OKI
PRINTING SOLUTIONS

MB260MFP
Maintenance Guide

032007A

MAINTENANCE GUIDE

CONTENTS

1. SCANNER

1.1 PREVENTIVE MAINTENANCE

To keep the terminal in good working condition, the following operations should be carried out regularly:

- Cleaning the CIS window of the flatbed scanner.
- Cleaning the front panel keys and the printer covers.
- Printer maintenance (refer to chapter **Laser printer**, page 25).
- Cleaning the printer with a soft cloth, **never use abrasives or detergents**.

1.1.1 CIS AND FLATBED WINDOW

1 - Set the On/Off switch to Off (position 0).

2 - Open the flatbed scanner cover.

3 - Clean the CIS window with a lint-free cloth moistened with isopropyl alcohol or use anti-static paper used for cleaning optic glass.

Recommended interval: depending on utilization; it is advisable to make a local copy to check if the window is clean.

1.1.2 FRONT PANEL KEYS AND COVERS

1.1.2.1 Cleaning the front panel keys

1 - Set the On/off switch to Off (position O).

2 - Clean the top of the front panel and the keys with a lint-free cloth moistened with isopropyl alcohol or a spray-on cleaning product.

3 - Leave the product on for a few seconds before wiping it off.

Recommended interval: to be defined depending on utilization.

1.1.2.2 Cleaning the covers

It is advisable to clean all the covers during a maintenance visit.

1 - Set the On/Off switch to Off (position O).

2 - Clean the external areas of the covers with a lint-free cloth moistened with isopropyl alcohol or a spray-on cleaning product.

3 - Leave the product on for a few seconds before wiping it off.

1.2 MAINTENANCE-TUNING

1.2.1 SUPPLY VOLTAGES: CONNECTIONS BETWEEN THE POWER SUPPLY BOARD AND CPU BOARD

CPU board pin CN° (CN11)	Values	Function
8-9	+ 5 V	5V Supply
4-6-7-10-11	GND	Ground
5-12-13	+ 24 V	24V Supply

Remark(s) : The mains input of the power supply is protected by a fuse.

1.2.2 CHECKING THE QUALITY OF PRINTS AND TUNING THE SCANNER

To check or improve the quality of prints, you should first tune the scanner. Follow this procedure:

1 - Press ▼, enter ***** then **A** on the keyboard and confirm with **OK**.
The terminal reboots.

2 - Start making copies of documents on the CIS window of the flatbed scanner and check the quality of the copies.

If the problem persists and if it is related to the scanner:

- Repeat the tuning procedure (step **1**).

If the problem persists and if it is related to the printer (the scanner still provides unsatisfactory results):

1 - Press ▼ then enter **56** on the keyboard. The terminal prints the list of printer tunings.

2 - Check the printer's printing and copying parameters.

3 - Check the consumable.

1.3 DISASSEMBLY/ASSEMBLY WORKSHEETS

Attention - BEFORE DISASSEMBLING/ASSEMBLING, MAKE SURE THE TERMINAL IS SWITCHED OFF.
DISCONNECT ALL CORDS AT THE FRONT AND BACK OF THE TERMINAL (USB AND POWER SUPPLY).

This device complies with IEC60825-1:1993+A1:1997+A2:2001 standard, is classified as laser class 1 product and contains one class 3B laser diode, 10.72 mW max, 770-795 nm and other class 1 LEDs (280 µW at 639 nm).

The maximum breakdown output power of radiation of laser diode is 50 mW at 770-795 nm.

Remark(s) : Depending on the model, remove the front panel.

