



This course explains the differences between the Z-C2 color copiers and their predecessor, the Z-C1 series.



No additional notes




How Many Models?

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- **D191: Z-C2b Std.**
 - 40 ppm, No internal finisher
 - Copy Speed (cpm): 40 (A4), 42 (LT)
- **D193: Z-C2b Fin.**
 - 40 ppm, with built-in internal finisher
 - Copy Speed (cpm): 40 (A4), 42 (LT)

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There is no 30ppm model in the Z-C2 series.



Main Features of Interest



- Color IPDS printing
- Improved address book management
 - Users can sort address data at the operation panel
 - Users can select multiple user data with WIM
- Silent mode for printing (to meet BAM standards)
 - Printing will be done at 15 ppm (A4)
- Java VM on-board as standard feature
- Log storing function to minimize the time for solutions to problems
- GW+ controller
- Android-based smart operation panel as an option (similar to Met-C1 and Or-C2)
 - No models with the smart operation panel as standard equipment
- SFU (Smart Firmware Update)
 - The CE can update the firmware from the operation panel through @Remote (without using an SD card).
- Enhanced HDD option (to meet the requirements for FIPS certification)
 - Authentication Code in Administrator Settings
 - Encryption of device data
 - Must remove the standard HDD from the machine before installing this option
- Reduced power consumption in Sleep Mode (Z-C1: 2.5W, Z-C2: 1W)
- Quicker recovery from Sleep Mode (Z-C1: 8s, Z-C2: 5.5s)
 - Z-C2 users can use the operation panel after 4 seconds

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Z-C2 is the first Ricoh product to support color IPDS and silent mode.



Basic Specs

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- **First copy time**
 - B/W: Less than 10s (A4/LT SEF)
 - FC: Less than 15s (A4/LT SEF)
- **Warm-up time: Less than 50 s**
- **Memory: 2GB**
- **HDD: 320GB (Standard)**
- **Paper feed capacity**
 - Standard: 650
 - Maximum: 2,300

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No additional notes



Options: Paper Feed and Output Trays

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		Also used with these models:	Similar to:	Note
M367: Paper Feed Unit PB1000		Z-C1		1 tray; only one of these can be installed
M368: Paper Feed Unit PB1010		Z-C1		2 trays
M369: Side Tray Type C400		Z-C1		
M370: 1 Bin Tray BN1000		Z-C1		D191 only

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No additional notes



Options: Controller

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		Also used with these models:	Similar to:	Note
D792: Browser Unit Type M10	New		Similar to those used with other models (XPS is a new type of option)	
D792: SD card for NetWare printing Type M10	New			
D792: IPDS Unit Type M10	New			
D792: XPS Direct Print Option Type M10	New			
D792: Camera Direct Print Card Type M10	New			

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No additional notes



Options: Controller

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		Also used with these models:	Similar to:	Note
M417: IEEE 802.11 Interface Unit Type O		Ti-P1		
D166: OCR Unit Type M2		CH-C1, MET-C1. OR-C2		
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		Different from Z-C1but installation is the same
D377: Data Overwrite Security Unit Type H		Used with many other models		For CC certification
D792: Enhanced Security HDD Option Type M10	New			

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No additional notes



Options: Fax

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		Also used with these models:	Similar to:	Note
D791: Fax Option Type M10	New		Similar to those used with other models	
D791: Fax Connection Type M10	New			
G578: Memory Unit Type B 32MB		In use with many models		

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No additional notes



Options: Other

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		Also used with these models:	Similar to:	Note
B870: Optional Counter Interface Unit Type A		Used with many other models		
D190: Smart Operation Panel Type M10	New		MET-C1, OR-C2	A new type of operation panel. The external keyboard bracket (used in MET-C1) is not required.

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No additional notes



Reliability Data

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- APV: 6.5k/Month
 - 20k maximum
- Color ratio: 25%
- PM Interval: 60k
- Call Ratio Target (Mainframe): 0.060
- MPBF Target (Mainframe): 108.0k
- MCBC: 38k
- Machine Life: 1,200k or 5 years whichever comes first

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Life of consumables: Same as Z-C1



Changes from Z-C1

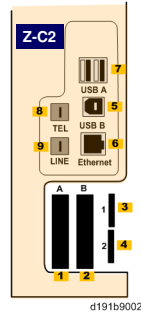
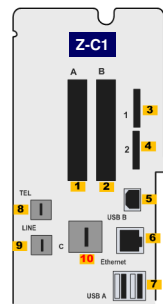
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No additional notes



Controller Board Sockets

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1. Slot A: Wireless LAN
2. Slot B: IEEE1284 (Z-C1 only), File Format Converter only, File Format Converter only
3. SD Card Slot 1: Application Slot
4. SD Card Slot 2: Service Slot
5. USB B: USB 2.0 I/F cable
6. Ethernet
7. USB A: Bluetooth, Digital Camera
8. TEL: For Fax
9. LINE: Telephone Cord (for Fax)
10. Gigabit Ethernet (Z-C1 only)

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No additional notes



SD Card Storage Location

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- Z-C1: The SD cards were stored in cover [A] at the left rear corner.
- Z-C2: This cover has been eliminated. Up to 3 SD cards can be stored behind the controller faceplate cover [B] of the Z-C2.

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No additional notes



Main Power Switch

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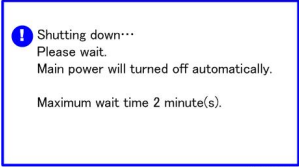

- Z-C1: A square rocker switch [A] is used.
- Z-C2: A round push-switch [B] is used.
 - The power switch is at the same location (rear left corner).
 - There is no power switch on the operation panel of the new model.

