-jitter Finder. Make sure to close all Excel files in advance.

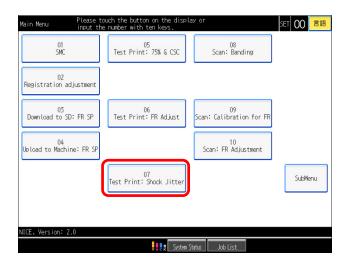




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 If a Shock-jitter sample is not in hand and the location of the Shock-jitter is unclear, press the 'Test Print: Shock Jitter' button from the NICE main menu screen to print out a test chart. Number of test charts required is different according to product.



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Appendix - Print speed and Productivity reference table for Shock-jitter

Finder

◆ Pro C651/C751:

**Print Speed:** 

Generic paper

0: High,	1:	Middle.	2:	Low
o. i iigii,		iviiaaic,	<b>-</b> .	

Donortuno	Paper						
Paper type	weight 1	weight 2	weight 3	weight 4	weight 5	weight 6	weight 7
Plain Paper	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Yellow	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Green	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Blue	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
lvory	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Orange	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Pink	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Red	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Gray	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Recycled Paper	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Preprinted Paper	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Letterhead	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Prepunched Paper	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Label Paper	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Tab Stock	1-986-101	1-986-102	1-986-103	1-986-104	1-986-105	1-986-106	1-986-107
Coated: Glossy			1-986-117	1-986-118	1-986-119	1-986-120	1-986-121
Coated: Matted			1-986-110	1-986-111	1-986-112	1-986-113	1-986-114
OHP (Transparency)					1-986-125		
Translucent paper	1-986-101						
Envelope				-1	1-986-122	1-986-123	1-986-124

Purple cells indicate the combinations that are not supported by spec.

◆ Pro C651/C751:

**Print Speed:** 

**Custom paper** 

SP1-986-001 ~ 100 0: High, 1: Middle, 2: Low

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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

<b>♦</b> Pro C65	Pro C651/C751: Productivity:		Generic	paper			
Paper type	Paper	Paper	Paper	Paper weight	Paper weight	Paper weight	Paper weight
гарет туре	weight 1	weight 2	weight 3	4	5	6	7
Plain Paper	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Yellow	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Green	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Blue	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Ivory	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Orange	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Pink	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Red	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Gray	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Recycled Paper	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Preprinted Paper	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Letterhead	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Prepunched Paper	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Label Paper	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Tab Stock	1-988-101	1-988-102	1-988-103	1-988-104	1-988-105	1-988-106	1-988-107
Coated: Glossy			1-988-117	1-988-118	1-988-119	1-988-120	1-988-121
Coated: Matted			1-988-110	1-988-111	1-988-112	1-988-113	1-988-114
OHP (Transparency)					1-988-125		
Translucent Paper	1-988-101						
Envelope					1-988-122	1-988-123	1-988-124

Purple cells indicate the combinations that are not supported by spec.

◆ Pro C651/C751: SP1-988-001 ~ 100 **Productivity:** 

**Custom paper** 

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Reissued: 6-Jun-15

◆ Pro C901:

**Print Speed:** 

Generic paper

SP1-161-101 ~ 124 (See table below.) 0: High (90ppm), 1: Low (70ppm)

Paper type	Paper weight 1	Paper weight 2	Paper weight 3	Paper weight 4	Paper weight 5	Paper weight 6	Paper weight 7
Plain Paper	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Yellow	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Green	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Blue	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
lvory	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Orange	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Pink	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Red	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Gray	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Recycled Paper	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Preprinted Paper	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Letterhead	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Prepunched Paper	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Label paper	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Tab Stock	1-161-101	1-161-102	1-161-103	1-161-104	1-161-105	1-161-106	1-161-107
Coated: Glossy		1-161-116	1-161-117	1-161-118	1-161-119	1-161-120	1-161-121
Coated: Matted		1-161-109	1-161-110	1-161-111	1-161-112	1-161-113	1-161-114
Envelope					1-161-122	1-161-123	1-161-124

Purple cells indicate the combinations that are not supported by spec.