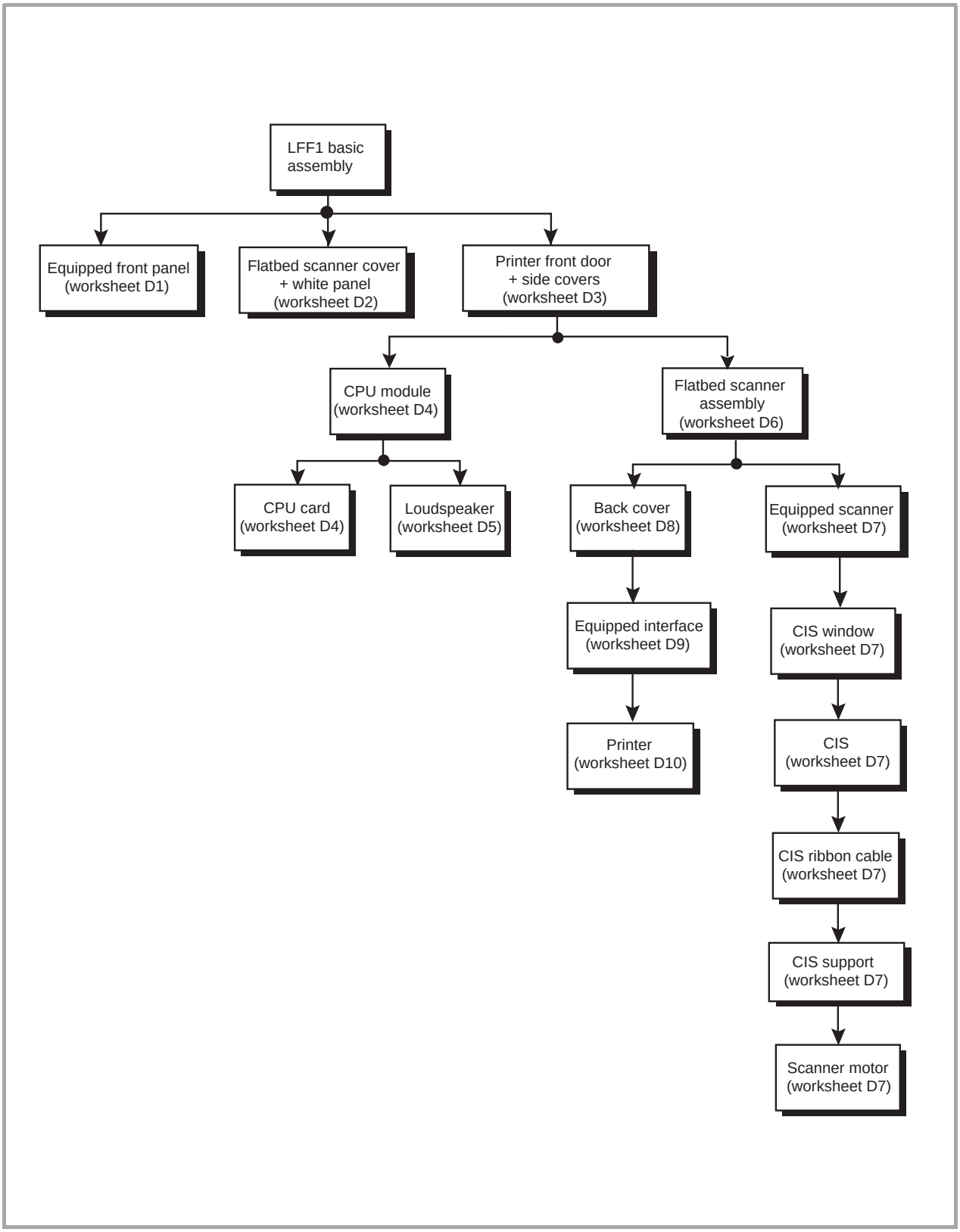
1.3.1 LIST OF TOOLS

- Cross-threaded (Philips) screwdriver
- Flat screwdriver (medium size)

1.3.2 LIST OF WORKSHEETS

- D1= Equiped front panel
- D2= Flatbed Scanner cover and white panel
- D3= Printer front door and side covers
- D4= CPU Module
- D5= Loud speaker
- D6= Flatbed scanner assembly
- D7= Equiped scanner - Scanner window frame - CIS - CIS ribbon cable - CIS support - Scanner motor
- D8= Back cover
- D9= Equiped Interface
- D10= Printer

1.3.3 WORKSHEET CHART



D1	**OBJECT :**EQUIPED FRONT PANEL

Requirements

- None.

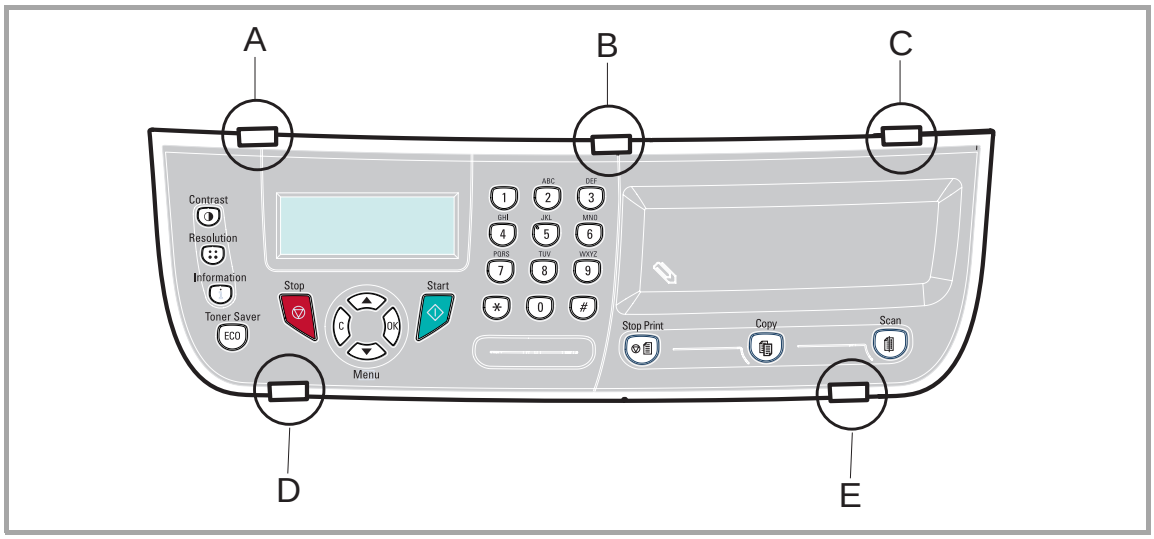
Preliminary steps

- None.

Disassembly

1 - Stand in front of the terminal.

2 - Unlock the three clips of the front panel (**A**, **B** and **C**).



3 - Pull the panel towards yourself to release it from the two bottom slots (**D** and **E**).

4 - Disconnect the panel ribbon cable from the panel card connector.

5 - Disassemble the equiped front panel.

Assembly

1 - Unpack and check all new components.

2 - Connect the panel ribbon cable to the panel card connector.

3 - Position the panel by inserting the two lower bearings (**D** and **E**) into their slots then clip the upper part into place.

D2	**OBJECT :**FLATBED SCANNER COVER AND WHITE PANEL

Requirements

- None.

Preliminary steps

- None.

Disassembly

1 - Stand in front of the terminal and open the flatbed scanner cover.

2 - Pull out the white panel located inside the flatbed scanner cover.

3 - Lift the flatbed scanner cover to extract the two hinges from their slots.

4 - Remove the flatbed scanner cover.

Assembly

1 - Unpack and check all new components.

2 - Assemble the flatbed scanner cover by inserting the two hinges into their slots.

3 - Stick the white panel into place.

D3	**OBJECT :**PRINTER FRONT DOOR AND SIDE COVERS

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

Preliminary steps

- None.

Disassembly

Printer front door

1 - Stand in front of the terminal.

2 - Push the left and right side of the printer front door and simultaneously pull it towards yourself.

3 - Move the arms away from each other and remove the printer front door.

Side covers

1 - Open the printer's paper tray.

