

PumaVI

Embossing machine

User Manual



Serial No. Embossing Unit:
Serial No. Electronic Cabinet .:

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Technical Data

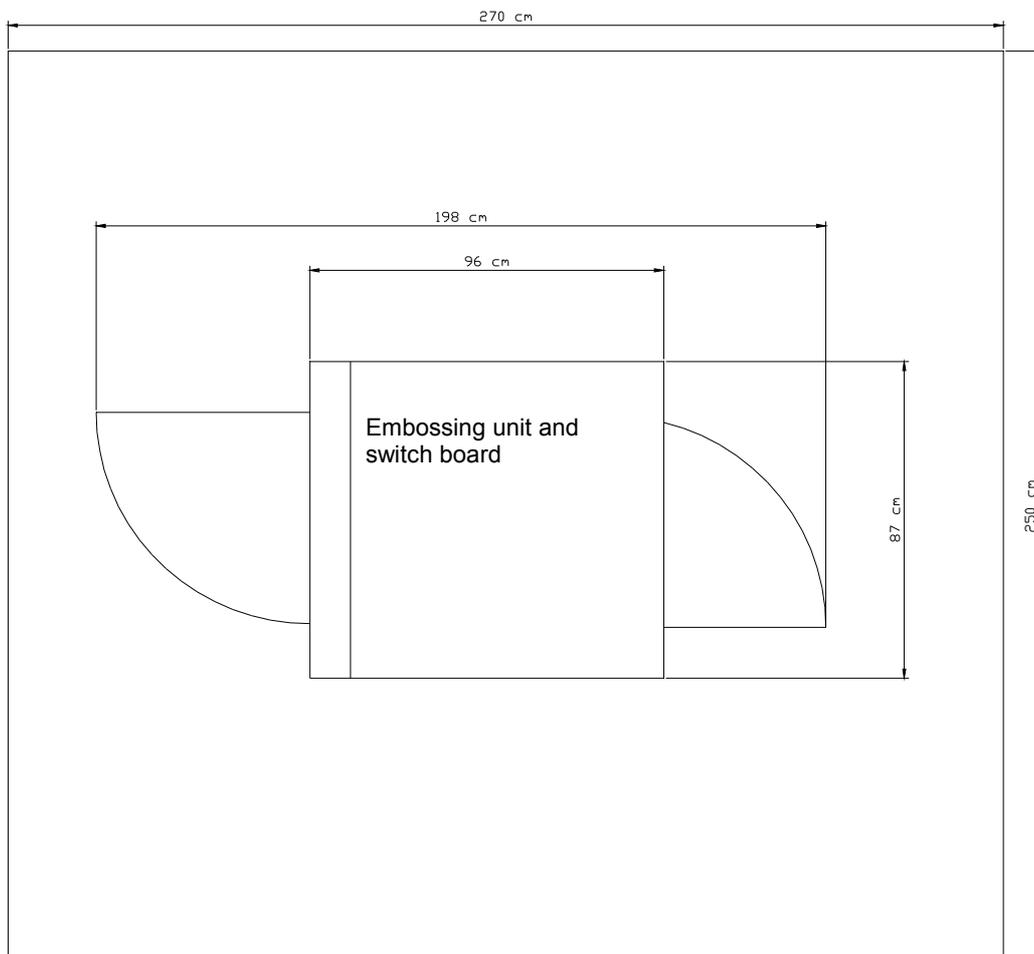
Working Temperature

0°-40° C

Weight

Control Cabinet	150 kg
Embossing Unit	85 kg
Punch	43 kg
Case for Control Cabinet	60 kg
Case for Embossing Unit	58 kg
Case for Punch	6 kg

Space Requirement



Embossing Specifications

Embossing speed	18 cells / per second	
Character size	large print	medium print
Dot spacing	2.7 mm	2.5 mm
Cell spacing	6.6 mm	6.0 mm
Cells per line	36	40
Line spacing	10.8 mm	10.0 mm

Graphics capability with special Graphics Stamp (fine pitch spacing)
Other printing formats available on request

Printing plate materials:

Size:

Width	max. 285 mm
Length	max. 340 mm
Thickness / double-plate	max. 0.60 mm

Materials:

Zinc:	degree of purity 99.9 %	DIN 1706
Aluminium:	degree of purity 99.5 %	DIN 1712 or 1745
Plastic:	Hard PVC/ Matt / Anti-static	

Operation:

Braille keyboard with special keys
Serial Port RS 232: 9600, 8, n, 1
(see page 27)

Operating voltages

selectable from 110 Volt to 240 Volt 50 / 60 Hz

Power consumption

1.1 KW

Installation and Operation

Delivery

Please check the delivery for completeness first.

The embossing machine consists of:

- 1 Embossing Unit
- 1 Control Cabinet
- 1 Braille Keyboard
- 1 Communications Cable
- 1 Driver Software (DOS, WIN 9x)
- 1 Instruction Manual (incl. documentation for Control Cabinet + Berger SPS)

Accessories

<u>Qty</u>	<u>Description</u>	<u>Item No.</u>
1	Adjusting Pin	EE - 11 890
1	Set of Transmission Wire	EE - 13 809
1	Eye Screw DIN 580 M16	NO - 10 667
1	Thickness Gauge 0.05 - 1 mm	WZ - 10 668
1	Set of Hex Socket Screw Key 1.5-6	WZ - 10 567
1	Fork Wrench (SW = opening 5.5 and 7) DIN 894	WZ - 10 655
1	Fork Wrench (SW = opening 13) DIN 894	WZ - 10 658
1	Fork Wrench (SW = opening 30) DIN 894	WZ - 10 661
1	Screwdriver for Slotted Screws 4x100 DIN 5270	WZ - 10 651
1	Screwdriver for Recessed-Head Screws 1x80	WZ - 13 554
1	Screwdriver for Recessed-Head Screws 2x100	WZ - 13 556
1	Screwdriver for Recessed-Head Screws 3x150	WZ - 13 557
1	Clock Oil Type 5 50ml	ZU - 10 669
1	Plastic Oiler	ZU - 13 935
1	Sample Printing Plates with brailled Test Sheets	
2	Fuse 16 Amp.	ZU - 14486
2	Fuse 6 Amp.	ZU - 14487

