

This is a service training course for the Cor-C1 series of black-and-white copiers.





Туре	RAC	RE	RA	RCN
C1c	1 model ARDF is standard; Smart Operation Panel is option	2 models 1) ARDF is standard, normal operation panel (the Smart operation panel is not available as an option) 2) ARDF is standard, Smart operation panel is standard	1 model ARDF is option; Smart Operation Panel is option	1 model ARDF is option; Smart Operation Panel is option
C1d	As above	3 models 1) ARDF is standard, normal operation panel 2) ARDF is standard, Smart operation panel is standard 3) Basic model (no scanner/printer unit or HDD), ARDF, normal operation panel is not The Smart operation panel is not available as an option for 1) or 3)	2 models 1) ARDF is option; Smart Operation Panel is option 2) Basic model (no PC scanner or printer), ARDF is option; Smart Operation Panel is option	As above
C1e	As above	2 models 1) ARDF is standard, normal operation panel (the Smart operation panel is not available as an option) 2) ARDF is standard, Smart operation panel is standard	As above	As above

Туре	RAC	RE	RA	RCN
C1f	1 model SPDF is standard; Smart Operation Panel is option	3 models 1) ARDF is standard, normal operation panel 2) SPDF is standard, normal operation panel 3) SPDF is standard, Smart operation panel is standard The Smart operation panel is not available as an option for 1) or 2)	2 models 1) ARDF or SPDF are options Smart Operation Panel is option 2) Basic model (no PC scanner or printer), ARDF or SPDF are options; Smart Operation Panel is option	2 models 1) ARDF or SPDF are options Smart Operation Panel is option 2) Basic model (no PC scanner or printer), ARDF or SPDF are options; Smart Operation Panel is option
C1g	As above	As above	As above	As above
C1h	As above	2 models 1) SPDF is standard, normal operation panel (the Smart operation panel is not available as an option) 2) SPDF is standard, Smart operation panel is standard	2 models 1) SPDF is standard; Smart Operation Panel is option 2) Basic model (no PC scanner or printer), SPDF is standard; Smart Operation Panel is option	2 models 1) SPDF is standard; Smart Operation Panel is option 2) Basic model (no PC scanner or printer), SPDF is standard; Smart Operation Panel is option

RE – ARDF with Smart Operation Panel as standard is not available.





Comparing Specifications Cor-C1c/d/e			mparing Specifications r-C1c/d/e			RICO imagine. chan	
	Or-C2a	Or-C2b	Or-C2c	Cor-C1c	Cor-C1d	Cor-C1e	
CPM	25	30	33	25	30	35	
Scanner	Color				Color		
		ARDF			ARDF		
	100 sheets			100 sheets			
RAM		1.5 GB			2 GB		
Hard Disk		250 GB			320 GB		
Paper Capacity (standard)	1150			1200			
Paper Capacity (maximum)	3150			4700			
Paper Weight (standard)	52 - 157			60 - 300			
Paper Weight (bypass)		52 - 157			52 - 300		
Paper Weight (duplex)		52 – 105			52 - 256		
Paper Size		A3 – A6			A3 – A6		
1st Copy Time		4.5		4	1.6	4.3	
Warm-up Time	15.5				With HDD: 14.0 Without HDD: 11.0 SOP model: 71.0	9	
TEC (kWh)	1.48	1.75	1.91	SP: 0.9 SOP: 0.9	Basic: 1.4 SP: 1.1 SOP: 1.1	Basic: 1.6 SP: 1.4 SOP: 1.4	

SP: Model with scanner and printer built in SOP: Model with Smart Operation Panel

