

# ML5720/ML5721/ML5790/ML5791

# User's Guide



# **PREFACE**

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. The manufacturer assumes no responsibility for the results of errors beyond its control. The manufacturer also cannot guarantee that changes in software and equipment made by other manufacturers and referred to in this guide will not affect the applicability of the information in it. Mention of software products manufactured by other companies does not necessarily constitute endorsement by the manufacturer.

While all reasonable efforts have been made to make this document as accurate and helpful as possible, we make no warranty of any kind, expressed or implied, as to the accuracy or completeness of the information contained herein.

The most up-to-date drivers and manuals are available from:

#### www.okiprintingsolutions.com

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As an ENERGY STAR Program Participant, the manufacturer has determined that this product meets the ENERGY STAR guidelines for energy efficiency. Note: Not comply (when employing Network Interface Card).



This product complies with the requirements of the Council Directives 2004/108/EC (EMC), 2006/95/EC (LVD) and 2011/65/EU (ROHS) as amended where applicable on the approximation of the laws of the member states relating to electromagnetic compatibility, low voltage and restriction of hazardous substances.

This product complies with EN55022 Class B. However, when fitted with the optional network interface card, RS232C serial interface card or optional cutsheet feeder, compliance to EN55022 is Class A. In a domestic environment this configuration may cause radio interference, in which case the user may be

required to take adequate control measures.

The following cables were used to evaluate this product to achieve EMC directive 2004/108/EC compliance and configurations other than this may affect that compliance.

CABLE TYPE	LENGTH (METRE)	CORE	SHIELD		
Power	1.8	×	×		
USB	5.0	×	~		
Parallel	1.5	×	~		
LAN	5.0	×	×		
Serial	2.1	×	V		

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# **ENVIRONMENTAL INFORMATION**



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# NOTES, CAUTIONS AND WARNINGS

NOTE

A note provides additional information to supplement the main text.

#### **CAUTION!**

A caution provides additional information which, if ignored, may result in equipment malfunction or damage.

#### **WARNING!**

A warning provides additional information which, if ignored, may result in a risk of personal injury.

For the protection of your product, and in order to ensure that you benefit from its full functionality, this model has been designed to operate only with genuine original ribbon cartridges. Any other ribbon cartridge may not operate at all, even if it is described as "compatible", and if it does work, your product's performance and print quality may be degraded.

Specifications subject to change without notice. All trademarks acknowledged.

# Introduction

Congratulations on purchasing this printer!

This printer series is designed to provide highly reliable letter quality printing and high resolution graphics for the desktop/office printing environment. It combines state-of-the-art, 18-pin (ML5720/ML5721) and 24-pin (ML5790/ML5791), serial impact dot matrix printing technology with advanced materials and superior construction to provide high performance and versatility in a desktop sized unit. Careful attention to ergonomics and application needs provides user friendly operation for operators of varying technical capabilities.

#### **ABOUT THIS GUIDE**

This manual is your user's guide (check the web site, www.okiprintingsolutions.com, for the most up-to-date version) for your printer and forms part of the overall user support listed below:

- > Installation Safety booklet: provides information as to safe use of the printer.
  - This is a paper document that is packaged with the printer and should be read before setting up your printer.
- > **Set-up guide**: to describe how to unpack, connect and turn on your printer.
  - This is a paper document that is packaged with the printer.
- > This **User's Guide**: to help you to become familiar with your printer and make the best use of its many features. Also included are guidelines for troubleshooting and maintenance to ensure that it performs at its best.
  - This is an electronic document stored on the manuals CD.
- > **Technical Reference Guide**: to provide detailed technical information for programmers and more technical users.
  - This is an electronic document available on the support web site.
- > **Network Guide**: to provide detailed technical information for network administrators to configure the optional accessory network interface.
  - This is an electronic document stored on the CD that accompanies the network interface card optional accessory.
- > **On-line Help**: on-line information accessible from the printer driver and utility software.

#### **ON-LINE USAGE**

This guide is intended to be read on screen using an Adobe Acrobat Reader. Use the navigation and viewing tools provided in Acrobat.

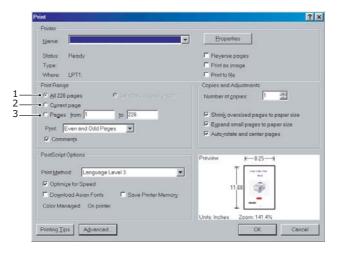
You can access specific information in two ways:

- > In the list of bookmarks down the left hand side of your screen, click on the topic of interest to jump to the required topic. (If the bookmarks are not available, use the "Contents" on page 4.)
- > In the list of bookmarks, click on Index to jump to the Index. (If the bookmarks are not available, use the "Contents" on page 4.) Find the term of interest in the alphabetically arranged index and click on the associated page number to jump to the page containing the term.

#### **PRINTING PAGES**

The whole manual, individual pages, or sections may be printed. The procedure is:

- 1. From the toolbar, select **File**, then **Print** (or press the **Ctrl + P keys**).
- **2.** Choose which pages you wish to print:
  - (a) **All pages**, (1), for the entire manual.
  - (b) **Current page**, (2), for the page at which you are looking.



(c) **Pages from** and **to**, (3), for the range of pages you specify by entering their page numbers.



3. Click on OK.

# **GETTING STARTED**

#### **WARNING!**

If you have not already done so, familiarise yourself with the content of the Installation Safety booklet supplied with your printer.

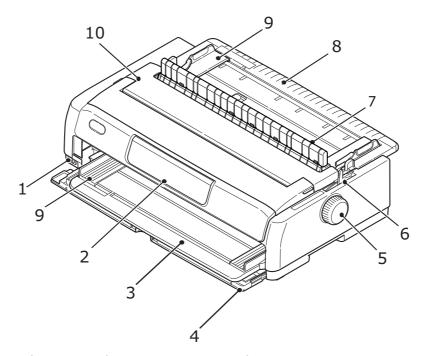
#### **RETAINING PACKING MATERIALS**

After setting up your printer according to the instructions in the Set-up Guide, retain your packing materials and container in case you ever need to ship or transport your printer.

#### **IDENTIFYING COMPONENT PARTS**

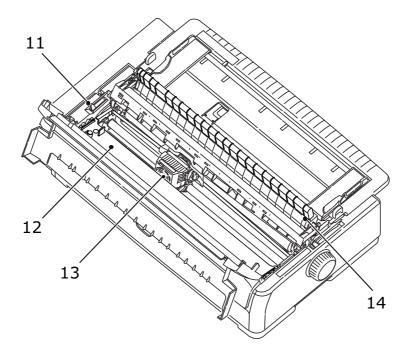
The main parts of your printer are identified and briefly explained below.

#### **FRONT VIEW**



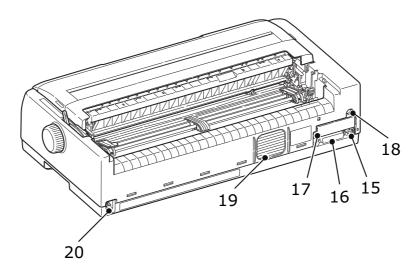
- **1.** Power Switch: to turn the printer power ON/OFF.
- 2. Operator Panel: contains button switches and indicators (described in detail later see "Operator panel" on page 36) that allow you to operate the printer.
- **3.** Front Feed Paper Tray: to feed cut sheet from the front.
- **4.** Front Cover: open to fit the front feed paper tray or to fit the tractor.
- **5.** Platen Knob
- **6.** Paper Type Lever: set according to the type of paper feed front feed (cut sheet), continuous rear feed, continuous front feed or continuous bottom pull.
- **7.** Pull-up Guide Assembly support
- **8.** Top Feed Paper Tray: raise to feed cut sheet paper from the top.
- **9.** Paper Guide: can be adjusted as required to locate the left edge of cut sheet paper.
- **10.** Top Cover: open and close for access, for example when changing a ribbon cartridge. Keep closed for noise reduction.

#### **INTERNAL VIEW**



- **11.** Paper Thickness Lever: set according to the thickness of the paper.
- **12.** Ribbon Cartridge: holds the printer ribbon.
- **13.** Print Head: prints the characters on the paper.
- **14.** Pull-up Guide assembly: remove when using optional Pull tractor and optional Cutsheet feeder.

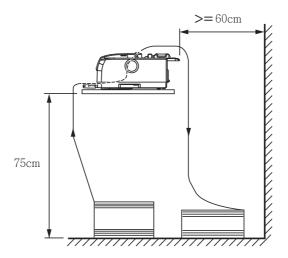
### **REAR VIEW**



- **15.** USB connector: connect to USB interface cable.
- **16.** Parallel connector: connect to parallel interface connector.
- **17.** Optional Serial/Network connector: connect to serial interface or network.
- **18.** Optional CSF/RPS connector: connect to cut-sheet feeder or roll paper stand.
- 19. Ventilator
- **20.** A/C Input: connect to printer power cable.

# LOCATING YOUR PRINTER

- > Select a firm, solid surface on which to site your printer.
- > Allow enough space around your printer (e.g. at least 60 cm from any wall) for easy access to the paper feed paths.



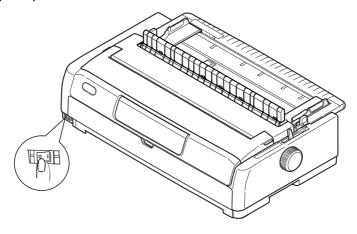
> Make sure a grounded power outlet is available nearby.

# **POWERING ON YOUR PRINTER**

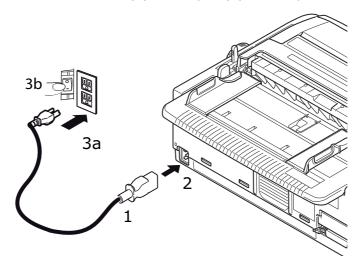
#### **WARNING!**

Operations of this equipment are not warranted when the equipment is connected to UPS (Uninterruptible Power Supply) and/or inverter. Doing so may result in damage of this equipment. Do not use an UPS and/or inverter.

**1.** Ensure that your printer Power Switch is set to OFF.



**2.** Connect the power cable connector (1) A/C Input (2) on the printer.



**3.** Connect the power cable to a 220/240 V AC (3a) power outlet and switch on the outlet power (3b).

# **WARNING!**

Be careful when inserting a three-pronged AC plug. Before plugging it in, check the position of the FG terminal. Incorrect insertion may cause damage not only to the printer main body but also peripheral devices and electric shock, smoke and ignition.

**4.** Turn the printer Power Switch to ON.



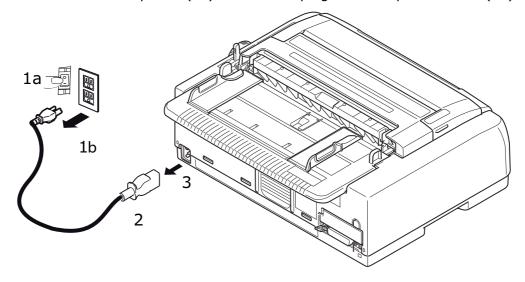
**5.** Check that the SLEEP, ALARM, SEL, TEAR, PRINT QUALITY, CHR PITCH and PRINT SPEED indicators on the operator panel illuminate.

#### **POWERING OFF YOUR PRINTER**

1. Turn the printer Power Switch to OFF.



2. Switch off the outlet power (1a) and then unplug from the power outlet (1b).



**3.** Unplug the power cable connector (2) from the printer (3).

#### PRODUCING A TEST PRINT

To check that your printer is operational, produce a test print on a sheet of 80 gsm A4 paper (for example) as follows:

#### **CAUTION!**

- Allow at least 5 seconds between turning the printer ON after turning it OFF. A shorter time interval between turning ON/OFF operations may cause printer power failure.
- Do not turn the printer OFF while it is printing as this may result in damage to the print head.
- **1.** Turn the printer Power Switch to OFF.

NOTE

Ensure that the ribbon cartridge is properly installed before printing a Test Page.

- **2.** Set the Paper Type Lever to cut sheet and set the Paper Thickness Lever to position 1.
- **3.** Press and hold the SEL and LF/FF button and turn the Power Switch to ON. The SEL LED will flash.
- **4.** Press and hold down the LF/FF button and then press the LOAD/EJECT button again. The alarm indicator should be illuminated to indicate that there is no paper in the printer.
- **5.** With the long side of the paper against the paper guide, insert the paper carefully into the printer. The printer will automatically grip the paper.
- **6.** The printer will start the test print.

NOTE

If required, you can pause the test print by pressing the SEL button and then resume the test print by again pressing the SEL button.

**7.** When the test print has completed, press the LOAD/EJECT button to eject the paper.

NOTE

If you want to abort the test print for any reason, press the SEL button followed by the LOAD/EJECT button to eject the paper and then turn the printer Power Switch to OFF.

# **CONNECTING TO A COMPUTER**

In this section you will interconnect your printer and computer, install the printer driver in your computer and print a test page.