Options:

Optional Accessories:

- 1 Toothed Belt X-drive
- 1 Toothed Belt Y-drive
- 2 Microswitch

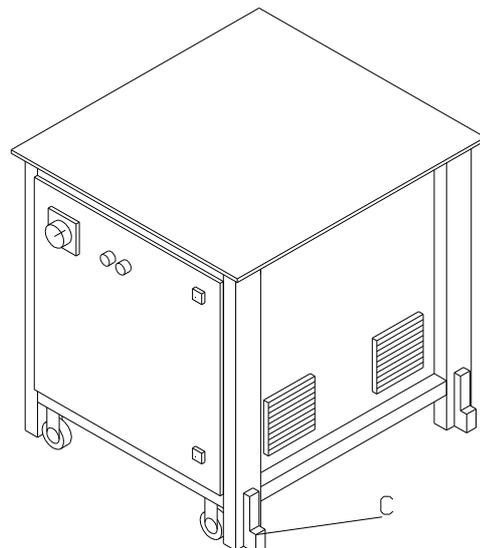
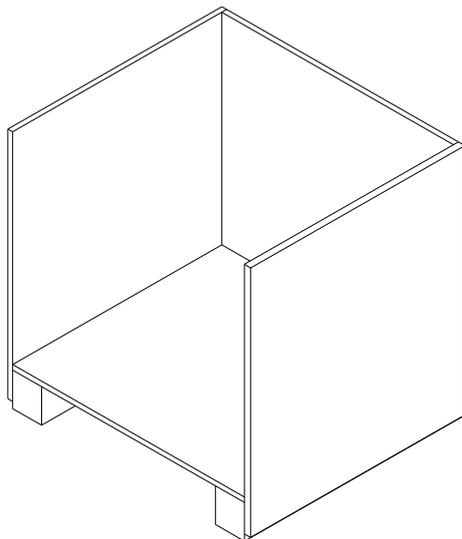
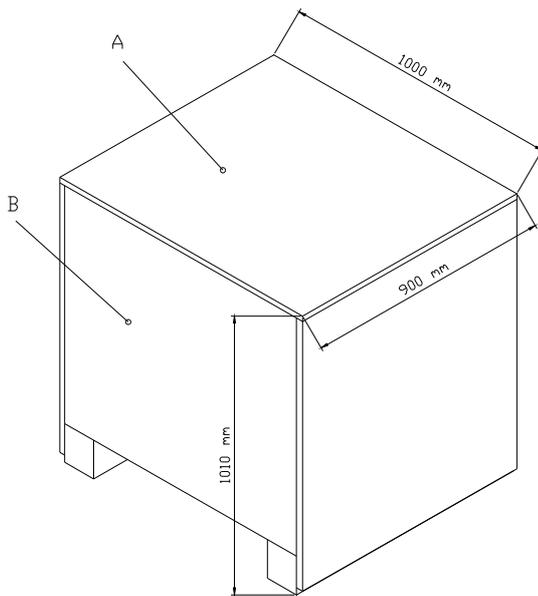
Pneumatic Punch

Graphics Software and Graphics Stamp

Control Cabinet Installation

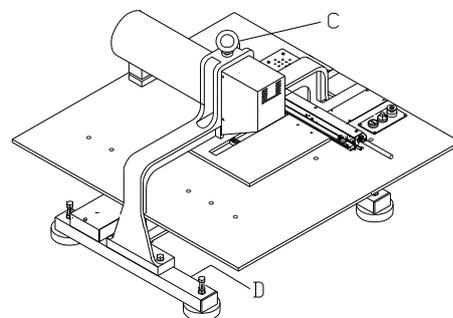
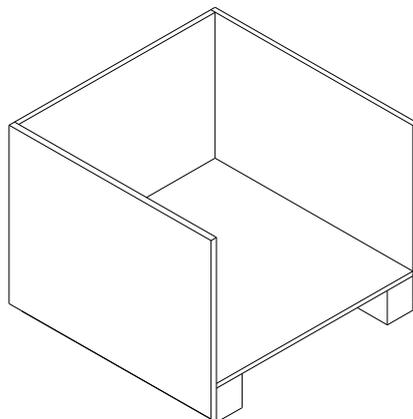
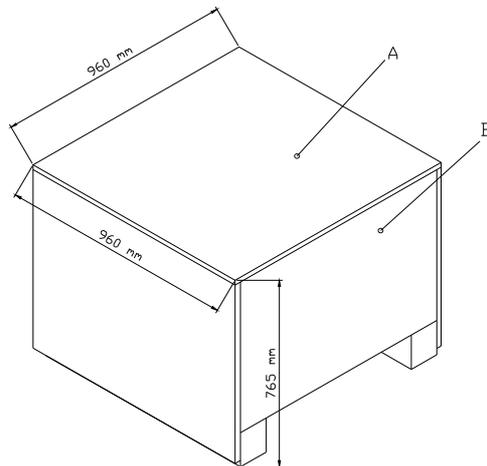
Always check shipping case for any damage that may be caused by water, pressure, etc.

1. Loosen all screws in cover plate "A" and front plate "B" and remove plates.
2. Take out Control Cabinet of shipping case gently.
3. Turn securing feet "C" upwards to move carriage.



Embossing Unit Installation

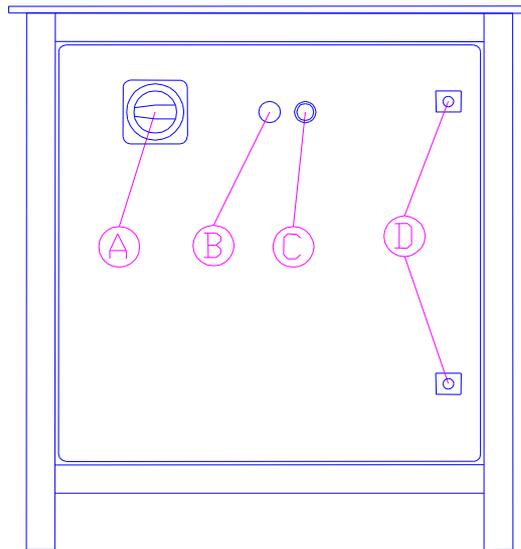
1. Loosen all screws in cover plate "A" and front plate "B" and remove plates.
2. Take out spare parts package and Braille Keyboard.
3. Screw eye screw "C" in Embossing Unit and gently lift out Embossing Unit of shipping case with a lever or similar and place it on Control Cabinet.
4. Screw the ground line of the Control Cabinet to the Embossing Unit (item "D").



