



Dell 3130cn **Service Manual**

21 Aug 2009

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Version record

Refer to the portion indicated by change bar in each section.

Also refer to the reasons in table below.

Version	Issue date	Note
1 st	February 15, 2008	1 st issued
2 nd	March 27, 2008	<p>2nd version issued <u>Section 1, FIP</u> 1. Rewrote contents 1.1 to 1.5 2.3 terminological corrections etc. 3.1 additional flows and terminological correction etc. Flows 1 to 5/8 to 10/12 to 20/22 to 23/25/27 to 29/31 to 32/34 to 35/38 to 39/45 to 58/60 to 62/64/66 to 69/71 to 90/92 to 98 corrected FIP-1.1 to 1.4/1.9 to 1.10/1.12 to 1.13/1.19 to 1.20/1.35/1.45/1.50/1.71/1.73 corrected Flows67 to 69 added</p> <p>4.1 illustration changed and table changed 4.3 terminological corrections etc. FIP-1.P1 to 1.P15 terminological corrected FIP-1.N1/1.N3 terminological corrected</p>
3 rd	May 30, 2008	<p>3rd version issued <u>Section 1, FIP</u> 1.5 Consumables life information added. 2.3 Expression of an error message has been improved. etc. 3.1 Supplementary explanation etc. was added. Flows11/FIP1.11 deleted. Flows22/32/57/61 supplementary sentence added. Flows5/8/23/24/45/63 to 69 flows improved. Flows30/46 to 52/58/60/62/75/76 Supplementary sentence added. And flow improved. Flows78 to 92 illustrations added. And supplementary sentence added.</p> <p><u>Section 2, Operation of Diagnostic</u> 1.2/2.2 Name corrected. 4.1.2 /4.1.3/6.2/6.3 Illustration changed etc. 4.5.13 /6.9.2 Parameter value corrected etc. 5./ 6. Name corrected. 5.3 PC screen changed etc. 5.4 Name corrected etc. 5.6 Menu corrected. 6.1 Explanation of IOT Test added. 6.6 Clerical error corrected. 6.7 Clerical error corrected.</p>

		<p>6.9.9 Counter value corrected.</p> <p><u>Section 3, Removal and Replacement Procedure</u> 1.1 Illustration changed. 1.2 Illustration changed. 2. Illustration changed etc. Removal 1/3~8/ 10~15/17/ 20~26 / 28/ 31/ 33~34/ 37~38/40~44/47~50 Illustration changed etc. Removal 36 Procedure changed. /Illustration changed. 3. Illustration changed. Replacement 1~4/6~7/10~11/13/16/18/20~ 24 /27/29~34/36~41/43/46~50 Illustration changed etc. Replacement 8 Procedure changed. / Illustration changed.</p> <p><u>Section 4, Plug/Jack(P/J) Connector Locations</u> 1.2 Illustration changed.</p> <p><u>Section 5, Parts List</u> 1.2 Illustration changed. PL1.1/ PL2.1/ PL2.2/ PL3.2 / PL7.1/ PL8.1/ PL12.3 Illustration changed. PL1.2/ PL3.1/ PL5.1/ PL6.1/ PL9.1/ PL10.1 List changed/ Illustration changed. PL12.2 Clerical error corrected.</p> <p><u>Section 6, Principles of Operation</u> 1.1 Illustration changed. 1.2 Illustration changed. 1.3.6 Neutralization deleted. 1.3.6 Paragraph number changed. 3.1.2/ 3.1.4 / 3.1.5 / 3.2.1 / 3.2.2 / 3.3.1 / 3.3.2 / 3.4.1 / 3.4.2 / 3.5.2 / 3.6.1 / 3.6.2 / 3.7.2 / 3.8.2 6.1 / 6.4 Illustration changed.</p> <p><u>Section 7, Wiring Diagrams and Signal information</u> 2.2 Name corrected. 2 MSI&REGI Connector pin number corrected. 3 DRIVE Diagrams Clerical error corrected.</p> <p><u>Section 8, Printer Specifications</u> 1.1 / 3.1 / 3.4 / 3.5 / 5.3 Illustration changed. 7.2/9.1/10.1.4/10.2.2/10.5.3/10.8.1 corrected. 9.1 Option added. 10.1.4 "Supported Client" added. 10.2.1 "FTP Protocol" deleted. 10.2.2 Supplementary sentence added. 10.5.3/10.8.1 Clerical error corrected.</p>
4th	December 17, 2008	4th version issued Section 1, FIP 3.1 The procedure was added. Flows 46 to 49/79

		4.1 Flow changed
4.1th	April 08, 2009	4.1th version issued Section 1, FIP . Flows25-1and Flows99 are added. (Change by error code (016-340).)
4.2th	August 12, 2009	4.2th version issued Section 1, FIP . Flows25/FIP1.25: The flow of 016-317 and 016-340 was corrected. Flows31/FIP1.31: The up-loading of Firmware was added.
4.3th	August 21, 2009	4.3th version issued Section 1, FIP . Flows25/FIP1.25: The download procedure of FW by the download mode was added. (Only 016-317) Flows25-1:NEW The download procedure of FW by the download mode was newly added. (016-340) Flows31/FIP1.31: The download procedure of FW by the download mode was added. (016-370)

Cautions

Operation contents of this document may be subject to modification without notice.