#### INTERCONNECTING PRINTER AND COMPUTER

#### **INTERFACES**

Your printer is equipped with two standard data interfaces:

- > Parallel: for direct connection to a PC. This port requires a bi-directional (IEEE 1284 compliant) parallel cable.
- > USB: for connection to a PC running Windows 2000 or above. This port requires a shielded cable 5m long conforming to USB version 2.0.

#### NOTE

- > This Interface default is set to Auto Interface see "Host Interface" on page 53. The Auto Interface function will enable the printer to receive data from the computer even when all the interfaces i.e. the Parallel, USB and the optional Network or Serial interfaces are connected at the same time. You can also select an individual interface to connect to the printer.
- > Interface cables are not supplied with your printer.

The following interfaces are available as optional accessories and are described in their accompanying installation documentation:

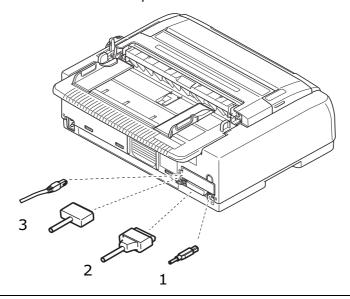
- > RS232 Serial interface
- > 100BASE-TX/10BASE-T network connection

NOTE

Refer to the Network Guide for setting up the network connection.

#### INTERCONNECTION

- 1. Ensure that both printer and computer are turned OFF.
- 2. Connect the required interface cable, USB (1) or parallel (2), or serial or network (3) to the printer and then to the computer.



NOTE

With the Auto Interface connection enabled, you can also connect all the interfaces at the same time.

**3.** Turn ON the printer and then turn ON the computer.

#### **EMULATIONS**

The factory default emulation for your printer is IBM PPR.

If you wish to change to one of the Epson or Microline emulations, see "To change a setting:" on page 41 and "Printer Control" on page 42.

#### INSTALLING THE PRINTER DRIVER

The driver for your printer is provided on the CD included with the printer.

Insert the Drivers CD into your computer and follow the on-screen instructions to install the printer driver for use with your printer.

NOTE

If the CD does not AutoPlay, click Start > Run > Browse, then browse to your CD-ROM drive, double-click Setup.exe and click OK.

#### **PRINTING A TEST PAGE**

As an example, using Windows XP:

- 1. Use **Start** > **Printers and Faxes** to show the Printers and Faxes window.
- **2.** Highlight the driver for your printer.
- 3. Use **File** > **Properties** to show the Properties window.
- **4.** On the **General** tab, click the **Print Test Page** button.
- **5.** Ensure that a test page has printed, verifying your printer computer setup.

# **PRINTING FROM A COMPUTER**

When printing to your printer from, for example, a Windows application on your computer, make your printing selections from the driver windows that appear on screen. These driver windows have been designed to be easy to use and intuitive while supplementary on-line help is available by clicking each window Help button.

### **OKI DIPUS**

The **OKI DIPUS** utility allows you remote access to the printer settings using the available applications. You can access DIPUS from **Start > All Programs > Okidata > OKI DIPUS**.

#### CONTROLLING THE PRINTER USING DIPUS

There are four utilities available within **OKI DIPUS**. Each utility provides access to the printer settings from your computer. Using these utilities you can change the button settings, menu settings, top of form settings and also view the current status of the printer. Any changes made can then be uploaded to the printer and it will be saved to the printer as new settings. These utilities are an alternative to the printer operator panel.

#### **Button setup utility**

Using this utility you can activate or deactivate buttons on your printer operator panel. Each button and its function is described in a message view.

#### Menu setup utility

Using this utility you can view and change your printers' Menu settings.

#### **Status monitor**

The Status Monitor utility allows you to view your printers' current status for example, Online, Online (power saving) and so on. In the event of a printer error occurring, a warning message is also displayed.

#### **TOF** setup utility

Using this utility you can now set the first line of print (TOF) for each page. This utility allows you to treat each print job individually.

For detailed information on each utility and the different settings contained within, refer to the on-line help, by clicking each window Help button.

# PAPER HANDLING

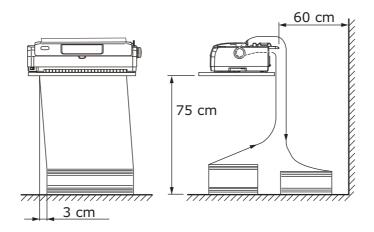
This section describes how to use cut sheet paper and continuous forms in your printer.

#### LOADING CONTINUOUS FORMS

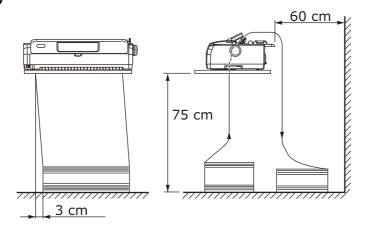
# **Setting up continuous forms**

- 1. To avoid paper feeding problems, carry out the following: Check your printer is on a surface approximately 75 cm above the floor.
- **2.** Position the continuous forms supply directly below the printer, no more than 3 cm left or right of the printer paper path.
- **3.** Ensure the rear of the printer is close to and parallel with the edge of the surface and at least 60 cm from any wall.

### Rear feed (Push)

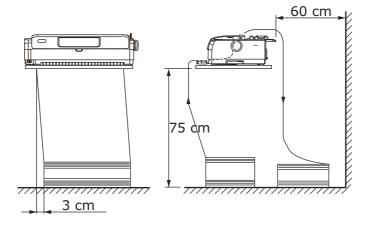


# **Bottom feed (Pull)**



NOTE When the optional Pull Tractor is used.

# Front feed (Push)



#### **FEEDING CONTINUOUS FORMS**

# REAR FEED (PUSH)

**1.** Ensure that the printer is turned ON.

NOTE

If there is a cut sheet in the printer, eject it as described in "Ejecting cut sheet paper" on page 30.

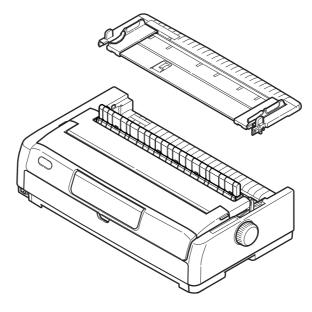
- 2. Ensure the Paper Type Lever is set to Continuous Forms "REAR".
- 3. Open the Top Cover and adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.

After adjusting, close the Top Cover.

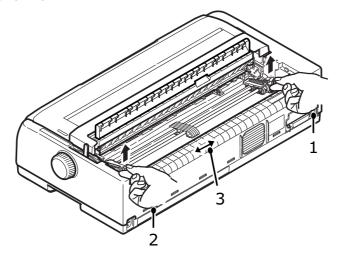
NOTE

If the Paper Thickness Lever setting does not match the paper being used, paper feeding and printing may not work properly.

**4.** Remove the top tray by holding the tray by the tabs on both sides and pulling it up from the printer.

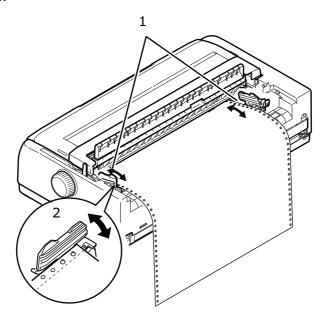


**5.** Lift the locking lever (1) of the right Pin Tractor and slide the Pin Tractor as required to adjust the paper position relative to the first horizontal character centre mark.



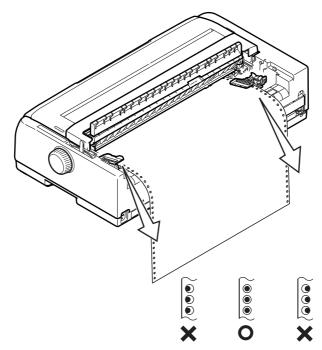
Press the locking lever back down to lock the Pin Tractor in the desired position.

- **6.** Lift the locking lever (2) of the left Pin Tractor and slide the Pin Tractor to the required position to accommodate the width of the continuous forms to be used. Move the rear paper guide (3) to midway between the left and right Pin Tractors.
- 7. Open the left and right Pin Tractor covers (1) and feed the continuous forms in the direction of the arrows, locating the sprocket holes (2) in the forms onto the sprocket pins. Ensure that the forms are properly aligned on the sprocket pins, then close the covers.



**8.** Adjust the left Pin Tractor to accommodate the width of the continuous forms, taking care that the forms are held neither too loosely nor too tightly between the Pin

Tractors. Press the locking lever down to lock the right Pin Tractor in the desired position.



- **9.** Lower the top paper tray and slide it towards the front of the printer until the marks align.
- **10.** Press the LOAD/EJECT button. The continuous forms will be taken into the printer and positioned at the first line print position and the SEL indicator will illuminate.

#### NOTE

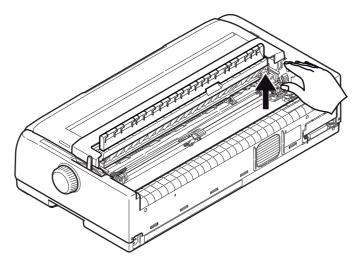
- > Raise the top paper tray if the paper does not feed properly when the rear tractor is used. This will stabilise the paper movement and prevent significant misalignment between the sheets when multi-part paper is used and also erratic line spacing.
- > When loading a specific type of continuous media using the Rear Feed, if you encounter paper jam, erratic line spacing or misalignment between the sheets of the multi-part paper due to the paper crumpling at the perforations and varying binding strength, use the optional pull tractor (bottom feed) to load this type of media.

# Dismounting the rear pin tractor

#### To dismount:

- **1.** Ensure that the printer is turned OFF.
- **2.** Remove the top tray by holding the tray by the tabs on both sides and pulling it up from the printer.
- **3.** Hold the Pin Tractor by its tabs on both sides.

**4.** Push the tabs in the arrow direction and then pull the Pin Tractor in your direction to release it.



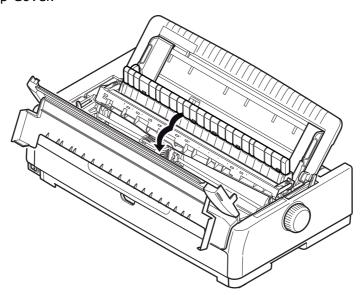
# FRONT FEED (PUSH)

NOTE

If there is a cut sheet in the printer, eject it as described in "Ejecting cut sheet paper" on page 30.

# Moving the tractor assembly

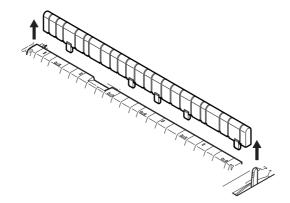
- 1. Ensure that the printer is turned OFF.
- **2.** Disconnect the power cord.
- **3.** Open the Top Cover.



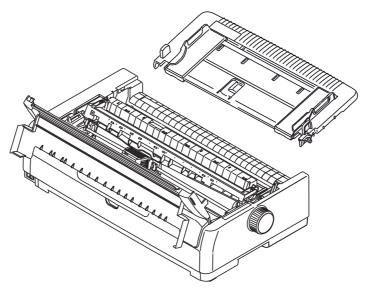
# **WARNING!**

Be careful as the print head may be hot after operation. Allow it to cool before touching it.

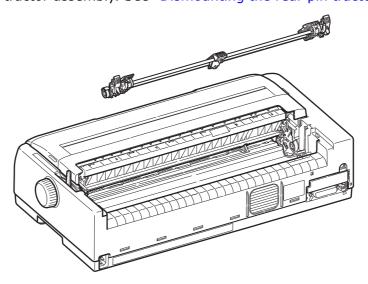
**4.** Remove the Pull-up Guide assembly support.



**5.** Remove the top tray by holding the tray by the tabs on both sides and pulling it up.

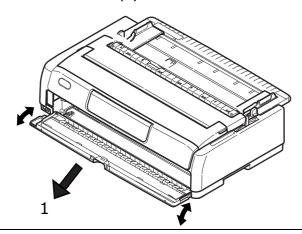


- **6.** Turn the printer, so that the back of the printer is facing you.
- **7.** Remove the tractor assembly. See "Dismounting the rear pin tractor" on page 21.



- **8.** Turn the printer, so that the front is facing you.
- **9.** Replace the top paper tray by aligning the arrows and then pushing it down.

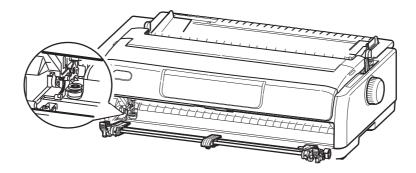
- 10. Close the Top Cover.
- **11.** Open and remove the front cover (1).



NOTE

If front cover is already open and the front cut sheet paper tray has been installed, gently lift the tray from the bottom and remove it, and then remove the front cover.