Cor-C1f/g	• •			imagine. ch
	Al-C2a	Al-C2b	Cor-C1f	Cor-C1g
CPM	40	50	40	50
Scanner	C	plor	Co	lor
	ARDF		ARDF/SPDF	
	100 sheets		100 sheets (ARDF), 220 sheets (SPDF)	
RAM	1GB		20	3B
Hard Disk	128 GB		320 GB	
Paper Capacity (standard)	1200		1200	
Paper Capacity (maximum)	4400		4700	
Paper Weight (standard)	60 - 216		60 -	300
Paper Weight (bypass)	52	- 220	52 - 300	
Paper Weight (duplex)	60 -	169	52 - 256	
Paper Size	A3	– A5	A3 – A6	
1st Copy Time	4.1	3.5	4.0	2.9
Warm-up Time	19		With HE Without H SOP mo	DD: 14.0 IDD: 11.0 del: 71.0
TEC (kWh)	2.89	3.56	Basic: 1.9 SP: 1.6 SOP: 1.7	Basic: 2.7 SP: 2.3 SOP: 2.3

SP: Model with scanner and printer built in SOP: Model with Smart Operation Panel

omparing Spec or-C1h	ifications		RICO imagine. cha
	Mt-C5a	Cor-C1h	
CPM	60	60	
Scanner	Color	Color	
	SPDF	SPDF	
	150	220	
RAM	1.5 GB	2 GB	
Hard Disk	250 GB	320 GB	
Paper Capacity (standard)	4300	1200	
Paper Capacity (maximum)	8300	4700	
Paper Weight (standard)	52 - 216	60 - 300	
Paper Weight (bypass)	52 - 216	52 - 300	
Paper Weight (duplex)	64 -169	52 - 256	
Paper Size	A3 – A5	A3 – A6	
1st Copy Time	3.9	4.3	
Warm-up Time	30	With HDD: 14.0 Without HDD: 11.0 SOP model: 71.0	
TEC (kWh)	6.5	Basic: 3.3 SP: 2.7 SOP: 2.8	

SP: Model with scanner and printer built in SOP: Model with Smart Operation Panel

Laser diode unit	Cor-C1c/d/e	Cor-C1f/g/h	1
Laser diode unit	LD 1 beam		
		LD 2 beams	1
Toner cartridges	24k type only	24k and 48k types available	1
Fusing	100V models are the same, b C1f/g/h have a stronger fusing	put for the 220V models, Cor- g lamp	1
Motors	Fusing and exit mechanisms driven by one motor: Fusing/exit motor	There are two motors: Fusing motor, paper exit motor	
Other differences	The following are different between the cde and the fgh: Air flow, IPU, PSU		
Waste toner bottle	PM part	PM part	1
Waste toner bottle	between the cde and the fgh: Air flow, IPU, PSU PM part	PM part	

Toner cartridges are the same size, but there is more toner in the fgh models.

Simila	rities w	vith Other Models	nge.
Unit	Similar Model	Comments	Γ
Scanner	Met-C1abcde		
Laser unit	K-C4		
OPC, OPC cleaning	Or-C2		
Development	Or-C2	The developer is the same as K-C4. The mechanism is the same as Or-C2.	
Toner supply	Met-C1abcde	The toner is the same as K-C4. The supply mechanism is the same as Met-C1.	
Paper feed	Met-C1abcde	Including duplex and bypass	
Transfer	Or-C2		
Fusing	Met-C1abcde	Cor-C1 uses a QSU type fusing unit, which is normally only used in color copiers. Because of this, thicker paper is supported (see the specifications slides earlier in the presentation).	
Paper exit	Met-C1abcde		
Waste toner handling	Met-C1abcde		
Drive mechanisms	Met-C1abcde	Feed/drum/development/transfer/fusing	1
Air flow	Met-C1abcde		
PCBs (SBU, SIO, PSU, HPV, BCU, IOB, IPU, controller)	Met-C1abcde	The controller is the same type, but of course, not the same exact component.	
Peripherals	Met-C1abcde		12

This slide shows which models have been used as the sources for the technologies used in this series.

In the Cor-C1, some changes have been made to these mechanisms, but they are very similar.