Ö^||Á&È will not assume responsibility for accidental or incidental damages, or editorial errors or omissions in this manual, the issue of this manual, or the use of this manual.

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1. About this manual

This manual is a standard service manual of Q&E containing information and maintenance of this laser printer (standard specifications).

2. Marks giving caution

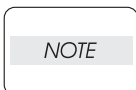
Maintenance operations requiring special cautions or additional information regarding descriptions in this manual are presented as "Warning," "Caution," or "Note," depending on their nature.



If instructions are not observed, death or serious injury may result.



If instructions are not observed, injuries to workers or physical damage to assets (including this laser printer) may result.



Essentials for procedures, steps, rules, and others.

Reference *Incidental information to descriptions.*

3. Related documents

- Instruction manuals (standard manuals)

Describe the operation and handling of this laser printer.

- Performance specifications

Describe in detail various specifications of this laser printer.

(In the event of a discrepancy between this manual and the performance specifications, the performance specifications take precedence.)

- Spare parts list

Information on maintenance parts (spare parts) for this laser printer.

4. Safety

To prevent possible accidents during maintenance operation, you should observe strictly the "Warning" and "Caution" information in this manual.

Avoid dangerous operations and operations out of the scope of this manual.

Various processes not covered by this manual may be required in actual operations, and should be performed carefully, always giving attention to safety.

4.1 Power source

Keep the power plug disconnected during the maintenance operation to prevent electric shock, burns and other damages.

If the power supply should be kept connected to measure voltage or for other similar reasons, take sufficient care to prevent electric shock, by following the procedures in this manual.



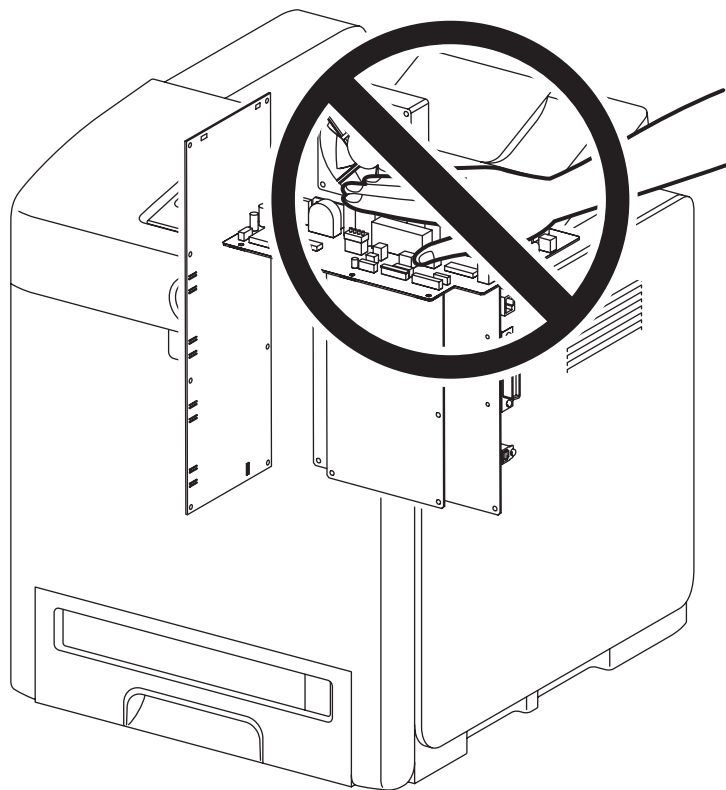
While the printer is on, never touch live parts if not required.



Power is supplied to the power switch / inlet even while the printer is off. Never touch its live components.



Do not touch live parts unless otherwise specified.



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4.2 Driving units

When servicing gears or other driving units, be sure to turn off the power switch and unplug the power cord. Drive them manually when required.



Do not do the print work removing the cover of the printer to confirm the operation of driving part.

4.3 High-temperature units

When servicing high-temperature units (securing unit, etc.), be sure to turn them off to prevent burns, injuries and other troubles. Remove the power plug and start service processes after they have cooled down sufficiently.