Controls

Control Cabinet left side:

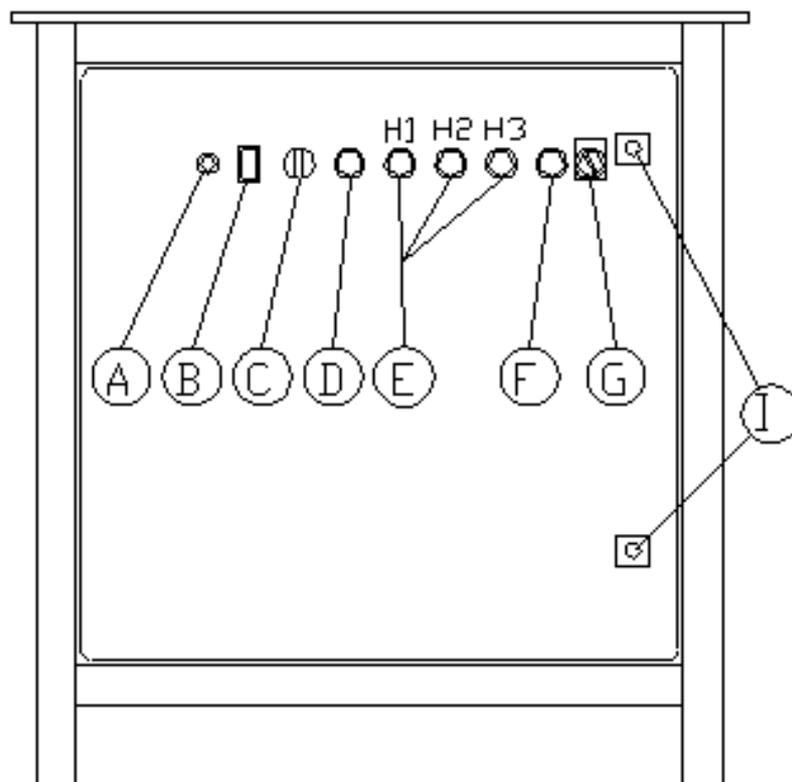
- "A" = Main Switch
- "B" = Pilot Lamp power "on"
- "C" = Key Switch power "on"
- "D" = Control Cabinet Door Lock



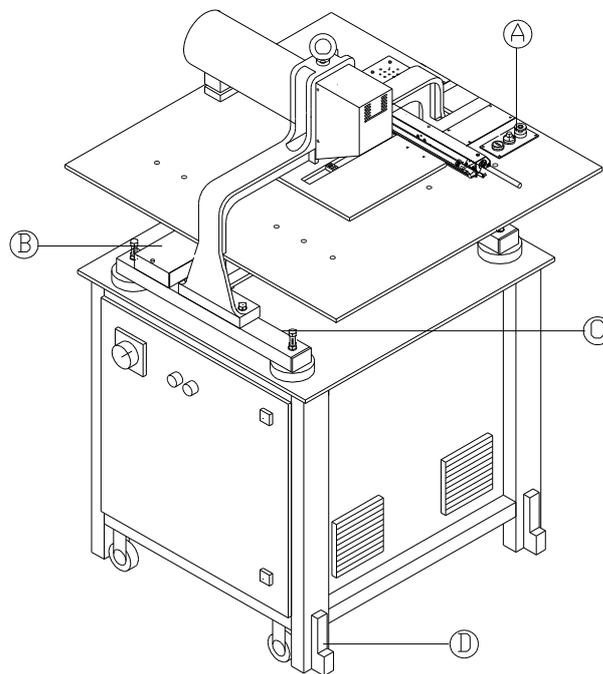
Controls

Control Cabinet right side:

- "A" = Braille Keyboard Connector
- "B" = 9-Pin PC Sub-D Connector
- "C" = Operating Mode Selector Switch
- "D" = Cancel Trouble Switch
- "E" = Trouble Light H1
Trouble Light H2
Trouble Light H3
- "F" = Operating Voltage 24V "on"
- "G" = Graphics Mode Graph / Text
- "I" = Control Cabinet Door Lock



Embossing Unit (overview)



- A = Positioning and Safety Off-Switch
- B = Cable Channel
- C = Ground Connection
- D = Securing Foot

Cautions:

The PUMA VI was designed for the production of printing plates of the materials specified in section "Technical Data" only. Using other materials may damage the machine.

Before operation, always check for correct voltage.

The ground cable must be fastened with screws to the Control Cabinet and the Embossing Unit.

Control and power cables may not be affected by any environmental influence.

It is most important to observe the operating conditions.

