



This course explains how to service the Z-P2 color printer. It assumes that you already know the Z-P1. If this is not true, please study the course for the Z-P1 before you start the course for the Z-P2.

To learn about this machine, please study the user's guide and the field service manual in addition to this TTP.



No additional notes


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 **Only One Model**

- Z-P2 (M257): SP C440DN
 - 40 ppm (A4), 42 ppm (LT): Same as the Z-P1b

3

There is no 35 ppm model in this series.

- The machine has this equipment built in.
 - 550-sheet tray
 - Bypass tray (100 sheets)
 - Duplex mechanism
 - Ethernet 10/100base T
 - Gigabit Ethernet
 - USB 2.0
 - USB host I/F (for the camera direct print card)
 - PCL5c/6, PostScript 3, PDF
 - Memory: 1 GB (no optional additional memory)

No additional notes

Optional Units

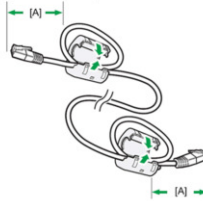
- Paper handling options
 - Up to 3 x 550-sheet paper feed units (PB1020): Same as Z-P1
- Controller options
 - Hard Disk Drive Option Type P7: New, 320 GB
 - No optional memory unit (1GB memory is standard)
 - One of the following:
 - IEEE802.11 Interface Unit Type O: Same as Z-P1
 - IEEE1284 Type A: Same as Z-P1
 - Camera Direct Print Card Type P7 (PictBridge): New
 - VM Card Type P7: New
 - IPDS Unit Type P7: New
 - XPS Direct Print Option Type P7: New
 - USB Device Server Option Type M12: Also used with Cor-C1
 - SD Card Set for Fonts Type D
- Others
 - Caster Table Type C: Same as Z-P1

No additional notes

■ Installation Mostly by the User

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- The machine and all options are installed by the customer, except for the following, which must be installed by a technician.
 - USB Device Server Option Type M12
- The Ethernet cable for the USB device server option must have ferrite cores bound 3 cm (about 1.2 inch) [A] from each end, as shown below.
 - NA models: After closing the cores, secure them in place with cable ties.



6

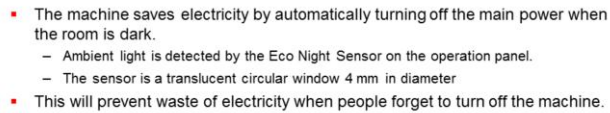
No additional notes

■ Improvements from Z-P1

- Eco Night Sensor
- GW+ controller
- Additional network interface port (optional)
 - USB Device Server Option Type M12 must be installed
- Firmware can be updated by Remote Firmware Update, in addition to the SC card method used with Z-P1.
- Z-P2 does not support SFU (Smart Firmware Update).

No additional notes

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The picture is not the Z-P2, but the function is the same.

Eco Night Sensor - 2

- The Eco night sensor has five brightness sensitivity levels (trigger thresholds).
 - Select with [User Tools] > [System] > [ECO Night Sensor] > [Brightness Sensor Level]
 - 1 is the darkest setting
- The timer to enter the sleep mode or turn the power off or on is set from 1 to 120 min.
 - Select with [User Tools] [System] > [ECO Night Sensor] > [Timer to Turn Off]
 - Select with [User Tools] [System] > [ECO Night Sensor] > [Timer to Turn On]
 - The timer for turning power off is reset if the ambient light level increases, printing is done, or any key is pressed before the specified time elapses.
- The Eco night sensor function can be enabled or disabled with the following user tool.
 - Enable/disable with [User Tools] > [System] > [ECO Night Sensor] > [Mode Setting]
 - There are three settings:
 - Inactive (disabled)
 - Auto power off only (default): The machine only turns the power off based on the sensor reading. It does not turn power back on again.
 - Auto power off and on: The machine turns power off and on based on the sensor reading.

No additional notes

■ Eco Night Sensor - 3

- If the controller is executing a process, the Light Detect Function activates after the process is completed.
- Light Detect also cannot activate if printing stopped due to a lack of paper or a paper jam.
- If a spooled print job is stored in the machine, the machine cannot activate Light Detect.
- After the Light Detect Function turns off the power, the machine cannot power on by itself. To power on the machine, the main power switch has to be turned on manually.

No additional notes

<div> <div></div> <div>Specifications Compared with Z-P1</div> <div> RICOH imagine. change. </div> </div>			
Model	Z-P1a	Z-P1b	Z-P2
Print Speed (A4)	35 ppm	40 ppm	40 ppm
Productivity	Time to First Print	B&W 10 Sec Colour 15 Sec	B&W 10 Sec Colour 15 Sec
	Media Capacity	Std. 650 Pages Max. 2,300 Pages	Std. 650 Pages Max. 2,300 Pages
Media	Paper thickness	52-256 gsm	52-256 gsm
	TEC Value	5.4KWh	5.8 KWh
Environment	Power Consumption in sleep mode	6W	4.45W
	Energy Star 2.0	No	Yes
Others	Size (W*D*H)	444*658*490mm	444*658*490mm
	HDD	Optional 80 GB	Standard 80 GB
	Operation Panel	4-line LCD	4-line LCD
	Max. Resolution	1,200 × 1,200 dpi	1,200 × 1,200 dpi
	ELP-NX	Optional	Standard

The specs are mostly the same as Z-P1.



