POSIFLEX™

PP2000 Series
2 Station Printer
User's Guide

Rev. A

Download from Www.Somanuals.com. All Manuals Search And Download.

POSIFLEX™

Federal Communications Commission Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

For compliance with Federal Noise Interference Standard, this equipment requires a shielded cable.

This statement will be applied only for the printers marketed in U.S.A.

CE manufacturer's Declaration of Conformity (EC Council Directive 89/336/EEC of 3 May 1989)

This product has been designed and manufactured in accordance with the International Standards EN50081-1/01.92 and EN50082-1/01.92 following the provisions of the Electro Magnetic Compatibility Directive of the European Communities as of May 1989

Warranty Limits

Warranty will terminate automatically when the machine is opened by any person other than the authorized technicians. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

About This Manual

This manual is aimed to assist the user to utilize the PP2000 series which is a series of POS thermal printers delicately designed to work with either serial or parallel interface connection. This manual covers both operational and technical aspects. This manual is revised to cover also the Epson emulation commands and some frequently asked questions.

The manufacturer of the PP2000 series heartily apologizes to the user for reserving the right to change or to modify this manual without notice due to the rapid and constant progress and improvement on science and technology. The user may always obtain the most up to date information through our web site: **http://www.posiflex.com.tw** .

© Copyright Mustek Corp. 1999

All rights are strictly reserved. No part of this documentation may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, or otherwise, without the prior written consent of Mustek Corp. the publisher of this documentation.

Download from Www.Somanuals.com. All Manuals Search And Download.

Table of Contents

PRODUCT BRIEFING ..... 1 -- 1

MAIN PARTS ON THE EXTERIOR ..... 2 -- 1

- OUTPUT AREAS ..... 2 -- 1
- CONTROL PANEL ..... 2 -- 1
- INPUT / OUTPUT CONNECTOR ..... 2 -- 2

INSTALLATION ..... 3 -- 1

- CHECK CONTENTS ..... 3 -- 1
- OPEN TOP COVER ..... 3 -- 1
- STORE STAMP INSTALLATION ..... 3 -- 2
- RIBBON INSTALLATION / REPLACEMENT ..... 3 -- 3
- CASH DRAWER CONNECTION ..... 3 -- 4
- CONNECT TO HOST COMPUTER ..... 3 -- 4
- POWER CONNECTION ..... 3 -- 4
- POWER ON ..... 3 -- 5
- PAPER ROLLS INSTALLATION ..... 3 -- 5
- SELF TEST ..... 3 -- 6
- REPLACE TOP COVER ..... 3 -- 6
- CLEAR BUFFER ..... 3 -- 6

MAINTENANCE NOTICES ..... 4 -- 1

SOFEWARE COMMANDS ..... 5 -- 1

SPECIFICATIONS ..... 6 -- 1

- VALIDATION PRINTING ..... 6 -- 1
- PAPER ROLL ..... 6 -- 1
- LED INDICATIONS ..... 6 -- 2
- BUTTON FUNCTIONS ..... 6 -- 2
- PRINTER GENERAL SPEC ..... 6 -- 3

Download from Www.Somanuals.com. All Manuals Search And Download.

STORE STAMP (OPTION) . . . . . 6 -- 4
INTERNAL SWITCHES . . . . . 6 -- 4
CASH DRAWER CONNECTOR . . . . . 6 -- 5
SERIAL INPUT CONNECTOR (STANDARD 9 PIN RS232 INTERFACE) . . . . . 6 -- 5
POWER INPUT CONNECTOR . . . . . 6 -- 5
PARALLEL INPUT CONNECTOR (STANDARD 25 PIN SPP INTERFACE) . . . . . 6 -- 5
DIMENSION AND WEIGHT . . . . . 6 -- 5
ENVIRONMENT . . . . . 6 -- 6
RELIABILITY . . . . . 6 -- 6
POWER ADAPTOR PA-300 . . . . . 6 -- 6

REGULAR MAINTENANCE PROCEDURE . . . . . 7 -- 1
DAILY MAINTENANCE . . . . . 7 -- 1
PERIODIC MAINTENANCE . . . . . 7 -- 2

BASIC TROUBLES SHOOTING . . . . . 8 -- 1
NO OPERATION AFTER POWER ON . . . . . 8 -- 1
CAN NOT PRINT WITH A NORMAL POWER ON . 8 -- 1
USE SELF TEST CAPABILITY IN CASE OF DOUBT . . . . . 8 -- 1
PAPER JAMMED . . . . . 8 -- 2

Download from Www.Somanuals.com. All Manuals Search And Download.

I. PRODUCT BRIEFING

This is a high speed 2 - station journal / receipt printer.