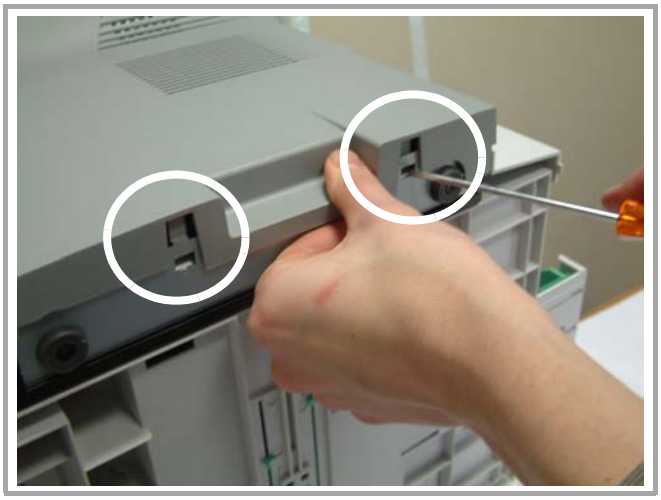
2 - Unscrew the two mounting screws on the front and back of the side covers.

Front mounting screw of the right hand side cover

Back mounting screw of the right-hand side cover

D3	**SUBJECT:** PRINTER FRONT DOOR AND SIDE COVERS *(CONTINUED)*

3 - Using a flat screwdriver, unscrew the side covers from their slots located under the terminal.



4 - Unclip the side covers from the top slots located at the back of the terminal and pivot them towards yourself to remove them.

5 -Remove the side covers.

Assembly

1 - Unpack and check all new components.

2 - Assemble the covers by reversing the steps for the disassembly procedure.

3 - Assemble the printer front door by reversing the steps for the disassembly procedure.

D4	**OBJECT :**CPU MODULE

Requirements

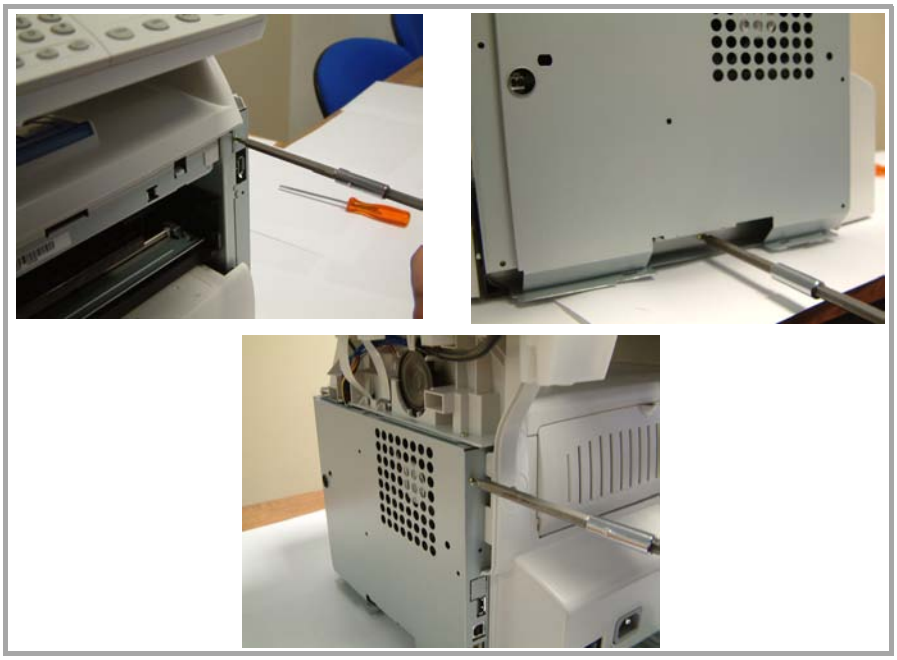
- Cross-threaded (Philips) screwdriver.

Preliminary steps

- Disassembling the printer front door and the right side cover (see worksheet D3).

Disassembly

1 - Unscrew the three mounting screws of the CPU board armour plate.



2 - Pull the CPU board armour plate towards yourself and remove it.

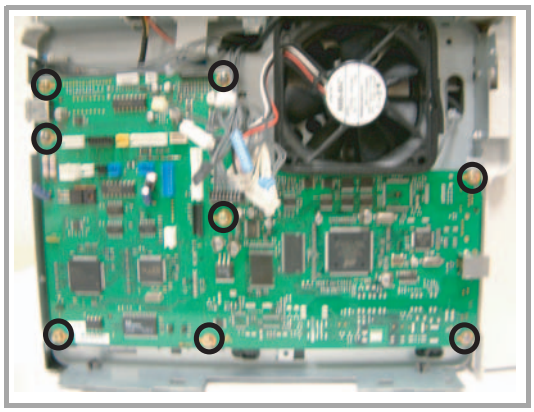
3 - Unscrew the mounting screw of the CPU card ground connector and disconnect it.

4 - Disconnect all incoming cords and leads from the CPU module connectors.

Attention - MEMORIZE ALL CONNECTIONS FOR REASSEMBLY.

D4	**OBJECT :**CPU MODULE *(CONTINUED)*

5 - Unscrew the eight mounting screws and remove the CPU board.



Assembly

1 - Unpack and check all new components.