Yields are based on these conditions: A4 (LT) long-edge feed 6% image coverage ratio

Targets	RICOH magine. change.
 Average CV per month 	
– C1c: 4K	
– C1d: 5K	
– C1e: 7K	
– C1f: 10K	
– C1g: 15K	
– C1h: 20K	
• Max CV per month (for a 5 year lifetime):	
– C1c: 15K	
– C1d: 20K	
– C1e: 30K	
– C1f/g/h: 50K	
	14

Reliability Information	RICOH imagine. change.
PM Cycle:	
 C1c/d/e: 120K C1f/g/h: 160K 	
 MCBC (Mean Copies Between Calls) 	
– C1c: 43.1K	
– C1d: 47.8K	
– C1e: 56.0K	
– C1f: 74.8K	
– C1g: 87.6K	
– C1h: 94.5K	
 Life: 	
 C1c: 5 years or 900K 	
 C1d: 5 years or 1,200K 	
 C1e: 5 years or 1,800K 	
 C1fgh: 5 years or 3200K 	
 Scanner: 5 years or 1,000K scans 	15











Options: Original Feed			
	Alex used with those	Similar to	Noto
	models:	Similar to.	140.00
D683: SPDF DF3080	Met-C1		Same as the unit that is built into the Ch-C1
0779: ARDF DF3090	Met-C1	K-C4	
D700: Platen Cover PN2000	Met-C1, K-C4		Option for Asia/Pacific, China, Taiwan (c/d/e/f/g models)
D593: ADF Handle Type C	Met-C1, Or-C1		

Options: P	imagine. cha		
	Also used with these models:	Similar to:	Note
D787: Paper Feed Unit PB3210	Met-C1 (yz only)	Ap/At-C3	2 trays
D694: Paper Feed Unit PB3150	Met-C1	Ap/At-C3	1 tray; only one of these can be installed
D695: LCIT PB3170	Met-C1	Ap/At-C3	Tandem Tray, 1000 sheets x 2
D696: LCIT RT3030	Met-C1	Ap/At-C3	Side LCT, 1500 sheets
D178: Caster Table Type M3			Requires PB3150
	1		

Options: F	RICOH imagine. change			
	Also used with these models:	Similar to:	Note	1
D687: Finisher SR3140	Met-C1		1000-sheet	1
D686: Booklet Finisher SR3150	Met-C1	B793 booklet finisher	1000-sheet	1
D688: Booklet Finisher SR3170	Met-C1	Ch-C1	2000-sheet	1
D689: Finisher SR3160	Met-C1	Ch-C1	3000-sheet	1
D717: Punch Unit PU3050	Met-C1		For D686/D687	1
D706: Punch Unit PU3060	Met-C1, CH-C1		For D688/D689	1
D690: Internal Finisher SR3130	Met-C1	Or-C1	500-sheet]
D716: Punch Unit PU3040	Met-C1, OR-C1			1
D691: Internal Shift Tray SH3070	Met-C1	Ap/At-C3		1
D685: Bridge Unit BU3070	Met-C1	Ap/At-C3		1
D692: 1 Bin Tray BN3110	Met-C1	Ap/At-C3		1
D725: Side Tray Type M3	Met-C1	Ap/At-C3		1
D766: Internal Finisher SR3180	Met-C1 (yz only)		New type of stapling mechanism, without metal staples	
			250-sheet; no punch unit	23

Options: Controller			RICO imagine. cha	
		Also used with these models:	Similar to:	Note
D3A7: Printer/Scanner Unit Type M12	New		Similar to those used with other models (except for the USB Device Server, which is a new type of option)	SC card option for basic models only: Requires Hard Disk Drive Option Type M12
D3A7: Postscript3Unit Type M12	New			
D3A7: USB Device Server Option Type M12	New			Contains a USB cable and an interface board with a USB inle and an Ethernet outlet.
D3A7: XPS Direct Print Option Type M12	New			
D3A7: Browser Unit Type M12	New			
D3A7: SD card for NetWare printing Type M12	New			
D3A6: Hard Disk Drive Option Type M12	New			
D3A6: Enhanced Security HDD Option Type M12				
D3A7: IPDS Unit Type M12	New			

USB Device Server: This is an interface board that connects to one of the USB sockets, and provides an additional Ethernet port. The machine can then be connected to two different subnets.