- A standard 2 station Journal / Receipt printer: The printing paper width is 44.5mm. The printer can print both journal and receipt at the same time or only journal or receipt alone.
- The ability for validation printing.
- The configuration of print head is a 9 Pin impact print head. The maximum printing speed is about 3 lines / sec and 24 characters / line. The paper feed speed by command of each journal and receipt is about 30 lines / sec.
- There are 3 code pages including USA, Multilingual and Portuguese for use.
- There are 16 sets of international character sets.
- There are two kinds of different interfaces including a 9 pin D subminiature connector for serial interface and a 25 pin D subminiature connector for parallel interface and the printer can automatically detect which one is in use.
- High capacity of printing buffer max. 32 KB can receive data speedily and store a large quantity of data.
- The ability of controlling two cash drawers.
- Built-in stand-by power to hold data for 1 hour from power off or power failure so that the printing can be continued after power resume. (This function can be disabled by jumper.)
- The ability of self-detection on errors like print head overheated.
- Clear LED status indication and easy operating buttons.
- External power supply or +24V DC power from the POS system.
- The PP2000 can be connected to a customer display and work under pass through commands.
- The life of print head expands considerably
- The style of the model is exquisite and beautiful. The printer itself takes very little space of the operation site and it is easy to use.

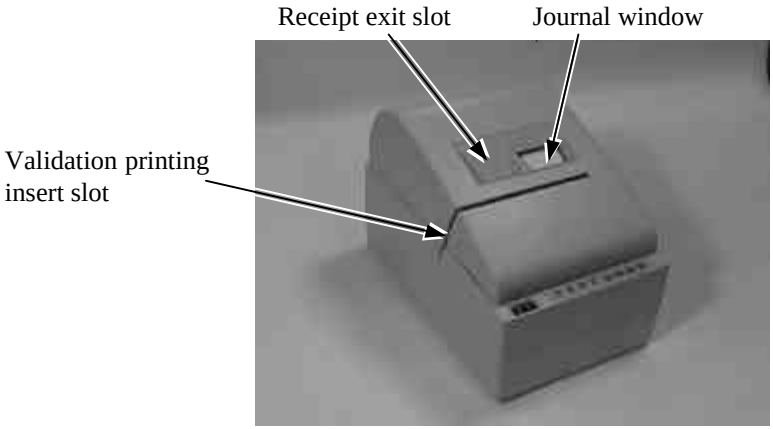
Download from Www.Somanuals.com. All Manuals Search And Download.

- Options include auto stamping ability of the store stamp on receipt and auto cutting of the receipt.
- The ability of cutting paper in full or in part by software on receipt.

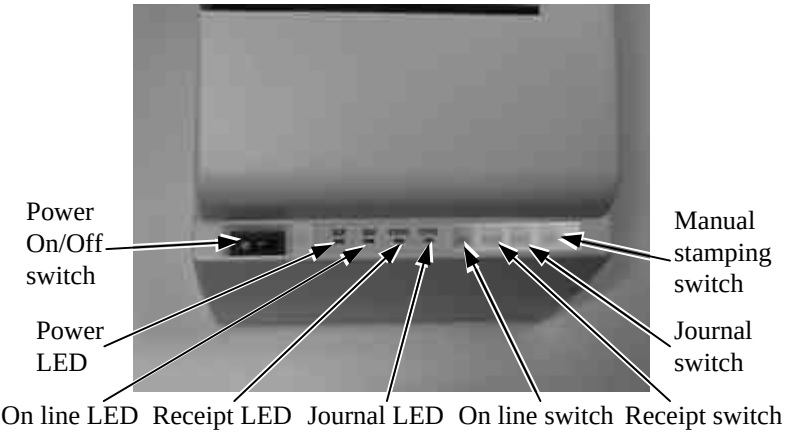
Download from Www.Somanuals.com. All Manuals Search And Download.

II. MAIN PARTS ON THE EXTERIOR

A. OUTPUT AREAS

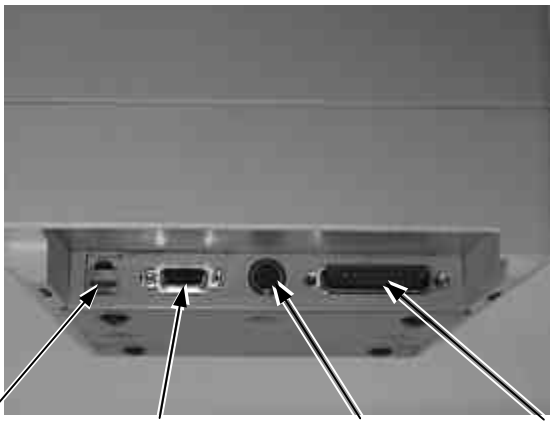


B. CONTROL PANEL



Download from Www.Somanuals.com. All Manuals Search And Download.