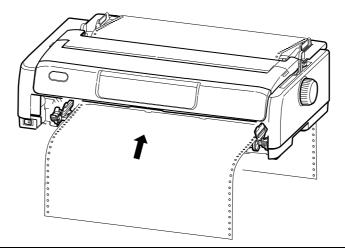
**12.** Holding by the tabs, guide the tractor into the side frames and push it downwards to lock it in place.



# Loading continuous form (front)

- **1.** Ensure that the printer is turned ON.
- 2. Ensure that the Paper Type Lever is set to Continuous form "FRONT"
- **3.** Open the Top Cover, adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.
- **4.** Lift the locking lever of the left Pin Tractor and slide the Pin Tractor as required to adjust the paper position then press the locking lever back down to lock the Pin Tractor in the desired position.
- **5.** Lift the locking lever of the right pin tractor and slide the Pin Tractor to the required position to accommodate the width of the continuous forms to be used. Move the paper guide midway between the left and right Pin Tractors.

**6.** Open the left and right Pin Tractor covers and feed the continuous forms in the direction of the arrow, locating the sprocket holes in the forms onto the sprocket pins.



NOTE Ensure that paper is fed straight into the printer to avoid the possibility of skew printing, irregular line feeding and paper jam.

- **7.** Ensure that the forms are properly aligned on the sprocket pins, then close the Pin Tractor covers.
- **8.** Adjust the right Pin Tractor to accommodate the width of the continuous forms, taking care that the forms are held neither too loosely nor too tightly between the Pin Tractors. Press the locking lever down to lock the right Pin Tractor in the desired position.
- **9.** Attach the front cover back in position and close the front cover.
- **10.** Press the LOAD/EJECT button. The continuous forms will be taken into the printer and positioned at the first line print position and the SEL indicator will illuminate.

#### NOTE

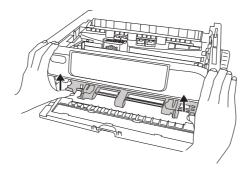
When loading a specific type of continuous media using the Front Feed, if you encounter paper jam, erratic line spacing or misalignment between the sheets of the multi-part paper due to the paper crumpling at the perforations and varying binding strength, use the optional pull tractor (bottom feed) to load this type of media.

### Dismounting the front pin tractor

To dismount:

- **1.** Ensure that the printer is turned OFF.
- **2.** Hold the Pin Tractor by its tabs on both sides.

**3.** Push the tabs in the arrow direction and then pull the Pin Tractor in your direction to release it.



#### **TEARING OFF CONTINUOUS FORMS**

- 1. With the SEL indicator illuminated, press the TEAR button to feed the continuous forms to the tear-off position.
- **2.** Carefully tear off the forms along the tear-off perforations in the direction shown. Using excessive force may result in tearing at a position other than the tear-off perforations.
- **3.** When data is received by the printer or when the SEL button is pressed to select the printer, the continuous forms is repositioned to the first line print position.

#### **ALIGNING THE TEAR-OFF PERFORATIONS**

If the tear-off perforations are not aligned with the paper cutter on the Top Cover, align them as follows:

- 1. With the SEL indicator illuminated, press the TEAR button to move the tear-off perforations to the paper cutter on the Top Cover.
- **2.** Check the position of the tear-off perforations relative to the paper cutter. Adjust to the desired tear-off position using Line Feeds (LF):
  - (a) To move the form forward, press the TEAR and the SEL buttons together.
  - (b) To move the form backward, press the TEAR and the LF/FF buttons together.

NOTE

ML5720/ML5721: Line Feeds are at 1/144 in. ML5790/ML5791: Line Feeds are at 1/180 in.

**3.** Release the buttons after the tear-off perforations have been aligned with the paper cutter.

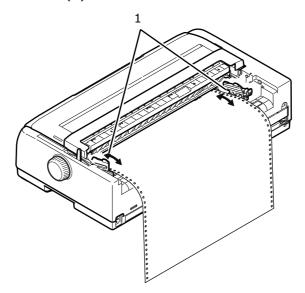
When data is received by the printer or when the SEL button is pressed to select the printer, the paper will retract to the new position.

# **REMOVING CONTINUOUS FORMS**

- 1. Tear off the continuous forms. See "Tearing off continuous forms" on page 26.
- **2.** Press the LOAD/EJECT button to move the front edge of the continuous forms backwards to the Pin Tractors.

#### NOTE

- > The printer switches to off line mode.
- > The ALARM indicator illuminates to indicate there is no paper present.
- > If sprocket holes of the last page of the forms disengage from the sprocket pins, do not attempt to eject the paper to avoid the possibility of a paper jam.
- **3.** Lift the Pin Tractor covers (1) and remove the forms.



**4.** Close the Pin Tractor covers.

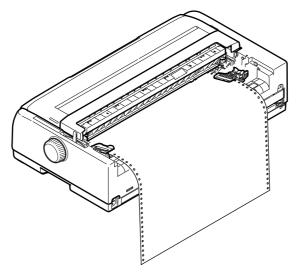
# **LOADING CUT SHEET PAPER**

**1.** Ensure that the printer is turned ON.

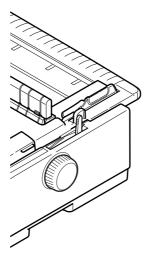
NOTE

If there are any continuous forms in the printer, eject them as described in "Removing continuous forms" on page 27.

**2.** Ensure that the Pin Tractor covers (1) are closed to avoid the possibility of paper jams.



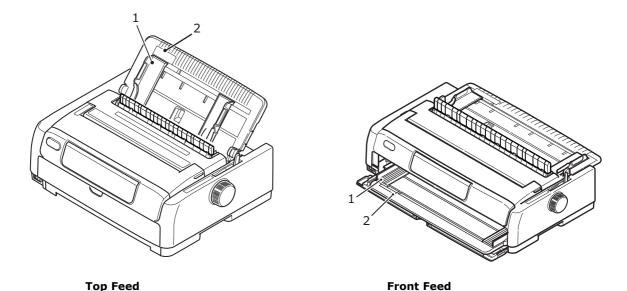
**3.** Ensure the Paper Type Lever is set to Cut Sheet.  $\Box$ 



**4.** To load the cut sheet in the Top Feed Paper Tray, raise the top tray.

To load the cut sheet in the Front Feed Paper Tray, open the front cover and install the front paper tray.

**5.** Set the left margin of the paper by adjusting the Paper Guide (1) along the scale (2) relative to the start of printed line marker arrow.

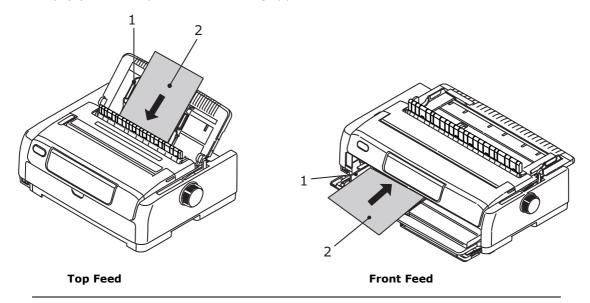


Open the Top Cover and Adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.

NOTE

If the Paper Thickness Lever setting does not match the paper being used, paper feeding and printing may not work properly.

7. With the printing side downwards for top feed and upwards for front feed and the left edge aligned with the Paper Guide (1), carefully insert the paper on the Paper Tray (2) into the printer until it is gripped.



#### NOTE

- > Ensure that the paper is accurately aligned along the Paper Guide to avoid the possibility of skew printing and paper jam.
- > When printing an envelope, do not fold up the flap. A flap aligned along the Paper Guide can lead to skew printing.
- > If you are feeding thick paper, push it in sufficiently until it touches the feed rollers, to avoid the possibility of skew printing and paper jam.

#### **EJECTING CUT SHEET PAPER**

When the printer reaches the end of the cut sheet page it automatically ejects the page. If required, add another sheet for the printer to continue printing from where it left off.

To eject a cut sheet left in the printer, carry out the following:

- **1.** Press the SEL button to put the printer off-line.
- 2. Press the LOAD/EJECT button and the paper is ejected to the Paper Tray.

NOTE

Paper longer than A4 length (297 mm) may overlap and possibly fall off the Paper Tray.

#### **CHANGING PAPER PATHS**

You can switch to cut sheet printing without removing continuous forms from the printer.

#### **Continuous forms to cut sheet**

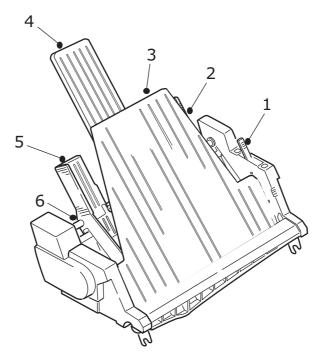
- **1.** Tear the continuous form at the tear off position.
- **2.** Press the LOAD/EJECT button. The printer will retract the continuous form automatically and set the printer in offline mode.
- **3.** Set the Paper Type Lever to Cut Sheet.
- **4.** To load cut sheet paper, see "Loading cut sheet paper" on page 28.

#### **Cut sheet to continuous forms**

- **1.** Remove any cut sheet paper in the printer.
- 2. Set the Paper Type Lever to Continuous form (REAR or FRONT or PULL).
- **3.** To load continuous forms, see "Loading continuous forms" on page 18.

NOTE

For installation instructions, see "Installing the Cut-sheet feeder" on page 73.



- 1. Paper Set Lever
- 2. Right Paper Guide
- 3. Front Sheet Support
- 4. Rear Sheet support
- 5. Left Paper Guide
- 6. Locking Lever
- **1.** Ensure the Paper Type Lever is set to Cut Sheet.  $\Box$
- 2. Open the Top Cover and adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.
- **3.** Remove the front sheet support (3).
- **4.** Place the paper set lever in the RESET position (1).
- **5.** Release the paper guides (2, 5) by pushing the locking levers (6) downward.
- **6.** Move the left paper guide to the position where you wish to set the left-hand edge of the sheet, making sure that this paper guide is not set to the right of the paper out sensor (the grove in the platen).
- **7.** "Flex a paper stack (not more than 170 sheets of 60 gsm paper). Square the stack, turn over and repeat the bending. The stack of paper should not exceed 16mm thickness.
- **8.** Insert the paper stack into the hopper and push it against the left paper guide (5), making sure that the paper fits under the corner separators.
- **9.** Move the rear sheet support (4) to the center.
- **10.** Adjust the right paper guide to the paper width (2).

- 11. Push both paper guide locking levers (6) upward into the locked position.
- **12.** Push the paper set lever gently backward into the SET position.

#### **CAUTION!**

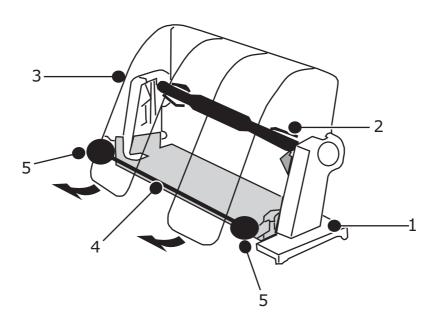
Ensure that the paper set lever is closed (towards the SET position) before printing with the CSF. If it is left open, the friction rollers will not be able to feed the paper, and the printer will print on the platen and may damage the printhead and platen.

**13.** Attach the front sheet support (3).

# LOADING THE OPTIONAL ROLL PAPER STAND (ML5720/ML5790)

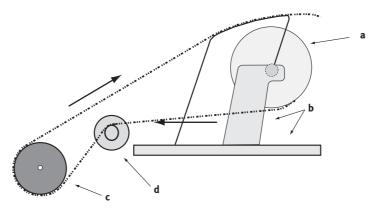
#### NOTE

For installation instructions, see "Installing the Roll paper stand (ML5720/ML5790)" on page 75.



- 1. Roll Paper Stand
- 2. Paper Shaft
- 3. Paper Separator
- 4. Tension Bar
- 5. Paper Guide
- **1.** Set the Paper Type Lever to RPS.
- 2. Open the Top Cover and adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.
- **3.** Open the paper separator all the way.
- **4.** Remove the paper roller. Note that there is a disk on the left end of the roller.
- **5.** Slide the roller into a tube of paper. Ensure the disk is on the left side and paper must roll up from the bottom.
- **6.** Replace the paper roller back into the stand, with the disc on the left side.

- **7.** Feed the paper over the roller on the stand.
- **8.** Set the paper onto the platen from the top of the tension bar.
- **9.** Rotate the platen knob until the top edge of the paper reaches the roll paper, and then set the Paper Type Lever to PULL to easily adjust the paper position.
- **10.** Align the paper so that the exit and entry paper edges align.
- **11.** Reset the Paper Type Lever to RPS.
- **12.** Move the paper guide and adjust it to the width of the paper.
- **13.** Lower the paper separator to its original position.
- **14.** Turn the platen knob to move the paper to the point where you want printing to start.