		Also used with these models:	Similar to:	Note
D164: IEEE 802.11a/g/n Interface Unit Type M2	New	Met-C1	Similar to those used with other models	
D166: OCR Unit Type M2	New	Ch-C1, Met-C1		
D3AF: Smart Card Reader Built-in Unit Type M12	New		Similar to those used with other models	
B679: IEEE 1284 Interface Board Type A		Used with many other models		
D566: Bluetooth Interface Unit Type D		Used with many other models		
D377: File Format Converter Type E		Used with many other models		
D640: Copy Data Security Unit Type G		Used with many other models		
D641: SD Card for Fonts Type D		Used with many other models		
B869: Unicode Font Package for SAP®		Used with many other models		
D362: Data Overwrite Security		At/Ap-C3		For CC certification

"Smart Card Reader Built-in Unit Type M2" is only available on the left USB port.

"Bluetooth Interface Unit Type D" is available on both the left and right USB ports.

Options: Fax				RICO imagine. ch	
	Also used with these models:	Similar to:	Note		
New		Similar to those used with other models			
New					
New					
New					
	Met-C1				
	In use with many models				
	New New New	Also used with these models: New New New New Met-C1 In use with many models	Also used with these models: Similar to: New Similar to those used with other models New Met-C1 In use with many models	Also used with these models: Similar to: Note New Similar to those used with other models	

Note the new type of fax memory (D3A5, Memory Unit Type M12, 64MB)

		Also used with these models:	Similar to:	Note
B870: Optional Counter Interface Unit Type M12	New		Similar to those used with other models	
D739: Key Counter Bracket Type M3		Met-C1		
D593: Card Reader Bracket Type 3352		Met-C1		
D148: Smart Operation Panel Type M3		Met-C1		A new type of operation panel.
D739: External Keyboard Bracket Type M3		Met-C1		For the Smart Operation Panel Type M3





This section explains the main points about installation. For full details, see the Field Service Manual.













SFU: Update at the I	lext Visit	RICOH imagine. change.
 Next, touch 'Reservation Settin Enter the date and time of the r want the machine to start to rec "Next time to visit this customer": The pact downloaded by this time/date. "When to receive? (1-7)": The download of of days before the next visit. If the first atte every 6 hours. If the download cannot be completed succ machine will stop trying to download the fir 	g'. ext visit, and input eive the package. age firmware will be automa the package firmware will b most fails, the machine will the sesfully by the time of the se mware.	t when you atically begin this number ry the download cheduled visit, the
Reserve and accessed par large information Reserved and accessed par large information Bick	Next time to visit this customer 2013 / 05 / 22 year month day When to receive? (1-7)	15 00 hour minute

If the machine is in Energy Saver mode when the download is scheduled to begin, the download will be performed in the background and the machine/panel will stay in Energy Saver mode.

The download will continue uninterrupted even if the user initiates a print job, copy job, fax receiving or other operation while the download is in progress.

The download will be terminated if the user turns the power off while the download is in progress.
SFU:	Update at the Nex	t Visit	RICOH imagine. change.			
 Then, when you visit the machine the next time, to update the firmware with the downloaded package, touch 'Download Firmware' and 'Reserve' again. Then touch [Reserved and received package information]. 'Success' means that the firmware was downloaded. Now you have to install it. The procedure is in the service manual: 5. System Maintenance > Package Firmware Update > Update at the Next Visit (Reserve)> How to Install Firmware Downloaded with RESERVE 						
	Reservation reception result Part number of reserved and recleved package Version of reserved and received package Package received date Reservation reception has succeeded. You may sart the update.	Success D1234567 1.35 2014/05/22 Back d197/0511				
			37			

If the download was unsuccessful, -- will be displayed.

SFU: U	Ipdate at the Nex	t Visit	RICOH imagine. change.
If the version the latest ve - If you wish to version, touch Then update - If you wish to the message	that was downloaded in rsion, the display shows ignore the version that was already [Execute] beside the message "Do of the package firmware will be start update using the firmware in the HC "Update to the received package."	to the HDD is of the following of downloaded, and dow wnload and update th red. DD (old version), touch	older than choices. mload the latest e latest package." I [Execute] beside
	(Ver.139) + Downloading may take some time. 	Execute	
	Language and	Back	







This section explains the main points about installation. For full details, see the Field Service Manual.

The slides only mention the main points of the installation procedure, not the complete procedure.









You will need this support again if you have to move the machine a long distance.