C. INPUT / OUTPUT CONNECTOR



Cash drawer connector | Serial connector | Power connector | Parallel connector

Download from Www.Somanuals.com. All Manuals Search And Download.

III. INSTALLATION

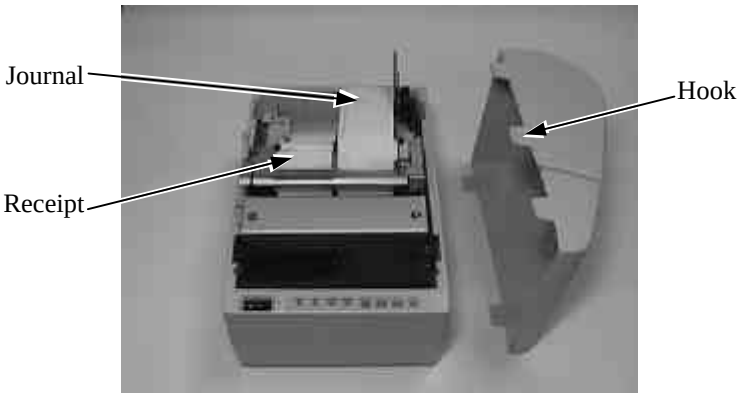
A. CHECK CONTENTS

When you unpack carefully the carton that delivers PP2000 series printer, you will find it contains several items as illustrated below.

- PP2000 2 - station receipt / journal printer
- Two rolls of paper roll sample
- One set of ribbon
- Power adaptor with power cord (option)

If there is any discrepancy or problem, contact your dealer immediately. **Be sure to save the packing materials in the event that the printer may need to be shipped at some point in the future.**

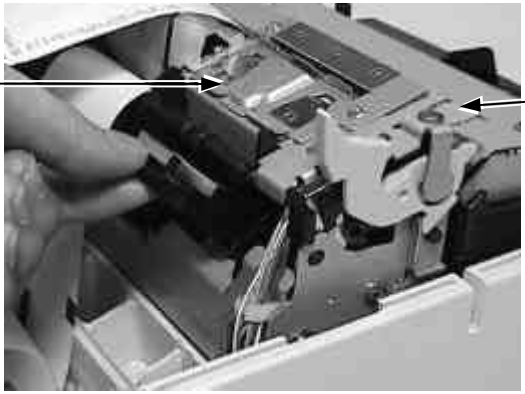
B. OPEN TOP COVER



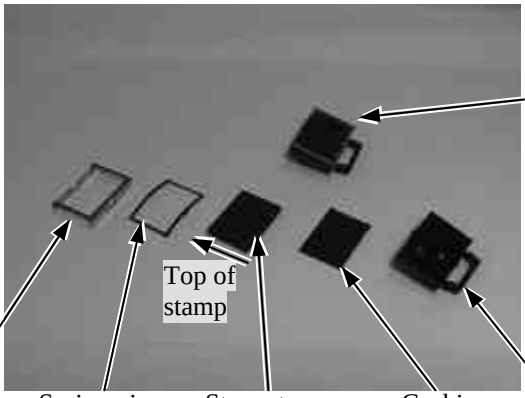
Please check the Power On / Off switch to be Off. Open top cover by gently pressing the rear part of top cover inward and lift it up., The above figure illustrates the result.

Download from Www.Somanuals.com. All Manuals Search And Download.

C. STORE STAMP INSTALLATION



If your printer comes with stamp option, you can find a store stamp case in the rear of the receipt part of print anvil assembly. You may take it out gently by holding its handle with your fingers.

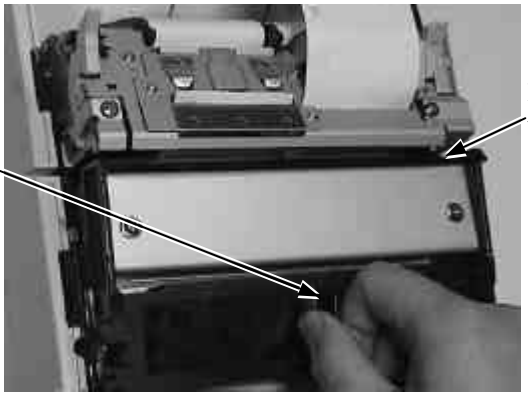


Disassemble the holder and the spring piece away from the stamp case, then install the store stamp, which is engraved with store name or logo, and cushion and reassemble the spring piece and holder onto the stamp case as illustrated in the picture above. **Please note the direction**

Download from Www.Somanuals.com. All Manuals Search And Download.

of store stamp. When the printing ink of the stamp is not enough, you can drip printing ink into the two holes in the rear of the stamp case.