CORRECT PAPER PATH					
a. Paper Roll	b. Roll Paper Stand				
c. Platen	d. Paper Guide				

#### **SETTING THE PAPER THICKNESS LEVER**

There are 10 lever positions for printing purposes. The  $10^{\text{th}}$  position is also to facilitate ribbon replacement.

Set the Paper Thickness lever for different paper types as follows:

PAPER TYPE	LEVER POSITION										
PAPERTIFE	1	2	3	4	5	6	7	8	9	10	REMARKS
Cut sheet paper											See below
52 - 81 gsm	Х										
81 - 128 gsm		Х									
128 - 156 gsm			Χ								
Postcard				Х							
Envelope							Х				
Continuous paper											See below
52 - 81 gsm	Х										
81 - 128 gsm		Х									

PAPER TYPE	LEVER POSITION										
PAPERTIFE	1	2	3	4	5	6	7	8	9	10	REMARKS
Carbon paper or Pressure- sensitive paper (40 gsm)											See below
2 part		Х									
3 part			Χ								
4 part				Х							
5 part					Х						
6 part						Х					
7 part							Х				

Set the Paper Thickness lever for overall paper thickness as follows:

OVERALL PAPER THICKNESS	LEVER POSITION
0.06 - 0.10 mm	1
0.11 - 0.15 mm	2
0.16 - 0.20 mm	3
0.21 - 0.25 mm	4
0.26 - 0.30 mm	5
0.31 - 0.35 mm	6
0.36 - 0.40 mm	7
0.41 - 0.45 mm	8
0.46 - 0.50 mm	9
0.51 - 0.53 mm	10

#### NOTE

- > Printing with lever positions 5 10 is not guaranteed.
- > If the lever position does not suit the paper thickness, paper feeding and printing may not work properly.
- > Do not print bankbooks to avoid possible pin breakage/ribbon snagging.
- > When lever positions 5 10 are selected, printing quality for carbon paper may decline resulting in illegible characters for example.

#### NOTE

- > When using 3-inch wide media, change the Centering Position in the Menu Settings to Mode 1. If the Centering Position is not set to 1, it will result in Paper Jam.
- > When loading envelopes, set the head gap based on the thickness of the overlapped and glued areas of the envelope and not the thin area. This will prevent dark printing in some areas on the envelope.
- > Do not use glossy paper if it is not tested thoroughly. This type of paper is left with marks from the paper feed roller or from rubbing. Also, the paper may not feed properly, causing incorrect line spacing.
- > Using Seal-type cards (for example to print bank/credit card balance statements) may cause ink to transfer when the printed sides overlap. Test it thoroughly to ensure it does not cause problems.

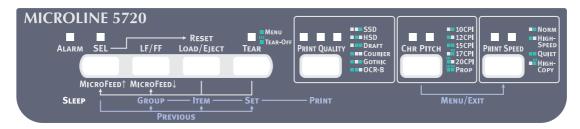
#### **CAUTION!**

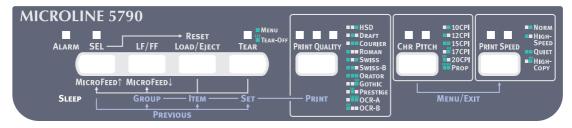
- Do not use Labels in individual sheets as the printing is not guaranteed. Test thoroughly before use.
- Be careful when using Labels as they may peel of their carrier sheet if the adhesive is not strong. This can result in paper jam. Feed Labels from the Front Tray instead of the Top Tray, as feeding from the top may cause the Labels to peel off and cause paper jams.

For information on using Envelopes, Labels and Card stock paper, refer to the Technical Reference Guide.

# **OPERATING INSTRUCTIONS**

# **OPERATOR PANEL**





The status/alarm indicators and button switches on the operator panel allow you to check printer status and control the printer. You can also use OKI DIPUS utilities to check printer status and control the printer from your computer, see "OKI DIPUS" on page 17.

## **INDICATORS**

INDICATORS	COLOUR	STATUS	MEANING
SEL	Green	ON	Printer is on-line i.e. is available to print.
		OFF	Printer is off-line i.e. is not available to print.
	FLASHING		When flashing together with the ALARM indicator, printing cannot be resumed at this stage. Turn the power OFF, verify that the carriage moves properly, then turn the power ON again.  If the problem is still there after you turn the power ON again, contact your dealer.  When flashing together with TEAR indicator, indicates Top Cover is open.
ALARM	Red	ON	Paper end status i.e. no paper present.
		OFF	Printer is in normal state.
		FLASHING	When flashing together with the SEL indicator, printing cannot be resumed at this stage. Turn the power OFF, verify that the carriage moves properly, then turn the power ON again.  If the problem is still there after you turn the power ON again, contact your dealer.  Indicates paper jam/media switch/incorrect paper lever setting status  When flashing together with TEAR indicator, indicates High temperature alarm status.
TEAR	Green	ON	Menu mode.
		OFF	Tear down position.
		FLASHING	Tear up position.
ML5720/ML5721			
PRINT QUALITY  1 2 3 1 1 1 PRINT QUALITY	Green	ON  > LED 3  > LED 2  > LED 2 and 3  > LED 1  > LED 1 and 3  > LED 1 and 2	Without ALARM indicator flashing:  Indicates SSD is selected.  Indicates HSD is selected.  Indicates DRAFT is selected.  Indicates COURIER is selected.  Indicates GOTHIC is selected.  Indicates OCR-B is selected.

INDICATORS	COLOUR	STATUS	MEANING
CHR.PITCH	Green	ON LED 1	With TEAR indicator ON: Printer is in MENU setting mode.
1 2 CHR PITCH		ON  > LED 2  > LED 1  > LED 1 and 2	With Alarm indicator flashing:  > Indicates paper loading jam.  > Indicates paper park/eject jam.  > Indicates incorrect media setting.
		ON > LED 2 > LED 1 > LED 1 and 2	Without Alarm indicator flashing:  > Indicates 10CPI is selected.  > Indicates 12CPI is selected.  > Indicates 15CPI is selected.
		FLASHING > LED 2	With Alarm indicator flashing:  > Indicates incorrect paper lever setting.
		FLASHING  > LED 2  > LED 1  > LED 1 and 2	Without Alarm indicator flashing:  > Indicates 17CPI is selected.  > Indicates 20CPI is selected.  > Indicates PROP (Proportional) is selected.
ML5790/ML5791			
PRINT QUALITY  1 2 3	Green	ON  > LED 3  > LED 2  > LED 2 and LED 3  > LED 1  > LED 1 and LED 3  > LED 1 and LED 2  > LED 1, LED 2 and LED 3	Without ALARM indicator flashing:  Indicates HSD is selected.  Indicates DRAFT is selected.  Indicates COURIER is selected.  Indicates ROMAN is selected.  Indicates SWISS is selected.  Indicates SWISS-B is selected.  Indicates ORATOR is selected.
		FLASHING  > LED 3  > LED 2  > LED 2 and LED 3  > LED 1	Without ALARM indicator flashing:  > Indicates GOTHIC is selected.  > Indicates PRESTIGE is selected.  > Indicates OCR-A is selected.  > Indicates OCR-B is selected.
CHR.PITCH	Green	ON LED 1	With TEAR indicator ON: Printer is in the MENU setting mode.
1 2 D D		FLASHING  > LED 2  > LED 1  > LED 1 and LED 2	Without ALARM indicator flashing:  > Indicates 17CPI is selected.  > Indicates 20CPI is selected.  > Indicates PROP (Proportional) is selected.
		ON > LED 2 > LED 1 > LED 1 and LED 2	With ALARM indicator flashing:  > Indicates paper loading jam.  > Indicates paper park/eject jam.  > Indicates incorrect media setting.
		FLASHING > LED 2	With Alarm indicator flashing:  > Indicates incorrect paper lever setting.
PRINT SPEED	Green	ON  LED 2 ON  LED 1 ON  LED 1 and 2 ON	With TEAR indicator OFF:  > Indicates NORM (Normal Speed) is selected.  > Indicates HIGH SPEED is selected.  > Indicates QUIET print is selected.
PRINT SPEED		FLASHING > LED 2 FLASHING	> Indicates HIGH COPY is selected.
SLEEP	Green	FLASHING	Low power consumption mode.

## **BUTTON FUNCTIONS**

The button functions described here are as in Print mode.

SWITCH	STATUS	FUNCTION	
SEL	On-line	Sets the printer to off-line.	
	Off-line	Sets the printer to on-line.	
LF/FF	On-line/Off-line	Feeds paper by one line. When pressed for more than 500ms, performs form feed.	
LOAD/EJECT	On-line/Off-line When no paper is loaded When paper is loaded: Continuous forms Cut-sheet paper Pull feed	Performs paper feed.  Retracts the form to the Pin Tractor.  Ejects the cut sheet.  Ineffective.	
TEAR	On-line/Off-line Continuous forms Pull feed	Delivers the continuous form to the cut position. Ineffective.	
PRINT QUALITY	On-line/Off-line	Select a font.	
CHR. PITCH	On-line/Off-line	Select a character pitch.	
PRINT SPEED	On-line/Off-line	Select print speed.	
SEL + LF/FF	On-line/Off-line	Ineffective.	
SEL + LOAD/EJECT	On-line	Ineffective.	
	Off-line	Holding down the SEL button and pressing the LOAD/EJECT button initialises the new Menu settings.	
SEL + CHR.PITCH	On-line	Ineffective.	
	Off-line	Selects MENU configuration.	
LF/FF + LOAD/EJECT	On-line/Off-line	Ineffective.	
LOAD/EJECT + SEL	On-line/Off-line ML5720/ML5721	Performs microfeed (forward) 1/144 inch when paper is loaded.	
	ML5790/ML5791	Performs microfeed (forward) 1/180 inch when paper is loaded.	
LOAD/EJECT + LF/FF	On-line/Off-line ML5720/ML5721	Performs microfeed (reverse) 1/144 inch when paper is loaded.	
	ML5790/ML5791	Performs microfeed (reverse) 1/180 inch when paper is loaded.	
TEAR + SEL	On-line/Off-line ML5720/ML5721	Performs microfeed (forward) 1/144 inch when paper is in tear off position.	
	ML5790/ML5791	Performs microfeed (forward) 1/180 inch when paper is in tear off position.	

SWITCH	STATUS	FUNCTION
TEAR + LF/FF	On-line/Off-line	
	ML5720/ML5721	Performs microfeed (reverse) 1/144 inch when paper is in tear off position.
	ML5790/ML5791	Performs microfeed (reverse) 1/180 inch when paper is in tear off position.
PRINT QUALITY + SEL	On-line/Off-line	
	ML5720/ML5721	Performs microfeed (reverse) 1/144 inch when paper is in Top of Form position.
	ML5790/ML5791	Performs microfeed (reverse) 1/180 inch when paper is in Top of Form position.
PRINT QUALITY + LF/	On-line/Off-line	
FF	ML5720/ML5721	Performs microfeed (forward) 1/144 inch when paper is in Top of Form position.
	ML5790/ML5791	Performs microfeed (forward) 1/180 inch when paper is in Top of Form position.
CHR.PITCH + PRINT SPEED	On-line/Off-line	Enters menu mode.

## **SETTING MENU VALUES**

The following information explains the printer settings and how you can change them. Printer items and their values are printed for reference.

## **CONFIRMING CURRENT SETTINGS**

To print the current menu settings, use a cut sheet of A4 paper or continuous forms of width at least 254 mm. In this example, two sheets of A4 paper is used.

- **1.** Set the Paper Type lever to cut sheet mode.
- **2.** To activate menu mode:
  - (a) Ensure that the printer is powered ON.
  - (b) Place the cut sheet on the front Paper Tray.
    - The cut sheet is gripped by the printer.
  - (c) Press and hold down the CHR PITCH button and then the PRINT SPEED button to enter menu mode, Menu print? is printed.
- **3.** Press PRINT QUALITY (PRINT) button and the printer prints out all the menu items currently selected and their corresponding settings.
- **4.** Exit or proceed to change menu settings:
  - (a) To exit menu settings confirmation, save the current settings, press CHR PITCH and PRINT SPEED buttons together. Save menu is printed.
    - Press LOAD/EJECT button to eject the cut sheet paper.
  - (b) To change the menu settings, see "Menu setting" on page 41.

### **MENU SETTING**

### NOTE

Before changing menu settings, you may wish to print the current menu settings as in "Confirming current settings" on page 40.

- **1.** Ensure that the printer is turned ON.
- **2.** Place the cut sheet on the Paper Tray, the paper is gripped by the printer.
- **3.** Press and hold down the CHR PITCH button and then the PRINT SPEED button to enter menu mode, Menu PRINT? is printed.
- **4.** Press the LF/FF (GROUP) or LOAD/EJECT (ITEM) or TEAR (SET) button to print the first menu item.
- **5.** To change a setting:
  - (a) Press LF/FF button to step forward and SEL + LF/FF to step backward to the required group.
  - (b) When in the required Group, press LOAD/EJECT button to step forward and SEL + LOAD/EJECT to step backward to the required item.
  - (c) When in the required Item, press TEAR to step forward and SEL + TEAR/MENU to step backward to the required value.
    - Repeat these steps to change the settings for other items.
- **6.** To exit menu settings confirmation, save the current settings, press CHR PITCH and PRINT SPEED buttons together.
  - Save menu is printed.
- **7.** Press LOAD/EJECT button to eject the cut sheet paper.