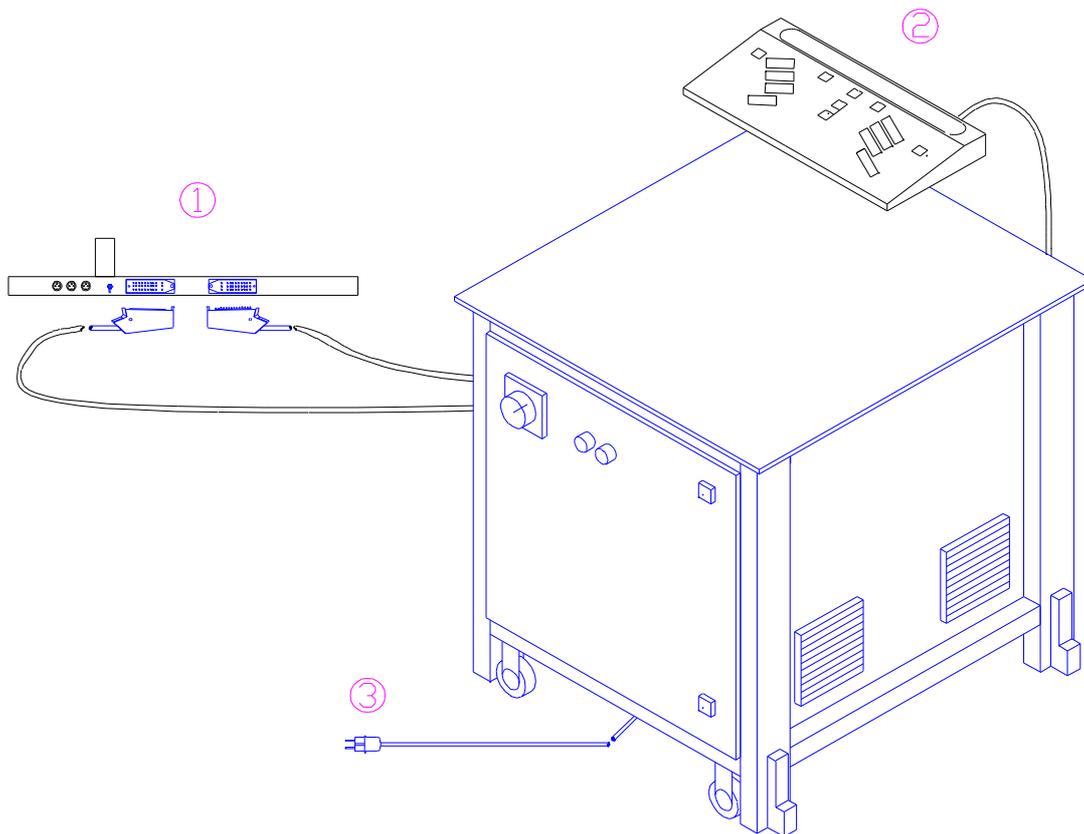
All protection devices must be installed before operating the machine.

In order to avoid accidents, never leave any object or your hand within the X-Carriage movement area.

Make sure that there is no object under or in-between the printing plate.

Connecting the PUMA VI

1. First, connect the control cables as shown in the drawing. These cables are not interchangeable.
2. Connect the Braille Keyboard.
3. Plug in the mains cable.

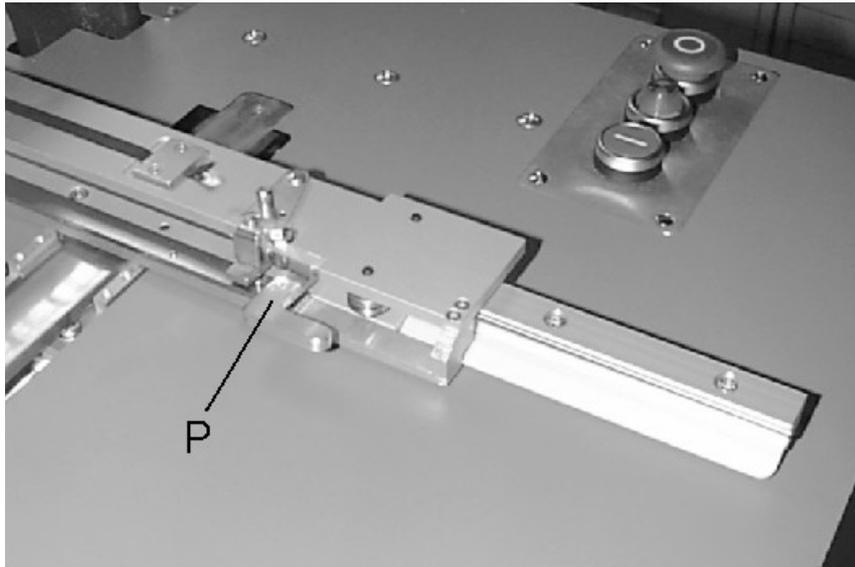


Operation

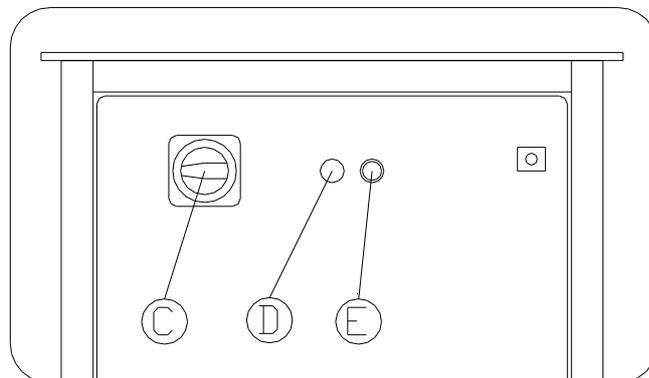
Before operating the PUMA VI, the operator should read this User's Handbook thoroughly or attend a training course of the Blista-Brailletec's Servicing Department to familiarise himself with the operation of the PUMA VI and observe cautions.

Procedure

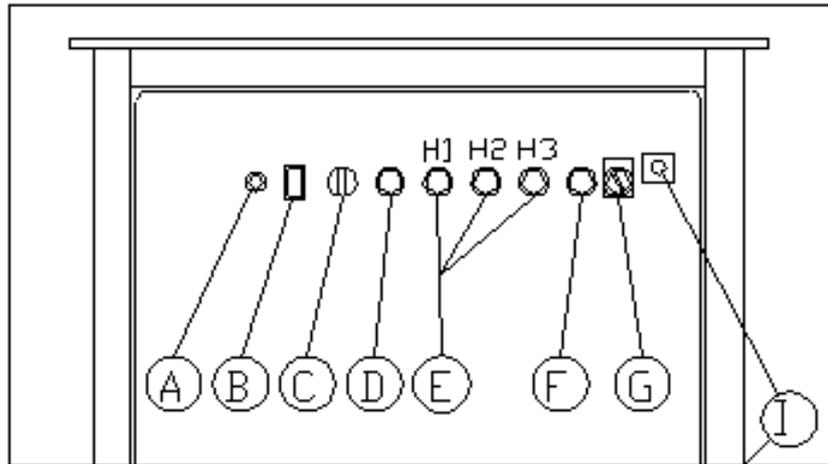
1. Open the plate holder and position the plate so that the fixing pins on the holder are inserted in the holes previously made in the plate. Close the plate holder "P" to lock the plate in position.