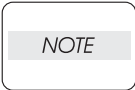


Because high-temperature units are still hot after they complete an operation, wait at least 40 minutes before starting maintenance service.

4.4 Laser beams



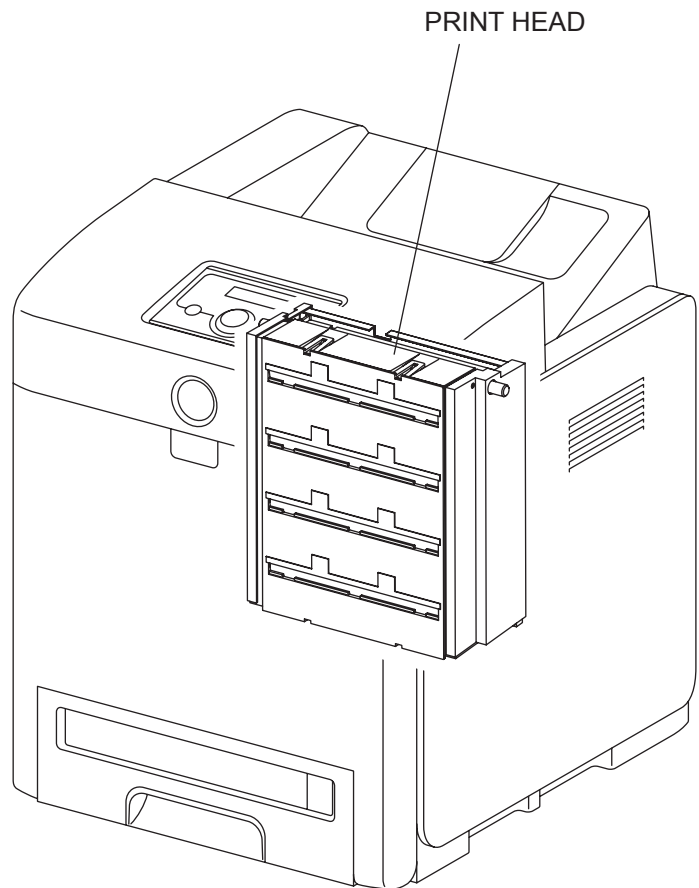
- *If your eyes are exposed to laser beams, you may lose your eyesight.*
- *Never open the cover if the warning label for laser beams is attached there.*
- *Before disassembling and reassembling this laser printer, be sure to turn it OFF.*
- *When servicing this laser printer while it is running, be sure to follow the procedures specified in this manual.*
- *You should be well aware that the laser beams are capable of injuring you and other people near the printer.*



Laser beams have features as follows:

- Frequencies are smaller in width than other beams (sun and electric bulbs) and phases are uniform so that high monochromatic and convergence performance can be obtained and thin beams of light can reach places at a long distance.
- Being highly converged, the laser beams exert a heating action that may be harmful to human body.

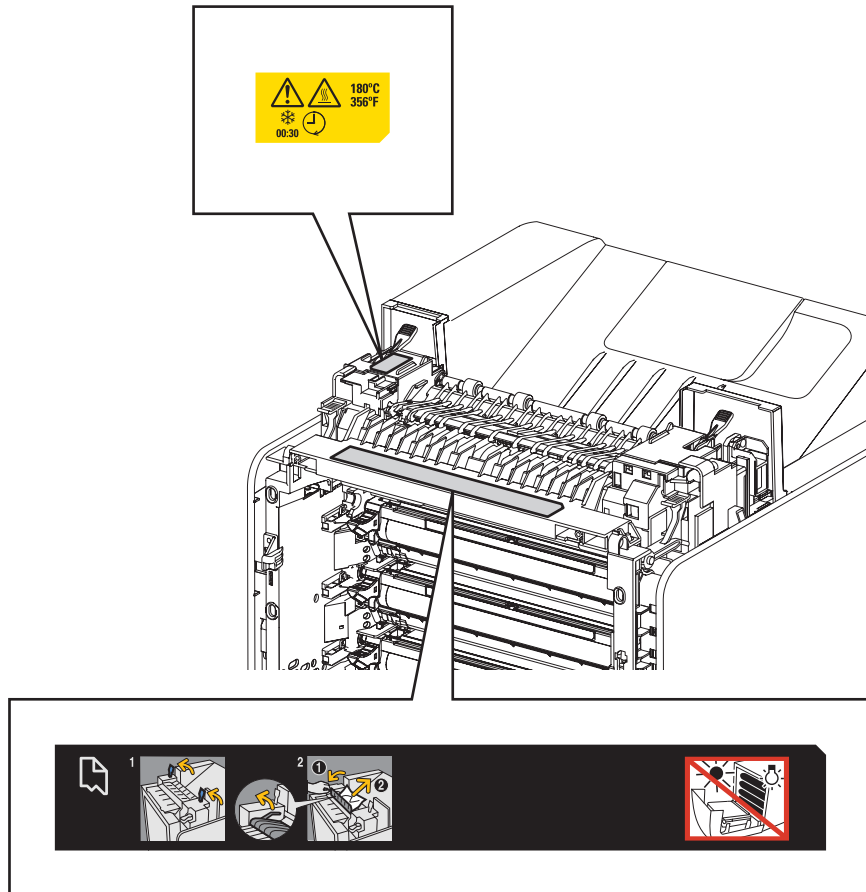
Reference: *The laser beams of this laser printer are invisible rays.*