D. RIBBON INSTALLATION / REPLACEMENT



When replacing the ribbon, please take the handle at the center of the old ribbon case and lift it up. Then the old ribbon can be taken out.

When installing a new ribbon, please place the new ribbon to a suitable position and align the axle hole under the ribbon case to the driving axletree of the printer. Then push down the ribbon case. Now

Download from Www.Somanuals.com. All Manuals Search And Download.

turn the knob of the ribbon in the marked direction to tighten the ribbon and to ensure proper operation of the ribbon and to avoid jamming.

E. CASH DRAWER CONNECTION

Using the Posiflex signal cable CCBLA-180 to control a Posiflex cash drawer (CR3100 or CR3200). However, by using the Posiflex signal split cable CCBLA-238, PP2000 series can control two Posiflex cash drawers (CR3100 or CR3200). (CCBLA-180 is a standard accessory with the Posiflex cash drawer CR3100 or CR3200.)

F. CONNECT TO HOST COMPUTER

The interface from PP2000 to host computer utilizes auto – detection between serial and parallel. To avoid improper operation, when one communication interface is in use, the input connector of the other interface should never be connected with any cable. All the external connectors are in the recessed area at the rear bottom. The 9 pin D sub Female connector supports the RS232 series interface and the 25 pin D sub Male connector supports the parallel interface. The protocol used in serial connection is defaulted: 9,600 bps, parity none, 8 data bits, 1 stop bit. The baud rate is adjustable from 2,400 to 19,200 bps.

G. POWER CONNECTION

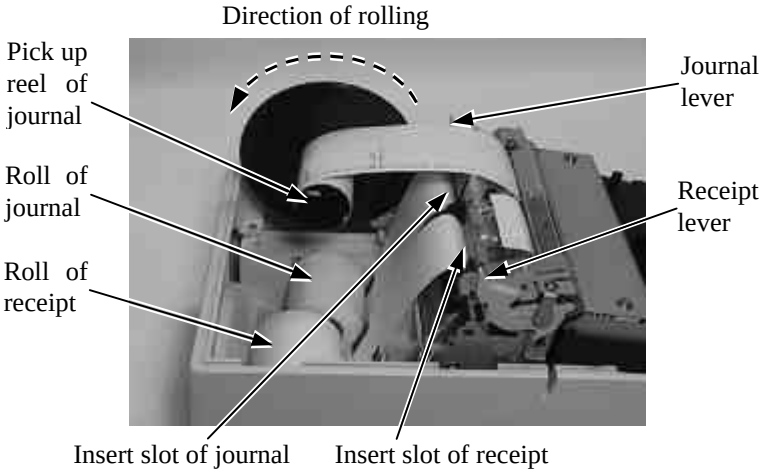
If used with Posiflex PST POS system, PP2000 can use DC power and the power cable from the POS system. If not, user must purchase PP2000 standard power adaptor. Pull the outer sleeve of the 3 pin plug of the power adaptor or power cord from the POS system backward to release the internal latch. Then insert the plug to the power connector and be sure to hear the click to obtain a firm contact. (Before extraction of this power cable, be sure to pull the outer sleeve of the plug backward too. Failure to do this could damage the power plug.) And then connect the power cord of the power adaptor to the wall outlet or turn on the POS system. Make sure that the type of power cord and the voltage requirement of the power adaptor meet the local power conditions. Now the printer is ready for power on.

Download from Www.Somanuals.com. All Manuals Search And Download.

H. POWER ON

Turn on the On/Off switch at the left to the control panel, there will be a short buzzing sound and it indicates a normal power on.

I. PAPER ROLLS INSTALLATION



1. Please refer to the picture above: Put the receipt roll into the left paper roll compartment and the journal roll into the right. Please note that the direction of paper roll is to be pulled up under the roll.
2. Push and hold down the receipt lever and insert the front end of receipt into the insert slot of receipt. When the front end of receipt is shown from the front end of the insert slot, release the receipt lever.
3. Push and hold down the journal lever and insert the front end of journal into the insert slot of journal. When the front end of journal is shown from the front end of the insert slot, feed the paper enough to be fixed to the pick up reel of journal and release the journal lever. Insert the front end of journal into the center slot of the reel and turn the reel in the indicated direction to fix the journal.

Download from Www.Somanuals.com. All Manuals Search And Download.