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No additional notes



Power On/Off



- Press the power switch on the left rear corner of the machine.
- After the "Please Wait" message goes off, touch [Copier] on the operation panel display.
- When you are ready to turn the machine off, press the power switch. A message is displayed (see the diagram above right).
 - This gives the hard disk drive enough time to stop rotating and to shut down safely before the machine loses power.
- Wait for the machine to go off automatically. When the operation panel display goes off, the machine is off.
 - There is no power switch on the operation panel.
- Before servicing the machine, disconnect the power cord and allow the machine to sit idle for a few minutes.

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No additional notes



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- The ADF of the previous and new machines is the same basic design.
- However, the base hinges of the ADF have been improved to increase their durability, and rubber pads have been added at three locations to reduce the noise when opening and closing the feed cover and original tray of the ADF.
 - The removal procedure is slightly different.

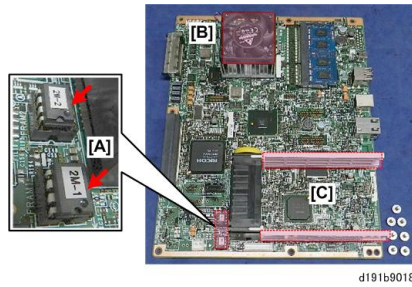
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No additional notes



Controller Board

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- The dual NVRAMs [A] on the controller board of the new models are at the lower left corner.
- The new controller board has an on-board cooling fan [B].
- The option board racks [C] are mounted on the lower right.

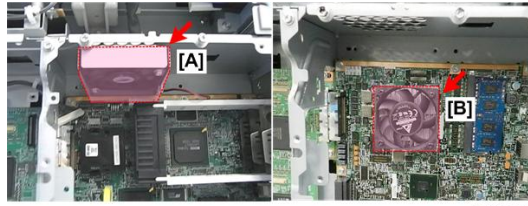
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No additional notes



Controller Fan

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- The controller fan [A] of the previous model has been eliminated and replaced by the cooling fan [B] mounted directly on the new controller board.

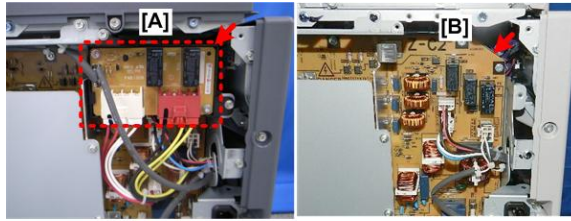
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No additional notes



SDB Board

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- The SDB (Shutdown Board) [A] of the previous models has been eliminated [B].

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No additional notes



HDD Unit

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- The standard HDD unit [A] of the previous models is larger than the HDD unit [B] of the new models.
 - Also, the shapes of the mounting brackets are different.
- The capacity of the HDD on the new models is 320 GB.

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No additional notes



Enhanced Security HDD Option (USA Only)

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- A new HDD option is available.
- This HDD unit is a self-encrypting drive that prevents security breaches.
- If this option is used, the standard HDD unit in the machine must be removed and replaced with this optional HDD unit.
 - The system administrator can consolidate the drive through a network. An Authentication Code is required in the Administrator Settings.
- After this option is installed, if the HDD unit is removed from the machine and connected to an unauthorized host system, the encryption keys and data are instantly invalidated.
 - This new "wipe technology" meets Federal Information Processing Standards (FIPS14-2), developed by the National Institute of Standards and Technology (NIST) for Federal computer systems.

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No additional notes



GW+ Controller

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- This is an advanced controller for high end A4 color MFP machines.
- GW+ is embedded and can offer the same solutions as other Ricoh products.

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No additional notes



IPDS (Intelligent Print Data Stream)

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- This allows bi-directional communication between the host and printer.
- This option is enabled easily by inserting an SD card to turn the machine into an IPDS printer.
- This is the first Ricoh color product to have this feature.

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No additional notes



Low Power Mode

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- Power consumption in low power mode is reduced from 2.5 W to 1.0 W (about 40% down).
- The operator can use the operation panel within 4 sec. after recovery from low power mode, and copying can start within 5.5 sec.

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No additional notes



- This machine is the first Ricoh product to support silent mode.
- After setting the machine for Silent Mode, print jobs will start automatically with less noise.
 - Documents can be printed quietly in libraries, meeting areas, etc. where people do not want to be disturbed by the noise of machine operation.
- Standard productivity is 40 ppm. However, in Silent Mode, priority is given to less noise and so productivity is reduced to 15 ppm.

No additional notes



Smart Operation Panel

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- The standard 9-inch operator panel can be replaced with an optional Smart Operation Panel that uses the Android OS.
 - This product is similar to those used on the Met-C1 and Or-C2.

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No additional notes



Some SP Modes were moved to SSP Mode

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- Many adjustments that were SP modes in the Z-C1 have been moved to SSP modes in the Z-C2.
- SP modes should consist of adjustments used by technicians during normal maintenance and repair. In the Z-C1, many of the SP modes are not for use in the field in normal cases.
 - Parts replacement (counter display/reset, initialization, etc)
 - Troubleshooting: Input/output tests, basic fusing temperature adjustments, registration adjustment
- SSP modes are for use only when instructed by designers or service supervisors.
 - Not used for normal servicing (fusing temperature adjustments for different types of paper, for example)
 - SSP modes should be used only in special field cases when instructed by the designers, such as for improving machine performance
 - Some SSPs are also used for kitting in the configuration center.
- The SMC report still contains some of the values that have been moved from SP mode to SSP mode. This is because these values are important for the designers when analyzing field problems.
 - The SSP items included on the SMC report will be explained briefly in the service manual.

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No additional notes



The End