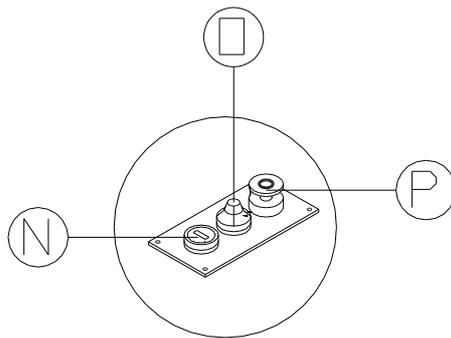
2. Turn on mains voltage using the Main Switch "C" and then the control voltage by means of Key Switch "E". Then the Pilot lamp "D" goes on.



3. Turn on control voltage (24 V) with Push-button "F". Then the green lamp inside this switch goes on. Select the desired operating mode with Selector Switch "C".



4. Press Start Button "N" on Embossing Unit. Lamp "O" lights up and the X-carriage is positioned. Press Start Button "N" again. Now the machine is ready for work.



Operating Modes

The Manual Mode

Set Selector Switch "C" to Hand (right Control Cabinet). The Start Key must be pressed a second time. The green signal light "0" on the embossing table shows the machine ready for work. Any braille character entered from the keyboard is embossed.

The PC Mode (Automatic Mode)

The PC mode allows to emboss a) text in braille or b) tactile graphics.

a) Embossing Text in Braille

Set Selector Switch "C" to "PC" (right Control Cabinet). Set Selector Switch "G" for graphics to "Text" ("Grafik aus" before 2005). Press Start Key N. The green signal light shows the machine ready for work and the serial port is enabled. Now any text previously converted into braille characters by the PUMA VI printer driver program can be received via the serial port.

b) Embossing Tactile Graphics

In order to obtain good-quality print-outs of tactile graphics, you should first replace the embossing stamp for text print-outs by the embossing stamp for tactile graphics.

Set Selector Switch "C" to "PC" (right Control Cabinet).

Set Selector switch "G" for graphics to "Graph". Press the Start Key "N". The green signal light shows the machine ready for work.

Tactile graphics previously prepared using the BrailleGraf drawing program can now be received via the serial port.

The Test Mode

Set Selector Switch "C" to Test (right Control Cabinet). Press the Start Key. The green signal light shows the machine ready for work. Now a stored test program runs which may be repeated as often as desired.

The Test Mode allows to test important functions and components in the PUMA VI. The errors listed below can be shown by the signal lights H1 through H3 (on right Control Cabinet).

Error Messages in the Test Mode

H1	H2	H3	
0	0	1	Embossing sensor defective / Autocorrect System activated
1	0	1	End-of-line sensor defective
0	1	0	Safety switch actuated
1	1	1	Page start sensor/Y-motor defective
0	1	1	Line start sensor defective
1	0	0	X-motor defective

Errors occurring during normal operation of the PUMA VI are shown by the following error messages:

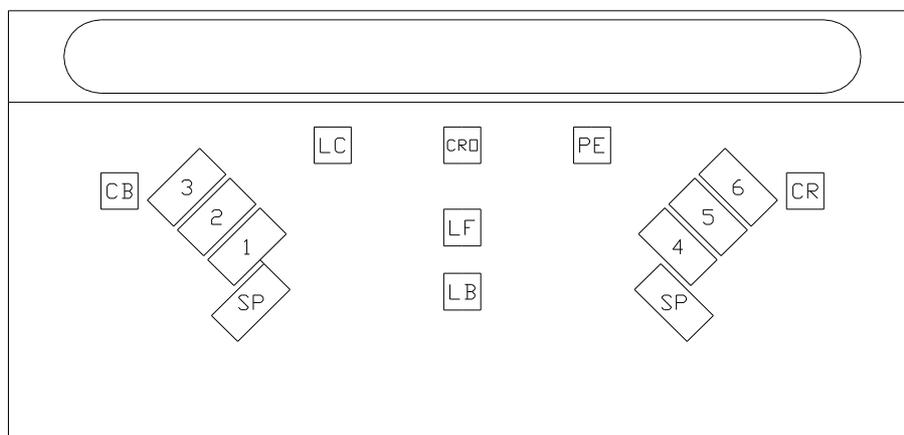
Error Messages in the Manual / PC Mode

H1	H2	H3	
0	0	1	Autocorrect System activated
1	0	1	Carriage jumped onto left limit switch
0	1	0	Safety switch actuated
0	1	1	Carriage moved onto right limit switch
1	0	0	Number of characters exceeds max. line length
1	1	0	number of lines exceeds max. page length
1	1	1	Graphics Mode switch >OFF<

Note:

Any error message shown must first be acknowledged with the red push-button "D" "Cancel trouble" (right Control Cabinet).

The Keyboard



Key Funktionen ↷

	Braille Dot 1		Carriage return / Line feed
	Braille Dot 2		back space
	Braille Dot 3		line feed
	Braille Dot 4		carriage return
	Braille Dot 5		line back
	Braille Dot 6		form feed
	Space		