♦ Pro C901: Print Speed:

**Custom paper** 

SP1-161-001 ~ 100

0: High (90ppm), 1: Low (70ppm)

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◆ Pro C90	1:	Product	tivity:	vity: Generic pape			
Donor type	Paper	Paper	Paper	Paper weight	Paper weight	Paper weight	Paper weight
Paper type	weight 1	weight 2	weight 3	4	5	6	7
Plain Paper	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Yellow	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Green	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Blue	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
lvory	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Orange	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Pink	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Red	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Gray	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Recycled Paper	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Preprinted Paper	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Letterhead	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Prepunched Paper	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Label Paper	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Tab Stock	1-207-101	1-207-102	1-207-103	1-207-104	1-207-105	1-207-106	1-207-107
Coated: Glossy		1-207-116	1-207-117	1-207-118	1-207-119	1-207-120	1-207-121
Coated: Matted		1-207-109	1-207-110	1-207-111	1-207-112	1-207-113	1-207-114
Envelope					1-207-122	1-207-123	1-207-124

Purple cells indicate the combinations that are not supported by spec.

If the SP value is '0' (default), input 100% for productivity.

If the SP value is not '0,' run a job under the following 2 conditions and time the intervals with a stopwatch respectively:

- ♦ Current SP value
- ♦ Default SP value (0)

Then, divide the time generated with the current SP value by the time generated with the default value to find out the productivity.

### ◆ Pro C901: Productivity: Custom paper

SP1-207-001 ~ 100 (Default: 0)

If the SP value is '0,' input 100% for productivity.

If the SP value is not '0,' run a job under the following 2 conditions and time the intervals with a stopwatch respectively:

- ♦ Current SP value
- ♦ Default SP value (0)

Then, divide the time generated with the current SP value by the time generated with the default value to find out the productivity.

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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

### ◆ Pro C5100S/C5110: Print Speed: Generic paper

See the following 2 tables to identify the process speed (1st~5th).

Paper type	Paper weight 1	Paper weight 2	Paper weight 3	Paper weight 4	Paper weight 5	Paper weight 6	Paper weight 7	Paper weight 8
Plain Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Yellow	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Green	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Blue	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
lvory	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Orange	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Pink	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Red	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Gray	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Recycled Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Preprinted Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Letterhead	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Prepunched Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Label Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Tab Stock	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Coated: Glossy		1-986-235	1-986-237	1-986-239	1-986-241	1-986-243	1-986-245	1-986-247
Coated: Matted		1-986-219	1-986-221	1-986-223	1-986-225	1-986-227	1-986-229	1-986-231
OHP (Transparency)				1-9	86-252			
Translucent Paper	1-986-201							
Envelope						1-986-249	1-986-250	1-986-251

Purple cells indicate the combinations that are not supported by spec.

Process Speed	Pro C5100S	Pro C5110		
1st speed	-	0: Standard		
2nd speed	0: Standard	-		
3rd speed	1: Medium	1: Medium		
4th speed	-	-		
5th speed	3: Medium Low	3: Medium Low		

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Reissued: 6-Jun-15

◆ Pro C5100S/C5110: Print Speed: Custom paper

SP1-986-001 ~ 100

0: Standard, 1: Medium Speed, 3: Low

Process Speed	Pro C5100S	Pro C5110	
1st speed	-	0: Standard	
2nd speed	0: Standard	-	
3rd speed	1: Medium	1: Medium	
4th speed	-	-	
5th speed	3: Medium Low	3: Medium Low	

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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

◆ Pro C5100	S/C511	0: F	Producti	ivity:	G	eneric p	aper	
Danar tuna	Paper							
Paper type	weight 1	weight 2	weight 3	weight 4	weight 5	weight 6	weight 7	weight 8
Plain Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Yellow	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Green	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Blue	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Ivory	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Orange	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Pink	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Red	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Gray	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Recycled Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Preprinted Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Letterhead	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Prepunched Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Label Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Tab Stock	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Coated: Glossy		1-988-235	1-988-237	1-988-239	1-988-241	1-988-243	1-988-245	1-988-247
Coated: Matted		1-988-219	1-988-221	1-988-223	1-988-225	1-988-227	1-988-229	1-988-231
OHP (Transparency)				1-9	88-252			
Translucent Paper	1-988-201							
Envelope						1-988-249	1-988-250	1-988-251

Purple cells indicate the combinations that are not supported by spec.