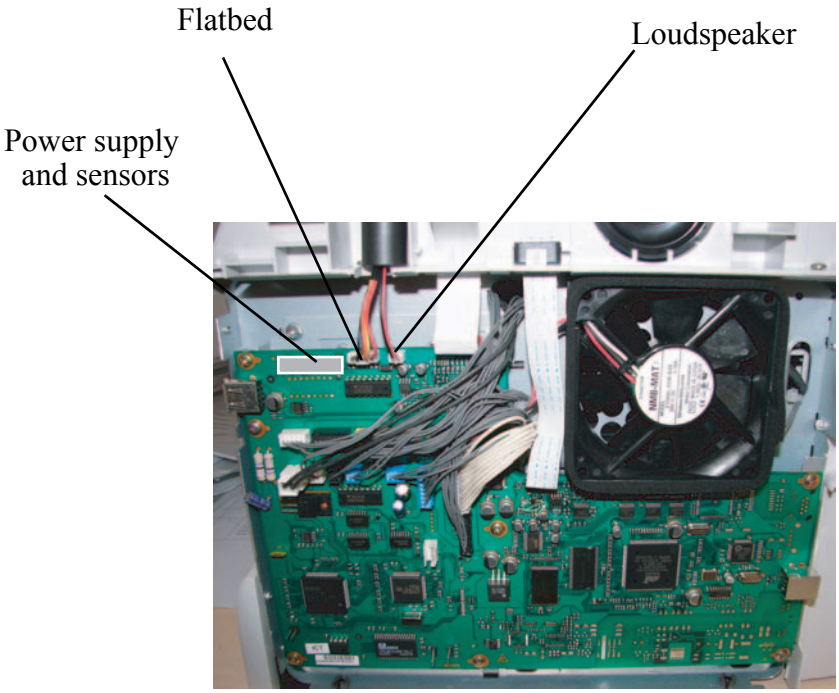
2 - Place the CPU board in the rack, screw in and tighten the eight mounting screws.

3 - Connect all the cords and leads to their corresponding CPU board connectors.

4 - Position and screw the ground connector to the CPU card.

5 - Position the CPU board armour plate, screw and tighten the three mounting screws.

6 - Position the right-hand side cover and the front door (see Worksheet D3).



D5	**OBJECT :** LOUD SPEAKER

Requirements

- None.

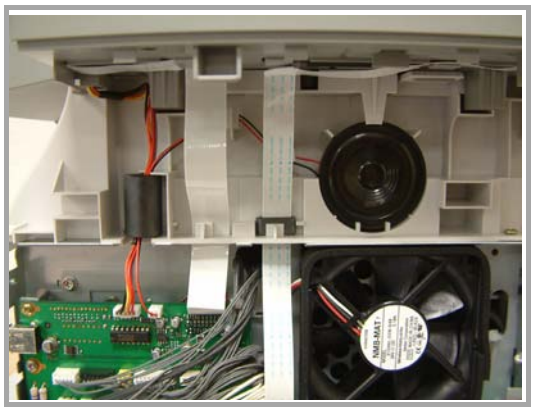
Preliminary steps

- Disassembling the front door and the right-hand side cover (see Worksheet D3).
- Disassembling the CPU armour plate (see Worksheet D5).

Disassembly

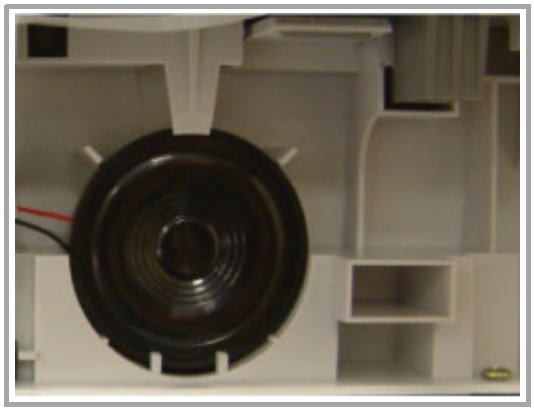
1 - Disconnect the loudspeaker connector from the CPU board.

2 - Remove the loudspeaker connector from its ferrite tube and cable guide.



Attention - MEMORIZE THE CABLE GUIDE FOR REASSEMBLY.

3 - Press the top clip inwards until it unclips and pull the loudspeaker towards yourself.



4 - Disassemble the loudspeaker.

Assembly

1 - Unpack and check all new components.

2 - Position the loudspeaker in front of its slot and insert the lower part.

3 - Press the top part of the loudspeaker until it clicks into place.

4 - Place the loudspeaker connector into its cable guide, do not forget the ferrite tube.

5 - Connect the loudspeaker connector to the CPU board.

6 - Put the CPU board armour plate into place (see Worksheet D5).

7 - Put the right-hand side cover and the front door into place (see Worksheet D3).

D6	**OBJECT :**FLATBED SCANNER ASSEMBLY

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

Preliminary steps

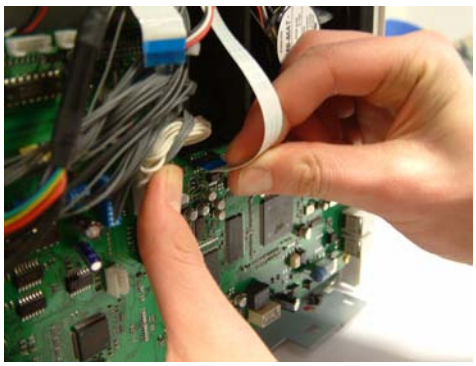
- Disassemble the flatbed scanner cover (see Worksheet D2).
- Disassemble the front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).

Disassembly

1 - Disconnect the scanner connector from the CPU board and remove it from its ferrite tube and cable guide.

2 - Disconnect the front panel ribbon cable and the CIS ribbon cable from the CPU board.

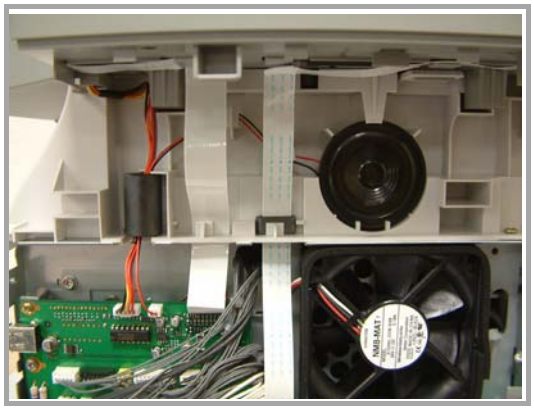
Panel ribbon connection



CIS ribbon connection

Attention - MEMORIZE THE CONNECTIONS FOR REASSEMBLY.