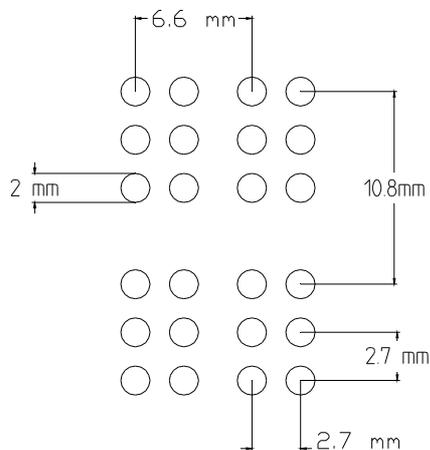
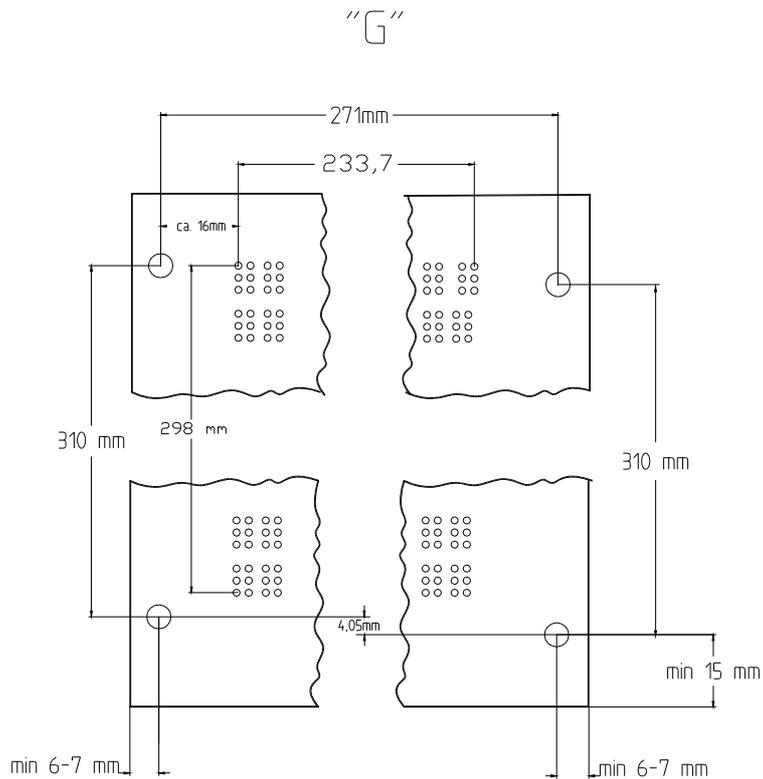
The keyboard has a repeat function which starts when a key is kept pressed down for longer than the time needed for the embossing process.

Setting and Correcting the Page Format

The following information is given for your guidance only. Modification or re-adjustment of the formats should only be carried out by trained staff.

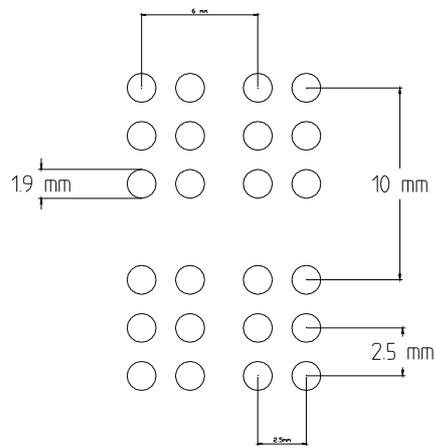
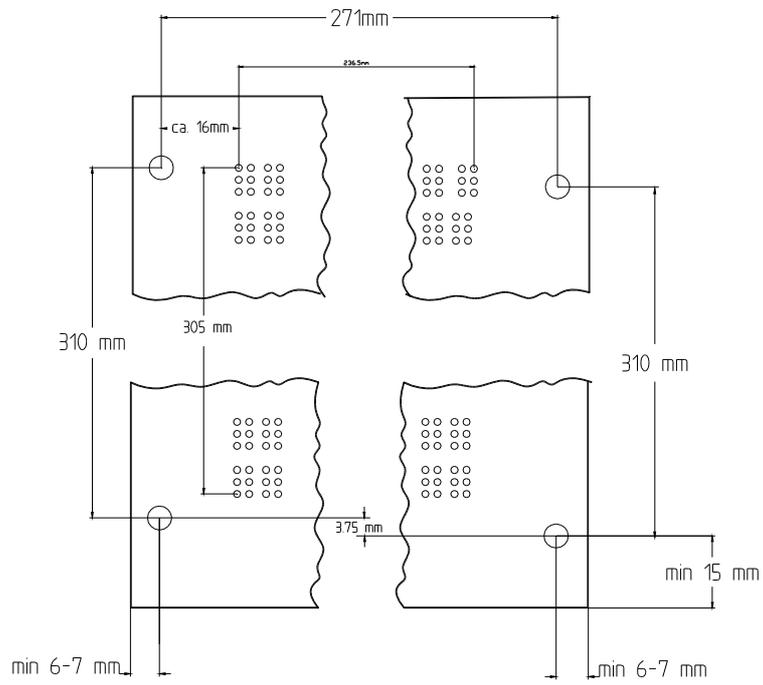
The page formats mentioned below are standard and may sometimes be very different from those in use at the customer's printing house. If necessary, please ask the Blista Brailletec for more information about other available formats.

Large Print



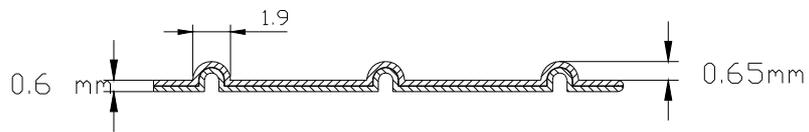
Medium Print

"M"

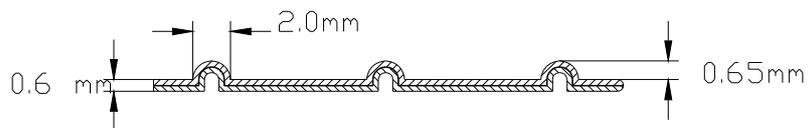


Dot Height

Medium Print



Large Print

Format Specifications

	Cells per line	Lines per page	Cells per page
Medium print	max.40	max.31	1240
Large print	max.36	max.28	1008

	Line spacing Dot 1 to dot 1	Dot spacing horizontal and vertical	Cell spacing Dot 1 to dot 1
Medium print	10.00mm	2.50mm	6.00mm
Large print	10.80mm	2.70mm	6.60mm

Adjusting the Dot Height

Should the dot height be re-adjusted after exchanging the embossing pins or after a longer period of use, then proceed as follows:

1. Loosen Hex Nut "B".
2. Re-adjust Shaft Nut "A" to the standard dot height using the adjusting pin included.

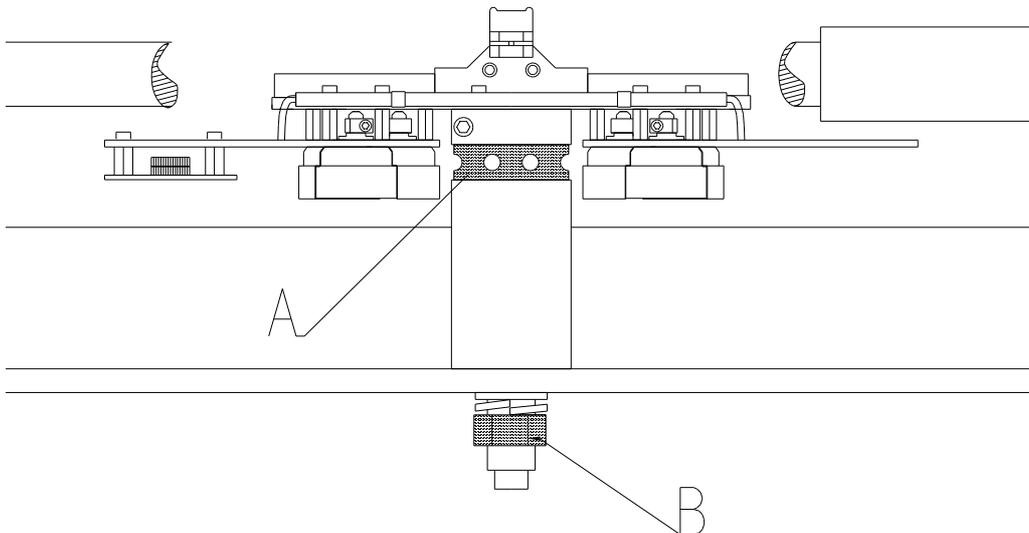
Note:

- Turning Shaft Nut "A" anti-clockwise (see mark +) increases
- Turning Shaft Nut "A" clockwise (see mark -) decreases the dot height.
- One whole rotation of Shaft moves the Embossing Unit by approx. 2 mm.
- Turning Shaft Nut by one hole moves the Embossing Unit by approx. 0.33 mm.

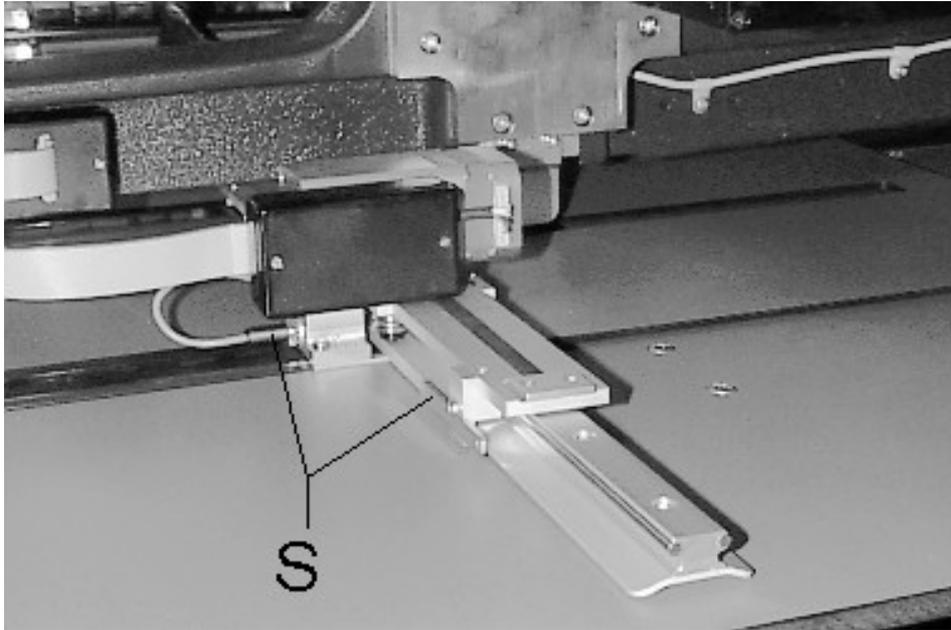
Warning!

The adjustment of the dot height is a tricky problem and must therefore be carried out with a great deal of care. Never adjust the dot height during the embossing process.

To adjust the dots to the correct height, increase/decrease by very small amounts. Embossing with too high dots will cause damage to the machine.



Top Margin of the Plate



The top margin of the plate is determined by the contact angle of Sensor "S". This ensures that the embossing area has the same position on all printing plates. We recommend the use of our factory-set top margin. If the width of the top margin must be re-adjusted for the embossing area, then it is necessary to move the contact angle accordingly.

Note:

Moving the contact angle to the machine front widens the distance between the embossing area and the top margin of the plate.

Observe: The minimum distance between Sensor "S" and contact angle is 0.20 mm and the maximum 1 mm.