4. To give an idea about the positioning matter of the receipt, the print center is 33.3 mm behind the auto-cut position, whilst the stamp center is 40.0 mm behind the print center.

J. SELF TEST

Please power off the printer for at least three seconds and then press and hold the receipt button while turning the on / off switch on. A slip of self test result is printed on both receipt and journal side. Any signal of the receipt button after the printing of self test result will cause paper feed of receipt.

K. REPLACE TOP COVER

If there is any difficulty in applying all the five hooks on top cover into the bottom base of the printer, always align the left three hooks first and then press down the top cover to the base. In this way, the top cover will not come in conflict with the receipt lever

L. CLEAR BUFFER

The PP2000E series provides a data preservation function during power off. This function helps the user to go on printing after an unexpected power failure. However there can be occasions that the user wants to restart the printer without printing the unwanted data received before the printer is turned off. To have the data input buffer cleared, the user may turn off the printer then press and hold both on line and journal switches during turning on the printer again.

Download from Www.Somanuals.com. All Manuals Search And Download.

IV. MAINTENANCE NOTICES

- The printer should be put at a well ventilated site and avoid direct sunshine, also avoid high temperature, high humidity, high magnetic field. The site should also be free from lots of metal chips and dust.
- Never place any vessel for water alcohol beverages or any kind of fluid over the printer. Otherwise it may get turned over and damage the component inside.
- Use only alcohol or neutral detergent for cleaning of the exterior, please never use organic solvent like benzene or thinner.
- Maintenance guide:

  Ribbon :

  Replace for a new one every three months or twenty thousand pieces of receipt/journal printing. Please do **not** pour ink into the ribbon or it is easy to damage the print head.

  Print head:

  Replace for a new one every seventy thousand pieces of receipt/journal printing.

  Store stamp:

  Add ink into store stamp once every three months or twenty thousand pieces of receipt/journal printed. To avoid illegible stamping, please replace new store stamp once every twelve months or eighty thousand pieces of receipt/journal printing.

  Auto cutter:

  Clean any paper cutting residue and dust in the auto cutting mechanism regularly to avoid sensor malfunction and paper jam.

  Use of any ribbon other than the standard supply from the manufacturer (ERC-32) or refilling of any ink to the ribbon may cause damage like broken pin in the print head and/or other consequences. Such damage and consequences are responsibility of the user and are out of the warranty of the manufacturer.

Download from Www.Somanuals.com. All Manuals Search And Download.

Download from Www.Somanuals.com. All Manuals Search And Download.

V. SOFTWARE COMMANDS

The commands supported by the PP2000 Printer are listed below. For detail description of the below listed commands, please visit our web site http://www.posiflex.com.tw for detail descriptions of each command.

NAME	HEX	FUNCTION
LF	0A	Print and line feed
CR	0D	Print and carriage return
ESC SP	1B 20	Set right side character spacing
ESC !	1B 21	Select print mode(s)
ESC $	1B 24	Set absolute print position
ESC %	1B 25	Select/cancel user-defined characters set
ESC &	1B 26	Define user-defined characters
ESC *	1B 2A	Select bit-image mode
ESC -	1B 2D	Turn underline mode on/off
ESC <	1B 3C	Return home
ESC =	1B 3D	Select peripheral device
ESC ?	1B 3F	Cancel user-defined characters
ESC @	1B 40	Initialize printer
ESC E	1B 45	Turn emphasized mode on/off
ESC G	1B 47	Turn double-strike mode on/off
ESC R	1B 52	Select an international character set
ESC U	1B 55	Turn unidirectional printing on/off
ESC \	1B 5C	Set relative print position
ESC c 0	1B 63 0	Select paper type for printing
ESC d	1B 64	Print and feed n lines
ESC i	1B 69	Full cut
ESC m	1B 6D	Partial cut

Download from Www.Somanuals.com. All Manuals Search And Download.

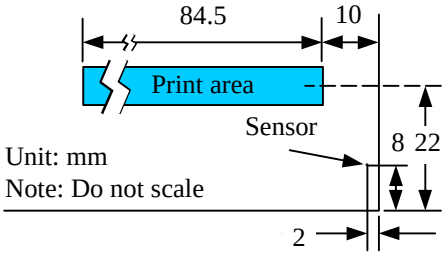
Software commands continued.

NAME	HEX	FUNCTION
ESC o	1B 6F	Stamp
ESC p	1B 70	Generate pulse
ESC t	1B 74	Select character code table
ESC u	1B 75	Transmit peripheral device status
ESC v	1B 76	Transmit paper sensor status
ESC z	1B 7A	Turn parallel printing mode on for receipt and journal
GS *	1D 2A	Define download bit image
GS /	1D 2F	Print download bit image

Download from Www.Somanuals.com. All Manuals Search And Download.