### NOTE

- > A GROUP is the general classification of functions/features.
- > An ITEM is the name of the function/feature.
- > A SET is the value in an Item.
- > Switching the printer OFF does not save the new settings.

## **MENU ITEMS AND SETTINGS**

In the menu settings tables below, factory default settings are shown in bold.

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Printer Control	Emulation Mode	Select emulation mode.	IBM PPR, EPSON FX, ML	<b>EPSON LQ</b> , IBM PPR, IBM AGM
Font	Print Mode	Select quality of ANK characters.	Draft NLQ Courier NLQ Gothic NLQ OCR-B HSD SSD	LQ Courier LQ Roman LQ Swiss LQ Swiss Bold LQ Orator LQ Gothic LQ Prestige LQ OCR- A LQ OCR- B DRAFT HSD
	Draft mode	Select the draft mode.	HSD SSD	-
	Pitch	Select character pitch.	10 CPI 12 CPI 15 CPI 17.1 CPI 20 CPI	
	Proportional Spacing	Select whether to use proportional spacing or not.	Yes No	
	Style	Select either font style.	Normal Italics	
	Size	Select the character scale size. Selects both double width and double height character or single width and single height characters.	Single Double	

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Symbol Sets	Character Set	Select character code table.	Set I Set II Standard (ML mode only) Line Graphics (ML mode only) Block Graphics (ML mode only)	Set II
	Language Set	Select a language character set.	ASCII French German British Danish I Swedish I Italian Spanish I Japanese Norwegian Danish II Spanish II Latin American Dutch TRS80 Swedish II Swedish III Swedish IV Turkish Swiss I Swiss II Publisher	ASCII French German British Danish I Swedish I Italian Spanish I Japanese Norwegian Danish II Spanish II Latin American Dutch Swedish II Swedish III Swedish IV Turkish Swiss I Swiss II Publisher
	Zero Character	Select either print font pattern to receive a zero character located at 30H in ANK code.	Slashed <b>Unslashed</b>	Slashed <b>Unslashed</b>

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Symbol Sets cont.	Code Page	Select a code page.	USA Canada French Multilingual Portugal Norway Turkey Greek_437 Greek_869 Greek_928 Greek_928 Greek_928 Greek_137 CYPRUS Polska Mazovia Serbo Croatic II ECMA-94 Hungarian CWI Windows Greek Windows East Europe Windows Cyrillic East Europe Latin II - 852 Cyrillic I-855 Cyrillic II-866 Kamenicky(MJK) ISO Latin 2 Hebrew NC (862) Hebrew OC Turkey_857 Latin 5 (Windows Turkey) Windows Hebrew Ukrainian Bulgarian ISO Latin 6 (8859/10) Windows Baltic Baltic_774 KBL-Lithuanian Cyrillic Latvia Roman-8 Icelandic-861 Multilingual 858 ISO 8859-15 Greek_737 POL1 Macedonian BRASCII Abicomp	USA Canada French Multilingual Portugal Norway Turkey Greek_437 Greek_869 Greek_928 Greek_928 Greek_928 Greek_137 CYPRUS Polska Mazovia Serbo Croatic II ECMA-94 Hungarian CWI Windows Greek Windows East Europe Windows Cyrillic East Europe Latin II - 852 Cyrillic I-855 Cyrillic II-866 Kamenicky (MJK) ISO Latin 2 Hebrew NC (862) Hebrew OC Turkey_857 Latin 5 (Windows Turkey) Windows Hebrew Ukrainian Bulgarian ISO Latin 6 (8859/10) Windows Baltic Baltic_774 KBL-Lithuanian Cyrillic Latvia Roman-8 Icelandic-861 Multilingual 858 ISO 8859-15 Greek_737 Asmo 449+ Asmo 708 Arabic 864 Windows Arabic POL1 Macedonian BRASCII Abicomp
	Slashed Letter 0	Set whether to convert slashed 0 located at 9BH and 9DH in USA code page or not.	Yes No	

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Rear Feed (Push)	Line Spacing	Select line feed pitch.	<b>6 LPI</b> 8LPI	
	Form Tear-Off	When printer is idle (0.5, 1.0 or 2.0 sec), paper is advanced from the current print position to the tear position. When data is received, paper is moved to its original printing position.	Manual 0.5 sec 1.0 sec 2.0 sec	
	Skip Over Perforation	Select whether to skip over perforation or not. (When a skip over perforation command is received, the received command is given priority.)	<b>No</b> 25.4 mm (1")	
	Page Width (Displayed only for ML5721 and ML5791)	Change to 8" to print on narrow paper.	<b>345.44 mm (13.6")</b> 203.2 mm (8")	
	Page Length	Select the length of a continuous form.	279.4 mm (11") 296.3 mm (11 2/3") 304.8 mm (12") 355.6 mm (14") 431.8 mm (17") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	Initial Position	Select the vertical print position when printer is turned on.	<b>Print Position</b> Cut Position	
	Cut Position Adjust	Select an adjustment value for the position to cut the end of a continuous form.	-20 ~ -1 0 +1 ~ +20	-30 ~ -1 0 +1 ~ +30
	TOF Adjust	Select an adjustment value for the reference position in regard to the TOF position of a continuous form.	-20 ~ -1 <b>0</b> +1 ~ +20	-30 ~ -1 0 +1 ~ +30

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Rear Feed (Push) cont.	Continuous Paper Top of Form	Select an adjustment value for the reference position in regard to the Top of Form of a continuous form.	2.12 mm (1/12") 4.23 mm (2/12") 6.35 mm (3/12") 8.47 mm (4/12") 10.58 mm (5/12") 12.70 mm (6/12") 14.82 mm (7/12") 16.93 mm (8/12") 19.05 mm (9/12") 21.17 mm (10/12") 23.28 mm (11/12") 25.40 mm (12/12") 27.52 mm (13/12") User Top of Form	
	LF Revise	Adjust the line feed amount.	-2 -1 <b>0</b> +1 +2	
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720 and ML5790. Select Mode 1 or Mode 2 for ML5721.	<b>Default</b> Mode1 Mode2	
Front Feed	Line Spacing	Select line feed pitch.	<b>6 LPI</b> 8LPI	
(Push)	Form Tear-Off	When printer is idle (0.5, 1.0 or 2.0 sec), paper is advanced from the current print position to the tear position. When data is received, paper is moved to its original printing position.	Manual 0.5 sec 1.0 sec 2.0 sec	
	Skip Over Perforation	Select whether to skip over perforation or not. (When a skip over perforation command is received, the received command is given priority.)	<b>No</b> 25.4 mm (1")	
	Page Width (Displayed only for ML5721 and ML5791)	Change to 8" to print on narrow paper.	<b>345.44 mm (13.6")</b> 203.2 mm (8")	

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Front Feed (Push) cont.	Page Length	Select the length of a continuous form.	279.4 mm (11") 296.3 mm (11 2/3") 304.8 mm (12") 355.6 mm (14") 431.8 mm (17") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	Initial Position	Select the vertical print position when printer is turned on.	<b>Print Position</b> Cut Position	
	Cut Position Adjust	Select an adjustment value for the position to cut the end of a continuous form.	-20 ~ -1 <b>0</b> +1 ~ +20	-30 ~ -1 <b>0</b> +1 ~ +30
	TOF Adjust	Select an adjustment value for the reference position in regard to the TOF position of a continuous form.	-20 ~ -1 <b>0</b> +1 ~ +20	-30 ~ -1 0 +1 ~ +30
	Continuous Paper Top of Form	Select an adjustment value for the reference position in regard to the Top of Form of a continuous form.	2.12 mm (1/12") 4.23 mm (2/12") 6.35 mm (3/12") 8.47 mm (4/12") 10.58 mm (5/12") 12.70 mm (6/12") 14.82 mm (7/12") 16.93 mm (8/12") 19.05 mm (9/12") 21.17 mm (10/12") 23.28 mm (11/12") 25.40 mm (12/12") 27.52 mm (13/12") User Top of Form	
	LF Revise	Adjust the line feed amount.	-2 -1 <b>0</b> +1 +2	
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720 and ML5790. Select Mode 1 or Mode 2 for ML5721 and ML5791.	<b>Default</b> Mode 1 Mode 2	

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Pull	Line Spacing	Select line feed pitch.	<b>6 LPI</b> 8 LPI	
	Skip Over Perforation	Select whether to skip over perforation or not. (When a skip over perforation command is received, the received command is given priority.)	<b>No</b> 25.4 mm (1")	
	Page width (Displayed only for ML5721/ML5791)	Change to 8" to print on narrow paper.	<b>345.44 mm (13.6")</b> 203.2 mm (8")	
	Page Length	Select the length of a continuous form.	279.4 mm (11") 296.3 mm (11 2/3") 304.8 mm (12") 355.6 mm (14") 431.8 mm (17") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	LF Revise	Adjust the line feed amount.	-2 -1 <b>0</b> +1 +2	-14 ~ -1 0 +1 ~ +14
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720/ML5790. Select Mode 1 or Mode 2 for ML5721/ML5791.	<b>Default</b> Mode 1 Mode 2	
Cut Sheet Top	Line Spacing	Select line feed pitch.	<b>6 LPI</b> 8 LPI	
	Form Tear-Off (Displayed when connected to the RPS)	When printer is idle (0.5, 1.0 or 2.0 sec), paper is advanced from the current print position to the tear position. When data is received, paper is moved to its original printing position.	Manual 0.5 sec 1.0 sec 2.0 sec	
	Page width (Displayed only for ML5721/ML5791)	Change to 8" to print on narrow paper.	<b>345.44 mm (13.6")</b> 203.2 mm (8")	

GROUP	ITEM	FUNCTION	SE	TS
			ML5720/ML5721	ML5790/ML5791
Cut Sheet Top cont.	Page Length	Select the page length of cut sheet.	279.4 mm (11" in) 296.3 mm (11 2/3") 304.8 mm (12") 420.9 mm (16.57") 355.6 mm (14") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	Initial Position (Displayed when connected to the RPS)(ML5720/ ML5790)	Select the vertical print position when printer is turned on.	Print Position Cut Position	
	Cut Position Adjust (Displayed when connected to the RPS)(ML5720/ ML5790)	Select an adjustment value for the position to cut the end of a continuous form.	-20 ~ -1 <b>0</b> +1 ~ +20	-30 ~ -1 0 +1 ~ +30
	Wait Time	Select the waiting time between setting paper on the tray and feeding it while the printer is waiting for paper to be fed in cut sheet manual feed mode.	Invalid 0.5 sec 1.0 sec 1.5 sec 2.0 sec 3.0 sec	
	Paper Length Control	Control the page length of cut sheet.	by MENU setting by Actual Page Length	<b>by MENU setting</b> by Actual Page Length
	Cut Sheet Auto Eject Position	Select a printable area at the bottom of cut sheets of paper in cut- paper mode (the character center position.)	6.35 mm (3/12") 12.70 mm (6/12") 14.82 mm (7/12") Invalid	
	TOF Adjust	Select an adjustment value for the reference position in regard to the TOF position of cut sheet paper.  The position moves to the rear of the form by (+) and to the top of the form by (-) in /1/144" (ML5720/ML5721) and 1/180" (ML5790/ML5791) increments.	-20 ~ -1 0 +1 ~ +20	-30 ~ -1 0 +1 ~ +30

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Cut Sheet Top cont.	Cut Sheet Top of Form	Select the reference position for the TOF position when feeding cut sheet. (Up to the mid-section of characters in the first line.)	2.12 mm (1/12") 4.23 mm (2/12") 6.35 mm (3/12") 8.47 mm (4/12") 10.58 mm (5/12") 12.70 mm (6/12") 14.82 mm (7/12") 16.93 mm (8/12") 19.05 mm (9/12") 21.17 mm (10/12") 23.28 mm (11/12") 25.40 mm (12/12") 27.52 mm (13/12") User Top of Form	
	LF Revise	Adjust a line feed in the cut sheet mode.	-14 ~ -1 0 +1 ~ +14	
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720.	Default Mode 1 Mode 2	
		Select Mode 1 or Mode 2 for ML5721.		
Cut Sheet Front	Line Spacing	Select line feed pitch.	6 LPI 8 LPI	
	Page width (Displayed only for ML5721/ML5791)	Change to 8" to print on narrow paper.	<b>345.44 mm (13.6")</b> 203.2 mm (8")	
	Page Length	Select the length of cut sheet.	279.4 mm (11") 296.3 mm (11 2/3") 304.8 mm (12") 355.6 mm (14") 420.9 mm (16.57") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	Wait Time	Select the waiting time between setting paper on the tray and feeding it while the printer is waiting for paper to be fed in cut sheet manual feed mode.	Invalid 0.5 sec 1.0 sec <b>1.5 sec</b> 2.0 sec 3.0 sec	
	Paper Length Control	Control the page length of cut sheet.	by MENU setting by Actual Page Length	by MENU setting by Actual Page Length