4.5 Warning/caution labels

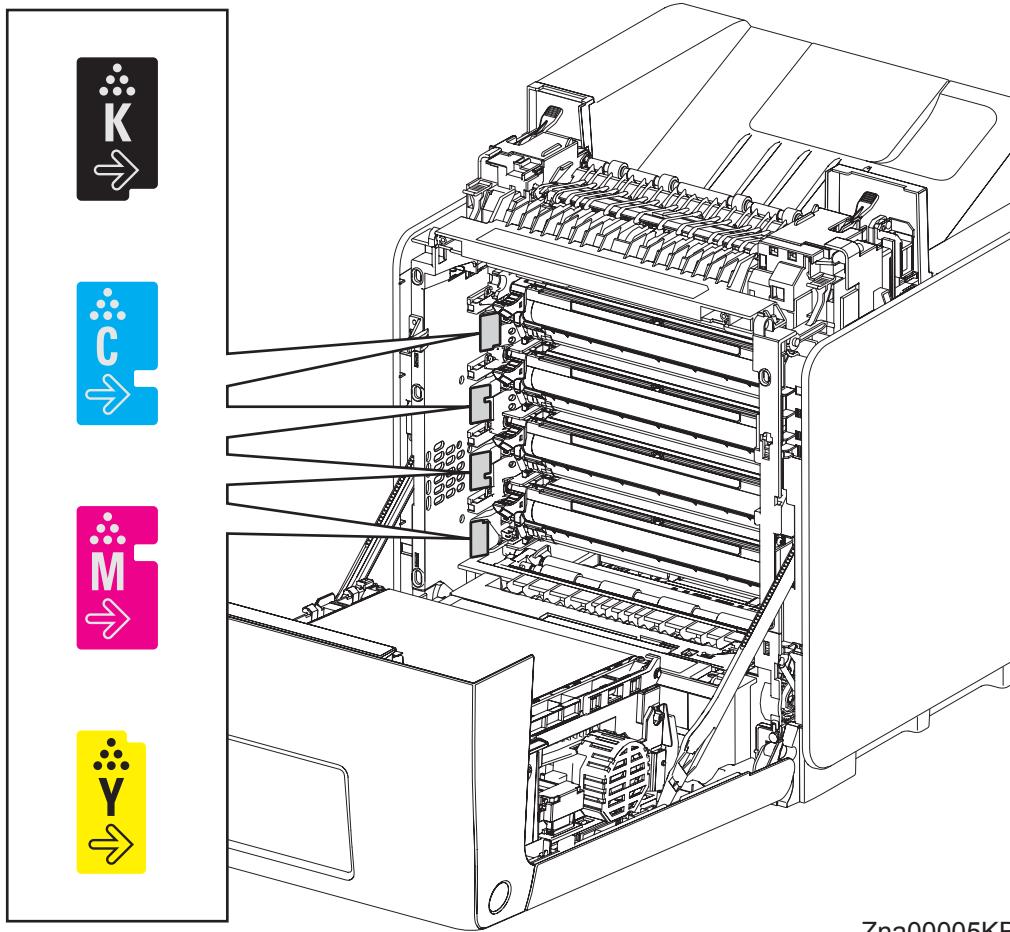
Warning labels and caution labels are attached to this laser printer to prevent accidents. Check those labels for their peeling or stains when servicing the printer.