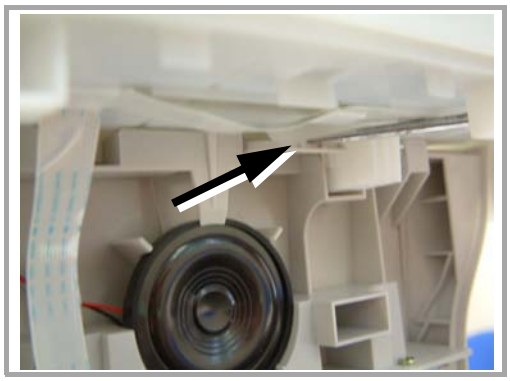
3 - Remove the front panel and CIS ribbon cables from their cable guide.



Attention - MEMORIZE THE CONNECTIONS FOR REASSEMBLY.

D6	**OBJECT :**FLATBED SCANNER ASSEMBLY *(CONTINUED)*

4 - Unlock the assembled flatbed scanner with a flat screwdriver and pull it towards yourself.



5 - Lift the assembled flatbed scanner and disassemble it.

Assembly

1 - Unpack and check all new components.

2 - Stand in front of the terminal.

3 - Position the assembled flatbed scanner on the equiped printer and slide it towards the left until it clicks into place.

4 - Place the front panel and CIS ribbon cables into their cable guide.

5 - Connect the front panel and CIS ribbon cables to the CPU board.

6 - Connect the scanner connector to the CPU board, do not forget the ferrite tube.

7 - Position the CPU board armour plate (see Worksheet D4).

8 - Position the side covers and the printer front door (see Worksheet D3).

9 - Position the ADF scanner cover (see Worksheet D2).

D7	**OBJECT :**EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE - CIS SUPPORT - SCANNER MOTOR

Requirements

- Cross-threaded (Philips) screwdriver.
- Flat screwdriver.

Preliminary steps

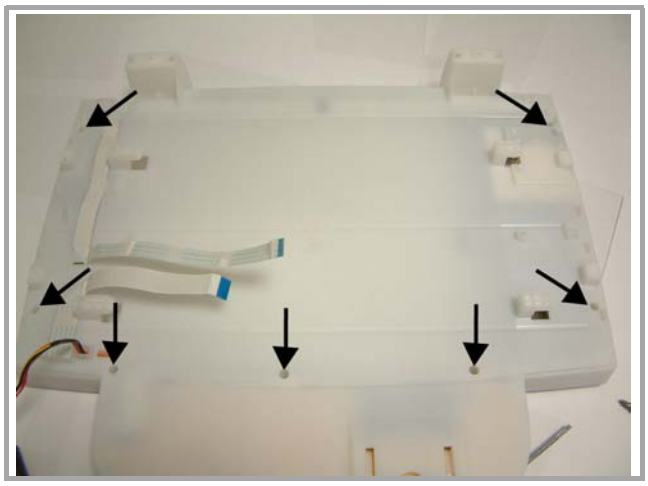
- Disassemble the scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the assembled flatbed scanner (see Worksheet D6).

Disassembly

- Scanner window frame

1 - Take the assembled flatbed scanner and turn it upside down.

2 - Unscrew the seven mounting screws at the back of the equiped scanner and turn it upside down.

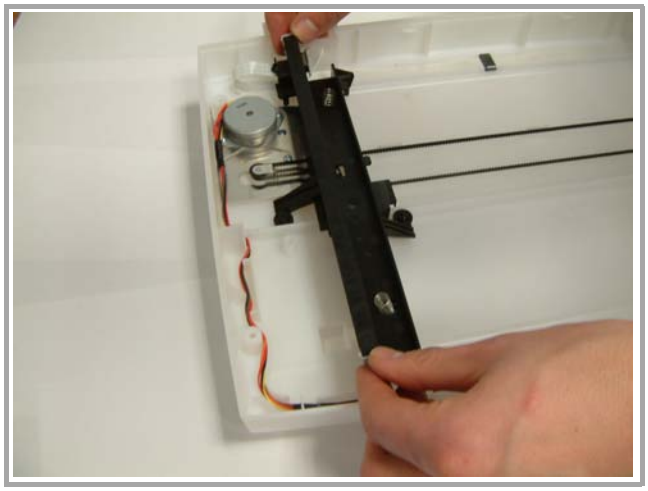


3 - Lift the front part of the scanner window panel and disassemble it.

D7	**OBJECT :**EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE - CIS SUPPORT - SCANNER MOTOR

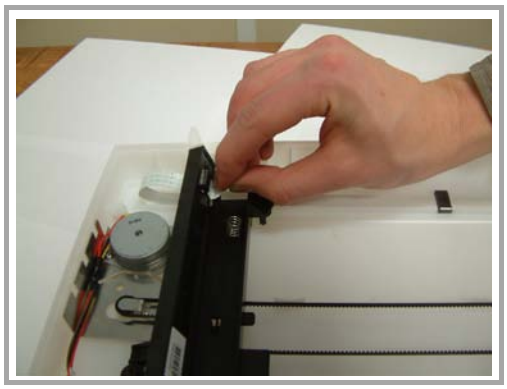
- CIS

1 - Lift the CIS backwards.



2 - Disconnect the CIS ribbon cable and disassemble it from its two side slots.

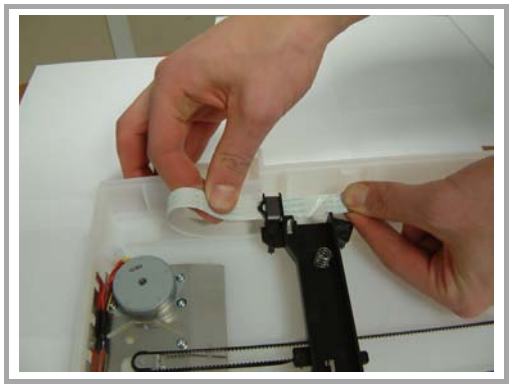
Attention - KEEP THE CIS SUPPORT SPRINGS AND SLIDES.