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Cut Sheet Front cont.	Cut Sheet Auto Eject Position	Select a printable area at the bottom of cut sheet paper in cut sheet mode (the character centre position).	6.35 mm (3/12") 12.70 mm (6/12") 14.82 mm (7/12") Invalid	
	TOF Adjust	Select an adjustment value for the reference position in regard to the TOF position of cut sheet paper.  The position moves to the rear of the form by (+) and to the top of the form by (-) in 1/144" (ML5720/21) and 1/180" (ML5790/91) increments.	-20 ~ -1 0 +1 ~ +20	-30 ~ -1 0 +1 ~ +30
	Cut Sheet Top of Form	Select the reference position for the TOF position when feeding cut sheet. (Up to the mid-section of characters in the first line.)	2.12 mm (1/12") 4.23 mm (2/12") 6.35 mm (3/12") 8.47 mm (4/12") 10.58 mm (5/12") 12.70 mm (6/12") 14.82 mm (7/12") 16.93 mm (8/12") 19.05 mm (9/12") 21.17 mm (10/12") 23.28 mm (11/12") 25.40 mm (12/12") 27.52 mm (13/12") User Top of Form	
	LF Revise	Adjust a line feed amount in the cut sheet mode.	-14 ~ -1 0 +1 ~ +14	
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720/ML5790. Select Mode 1 or Mode 2 for ML5721/ML5791.	Default Mode 1 Mode 2	
Set-up	Graphics	Select the printing direction when double-height print data exists in a line.	ng Uni-directional ouble- <b>Bi-directional</b>	
	7 or 8 Bits Graphics (Displayed only for ML Emulation)	Select to change graphics settings.	<b>7</b> 8	-
	Receive Buffer Size	Select size of the received buffer. When "1 Line" is selected, the receive buffer size is set to 2 k bytes.	0 K 1 Line 32 K 64 K <b>128 K</b>	

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Set-up cont.	Paper End Detection	Select whether to detect paper end or not. Change to OFF to override the sensor and print closer to the bottom of the page.	On Off	-
	Print Registration 1	Adjust the print starting position on printing in the reverse direction. (The position moves to the right or left in 1/720 in increments.)	-10 ~ -1 0 +10 ~ +1	
	Print Registration 2	Adjust the print starting position on printing in the reverse direction. (The position moves to the right or left in 1/720 in increments.)	-10 ~ -1 0 +10 ~ +1	
	Print Registration 3	Adjust the print starting position on printing in the reverse direction. (The position moves to the right or left in 1/720 in increments.)	-10 ~ -1 <b>0</b> +10 ~ +1	
	Print Registration 4	Adjust the print starting position on printing in the reverse direction. (The position moves to the right or left in 1/720 in increments.)	-10 ~ -1 <b>0</b> +10 ~ +1	
	7 or 8 Bits Data Word	Select data word lengths.	7 <b>8</b>	-
	Operator Panel Function	Select full or limited operation.	Full Operation Limited Operation	
	Reset Inhibit	Changing this to Yes prevents a reset signal from the computer from resetting the printer to its defaults.	No Yes	
	Print Suppress Effective	Select whether to enable or disable a print suppress setup command.	No Yes	
	Auto LF	Select whether to perform auto LF operation or not upon receiving a CR code. If your print out is consistently double spaced, select No, if it overprints, select Yes.	No Yes	
	Auto CR (Displayed only for IBM emulation)	Select Yes to add a carriage return when a Line Feed is received at the end of a line.	<b>No</b> Yes	

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Set-up cont.	Print DEL Code (Displayed only for ML Emulation)	Change the setting to Yes to print the DEL code (decimal 27) as a solid box.	No Yes	-
	SI Select Pitch (10 CPI) (Displayed only for IBM emulation)	Select how to handle an SI command received in 10 CPI mode.	<b>17.1 CPI</b> 15 CPI	
	SI Select Pitch (12 CPI) (Displayed only for IBM emulation)	Select how to handle an SI command received in 12 CPI mode.	<b>12 CPI</b> 20 CPI	
	Time Out Print	Select valid or invalid.	Invalid <b>Valid</b>	
	Auto Select	Determines whether or not the printer will automatically be selected after you load in paper. Select No if you want to set the Top of Form position.	Yes No	
	Host Interface	Selects which interface the printer uses to receive printing commands.	Auto Interface Parallel USB Optional	
	I/F Time Out	Sets the length of time before the interface switches to idle status when no printing commands have been received.	15 sec 30 sec 45 sec 1 min 2 min 3 min 4 min 5 min	
	ESC SI Pitch (Displayed only for IBM emulation)	Sets the character pitch used when the ESC SI command is received.	<b>17.1 CPI</b> 20 CPI	
	Select Language Set	Changing the language set replaces certain standard symbols with special characters used in foreign languages.	Combined Code Page Only	
	Print Style	Select the printer impact mode.	Normal High Speed Quiet High Copy	
	Select Quiet Mode	Select Quiet print mode.	Mode 1 Mode 2	
	Select High Copy Mode	Select High Copy print mode.	Mode 1 Mode 2 Mode 3 Mode 4	
	Reverse Feed Control	Set reverse feed control.	TOF Stop TOF Over	

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Set-up cont.	Print Direction at DH Mode	Select the print direction at the double height printed.	<b>Uni-directional</b> Bi-directional	
	Sleep Time	Set idle time to enter sleep mode.	5 min 10 min 15 min 30 min 60 min	
	Pin Control	Select whether to have or not have print control during line printing.	-	<b>Standard</b> Special
	Pin Control Select	Select the method to print lines when Special is selected in Pin Control menu.	-	Mode1 Mode2
	Paper End	Select when to detect Paper End.	On-line Off-line	
	FF Function	Set feeding operation upon receiving an FF code after cut paper is fed.	Eject Form Feed	
	Cut Sheet Park Function	Select Valid to enable paper feed out of the cut sheet.	<b>Invalid</b> Valid	
	Feed Up when Menu Printing	Select Yes to move the paper to the top cover to see the MENU printing.	No Yes	
Parallel I/F	I-prime	Select whether to print or clear buffer contents upon initialisation by receiving I-PRIME.	Invalid <b>Buffer Print</b> Buffer Clear	
	Auto Feed XT (Displayed only for EPSON emulation)	Select the validity of an Auto Feed XT signal.	Valid <b>Invalid</b>	
	Bi-direction	Set whether to return a device ID or not in accordance with IEEE1284.	<b>Enable</b> Disable	
Serial I/F (Displayed when connected to Serial	Parity	None: Absence of parity bit Odd: Odd parity Even: Even parity Ignore: Do not convert the character to ox40 in case of parity error.	None Odd Even Ignore	
Interface)	Serial Data 7/8 Bits	Select Serial bit.	<b>8 bit</b> 7 bit	
	Protocol	Select an I/F Busy control method.	Ready/Busy X-On/X-OFF Ready/Busy & X-ON	/X-OFF

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
Serial I/F cont. (Displ- ayed	Diagnostic Test	Select to perform input/ output diagnosis of RS-232C interface signals.	No Yes	
when connec- ted to Serial Interface)	Busy Line	Select to set the Busy Line.	SSD- SSD+ DTR RTS	
	Baud Rate	Select to set the Baud Rate.	<b>9,600 bps</b> 4,800 bps 2,400 bps 1,200 bps 600 bps 300 bps 19,200 bps	
	DSR Signal	Select the DSR Signal.	<b>Valid</b> Invalid	
	DTR Signal	Select a method to switch a DTR signal of a serial interface.	Ready on Power Up Ready on Select	
	Busy Time	Select the minimum time between BUSY to READY.	<b>0.2 sec</b> 1.0 sec	
	Stop Bit	Select the stop bit.	<b>1 bit</b> 2 bit	
	Receive error	Select the receive error.	<b>Checked</b> Unchecked	
CSF Bin 1 (Display-	Line spacing	Select line feed pitch	<b>6 LPI</b> 8 LPI	
ed when Single-bin Cut-sheet feeder is	Page Width (Displayed only for ML5721/ML5791)	Change to 8 inch to print on letter size paper.	<b>203.2 mm (8")</b> 345.44 mm (13.6")	
reeder is installed)	Page Length	Select the length of cut sheet.	279.4 mm (11")  296.3 mm (11 2/3") 304.8 mm (12") 355.6 mm (14") 420.9 mm (16.57") 76.2 mm (3") 82.6 mm (3.25") 84.7 mm (10/3") 88.9 mm (3.5") 93.1 mm (11/3") 101.6 mm (4") 127.0 mm (5") 139.7 mm (5.5") 152.4 mm (6") 177.8 mm (7") 203.2 mm (8") 215.9 mm (8.5")	
	Cut Sheet Auto Eject Position	Select a printable area at the bottom of cut sheet paper in cut sheet mode (the character centre position).	6.35 mm (3/12 in) 12.7 mm (6/12 in) 14.82 mm (7/12 in)	

GROUP	ITEM	FUNCTION	SETS	
			ML5720/ML5721	ML5790/ML5791
CSF Bin 1 cont. (Displayed when Single-bin Cut-sheet feeder is installed)	TOF Adjust	Select an adjustment value for the reference position in regard to the TOF position of cut sheet paper.  The position moves to the rear of the form by (+) and to the top of the form by (-) in 1/60 in increments.	-20 ~ -1 0 +1 ~ +20	
	Cut Sheet Top Of Form	Select the reference position for the TOF position when feeding cut sheet. (Up to the mid-section of characters in the first line.)	2.12 mm (1/12") 4.23 mm (2/12") 6.35 mm (3/12") 8.47 mm (4/12") 10.58 mm (5/12") 12.70 mm (6/12") 14.82 mm (7/12") 16.93 mm (8/12") 19.05 mm (9/12") 21.17 mm (10/12") 23.28 mm (11/12") 25.40 mm (12/12") 27.52 mm (13/12") User Top of Form	
	LF Revise	Adjust a line feed amount in the cut sheet mode.	-14 ~ -1 0 +1 ~ +14	
	Centering Position	Select to limit printhead travel when printing narrow columns. Select Mode1 for ML5720. Select Mode 1 or Mode 2 for ML5721.	Default Mode 1 Mode 2	
Extension	Detect Sprocket Hole	Select Enable when loading continuous form to detect sprocket hole, and avoid printing on the hole.	<b>Enable</b> Disable	
	Right Margin(Fanfold)	Select to set the blank space (width) on the right side of the continuous form.	Right Margin Over 1 mm 3 mm 5.08 mm 10 mm 13 mm 15 mm 20 mm 25 mm	
	Right Margin (Cut Sheet)	Select to set the blank space (width) on the right side of the cutsheet paper.	Right Margin  1 mm  2 mm  3 mm  4 mm  5 mm  6 mm	

### **INITIALISING MENU SETTINGS**

To restore the menu settings to their initial values, carry out the steps below.

NOTE

The values adjusted by the Adjustment menus are not initialised by the following procedure.

- **1.** Set the Power Switch to OFF.
- **2.** Press and hold down the SEL and LF/FF buttons together and then set the Power Switch to ON.

The SEL LED will flash.

**3.** Press and hold down the TEAR button and then press the SEL button again.

## **ADJUSTING TOF POSITION**

Use the following procedure to set TOF to accord with the reference position (6.35 mm (0.25 in)). The reference position refers to the first line of the paper i.e. the position to which the printer feeds the paper when automatically loading the paper.

NOTE

Adjusting of TOF can be done in cut sheet mode or continuous forms mode.

- 1. Print out the menu settings of the printer as in "Confirming current settings" on page 40 and confirm that the TOF (in cut sheet mode or continuous forms mode) is 23.28 mm (11/12 in).
- 2. Remove the cut sheet paper by pressing LOAD/EJECT button or retract the continuous form as described in "Removing continuous forms" on page 27.
- **3.** Set the Paper Type lever to the required paper type.
- **4.** Place the cut sheet paper on the Paper Tray (front or top) and adjust the paper guides to suit the paper width.

When continuous forms are used, place the paper on the Pin Tractor.

**5.** To load the cut sheet paper, insert the cut sheet in the Top of Form position, and the paper is automatically loaded.

To load the continuous form, press LOAD/EJECT button.

NOTE

TOF default is set at 23.28 mm (11/12 in).

**6.** Align the paper with the first print line position as follows:

ML5720/ML5721:

- > To feed the paper forward by a small amount (1/144 in), press the LOAD/EJECT and SEL buttons together.
- > To feed the paper backward by a small amount (1/144 in), press the LOAD/EJECT and LF/FF buttons together.