4.5.1 Caution label for high-temperature units



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4.5.2 Caution label for toner cartridges



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Dell™ 3130cn Ship-with Black Toner Cartridge Order Supplies at : www.dell.com/supplies
 Black Toner Cartridge / Cartridge de toner noir / Cartuccia del toner color Nero
 Tonerkassette schwarz / Cartuchos de toner negro / Zwarto tonerassette / ブラックトナーカートリッジ

C

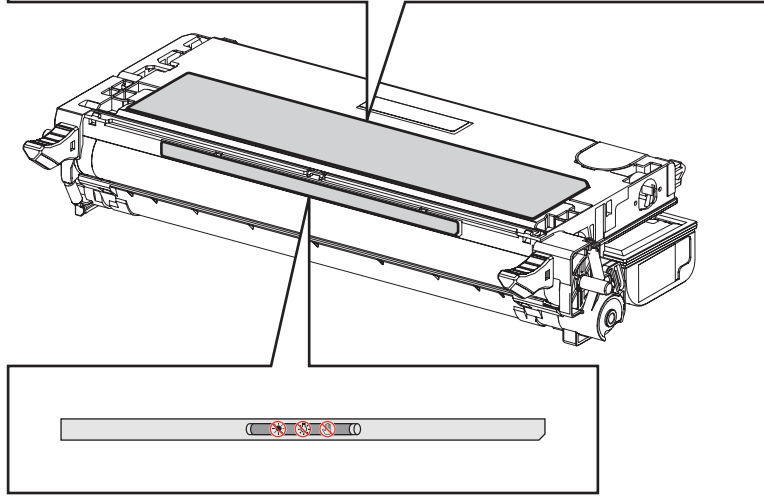
Dell™ 3130cn Ship-with Cyan Toner Cartridge Order Supplies at : www.dell.com/supplies
 Cyan Toner Cartridge / Cartridge de toner cyaan / Cartuccia del toner color Ciano
 Tonerkassette cyaan / Cartuchos de toner cian / Cyan tonerassette / シアントナーカートリッジ

M

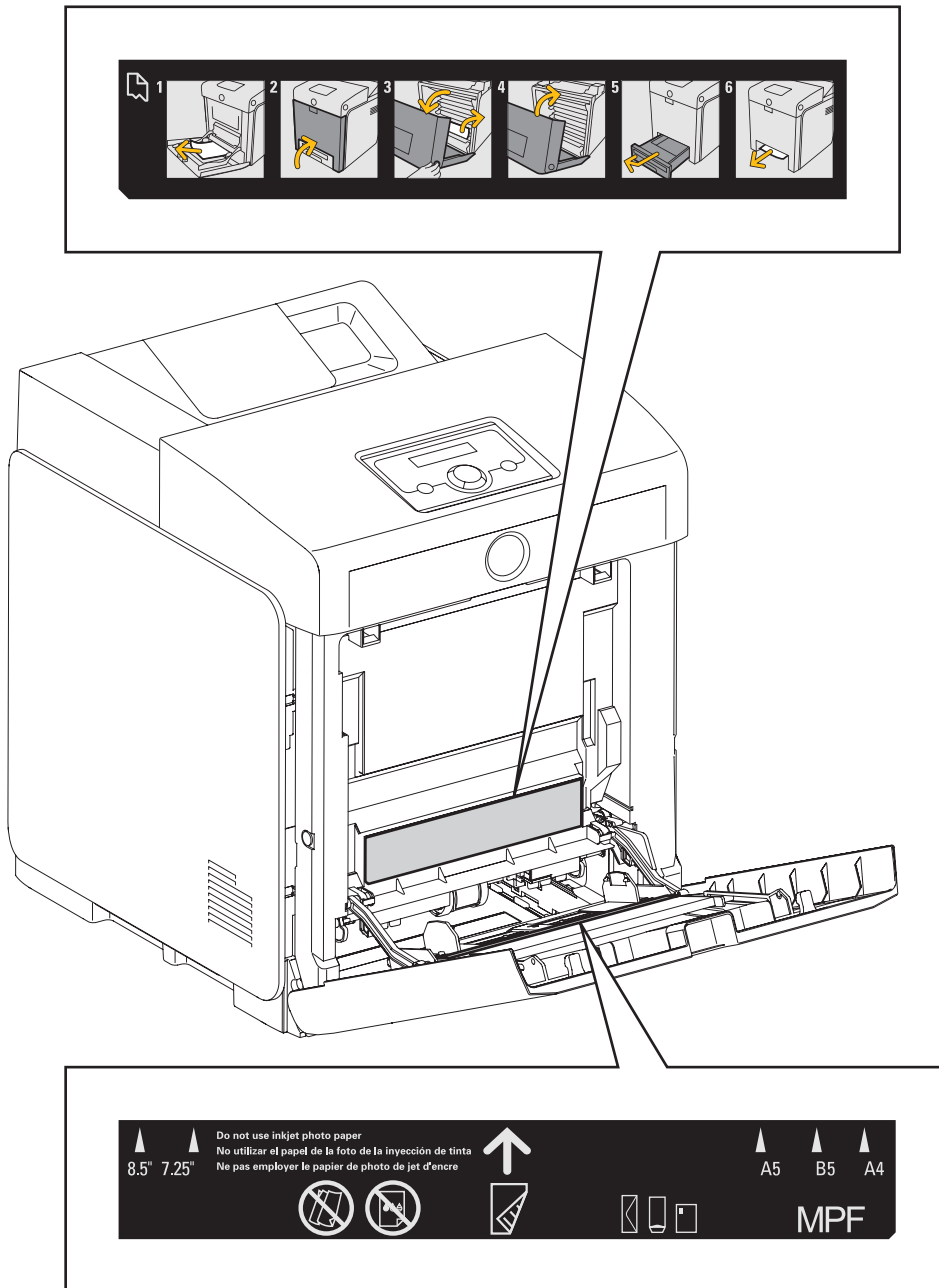
Dell™ 3130cn Ship-with Magenta Toner Cartridge Order Supplies at : www.dell.com/supplies
 Magenta Toner Cartridge / Cartridge de toner magenta / Cartuccia del toner color
 Magenta / Tonerkassette magenta / Cartuchos de toner magenta / Magenta tonerassette / マゼンタトナーカートリッジ