3 - Disassemble the CIS.

- CIS ribbon cable

1 - Unfold the end of the CIS ribbon cable and remove it from its slot.



2 - Slide the CIS ribbon cable out of its ferrite tube which is fixed to the CIS panel and remove it from the scanner.

3 - Remove the CIS ribbon cable from its cable guides located above and below the scanner bottom then slide it to extract it from the scanner bottom.

Attention - MEMORIZE THE CABLE GUIDE FOR REASSEMBLY.

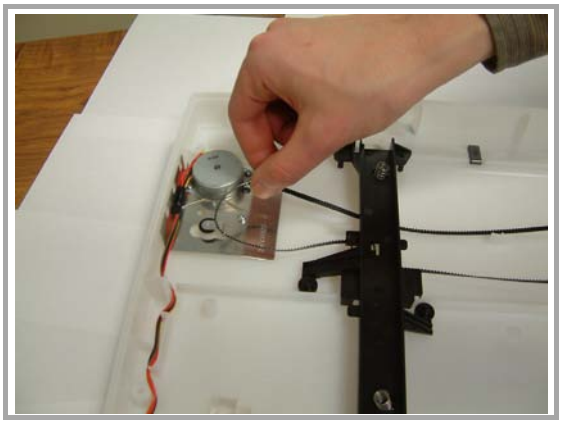
D7	**OBJECT :**EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE - CIS SUPPORT - SCANNER MOTOR

4 - Disasssemble the CIS ribbon cable.

- CIS support

1 - Lift the CIS drive pulley and the drive to extract the CIS drive pulley from its slot.

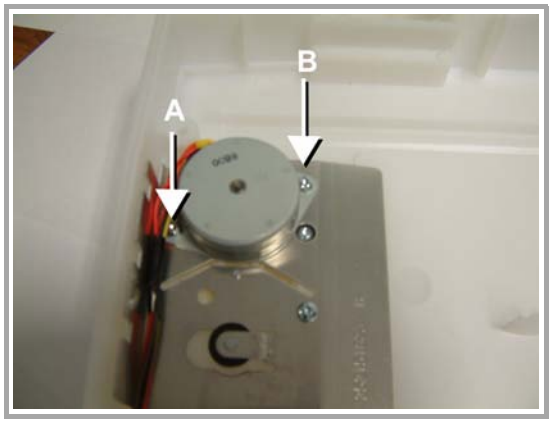
2 - Remove the belt from the drive pulley.



3 - Lift then disassemble the CIS panel.

- Scanner motor

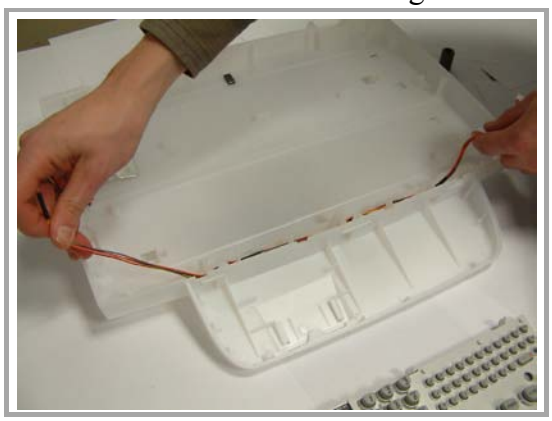
1 - Unscrew the two mounting screws of the scanner motor (**A** et **B**).



2 - Remove the end of the scanner motor connector from its ferrite tube.

D7	**OBJECT :**EQUIPED SCANNER - SCANNER WINDOW FRAME - CIS - CIS RIBBON CABLE - CIS SUPPORT - SCANNER MOTOR

3 - Remove the CIS motor connector from its cable guide.



4 - Disassemble the scanner motor.

Assembly

1 - Unpack and check all new components.

2 - Position the scanner motor and screw in the two mounting screws.

3 - Place the motor connector in its cable guide, do not forget the ferrite tube.

4 - Position the CIS support, place the belt in the CIS drive pulley, do not forget the CIS support springs.

5 - Check that there is enough grease on the pulley motor axis.

6 - Place the CIS ribbon cable in its cable guide, do not foget the ferrite tube, then connect it to the CIS.

7 - Place the CIS, do not forget its slides and support springs.

8 - Position the scanner window frame by first inserting the back part, then insert the front part. Screw in the two mounting screws for the scanner window frame.

9 - Turn the equiped scanner around and screw in the seven mounting screws.

10 - Assemble the assembled flatbed scanner (see Worksheet D6).

11 - Assemble the CPU board armour plate (see Worksheet D4).

12 - Assemble the side covers and the printer front door (see Worksheet D3).

13 - Assemble the ADF scanner cover (see Worksheet D2).

D8	**OBJECT :**BACK COVER

Requirements

- Cross-threaded (Philips) screwdriver.

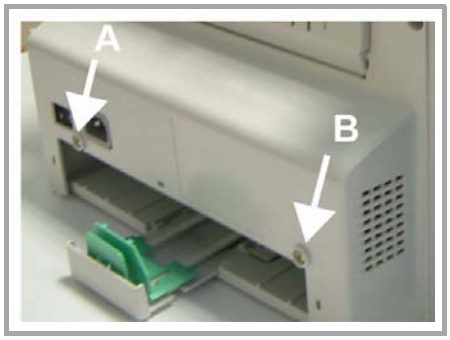
Preliminary steps

- Disassemble the ADF scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the assembled flatbed scanner (see Worksheet D6).

Disassembly

1 - Stand behind the terminal.

2 - Unscrew the two back mounting screws on the back cover (**A** and **B**).



3 - Unscrew the two top mounting screws on the back cover (**C** and **D**).

4 - Pull the back cover towards yourself and remove it.

Assembly

1 - Unpack and check all new components.