ML5790/ML5791:

> To feed the paper forward by a small amount (1/180 in), press the LOAD/EJECT and SEL buttons together.

> To feed the paper backward by a small amount (1/180 in), press the LOAD/EJECT and LF/FF buttons together.

### NOTE

- > Press the TEAR button to move the continuous form down before adjusting the TOF.
- > For ML5720/ML5721: the specified correction range is  $\pm$  20/144 in
- > For ML5790/ML5791: the specified correction range is  $\pm$  30/180 in.
- **7.** When the paper is positioned at the required TOF, release the buttons in Step 6 above.
  - To save this position as the TOF, press and hold the SEL button and then press the LF/FF button.

## **TROUBLESHOOTING**

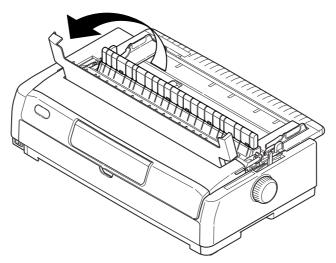
## **CLEARING PAPER JAMS**

### **C**UT SHEET PAPER JAMMED IN PRINTER

## **WARNING!**

Do not carry out any operations inside the printer with the Power Switch set to ON.

- 1. Set the Power Switch to OFF.
- **2.** Open the Top Cover.

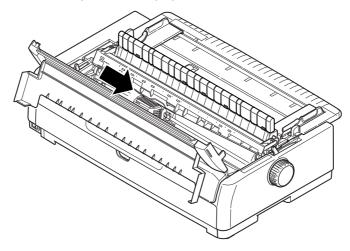


**3.** Set the Paper Thickness lever to position 10.

## **WARNING!**

The Print Head may be hot after printing. Allow it to cool before touching it.

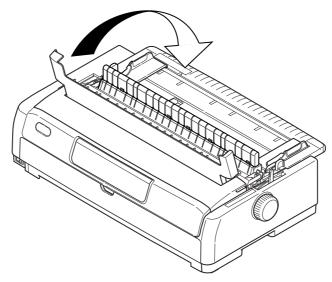
- **4.** Remove the ribbon cartridge. See "Changing a ribbon cartridge" on page 68.
- **5.** Move the print head away from the paper.



- **6.** Rotate the platen knob in the relevant direction and pull the cut sheet out from the top of the printer.
- **7.** If a paper fragment remains inside the printer:
  - (a) use tweezers to grip and extract it or
  - (b) insert a triple folded sheet from the Paper Tray and turn the platen knob to pass the folded sheet through and push out the paper fragment.



**8.** When the paper jams are cleared, replace the ribbon cartridge, reset the paper thickness lever and close the printer top cover.



**9.** Set the Power Switch to ON.

NOTE

Use the above procedure to clear paper jam when using cut-sheet front feed.

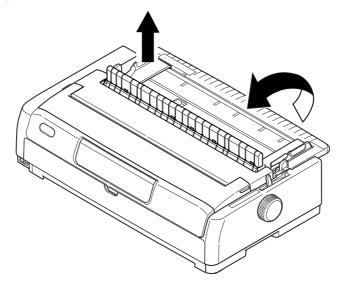
### **CONTINUOUS FORMS JAMMED IN PRINTER**

## **WARNING!**

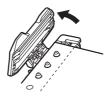
Do not carry out any operations inside the printer with the Power Switch set to ON.

- 1. Set the Power Switch to OFF.
- 2. Open the Top Cover.
- **3.** Tear off any unprinted continuous forms.

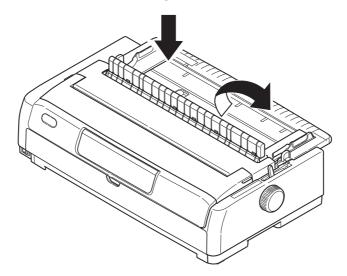
**4.** Remove the top Paper Tray by holding the tray by the tabs on both sides and pulling it up from the printer.



**5.** Raise each Pin Tractor cover and remove the continuous forms from the Pin Tractors.



- **6.** Rotate the platen knob and remove the forms from the front of the printer.
- **7.** If a form fragment remains inside the printer, place two or three forms in a stack on the Pin Tractors and turn the platen knob to push the fragment out of the printer.
- **8.** When the paper jams are cleared, lower the top Paper Tray and slide it towards the front of the printer until the marks align.



**9.** Close the Top Cover.

NOTE

Use the above procedure to clear paper jam when using continuous form-front push.

## **RESPONDING TO ALARM CONDITIONS**

Use the following table for guidance on how to respond to indicated alarm conditions.

INDIC	CATOR	ALARM MEANINGS AND ACTIONS
SEL	ALARM	
OFF	ON	Paper has run out. Add paper and press the SEL button.
OFF	Flashing	The Paper Type lever is wrongly set for the type of paper in use. Press the SEL button and set the Paper Type lever to the correct position.
OFF	Flashing	Problem with cut sheet feeding. Remove the cut sheet.
Flashing	ON	Print data is received but printing does not start because no paper is being fed. Insert paper.
Flashing	Flashing	Printing cannot be resumed at this stage. Turn the power OFF, verify that the carriage moves properly, then turn the power ON again.  If the problem is still there after you turn the power ON again, contact your dealer.

## **RESPONDING TO GENERAL PROBLEMS**

Use the following table to help you to identify symptoms with possible causes and take suggested remedial actions.

PROBLEM	CAUSE	ACTION			
No power					
No power	The power cable is not properly connected.	Check the power cable is properly connected at both power outlet and printer.			
	Power outlet problem or power outage.	Plug another appliance into this outlet to check if it works.			
No printing takes place					
SEL indicator is unlit.	The printer driver is not installed properly.	Re-install the printer driver correctly.			
	The printer has just stopped printing.	Press the SEL button.			
	There is no paper in the printer.	Load paper.			
SEL indicator is illuminated but no printing takes place.	Interface cable is disconnected.	Reconnect the interface cable.			
	Wrong interface cable has been used.	Use correct interface cable.			
The print head is moving but no printing takes place.	The ribbon cartridge has not been installed.	Install the ribbon cartridge.			

PROBLEM	CAUSE	ACTION				
Print position offset	Print position offset					
The horizontal printing position is offset.	The start position may change after the printer is powered on.	When the printer is powered ON, switch from off-line mode to on-line mode by pressing the SEL button. Reset the start position. You must set the Power Switch to OFF before you change the start position.				
Printing slows down						
Print direction changes suddenly to unidirectional.	When the print head overheats, the printer automatically starts unidirectional split printing.	When the print head temperature drops sufficiently, the printer will return to its original operation.				
PE warning						
The print carriage does not operate.	There is contamination on the carriage shaft.	Clean any paper dust and contamination from the carriage with a dry cloth.				
Print blurring						
The characters are too pale to display properly on the paper.	The Paper Thickness lever position does not match the paper.	Correct the Paper Thickness lever setting.				
	The printer is set to print at high speed.	Set the speed to normal.				
	The ribbon has reached its end of life.	Replace the ribbon by a new one.				
	The ribbon cartridge is not installed correctly.	Reinstall the ribbon cartridge correctly.				
	The ribbon has been wound incorrectly.	Replace the ribbon cartridge by a new one.				
	The ribbon is not transferring properly.	Replace the ribbon cartridge by a new one.				
A line of print is missing.	Broken wire pins.	Contact your dealer.				
The printout differs from the	e screen display.					
Printout of completely different characters or symbols.	Incorrect print setup for the user application.	Reselect print setup for the applications according to priority.				
	The application control codes for the previous print operation are still enabled.	Initialise the printer.				
	The input application control signal is not correct.	Print in hex dump mode and verify the data content. Make corrections in the application.				
	The interface cable is not properly connected.	Reconnect the cable correctly.				

PROBLEM	CAUSE	ACTION	
Too high or too low TOF	The TOF is not correctly	Initialise the printer.	
(where printing starts).	selected.	Select correct TOF for cut sheet and continuous forms.	
		Select the first-line print position and adjust the paper top position.	
		Reselect the margin correctly in the application.	
Too large or small left and/or right margins.	The left or right margin is not correctly selected.	Incorrect positions of the Paper Guide or Pin Tractors. Select and adjust the position again depending on the paper type.	
		Reselect the left and right margins correctly in the application.	
When continuous forms are used, the content of a single form is printed on two forms.	The paper length selected in the application does not match the physical paper length.	Match the paper length selected in the application with the physical paper length in use.	
When cut sheets are used, the content of a single sheet is printed on two sheets.	The paper setting selected in the application does not match the physical paper size.	Match the paper setting selected in the application with the physical paper in use.	
	It does not match the lines per page as the printer	Leave enough top and bottom margin in the application.	
	automatically detected.	Correct the cut sheet LF adjustment.	
The content of a single line is printed in two lines.	The left and/or right margins are not correctly selected.	Reselect the left and right margins correctly in the application.	
When continuous forms are used, several blank lines appear in the printout.	Tear-off perforation spacing is selected.	Cancel tear-off perforation spacing.	
Broken and uneven vertical lines.	This may happen in bidirectional printing.	Use Print Registration in the adjustment mode to adjust.	
Too large or small line spacing.	Line spacing is not selected correctly.	Reselect line spacing correctly in the application.	
Split print			
Blanks appear in graphic printout.	This is a paper feed error, which is especially notable in printing regular characters.	This is not a failure.	
Blanks or deformed characters appear in double height type or other extended types.	This is a paper feed error due to line feeding in printing a single character.	This is not a failure. Use the printer's built-in fonts when you print important documents or bills.	

PROBLEM	CAUSE	ACTION
Improper cut sheet feed		
No paper feed.	Sheets are located off the paper guide.	Load sheets with their left edges against the paper guide.
	Sheets are not loaded to the end.	Load sheets to the end.
Continuous forms instead of cut sheets are fed.	The printer is in the continuous forms mode.	Eject the continuous forms and select cut sheet mode for the printer.
Paper distortion.	Sheets are not loaded to the end, or they are not inserted straight.	Load sheets to the end.
	Paper with wrinkles, folds or other defects.	Change paper.
	Paper not specified for the printer.	Use paper types specified for the printer.
Unable to eject.	The LF/FF button is pressed.	Press the LOAD/EJECT button.
Improper continuous forms	feed.	
No line feed, and no paper feed.	Paper is off the Pin Tractors.	Reload paper correctly.
ieeu.	The adjust lever position does not match the paper type.	Set the adjust lever to the correct position.
Paper distortion or jam.	Forms are loaded with their left holes out of line with the right ones.	Load forms with their left holes in line with the right ones.
	Inadequate distance between the left and right Pin Tractors, making for loose paper.	Relocate the Pin Tractors to tighten the paper.
	Skew paper feeding.	Move the paper to make it straight.
	Paper movement is blocked.	Remove the blockage.
	Paper source is too far from the printer.	Move the paper source nearer to the printer.
	Paper not specified for the printer.	Use paper types specified for this printer.
Several blank lines appear in the printout.	Skip over perforation spacing is selected.	Cancel the skip over perforation spacing.
The selected skip over perforation spacing does not match the physical tear-off perforation positions.	The paper length selected in the application does not match the physical paper length.	Match the paper length selected in the application with the physical paper length in use. Select the paper length in number of lines in the application.
Abnormal switchover between	en cut sheet and continuous	forms modes.
No cut sheet feed.	The printer is in continuous forms mode.	Set the Paper Type lever to cut sheet mode.
No continuous forms feed.	The printer is in cut sheet mode.	Set the Paper Type lever to continuous forms mode.

PROBLEM	CAUSE	ACTION
Paper feed operations for both cut sheets and continuous forms are actuated.	The cut sheet is not ejected.	Eject the cut sheet.

## **CLEANING YOUR PRINTER**

To keep your printer in good operating condition, you are advised to clean it regularly.

## **WARNING!**

Set the printer Power Switch to OFF and disconnect the power cable from the printer before cleaning the printer.

### PRINTER EXTERIOR

### **CAUTION!**

Keep the Top Cover closed to avoid the possibility of detergent entering the printer

Clean the exterior of the printer as required, but at least every six months or 300 hours of operation, whichever comes first.

> Moisten a piece of cotton cloth with diluted neutral detergent and carefully wipe the printer exterior.

### PRINTER INTERIOR

### **WARNING!**

As the print head becomes hot during printing, allow it to cool before carrying out any cleaning inside the printer. Do not use any flammable solvents for cleaning the printer to avoid any risk of fire or electric shock.

Clean the interior of the printer every 6 months or 300 hours of operation, whichever comes first.

Using a soft cloth, cotton swabs and a vacuum cleaner, clean the interior of the printer as follows:

WHERE TO CLEAN	WHAT TO CLEAN	
The carriage and the area around it	Clean and remove paper waste, dirt, dust and ribbon	
The paper travel surface	shreds.	