Y

Dell™ 3130cn Ship-with Yellow Toner Cartridge Order Supplies at : www.dell.com/supplies
 Yellow Toner Cartridge / Cartridge de toner jaune / Cartuccia del toner color Giallo
 Tonerkassette gelb / Cartuchos de toner amarillo / Giallo tonerassette / イエロートナーカートリッジ

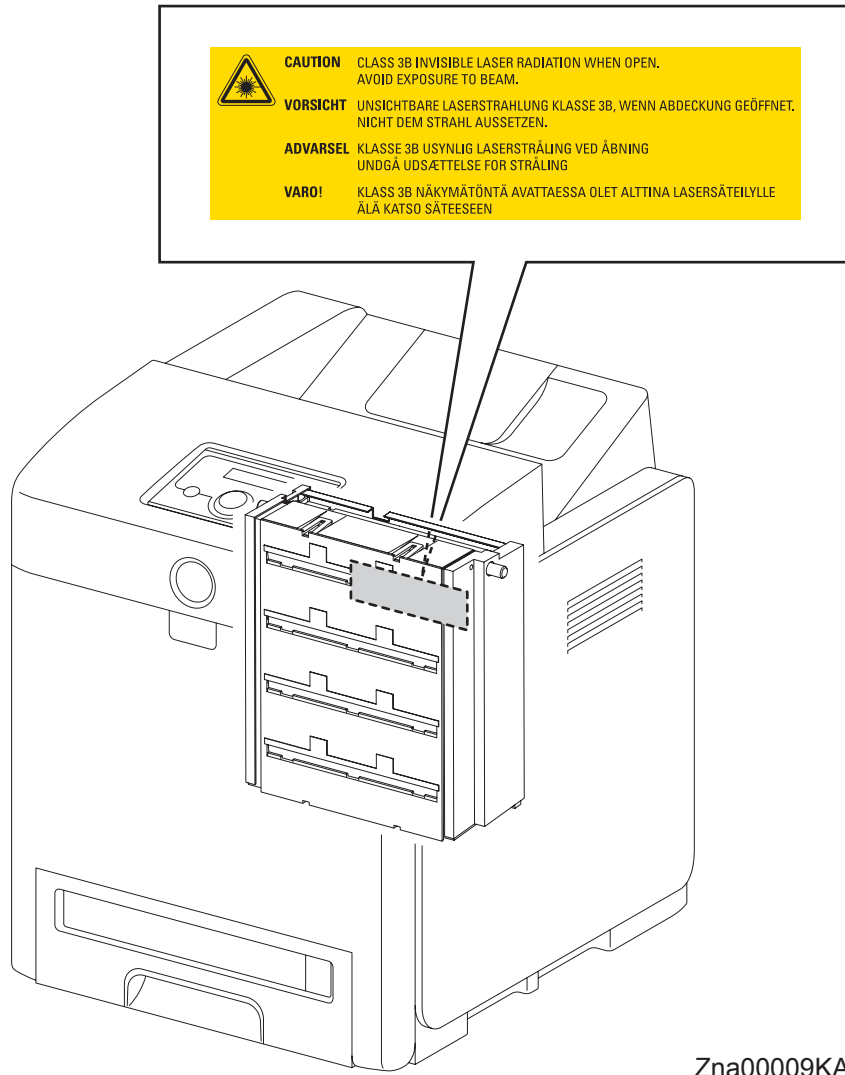