**♦** *Pro C5100S/C5110: Productivity: Custom paper* SP1-988-001 ~ 100



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Reissued: 6-Jun-15

Model: Aries-C1.5/P1.5 (D095/M077) Date: 17-Jun-14 No.: RM077114a

## **♦** MP C6502/C8002: Print Speed:

See the following 2 tables to identify the process speed (1st~5th).

Paper type	Thin Paper	Plain Paper 1	Plain Paper 2	Middle Thick	Thick Paper 1	Thick Paper 2	Thick Paper 3	Thick Paper 4
Do not Display	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Recycled Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Color Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Letter head	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Label Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Preprinted Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Bond Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Cardstock	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Prepunched Paper	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Special Paper 1	1-986-217	1-986-219	1-986-221	1-986-223	1-986-225	1-986-227	1-986-229	1-986-231
Special Paper 2	1-986-217	1-986-219	1-986-221	1-986-223	1-986-225	1-986-227	1-986-229	1-986-231
Special Paper 3	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
Coated Paper	1-986-233	1-986-235	1-986-237	1-986-239	1-986-241	1-986-243	1-986-245	1-986-247
Coated Paper: Gloss				1-9	86-253			
Tab Stock	1-986-201	1-986-203	1-986-205	1-986-207	1-986-209	1-986-211	1-986-213	1-986-215
OHP (Transparency)				1-9	86-252			
Translucent Paper	1-986-201							
Envelope						1-986-249	1-986-250	1-986-251

Purple cells indicate the combinations that are not supported by spec.

Process Speed	MP C6502	MP C8002		
1st speed	-	0: Standard		
2nd speed	0: Standard	-		
3rd speed	-	1: Medium		
4th speed	1: Medium	2: Medium Low		
5th speed	3: Medium Low	3: Low		

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Reissued: 6-Jun-15

## ♦ MP C6502/C8002: Productivity

Donor type	Thin	Plain	Plain	Middle	Thick	Thick	Thick	Thick
Paper type	Paper	Paper 1	Paper 2	Thick	Paper 1	Paper 2	Paper 3	Paper 4
Do not Display	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Recycled Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Color Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Letter head	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Label Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Preprinted Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Bond Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Cardstock	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Prepunched Paper	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Special Paper 1	1-988-217	1-988-219	1-988-221	1-988-223	1-988-225	1-988-227	1-988-229	1-988-231
Special Paper 2	1-988-217	1-988-219	1-988-221	1-988-223	1-988-225	1-988-227	1-988-229	1-988-231
Special Paper 3	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
Coated Paper	1-988-233	1-988-235	1-988-237	1-988-239	1-988-241	1-988-243	1-988-245	1-988-247
Coated Paper: Gloss	1-988-253							
Tab Stock	1-988-201	1-988-203	1-988-205	1-988-207	1-988-209	1-988-211	1-988-213	1-988-215
OHP (Transparency)	1-988-252							
Translucent Paper	1-988-201							
Envelope						1-988-249	1-988-250	1-988-251

Purple cells indicate the combinations that are not supported by spec.

# Technical Bulletin

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Model: Aries-P1.5/C1.5			Date: 28-Jul-14		14	No.: RM077115
Subject: DOSS (Data overwrite security system) activation procedure					d by: T. M	/liyamoto
From: 1st Tech s	ervice Sect., PP Tech Service	Dept.				
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	Part info	al		⊠ Servic	n required ce manual revision fit information

Please add the following procedure for activating the DOSS (data overwrite security system) to your field service manual in the following section:

2. Installation > MFP Option

### DOSS (data overwrite security system) Activation Procedure

- 1) Go into the SP mode.
- 2) Select SP5-878-001 "Option Setup" and push "Execute" on the operation panel.
- 3) Turn the machine power off and then on.

#### NOTE:

- DOSS is a standard function of the ProC901/901S. An SD card is unnecessary for DOSS installation and activation.
- DOSS on the ProC901/901S does not support CC (common criteria) certification.
   DO NOT use DOSS for customers who require CC certification.