Initial Toner Supply and Process Control RICO	ge.		
To do the initial toner supply, turn on the main power switch while the front cover is open.			
 If the front cover is closed when doing the initial toner supply, the machine starts a normal toner supply. 			
Enter the SP mode (8-0618-2, then hold down the clear button).			
 Initializing messages will not show up if you enter SP mode from the home screen, so please make sure that you enter SP mode from the copy window. 			
 Set SP3-510-031 to "1" and press '#' on the operation panel, then press 'Exit' to leave SP mode.			
Close the front cover and the machine automatically starts the initial toner supply.			
 If you turn on the machine without closing the front cover, the initial toner supply is not performed at installation, and the machine goes to the toner end condition even if the machine has plenty of toner in the toner bottle. 			
 It takes about one to two minutes to finish the initial toner supply. If the toner has not been shaken well, it may take up to about 10 minutes. 			
 If a toner bottle has not been set, the machine does not work because there is a toner bottle set detection mechanism (a push switch has been added to detect this). 			
 Execute SP7-622-250 (PM Counter Reset).			
After this has finished, do the initial process control: SP3-011-001			
	47		

It is possible to close the front cover and start printing even if the toner bottle is not set correctly. So a push switch was added to detect when the bottle is set correctly.









See the field service manual for the password setting procedure: Installation > Main Machine Installation > Important Notice on Security Issues



For models with printer/scanner options built in, the SP is already set to 'enabled'.







This section explains the main points about installation. For full details, see the Field Service Manual.

The slides only mention the main points of the installation procedure, not the complete procedure.





There is no space to use a normal screwdriver, so we must use one of the connecting brackets to attach the screw.













- [A]: Scale marks for DLT
- [B]: Scale marks for A3
- [C]: 7 scale marks at 2 mm intervals
- [D]: Center mark



Troubleshooting > Other Problems > Early Paper Full Detection at the 1000sheet Finisher

The trailing edges of excessively curled paper can activate the tray full sensors before the tray is actually full.

Once the "Exit Tray Full" message displays, the job cannot continue until some sheets are removed from the tray which is only partially full. The trays are designed to prevent this problem.



Troubleshooting > Other Problems > Stacking Problem at the 1000-sheet Finisher



Troubleshooting > Other Problems > Finisher Jogger Problem







Troubleshooting > Other Problems > Jammed Paper at the Bridge Unit





The OCR card does not need to be kept in the slot after installation. So the legal aspects about merging the OCR software are not a problem, because there is no need to merge the OCR software.






USB Device Server: This is an interface board that connects to one of the USB sockets, and provides an additional Ethernet port. The machine can then be connected to two different subnets.

The interface board comes with a USB cable that connects from the machine at USB socket [C] to a USB inlet on the interface board, and Ethernet comes out of the interface board.









Important Notes	nge.
 With previous models, when the DC power was turned off, the supply of power from the AC control board to machine internal systems was stopped. With this model, even after the main switch/DC power has been turned off, a voltage of 5V still flows through the machine to detect when the switch is pushed to turn the power on. Therefore, before performing any kind of machine 	
maintenance, you must physically remove the power cord from the outlet and wait several minutes (approx. equivalent to the time it takes to remove the rear cover).	79

PM Schedule	RICOH nagine. change.
 Cor-C1cde 	
 PCDU components (drum, pick-off pawl, charge roller, charge ro cleaning roller, drum cleaning blade, developer, development ur filter/seal): 120k 	oller hit
 Transfer unit: 120k 	
 Development unit gears, fusing unit (pressure roller, bearing, sle unit): 240k 	eeve
 Waste toner bottle (Cor-C1e only): 120k 	
 Cor-C1fgh 	
 PCDU components (drum, pick-off pawl, charge roller, charge ro cleaning roller, drum cleaning blade, developer, development ur filter/seal): 160k 	oller hit
 Transfer unit: 160k 	
 Development unit gears, fusing unit (pressure roller, bearing, sle unit): 320k 	eeve
 Waste toner bottle: 160k 	
	80

Yields are based on these conditions:

A4 (LT) long-edge feed

6% image coverage ratio

3 prints per job (Cor-C1c/d), 5 prints per job (Cor-C1e/f/g/h)

The machine checks machine usage based on rotation distance, not number of sheets, so the PM cycle will probably not run out at exactly 120k, for example. The 120k limit is only based on machine usage under the above listed conditions.