VI. SPECIFICATIONS

A. VALIDATION PRINTING



Paper width: 140 mm or above
Paper height: 65 mm or above
Paper thickness: 0.07 ~ 0.14 mm
Validation print: One line
Number of characters: 55
Print area and sensor position: As illustrated in drawing above

B. PAPER ROLL

Paper type: High quality paper
Paper roll width: 44.5 +/- 0.5 mm
Paper roll max. O. D.: 83 mm
Paper thickness: 0.06 ~ 0.09 mm

Download from Www.Somanuals.com. All Manuals Search And Download.

C. LED INDICATIONS

Power LED: Green: Printer power is working

On line LED: Green: Printer is at on line state. The printer takes command from the host system at this state and takes no command from the buttons.

Receipt LED: Red: Receipt paper is out, or malfunction with receipt print.

Journal LED: Red: Journal paper is out or malfunction with journal print.

D. BUTTON FUNCTIONS

On line button: Switches the printer between on line and off line states. The data in the buffer keep printing out.

Receipt button: Feeds receipt forward one line by each press under off line state.

Journal button: Feeds journal forward one line by each press under off line state. Can be used to clear buffer if the printer switched on while both this button and on line button are pressed.

Stamp button: Execute one stamp operation by each press under off line state. (Applicable with stamp option only)

Download from Www.Somanuals.com. All Manuals Search And Download.

E. PRINTER GENERAL SPEC

ITEM	SPECIFICATION
Functions	Receipt, journal and validation printing
Printing Method	9pin dot matrix impact; synchronized or separate printing of receipt and/or journal
Printing Speed	About 3 lines/sec., bi-directional
Printing Capacity	Receipt: 24 characters/line Journal: 24 characters/line Validation: 55 characters in one line
Paper Feed	Receipt and journal by separate friction feed
Max. Paper Feed Speed	About 30 lines/sec.
Built in Characters	3 code pages with 16 international character sets
Data Buffer	32KB max.
Paper Type	Receipt: paper roll (44.5 mm wide x 83 mm max. O. D.) Journal: paper roll (44.5 mm wide x 83 mm max. O. D.) Validation: single sheet or 2 layers of auto copy
Inked Ribbon	EPSON ERC-32(P) purple
Receipt Auto Cut Pattern	Full cut: 1 point left uncut Half cut: 3 points left uncut
Interface	Auto detect between RS232 and Centronics
Sensor	Print head over heat protection
Control over Cash Drawers	Can control 2 cash drawers separately
Power Used	DC 24V

Download from Www.Somanuals.com. All Manuals Search And Download.

F. STORE STAMP (OPTION)

Cushion width: 34.0 mm
Cushion height: 24.0 mm
Cushion thickness: 1.0 mm
Cushion material: PE foam
Stamp total width: 34.0 mm
Stamp total height: 24.0 mm (engraving included)
Stamp total thickness: 5.0 mm
Engraving width: 30.0 mm
Engraving height: 20.0 mm
Engraving thickness: 1.2 mm
Stamp material: porous rubber
Ink type: pre-inked stamp ink (has to match the material of stamp)

G. INTERNAL SWITCHES

Dismount the 4 screws at bottom of the printer and there is a control board fixed on a steel plate. On this control board, there is a 4PST DIP switch. The functions of each position of this DIP switch are described below:

P1: For factory setting, should not be changed.

P2: For data preservation. ON – data in input buffer remains when power off; OFF – data in input buffer are cleared when power off.

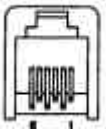
P3 and P4: Setting on serial interface protocols.

P3 OFF	P4 OFF	2,400 bps N, 8, 1
P3 OFF	P4 ON	4,800 bps N, 8, 1
P3 ON	P4 OFF	9,600 bps N, 8, 1 (Default)
P3 ON	P4 ON	19,200 bps N, 8, 1

Download from Www.Somanuals.com. All Manuals Search And Download.