# Technical Bulletin

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Model: Aries P1.5/C1.5 Date: 28-Jan-15 No.: RM077116

Subject: FSM revision - Notes on LD unit replacement			Prepared by: Hiroaki H Matsui		
From: 1st Tech service Sect., PP Tech Service Dept.					
Classification:	<ul><li>☐ Troubleshooting</li><li>☐ Mechanical</li><li>☐ Paper path</li><li>☐ Product Safety</li></ul>	□ Part informate     □ Electrical     □ Transmit/rec     □ Other (		<ul><li>☐ Action required</li><li>☑ Service manual revision</li><li>☐ Retrofit information</li><li>☐ Tier 2</li></ul>	

### IMPORTANT NOTES REGARDING LASER DIODE UNIT REPLACEMENT

Please add the following notes to your field service manual, at the beginning of the section:

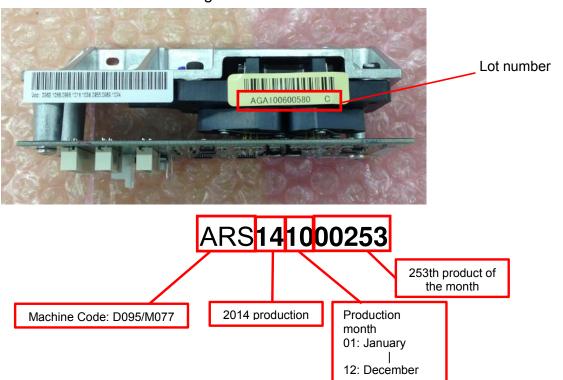
4. Replacement and Adjustment > Laser Unit > LD Units > When installing a new LD unit (page 370)

### When installing a new LD unit

#### **NOTE**

When replacing with a new laser diode (LD) unit procured as a service part, spacer seals may have to be attached to the LD unit before replacement, which depends upon the lot number. Make sure to check the lot number of the new LD unit before installation.

- If the lot number is ARS141000253 or greater (for example, ARS141000270), spacer seals are included as accessory parts to the LD unit. See the instructions below to install the spacer seals.
- If the lot number is ARS141000252 or smaller (for example, ARS140900005), spacer seals are not included. Disregard the instructions below.



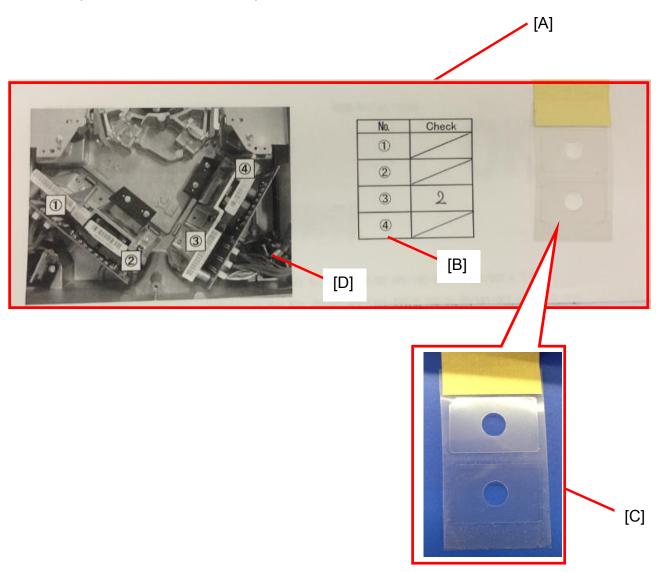
**PAGE: 2/3** 

Model: Aries P1.5/C1.5 Date: 28-Jan-15 No.: RM077116

### Where to attach and how many to attach

Spacer seals [C] are provided together with an instruction sheet [A]. Numbers 1~4 in table [B] on the instruction sheet correspond to the numbers in the photo indicating where the spacer seals need to be attached. Quantities of the spacer seals are handwritten in the table to indicate how many seals need to be attached.

The example below shows that 2 spacer seals need to be attached to location 3.



**NOTE:** The spacer seals may have 4 different types of thickness, but all spacer seals need to be attached to the same location according to the instruction sheet [A].



Model: Aries P1.5/C1.5

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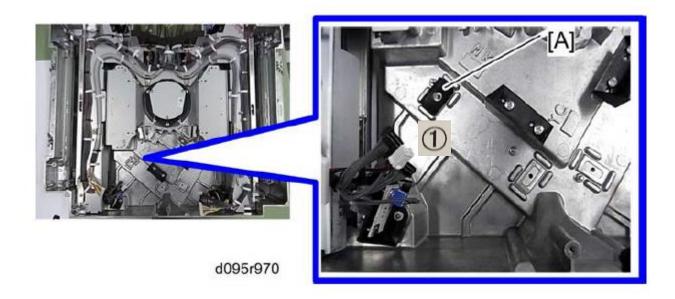
Date: 28-Jan-15 No.: RM077116

**PAGE: 3/3** 

### **IMPORTANT**

You may find spacer(s) attached to the laser unit when removing the original LD unit as shown in the photo below. (A spacer is attached to location ① .)