See 'Preventative Maintenance – PM Parts Settings' in the service manual for full details of how to replace a PM part and check the machine after replacement.



If you do SP3-701-2 and replace the PCU, the counters for the PCU and all the components parts (such as the cleaning blade) will all be reset.

If you do SP3-701-23 and replace the development unit, the counters for the development unit and all the components parts (such as the filter) will all be reset. The counters for the PCU will not be reset.

If you do not do SP3-701-23 before replacing the development unit, the machine will think that the entire PCDU was just replaced and will reset all the PCDU counters. This is because the ID chip for the PDCU is in the development unit.







📕 Но	w to check	the PM Cou	unters	RICOH imagine. change.	
 Step 1: Enter the SP mode (8-0618-2, then hold down the clear button) and choose PM Counter. 					
	SP mode	HAIN 0.	.19 Exit		
		System So			
		Fex Sp			
		Printer Sp			
		Scanner Sp			
		PM Counter	J		
		Firmmre Updete			
	<u>8</u>		20 MAR 2014 7:19		
				86	

This is a procedure to check the PM counters without inputting each SP number.

How	RICOH imagine. change.		
 Step 2: Pre 	ess 'Estimated Usage Ra	ate/Estimated Remain Days'	
SP	Mode(PM Parts)	Prev. Menu Exit	
Se	lect item		
	All PM Parts list	Counter clear for parts exceeding target yield	
[Parts list for PM yield indicator	Clear all PM settings	
[Parts exceeding target yield	Counterlist print out	
ĺ	Estimated Usage Rate / Estimated Remain Days	Commissioning Status Report Print	
		20 MMR 2014 7:29	
			87

How to check the PM Counters				RICOH imagine. change.	
 Step 3: You 	can see the Rema	aining Days fo	or each	part.	
SP M	Mode(PM Parts)		P	rev. Menu Exit	
Est	imated UsageRate/Remain	Days Select parts	S		
No	Description	Exceed Usage Rate	Remain Days		
002	#PCU	000	255	lear	
023	#Dev Unit	000	255	Clear 01/01	
108	#Paper Transfer Roller Unit	000	255	Clear	
115	#Fusing Unit	000	255	lear Prev	
206	#ADF Pick-up Roller	000	255	Clear Wheat	
207	#ADF Paper Supply Belt	000	255	lear	
208	#ADF Reverse Roller	000	255	lear	
				_	
				20 MAR 2014	
.				7:29	
					88

You can see the remaining days for each part.

The diagram shows the screen for a new machine, so the values are showing the maximum remaining days.















Note that fusing and paper exit are driven by the same motor in the slower models (D197/D198/D199). But, in the faster models (D200/D201/D202), there are two motors.











There is no set switch for the toner bottle; this is a cost reduction measure.









DHB: Dehumidification board





Air taken in from both the PCDU cleaning unit and the laser unit is taken out from the left rear exhaust. An air-flow duct is installed between the fusing unit and the toner bottle, to suppress excessive temperature rise of the toner bottle.

Note the extra fans for the higher-speed models.

The PSU cooling fan cools the PSU board directly.

The development bearing cooling fan takes air in from the rear of the machine outside and applies the air to the bearing of the mixing auger.








Cooling is increased over previous models, because the Cor-C1 series uses all motors and a few clutches, and is more compact.

Condition	Development Exhaust Heat Fan	Paper Exit Fan	Fusing Fan	Development Bearing Cooling Fan*2	PSU Cooling Fan*2
Warm-up	Stops	Stops	Stops	Stops	Stops
Standby	Rotates at low speed	Stops	Rotates at low speed	Stops	Stops
Printing	Rotates	Rotates	Rotates	Rotates	Rotates
After Printing	Rotates at low speed *1	Stops*1	Rotates at low speed*1	Stops*1	Stops*1
Abnormal (Jam)	Stops	Stops	Stops	Stops	Stops
This tab	le shows h ns. en the temperatu	now the fan:	s operate u e reaches 45.5 d	nder specifi	C Is keep





This is in addition to cpm control initiated from the fusing unit.