4.5.3 Caution label for MPF

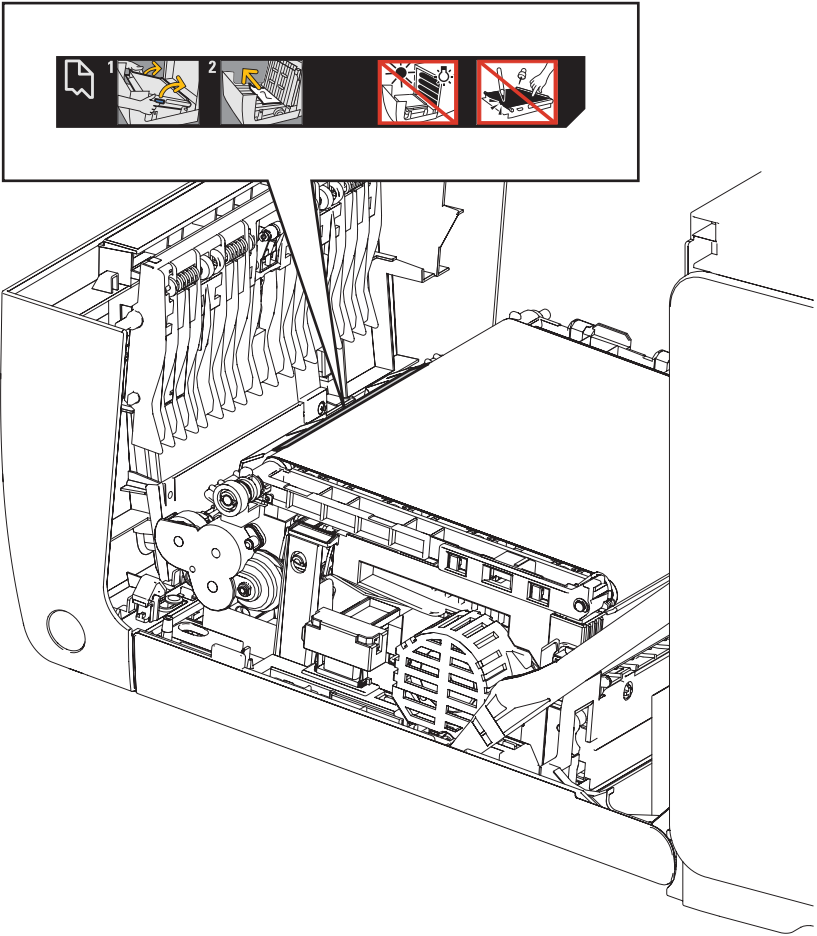


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4.5.4 Caution label for print head

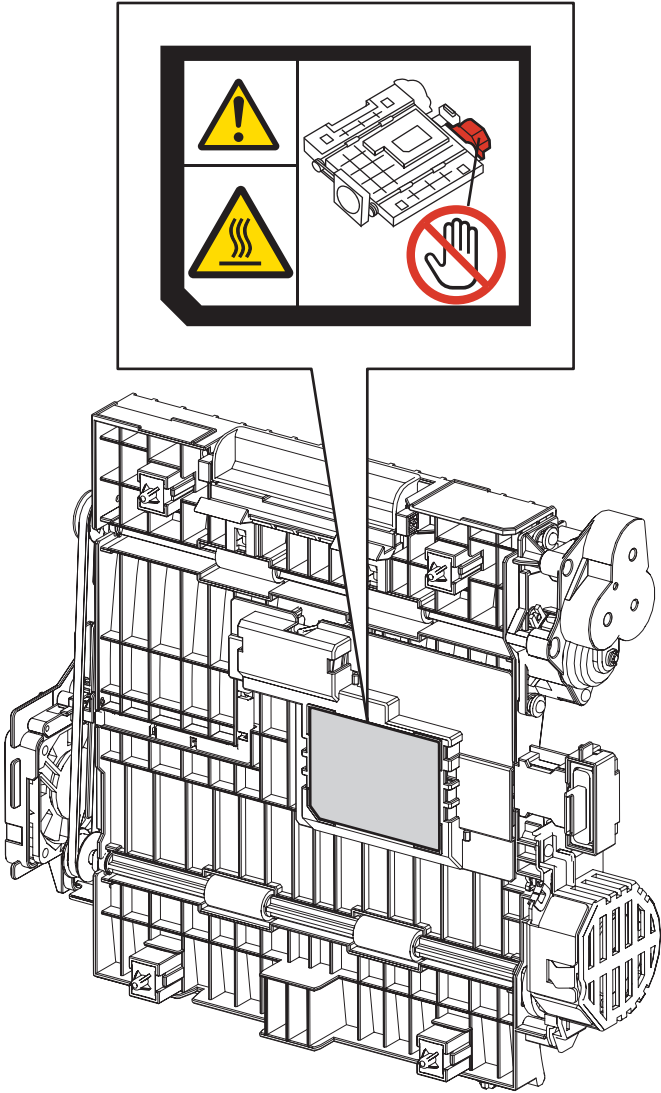


4.5.5 Caution label for transfer belt



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4.5.6 Caution label for duplex