User Maintenance Items – Same as Z-P1

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- PCDU – Black: 50k
- PCDU – Color: 50k
- Transfer unit (Image transfer belt unit, Paper Transfer Roller): 100k
- Waste Toner Bottle: 50k
- Fusing unit, (with 3 x Dust filter): 120k

12

These parts are replaced by the customer, if the customer has a user maintenance contract.



Service PM Items

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- Supply Items
 - PCDU – Black: 60k
 - Waste Toner Bottle: 50k
- Service Parts
 - PCDU – C: 60k
 - PCDU – M: 60k
 - PCDU – Y: 60k
 - Image Transfer Belt Unit: 180k
 - Paper Transfer Roller: 180k
 - Fusing Unit: 120k

13

These parts are replaced by the technician, if the customer has a meter charge contract.



■ Targets

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- Toner Yield: 15k (3k for the starter kit)
- APV: 3.2k prints/month
 - Max PV: 20k
 - Duty: 150k
- PM cycle (Meter charge contracts)
 - 50k (Waste toner bottle)
 - 60k (Other PM parts)
- Color ratio: 50%
- Machine Life: 1200k prints or 5 years, whichever comes first

14

This is the same as the Z-P1. Toner and PM kits are the same as the Z-P1.



Engine Details, Replacement and Adjustment

15

No additional notes

Summary

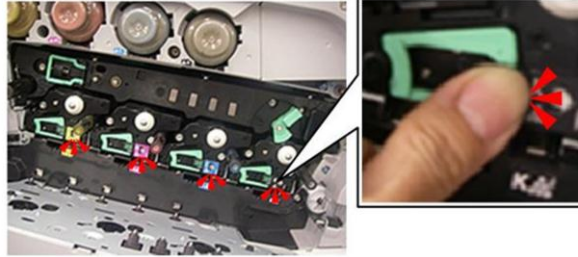
- Basically the same as Z-P1. The main differences are as follows.
 - Power switch: Changed to be similar to other recent models. So, when removing parts from the machine, you must turn off the power and disconnect the power cord.
 - Eco night sensor added
 - BB (Bridge Board) modified
 - A GW+ controller is used.
 - Controller options added: Similar to other recent models
 - The optional paper tray is the same as Z-P1.

No additional notes

■ Installing a PCDU - 1

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- Some new steps were added to the service manual.
- First of all, after inserting a PCDU, always push the PCDU lever in until you hear it click and lock.



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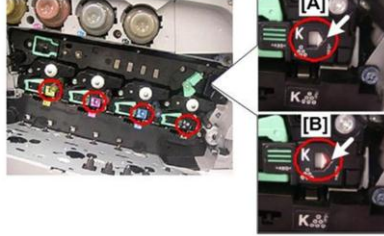
17

No additional notes

■ Installing a PCDU - 2

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- Check the five-sided window of each PCDU.
 - If the area inside the window is all white [A], the unit is installed correctly.
 - If you see any red color [B] inside the window, the unit is installed incorrectly.



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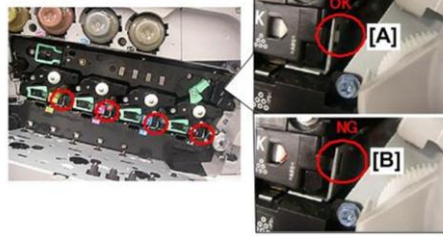
18

No additional notes

■ Installing a PCDU - 3

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- On each unit, check the slot and bracket alignment.
 - If you see the white lock tab inside its slot [A], the unit is installed correctly.
 - If you do not see the white tab inside the slot [B], the unit is installed incorrectly.



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19

No additional notes

■ Installing a PCDU - 4

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- Turn the ITB lock lever clockwise to lock it.



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20

No additional notes

■ Installing a PCDU - 5

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- Use both hands to close the drum securing plate [A].
- Turn the lock lever clockwise to lock it.



21

No additional notes

Controller Board NVRAMs

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- The NVRAMs [B] are a set and must always be removed together and installed on a new board at the correction locations.
 - 2M-2 is inserted into the connector labeled FRAM-2.
 - 2M-1 is inserted into the connector labeled FRAM-1.
 - The semi-circular notch of each NVRAM should be aligned with the white semi-circular notch below it as shown above at the dotted white lines.



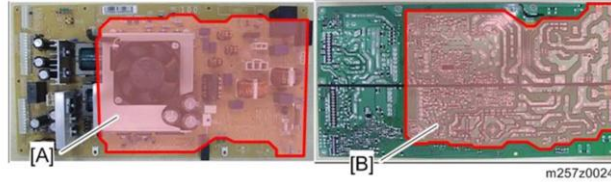
22

Failure to install the NVRAMs at the correct locations will cause the machine to issue SC195-00.

If the NVRAMs are installed incorrectly, this could cause the board and NVRAMs to short out and cause permanent damage.

■ Handling the PSU

- The PSU still has residual electrical charge on some parts even if the main power is turned off. Make sure that the power plug is unplugged when you maintain or service the PSU.
- Never touch the areas [A] [B] shown below with bare hands when working with the PSU.



23

No additional notes



The End