**DO NOT** remove spacer(s) originally attached. When installing the new LD unit, attach new spacer(s) on top of the original spacer(s).



## Technical Bulletin

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Model: Aries-P1.5/C1.5 Date			Date	ate: 22-Nov-16		No.: RM077117
Subject: Double feed is not detected			Prepared by: Hiroaki H Matsui			
From: PP Tech Se	rvice Dept., 1st PP Tech Servi	ce Sect.				
Classification:	<ul><li>☑ Troubleshooting</li><li>☑ Mechanical</li><li>☑ Paper path</li><li>☑ Product Safety</li></ul>	Part info Electric Transm Other (	al		☐ Servi	n required ce manual revision ofit information

#### **SYMPTOM**

Blank sheets are mixed in duplex jobs, because double-feed was not detected and the double-fed sheet was not separated while passing through the PTR, fusing and switchback units.

**Note:** The problem tends to occur with Thick 4 or thinner paper that tend to stick and is less likely to occur with thick paper.

### **CAUSE**

The emitter of the double-feed detection sensor lacks accuracy in the LED output level.

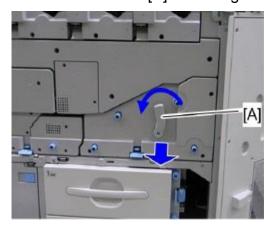
### **SOLUTION**

The LED output level of the double-feed detection sensor was optimized, and a new service part containing the emitter, receiver and harness was registered with **p/n: M0777405**. If the problem occurs, replace with the new sensor.

Note: Make sure to replace the emitter, receiver and harness as a set.

### How to replace the double-feed detection sensor

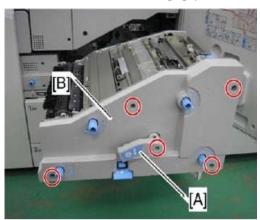
- 1. Open the right front door.
- 2. Turn the lock lever [A] of the registration unit counterclockwise and pull out the unit.



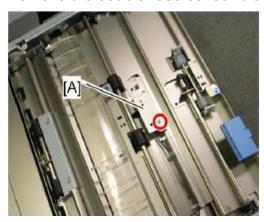
**PAGE: 2/3** 

Model: Aries-P1.5/C1.5 Date: 22-Nov-16 No.: RM077117

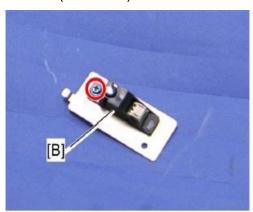
3. Remove the lock lever [A] (screw x1) and the inner cover [B] (screw x4).



4. Remove the double-feed sensor bracket [A] (screw x1, connector x1).



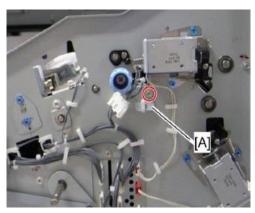
5. Remove the receiver from the bracket and replace it with the receiver of the new sensor (screw x1).



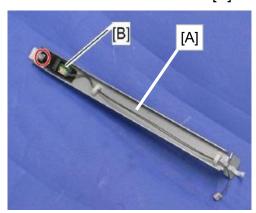
**PAGE: 3/3** 

Model: Aries-P1.5/C1.5 Date: 22-Nov-16 No.: RM077117

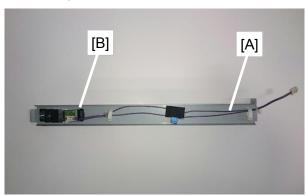
6. Remove the double-feed sensor bracket [A] (screw x1, connector x1).



7. Remove the sensor harness [A] and emitter [B] from the bracket.



8. Install the harness and emitter of the new sensor onto the bracket (harness clamp x1, screw x1).



9. Put back the unit by following the above steps in reverse order.