Replacement and Adjustment > Controller Unit > LCD

See the above section of the service manual for more details on replacing the two types of LCD panel.













Hard Disk Replacement	RICOH imagine. change.
 Before replacing the HDD, copy the ac book data to an SD card with SP5846- possible. 	ldress 051 if
 If the customer is using the Data Oven Security, the Data Encryption feature of Scanned PDF, these applications mus installed again. 	write or OCR t be
	126





Light from the Scanner lamp illuminates the original and reaches the CCD via the following route: 1st mirror > 2nd mirror > 3rd mirror > lens > CCD.

A white reference plate for shading correction is attached to the underside of the scale on the left of the machine. This is read by the scanner and CCD just after the power is turned ON. The data read are temporarily stored in a RAM, and used for correction of document image data.





By changing over SP4-305-001 (8K/16K Detection), you can change between A4 size/letter size or Chinese paper size (8×16).

If the user specifies that the lamp is too bright before scanning starts, the brightness pre-scan can be reduced by decreasing the value of SP4-309-004 (Scan Size Detect:Setting LED PWM Duty). However, if the lamp brightness is reduced, size detection for a document with a large number of solid images will be less accurate.



To convert between contact and no contact type scanning:

Replacement and Adjustment > Scanner Unit > Modifying the Scanner (contact/contactless) when using ARDF

Replacement and Adjustment > Scanner Unit > Modifying the Scanner (contact/contactless) when using SPDF

For the optional ARDF

Troubleshooting > Other Problems > Converting the ARDF DF3090 (D779) to Contact Scanning



This function is the same as Met-C1.



















The PCL is a new feature. It is explained later.







Cleaning blade: This is the 'counter blade' method.
























A spring at the rear of the PCDU pushes the PCDU forwards. If you do not push the PCDU in while screwing it in, the face plate may not be installed straight. Transfer roller contact and release will not work properly as a result.







Developer Replacement - 2	Hange.
 Before replacing the developer, set SP3-701-024 to "1" and turn the main power switch OFF. 	
 Take care when reassembling the development unit; the transparent sheets at each end of the development sleeve must be positioned correctly. See the service manual for details. 	
 After new developer is installed, initialization begins automatically. No SP is needed. 	
 If you want to replace the development filter during the same visit as you replace the developer, replace the developer before you replace the filter. 	
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The development seal set is a separate service part. It is not included with the developer.













These two slides explain when process control is done.





















[F] is the waste toner recycling coil. However, the waste toner is not recycled to the development unit. It goes to the waste toner bottle.




It is possible to change the toner end detection method with SP modes: SP3100-003: Detection method

- 1 (default): Using the TD sensor output (described on the slide)
- 2: Using a counter

The number of sheets between near-end and end is set by SP3133-001; default 90 sheets.

SP3133-011 shows how many pages have been printed since near-end occurred.

0: Using both of these; near-end occurs when the first condition is detected







- 1. Pick-up roller (1st paper tray)
- 2. Feed roller (1st paper tray)
- 3. Separation roller (1st paper tray)
- 4. Feed roller (2nd paper tray)
- 5. Separation roller (2nd paper tray)
- 6. Pick-up roller (2nd paper tray)



- 1. Paper feed motor
- 2. Vertical transport motor
- 3. Pick-up roller (First tray)
- 4. Paper feed roller (First tray)
- 5. Vertical transport roller (First tray)
- 6. By-pass transport roller
- 7. Vertical transport roller (Second tray)
- 8. Paper feed roller (Second tray)
- 9. Pick-up roller (Second tray)









- 1. Pickup arm
- 2. Upper limit sensor
- 3. Pick-up roller
- 4. Feed roller
- 5. Feed guide
- 6. Separation roller



Note that the action of the solenoid is different from the bypass tray.

Trays 1 and 2: When the solenoid turns on, the pick-up solenoid moves up away from the top sheet of paper.