H. CASH DRAWER CONNECTOR

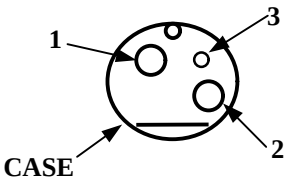
PIN	DEFINITION
1	Frame ground
2	CR2 kick (by Esc p 0 n1 n2)
3	Drawer open sense
4	+24V DC power
5	CR1 kick (by Esc p 1 n1 n2)
6	Signal ground



I. SERIAL INPUT CONNECTOR
(standard 9 pin RS232 interface)

J. POWER INPUT CONNECTOR

PIN	DEFINITION
1	+24 V DC power
2	Power ground
3	N. C.
CASE	Frame ground



K. PARALLEL INPUT CONNECTOR
(standard 25 pin SPP interface)

L. DIMENSION AND WEIGHT

	Length	Width	Height	Weight
PRINTER	265 mm	176 mm	193 mm	2.5 Kg
PACKED	315 mm	240 mm	320 mm	3.8 Kg (w/o power adaptor) 4.5 Kg (w/ power adaptor)

Download from Www.Somanuals.com. All Manuals Search And Download.

M. ENVIRONMENT

Temperature: 0°C to 50°C
Humidity: RH 10% to RH 90% without condensation

N. RELIABILITY

Printer mechanism (without print head) life: 8,000,000 lines
Print head life: 150,000,000 characters (2 dots/wire/character average)

O. POWER ADAPTOR PA-300

ITEM	SPECIFICATION
INPUT VOLTAGE RANGE	100 V AC to 250 V AC
INPUT FREQUENCY	50 to 60 Hz
OUTPUT VOLTAGE	+24 V DC
OUTPUT POWER	max. 60 W
CONTINUOUS LOAD	max. 2.2 A
OUTPUT STABILITY	+/- 5%
RIPPLE AND NOISE	max. 240 mV

Any application of a non Mustek supplied standard power adaptor may cause damage to the printer, abnormal operation or noise interference. All such degradations are not covered in the manufacturer's warranty.

Download from Www.Somanuals.com. All Manuals Search And Download.

VII. REGULAR MAINTENANCE PROCEDURE

A. DAILY MAINTENANCE

Perform a basic cleaning and maintenance daily at a suitable timing as following

Paper exit area

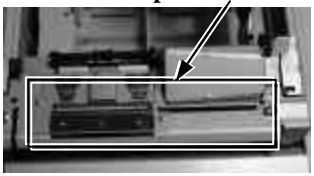


Fig 1 Paper exit area

Insert slot area

Fig 2 Insert slot area

Stamp area

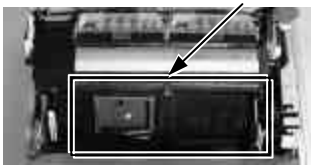


Fig 3 Stamp area

1. Turn power off and open the top cover. Press down the receipt lever and the journal lever. Take out both the paper roll of receipt and journal.
2. Use the attached soft brush to clean the area of the paper exit as indicated in Fig.1.
3. Pull both the receipt lever and journal lever forward to raise the print anvil assembly. Use the attached soft brush to clean the insert slot area in the direction as indicated in Fig.2. Brush gently away the dust and paper residuals in the direction from the journal end to the receipt end.
4. Check for dust and paper residuals in the stamp area. Use the attached soft brush to clean this area as indicated in Fig.3.
5. Replace the print anvil assembly. Use mini-vacuum cleaner if necessary to remove all the dust and paper residuals out of the interior of the printer.
6. Check if the ribbon is still integrated and in good condition. Replace a new ribbon if any damage found.

Download from Www.Somanuals.com. All Manuals Search And Download.

B. PERIODIC MAINTENANCE

A periodic maintenance and lubrication should take place by a qualified maintenance specialist in every 6 months.

Download from Www.Somanuals.com. All Manuals Search And Download.

VIII. BASIC TROUBLE SHOOTING

A. NO OPERATION AFTER POWER ON

If the printer does not work, neither does the power on LED lit:

1. Check if the power cord is well connected.
2. Check if the power outlet the printer is connected to is supplied with power.
3. If the printer does not work, neither does the buzzer beep, however the power LED does lit, please contact the service dept. of the manufacturer.

B. CAN NOT PRINT WITH A NORMAL POWER ON

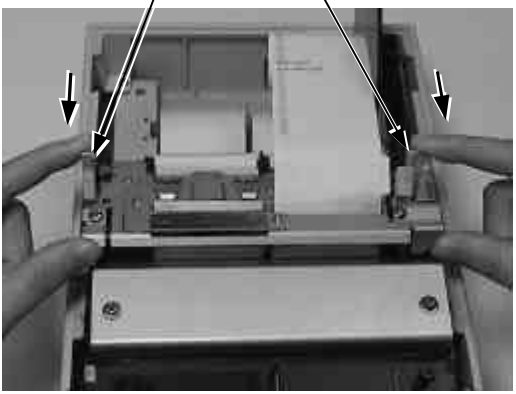
1. Check if the on line LED is turned on.
2. Check if the interface cable is securely connected. Go on operation after fixing every joint.
3. Check if the interface cable is incorrectly connected.