2 - Place the back cover and screw in the four mounting screws (**A**, **B**, **C** and **D**).

3 - Assemble the assembled flatbed scanner (see Worksheet D6).

4 - Assemble the CPU board armour plate (see Worksheet D4).

5 - Assemble the printer front door and the side covers (see Worksheet D3).

6 - Assemble the ADF scanner cover (see Worksheet D2).

D9	**OBJECT :**EQUIPED INTERFACE

Requirements

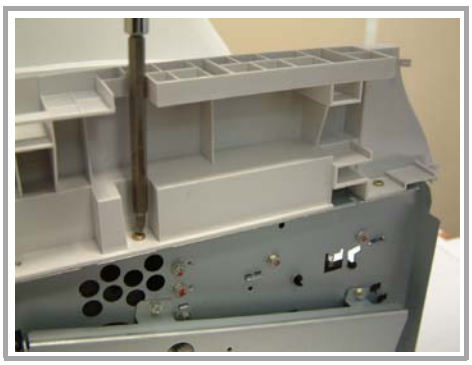
- Cross-threaded (Philips) screwdriver.

Preliminary steps

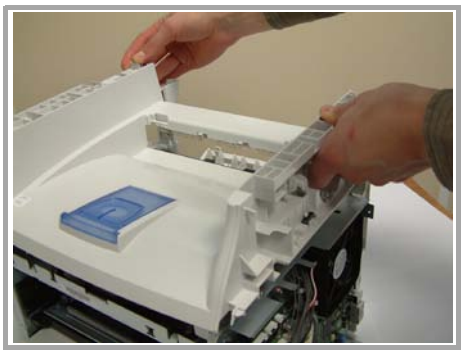
- Disassemble theADF scanner cover (see Worksheet D2).
- Disassemble the printer front door and the side covers (see Worksheet D3).
- Disassemble the CPU board armour plate (see Worksheet D4).
- Disassemble the loudspeaker (see Worksheet D5).
- Disassemble the assembled flatbed scanner (see Worksheet D6).
- Disassemble the back cover (see Worksheet D8).

Disassembly

1 - Unscrew the two mounting screws on the left and right side on the equiped interface.



2 - Lift and remove the equiped interface.



Assembly

1 - Unpack and check all new components.

2 - Position the equiped interface and screw in the four mounting screws on both sides.

3 - Assemble the back cover (see Worksheet D8).

4 - Assemble the assembled flatbed scanner (see Worksheet D6).

5 - Assemble the loudspeaker (see Worksheet D5).

6 - Assemble the CPU board armour plate (see Worksheet D4).

7 - Assemble the printer front door and the side covers (see Worksheet D3).

8 - Assemble the ADF scanner cover (see Worksheet D2).

D11	**OBJECT :**PRINTER

Requirements

- Cross-threaded (Philips) screwdriver.

Preliminary steps

- None.

Disassembly

1 - Stand in front of the terminal.

2 - Disassemble the equiped front panel (see Worksheet D1) and the ADF scanner cover (see Worksheet D2).

3 - Disassemble the printer front door and the side covers (see Worksheet D3).

4 - Disassemble the CPU module (see Worksheet D5) and the loudspeaker (see Worksheet D6).

5 - Disassemble the assembled flatbed scanner (see Worksheet D7).

6 - Disassemble the back cover (see Worksheet D9) and the equiped interface (see Worksheet D10).

Assembly

1 - Unpack and check all new components.

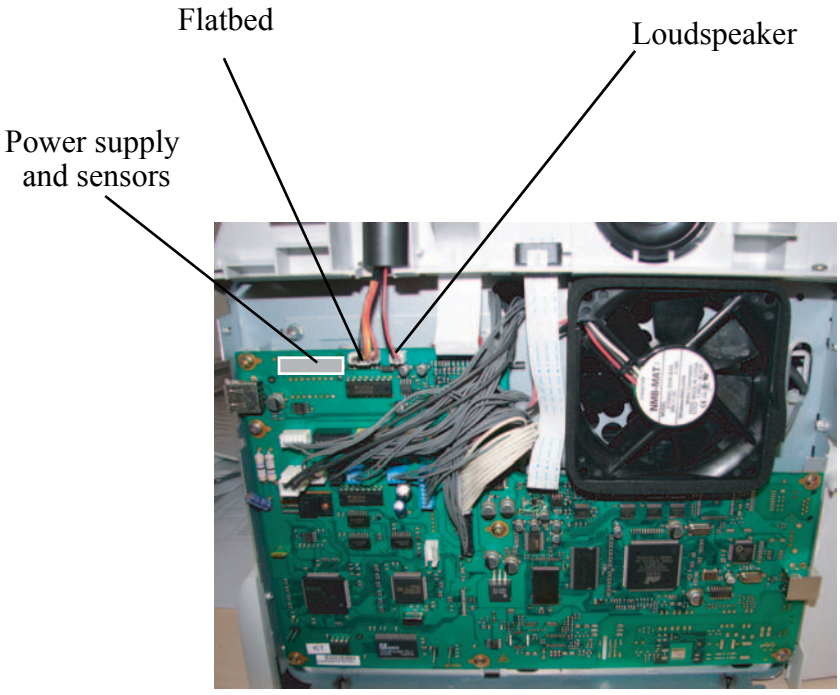
2 - Assemble the equiped interface (see Worksheet D9) and the back cover (see Worksheet D8).

3 - Assemble the flatbed scanner assembly (see Worksheet D6).

4 - Assemble the CPU module (see Worksheet D4) and the loudspeaker (see Worksheet D5).

5 - Assemble the side covers and the printer front door (see Worksheet D3).

6 - Assemble the ADF scanner cover (see Worksheet D2) and the equiped front panel (see Worksheet D1).



1.5 ADMINISTRATOR FUNCTIONS

Each one of the administrator functions described here can be accessed via a specific succession of keys.

The alphabetic keys are available via the navigation keys ▼ and ▲ via the keyboard.