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Unpacking the Printer



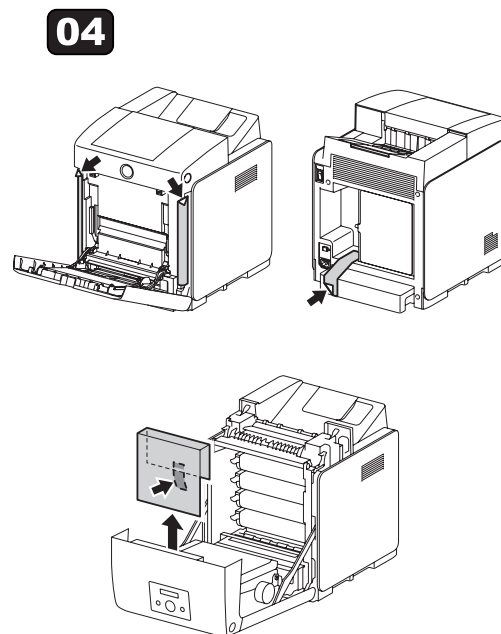
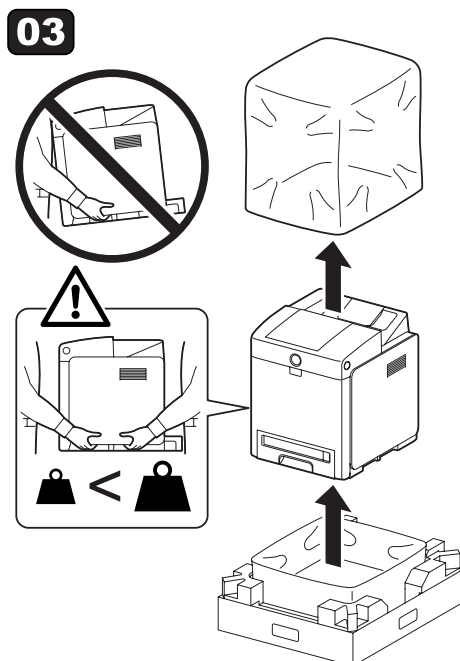
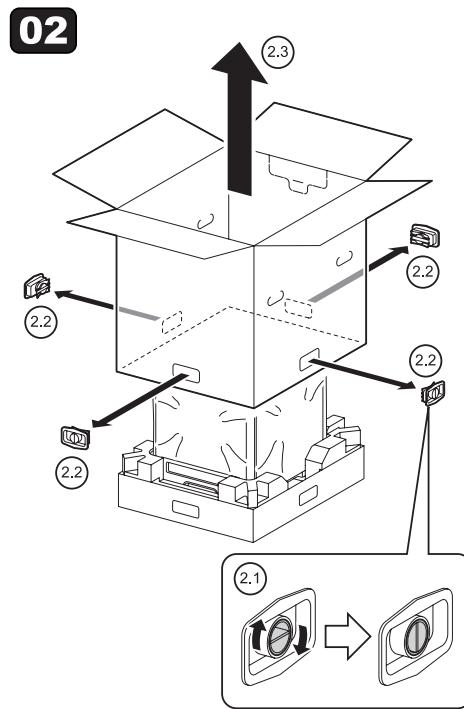
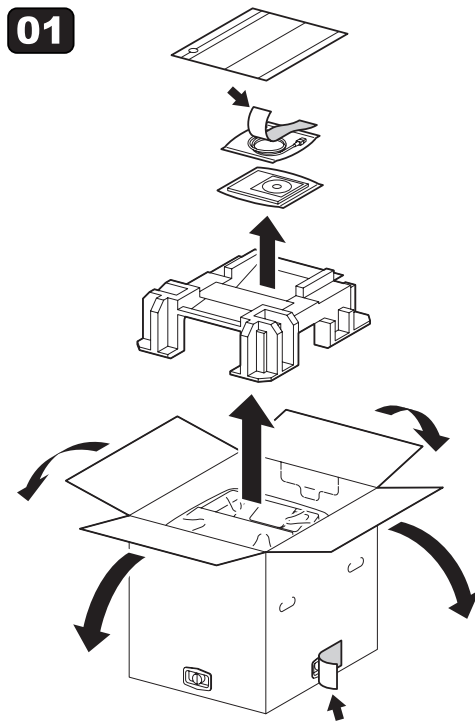
The printer must be carried horizontally with two or more persons.



Take extreme care to avoid personal injuries.

Check visually the printer for evidence of any damages.

Peel all tapes off the printer.



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