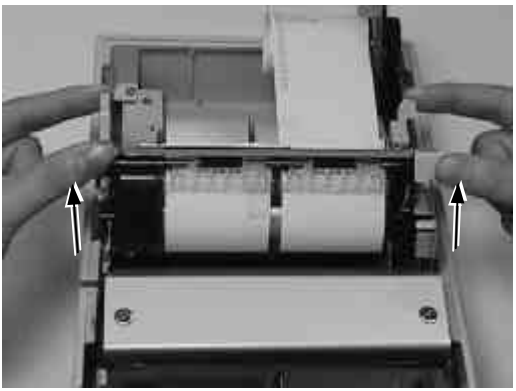
C. USE SELF TEST CAPABILITY IN CASE OF DOUBT

Power off the printer first. Press and hold the receipt button when turning the power switch on for about 2 second. The printer will print out the self test data together with the built in fonts.

Download from Www.Somanuals.com. All Manuals Search And Download.

D. PAPER JAMMED

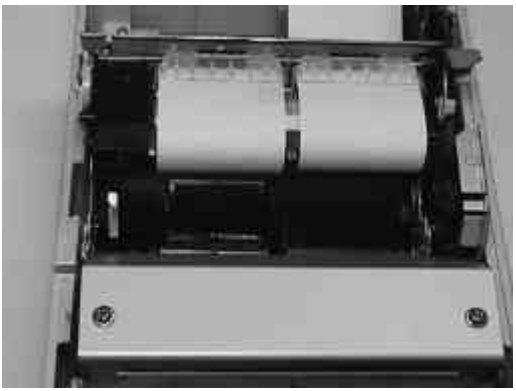




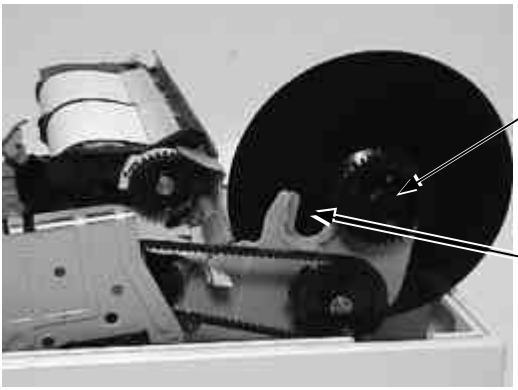
Raise the print anvil assembly

In case of serious paper jammed problem, please pull both the receipt lever and the journal lever forward and push the print anvil assembly backward (as indicated in the picture) to raise the print anvil assembly.

Download from Www.Somanuals.com. All Manuals Search And Download.

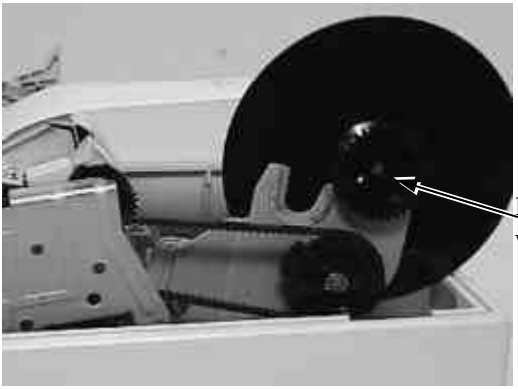


Once the print anvil assembly is lifted, the paper jam can be dismissed. Please clean the paper residue in the area before putting back the print anvil assembly if the condition requires.

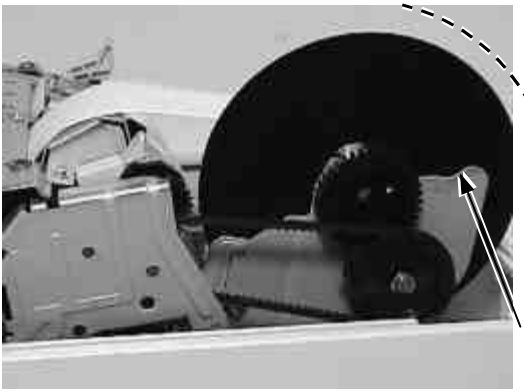


When you are putting back the print anvil, please pay special attention to the position of the pick up reel for journal. Because the journal pick up reel moves backward automatically when the print anvil is raised.

Download from Www.Somanuals.com. All Manuals Search And Download.



However, the journal pick up reel does not automatically move forward when the print anvil assembly is put back.



Please then put the journal pick up reel back to its original location, and roll the reel so that the journal remains properly tensioned.

Download from Www.Somanuals.com. All Manuals Search And Download.

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com