For example, to enter a sequence ▼ *** A** (launching scanner tuning):

1 - Press the following key ▼.

2 - Press the following key *****.

3 - Press ▼ to display all the options available until you reach **A**.
Confirm your choice with **OK**.

1.5.1 INITIALIZING AND ERASING MEMORY

Before you start, set the 8 bit parameter installation configuration 1 to 1.

Attention - UNDOCUMENTED FUNCTIONS ARE RESERVED.

DO NOT TRY AND USE FUNCTIONS THAT ARE NOT DOCUMENTED IN THIS SECTION, THIS MAY LEAD TO THE PERMANENT LOSS OF DATA.

Attention - USE OF THESE LISTED FUNCTIONS WILL LEAD TO THE PERMANENT LOSS OF DOCUMENTS AND PARAMETERS ON THE MACHINE.

- Reset all parameters (user, installer or technical) to the default configuration (factory configuration):

▼ (#) (0)

- Erase the printer counters:

▼ (#) (3)

- Reinitialize the flash data (erases all):open the printer front door then:

▼ (#) (5)

- Erase all.
  Reset to default configuration (combination of functions 0 and 8):

▼ (#) (7)

- Erase all documents stored in memory:

▼ (#) (8)

- Erase the first element of the printer queue:

▼ (#) (I)

- Erase Printer Error:

▼ (#) (T)

Then switch ON/OFF the machine.

1.5.2OTHER FUNCTIONS

Some of the administrator functions allow you to display or print the terminal counters.

The table below details the counters available:

The counter ...	lists the number of ...
Printed pages counter	pages printed
Scanned pages counter	pages scanned
Printed sheets counter	paper sheets printed
Printer does not grip the sheet	no-paper feeds detected on the printer
Jam in printer	paper jams detected inside the printer
Jam in printer output	paper jams detected on the exit tray
Manual and automatic ON/OFF	times the machine has been switched On/Off (manually and automatically)
Insert toner card	toner card readings
Pixel number (*10000)	pixels the machine has printed (*10000)
Counter TONER	toner remaining in toner units

Before you start, position the Soft-switch 1 bit n°8 to 1.

Attention - UNDOCUMENTED FUNCTIONS ARE RESERVED.

DO NOT TRY AND USE FUNCTIONS THAT ARE NOT DOCUMENTED IN THIS SECTION, THIS MAY LEAD TO THE PERMANENT LOSS OF DATA.

- Printing all parameters (including installation and technical parameters):

▼ (*) (1)

- Switching to forced standby mode regardless of the clock:

▼ (*) (2)

- Switching to software download via a computer link:

▼ (*) (4)

- Save the parameters on I2C card:

Attention - ALL DATA PRESENT ON THE I2C CARD PRIOR TO THE OPERATION WILL BE LOST AFTER OPERATION AND REPLACED BY PARAMETERS FROM THE MACHINE.

▼ (*) (5)

- Restore the parameters from I2C card:

Attention - ALL PARAMETERS STORED IN THE MACHINE PRIOR TO THE OPERATION WILL BE LOST AFTER OPERATION AND REPLACED BY THOSE FROM THE I2C CARD.

▼ (*) (9)

- Launching scanner tuning:

▼ * A

- Displaying miniboot version:

▼ * B

- Displaying the state of the applications, traffic and drivers:

▼ * E

- Entering the serial number (with the SOS 1 bit 8 at 1):

▼ * N

- Displaying the internal counters:

▼ * O

- Displaying the GDI throughput:

▼ * P

- Rebooting the machine manually (with the SOS 1 bit 8 at 1):

▼ * R

- Displaying main software version, cheksum:

▼ * V

- Displaying the printer firmware version and the 120V/220V configuration:

▼ * W

Depending on the printer model, the terminal LCD screen displays:

PRINTER FIRMWARE Vx.x 120V	or	PRINTER FIRMWARE Vx.x 220V

- Printing internal counters:

▼ * Y

1.6 REPLACING THE CPU BOARD

To replace the terminal's CPU board, follow this procedure:

1 - Print the terminal's parameters (user, administrator and technical) and the activity counter values in order to keep a record (▼ **5 6**).
You can also store user parameters on a smart card (▼ ***6**) and restore them (▼ ***9**) after the machine is serviced.

2 - Replace the CPU board (see Worksheet D5).

3 - Launch the scanner calibration (▼ **8 0**).

1.6 REPLACING THE SCANNER

To replace the scanner, follow this procedure:

1 - Print the terminal's parameters (user, administrator and technical) and the activity counter values in order to keep a record (▼ **5 6**).
You can also store user parameters on a smart card (▼ ***6**) and restore them (▼ ***9**) after the machine is serviced.

2 - Replace the scanner (see Worksheet D6).

3 - Launch the scanner calibration (▼ **8 0**).

2. LASER PRINTER

Refer to the printer's technical manual.

2.1 REPLACING THE PRINTER

To replace the printer, follow this procedure:

1 - Set the On/Off button to Off (position 0).

2 - Disconnect the USB cables and the power supply cable located at the back of the printer.

3 - Disassemble the consumable (it belongs to the client).

4 - Disassemble the printer (see Worksheet D10, page 21).

5 - Reassemble all the elements of the new printer (see Worksheet D10, page 21).

6 - Reassemble the client's consumable.

7 - Reconnect the USB and power supply cable.

8 - Set the On/Off button to On (position I).

Remark(s) : During repairs, it may happen that the remaining capacity indicated by the machine (▼**8 6**) does not correspond to the user's actual toner cartridge capacity. In particular, the user may reach the end of the toner (poor quality of prints) before the remaining capacity displayed by the machine reaches 0%.

2.2 ROLLERS CHARACTERISTICS

	Diameter	**Circonference**
Drum	24 mm	75.4 mm
Fusing roller	29.8 mm	93.6 mm
Fusing press roller	24.5 mm	77 mm
Transfer roller	15 mm	47.1 mm