Bypass tray: When the solenoid turns on, the pick-up roller moves down onto the top sheet of paper.









4 is an idle roller.



The gear on the feed roller shaft colored grey in the diagram is a one-way gear.















Basically the same mechanism as AI-C1, except that AI-C1 uses a transfer belt and not a roller.









This is basically the same as the Met-C1. This is the first black-and-white machine to use this fusing method.













Hardv	vare Detection S	C Codes	-1 RICOH imagine. change.
 For the SCs in red in the following table, a new fusing unit or heating sleeve unit must be installed before you can reset the machine. 			
 If one of these SCs occurs, the sleeve is damaged, as an invisibly tiny kink which grows bigger and deeper into a tear, which may hurt the customer's fingers. 			
 To prevent this, the machine requires a new fusing unit or heating sleeve unit to reset. 			
	Sensors	Cor-C1	
	Thermopile (Center)	SC544-01	
	Thermopile (Edge)	SC554-01	
	Thermistor (Center)	SC564-01	
	Thermistor (Edge)	SC574-01	
	NC sensor (Center)	SC544-02	
	NC sensor (Edge)	SC554-02	
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This is the same as Met-C1.





If you replace a complete fusing unit, you do not need to perform SP 3-701, because the machine detects a new unit automatically. If you replace only a part of the fusing unit, however, such as the pressure roller, you must set SP3-701-xx before you replace that part.



This is the same process for all models in the series.
Service Notes	RICOH imagine, change.
 When the fusing unit is break, causing a servic displays a warning on t 240k or f/g/h: 320k) page or f/g/h: 350k) pages. If you replace a compleneed to perform SP 3-7 detects a new unit autor a part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit pressure roller, you mutical part of the fusing unit part of the fusing unit pressure roller, you mutical part of the fusing unit part of the fusing unit pressure roller, you mutical part of the fusing unit part of the fusing unit pressure roller, you mutical part of the fusing unit part of the fusing un	used past its PM cycle, it may e call. Therefore, the machine he operation panel at (c/d/e: ges and stops at (c/d/e: 260k te fusing unit, you do not '01, because the machine matically. If you replace only , however, such as the st set SP3-701 for that part.
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Before Working on the Fusing Unit

- In 100 V models, only one of the AC lines for the fusing unit is shut off when you turn off the main power; the other line carries current even when you turn off the main power switch.
- So, turn off the main power switch <u>and</u> pull out the AC power cord from the wall socket before doing replacement.

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The rollers are driven by the following motors:

Reverse roller: Reverse motor Duplex entrance roller 1: Duplex entrance motor Duplex entrance roller 2: Duplex entrance motor Duplex transport roller 1: By-pass feed/duplex motor Duplex transport roller 2: By-pass feed/duplex motor Duplex exit roller: By-pass feed/duplex motor



- 1. Duplex Exit Roller
- 2. Bypass Paper Feed Roller
- 3. Bypass Pick-up Roller
- 4. Bypass Separation Roller Drive Shaft
- 5. Bypass Separation Roller



Interleaving

Paper length less than 216mm: 3

216-432 mm: 2

432-457.2 mm: 1

When feeding to the one-bin tray

Paper length less than 216mm: 2

216-432 mm: 1





When the rear edge of the paper leaves the paper exit roller, the paper eject/pressure release motor switches OFF.



The fusing exit sensor [B] controls the changes in direction of the reverse roller.





Overview	RICOH imagine. change.
 Printing with low toner coverage leaves uncharged toner in the development unit. degrades developer more quickly. To keep toner in the development unit fre the machine makes a pattern on the drum when low toner-coverage pages are print. This supplies a certain amount of fresh to to the development unit. 	This sh, n ed. ner
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Originally, the machine was designed to have a 'recycle toner' mode and a 'discard toner' mode. However, at the moment, there is no recycle mode and the mechanism stays in the 'discard' position. However, the solenoid and shutter are still present in the machine.









The 10 mg/m number is not the actual amount – it is just a convenient number to make the process easier to understand.















These are the same finishers as in the Met-C1 series. However, some new steps and notes have been added to the service manual, and some of these should be mentioned here.









The End