## **CAUTION!**

When you clean the interior of the printer with a vacuum cleaner, do not attempt to clean any parts smaller than the suction nozzle. Do not clean any interior working parts with the suction nozzle to avoid possible damage to the printer.

## **CONSUMABLES AND ACCESSORIES**

## **CONSUMABLES**

When the printed image becomes faint or incomplete, replace the ribbon cartridge.

### CHANGING A RIBBON CARTRIDGE

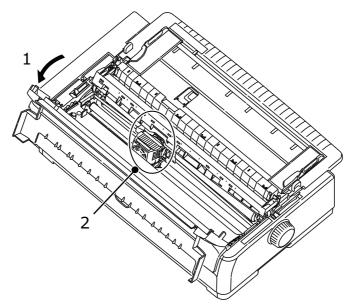
## **CAUTION!**

Only use genuine Original consumables to ensure the best quality and performance from your hardware. Non Original products may damage your printer's performance and invalidate your warranty.

## **WARNING!**

Do not change the ribbon cartridge with the Power Switch set to ON.

- 1. Set the Power Switch to OFF.
- **2.** Open the Top Cover and set the paper Thickness lever to position 10.

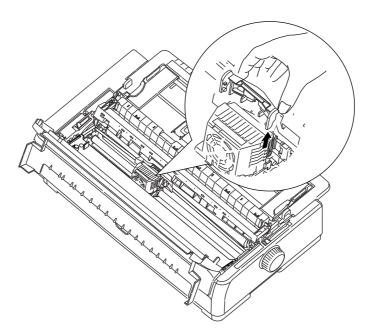


## **WARNING!**

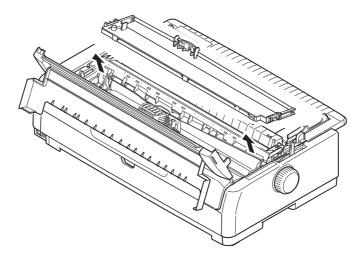
The print head and area around it may be hot after printing. Allow it to cool down before touching it.

**3.** Move the carriage to the center (2) for ribbon replacement position.

**4.** Holding the sides of the ribbon guide, slope it up and out to remove it from the carriage.

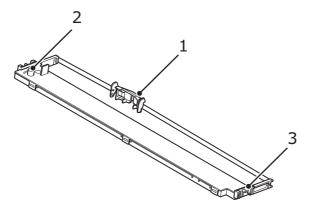


**5.** Holding the ribbon cartridge close to both ends, slope it up and out until it unlocks then remove it along the direction indicated by the arrows.

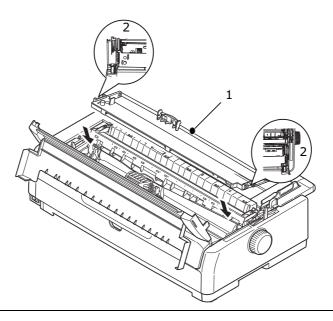


**6.** Dispose of the cartridge in accordance with your local guidelines.

**7.** Remove the new ribbon cartridge from its wrapping and note the position of the Ribbon Guide (1), Knob (2) and Pin (3).

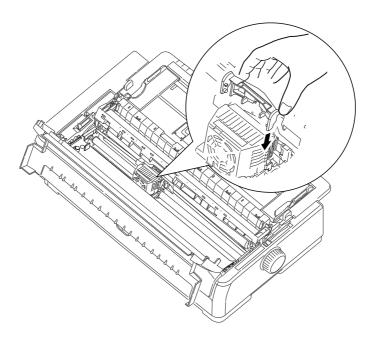


**8.** In the direction indicated by the arrows, insert the pins at both ends of the ribbon cartridge (1) into the U grooves (2) in the printer until the ribbon cartridge is fully locked.



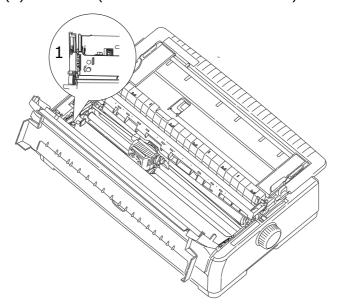
NOTE
It may be easier to mount the ribbon cartridge in place if you align it with the topside of the grooves. Also, a slightly loose ribbon may make it easier to mount the ribbon cartridge.

**9.** Holding the sides of the ribbon guide slope it downward until the ribbon guide comes in line with the slot of the print head.



NOTE
Ensure that the guide is pushed to the end of the print head.

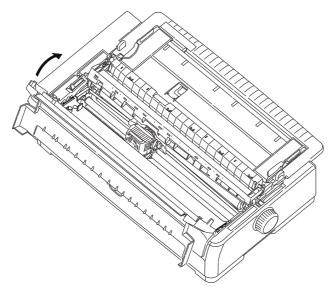
- **10.** Move the print head horizontally to ensure that the ribbon is properly installed.
- **11.** Turn the knob (1) clockwise (in the direction of the arrow) to wind up the ribbon.



## **CAUTION!**

- > Do not turn the knob anticlockwise as the ribbon might jam.
- Make sure that the ribbon is not twisted or damaged when it goes through the gap between the Print Head and the ribbon guide.

- **12.** Set the Paper Thickness lever to match the paper being used. (See "Setting the Paper Thickness lever" on page 33.)
- **13.** Close the Top Cover.



**14.** Set the printer Power Switch to ON.

### **CONSUMABLE ORDER INFORMATION**

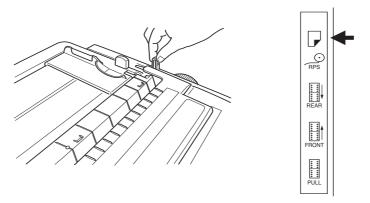
ITEM	MODEL	LIFE	ORDER NO.
Ribbon cartridge (Black)	ML5720/ML5790	8 million characters	44173405
	ML5721/ML5791	13 million characters	44173406

## **INSTALLING OPTIONS**

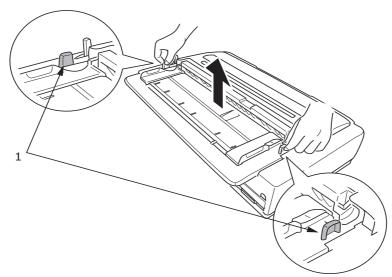
## INSTALLING THE CUT-SHEET FEEDER

To install the optional cut-sheet feeder (CSF) carry out for the following:

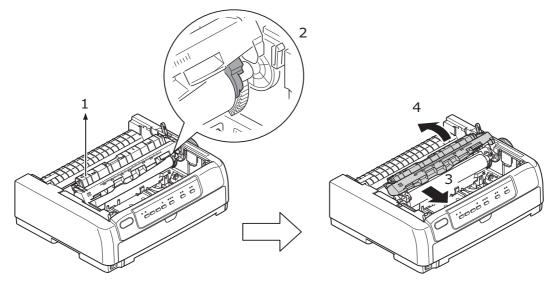
- **1.** Ensure that the printer is turned OFF.
- **2.** Ensure that the Paper Type Lever is set to Cut-Sheet.



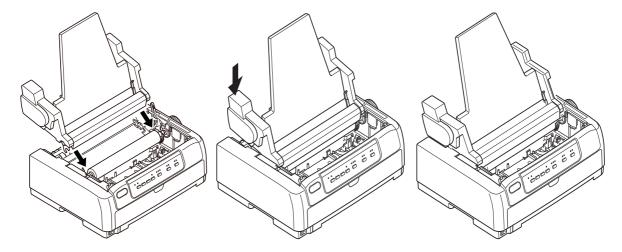
- **3.** Open the top access cover, adjust the Paper Thickness Lever to suit the paper. See "Setting the Paper Thickness lever" on page 33.
- **4.** Remove the top tray by holding the tabs (1) on both sides and pulling it up away from the printer.



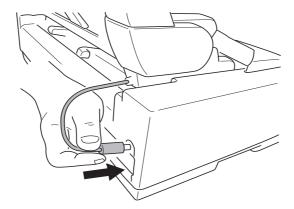
**5.** Remove the Pull-up Guide assembly (1) by disengaging the latches (2) on both sides, pulling it forwards (3) and then pulling it up (4).



**6.** Guide the edge of Cut-sheet feeder on both sides onto the platen and then press down to lock it in place.



**7.** Plug in the CSF connector into the CSF port in the rear of printer.



## **8.** Set the printer Power switch to ON.

NOTE

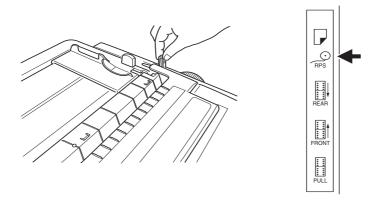
The Guide Assembly packed with CSF cannot be used on ML5720/ML5721.



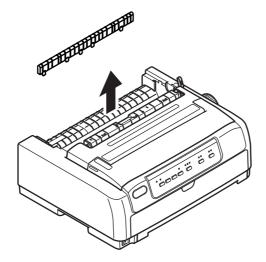
## INSTALLING THE ROLL PAPER STAND (ML5720/ML5790)

To install the optional Roll Paper Stand (RPS), carry out the following:

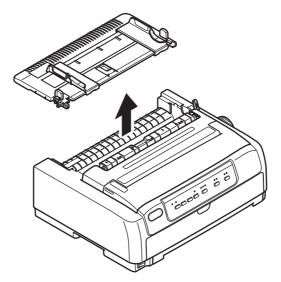
- 1. Ensure that the printer is turned OFF.
- **2.** Ensure that the Paper Type Lever is set to RPS.



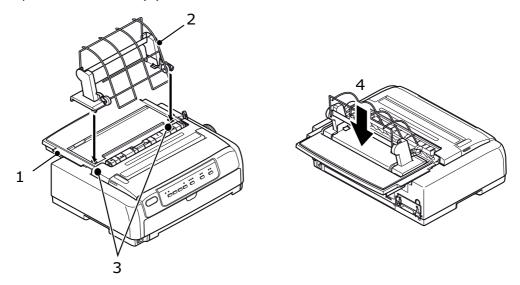
**3.** Remove the Pull-up Guide assembly support.



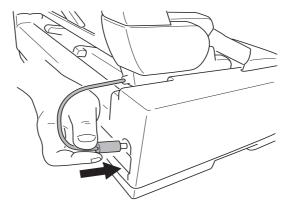
**4.** Remove the top tray by holding the tray by the tabs on both sides and pulling it up from the printer.



**5.** Install the separator (1). Insert the RPS (2) into the separators insertion slots (3) and push it backward (4).



**6.** Plug in the RPS connector into the port in the rear of the printer.



# Installing the Network and Serial Interface Card

To install any of the above options, follow the detailed installation sheet that accompanies the option.

## **OPTION ORDER NUMBERS**

OPTION	MODEL	ORDER NUMBER
Pull Tractor	ML5720/ML5790	44753902
	ML5721/ML5791	44754002
Cut-sheet Feeder Single Bin	ML5720/ML5790	44497402
	ML5721/ML5791	44497502
Roll Paper Stand	ML5720/ML5790	YA4053-1057G015
Tractor Unit	ML5720/ML5790	44454902
	ML5721/ML5791	44455002
RS-232C Serial Interface	ML5720/ML5721 ML5790/ML5791	44455102
100BASE-TX/10BASE-T Network Interface	ML5720/ML5721 ML5790/ML5791	please contact your OKI dealer

# **SPECIFICATIONS**

MODEL	MODEL NUMBER
ML5720	D22540B
ML5721	D22550B
ML5790	D22560B
ML5791	D22570B

ITEM	SPECIFICATION
Print method	Impact dot matrix
Print head ML5720/ML5721 ML5790/ML5791	18 pin, 0.3mm (0.012 in) diameter 24 pin, 0.2mm (0.0079 in) diameter
Dimensions ML5720/ML5790 ML5721/ML5791	438mm(W) x 375mm(D) x 191mm(H) 592mm(W) x 375mm(D) x 191mm(H) (with platen knob, pull-up guide assembly support and paper separator)
Weight ML5720/ML5790 ML5721/ML5791	7.5 kg 10 kg
Power rating Voltage Frequency	220 - 240V ± 10% 50/60 Hz ± 2%
Power consumption (without options attached) Operation ML5720/ML5721 ML5790/ML5791 Standby mode Powersave mode	Typ. 59W (ISO/IEC10561/Letter/Draft Range 1) Typ. 88W (ISO/IEC10561/Letter/Draft Range 1) 15 W 2.0W
Environmental conditions Operating Storage	5°C - 35°C, 20% - 80% RH (Testing condition for print precision: 15°C - 30°C, 40% - 70%RH) 10°C - 50°C, 5% - 95% RH When the printer is stored, it should be in its original packaging, with no moisture formation.
Noise level	The acoustic noise of this product is less than 57dB (A) (ML5720/ML5721) and 57dB (A) (ML5790/ML5791) as measured in accordance with EN ISO 7779.

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