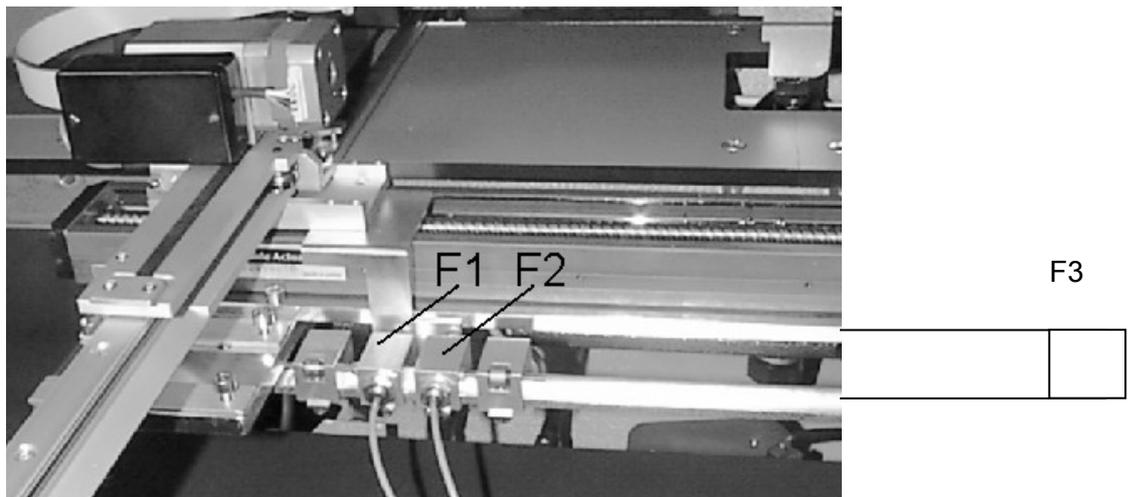
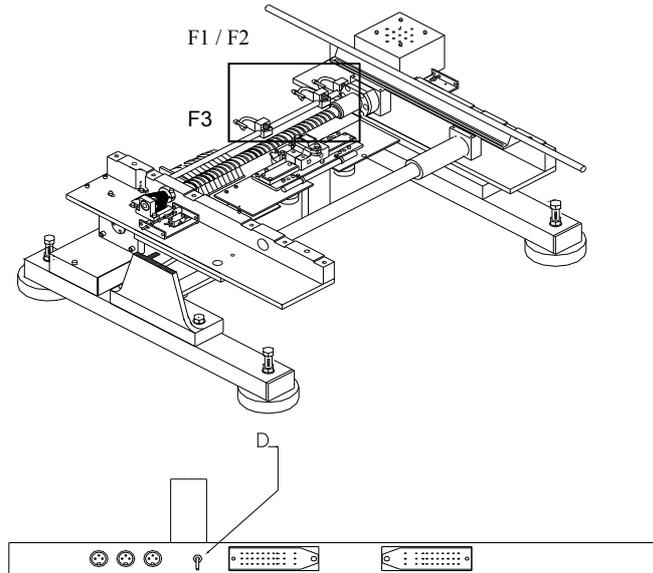
The Sensors "F1", "F2" and "F3"

Sensors "F1" and "F2" determine the beginning of the embossing area at the left margin of the plate. Switch "D" allows to activate Sensor "F1" or Sensor "F2".

- Activating Sensor "F1" using switch "D" selects the embossing area preferably in use at the customer's printing house and the standard plate format should be used.
- Activating Sensor "F2" using switch "D" allows the customer to select a second embossing area. The plate format in use and the embossing area must harmonize with each other.
- In the "manual mode" Sensor F3 monitors the end of line.

Warning:

Sensors "F1" and "F2" also determines the interpoint quality (see appropriate section). Therefore their position should not be moved carelessly!



Interpoint Adjustment

In order not to crush the already embossed dots on the front side of the printing plate when embossing its reverse side, the embossing area on the reverse side must be moved in horizontal

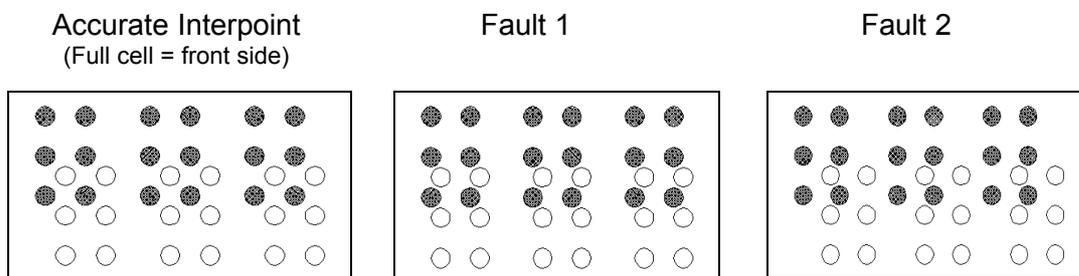
and vertical direction so that the dots of all braille characters of both sides are embossed between

the dots of the braille characters of each other side (interpoint). The differing positions of the embossing areas on the front and reverse sides are determined by the fixing holes previously made

in the plates for installation on the PUMA VI.

There are two faults that may occur in the interpoint despite high-accuracy in holding the plates:

1. Both embossing areas are moved against each other in X-direction (line direction) (see drawing Fault 1 and Fault 2).
2. The printing plate does not move accurately in X- and Y-direction at an angle of 90°



1. Adjusting the Interpoint in X-Direction

The positions of the two embossing areas on the front and reverse sides of the plate are determined by Sensors F1 for the first format and F2 for the second one (see page 21).

Very fine adjustment to the position of the sensors can be made using the set screws after loosening their holding yokes. In order to adjust the embossing areas for perfect interpoint, re-adjust the respective sensor by **a half of the incorrect displacement**.

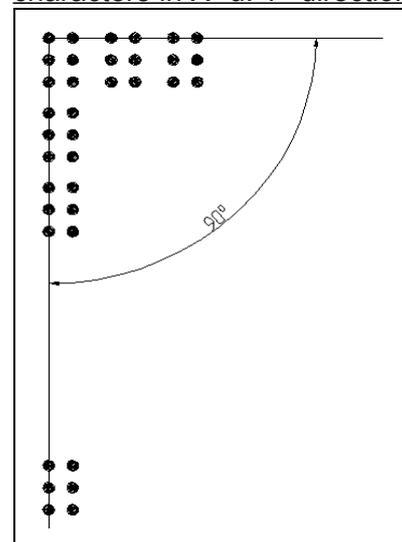
If dots 1,2,3 in a cell on the plate reverse side are displaced towards dots 1,2,3 of a cell on the front side (fault 1), then Sensor F1 (or F2) must be moved to the left from the line of sight of the picture on page 21.

If dots 1,2,3 in a cell on the plate reverse side are displaced towards dots 4,5,6 of a cell on the front side (fault 2), then Sensor F1 (or F2) must be moved to the right from the line of sight of the picture on page 21.

2. Re-adjusting the X-Y Orthogonality

If the carriage does not transport the plate on the PUMA VI at exactly a 90° angle in the X- and Y-directions, then the characters will be crushed in the interpoint, in particular in the last line of the plate. For re-adjustment, the bar with the fixing pins for the printing plate must be re-adjusted **by a half of the cell displacement** after loosening the screw at the bottom fixing pin.

Printing plate with outlined braille characters in X- u. Y- direction



The Control

The PUMA VI uses a CPU, the so-called Store-Programmed Control "SPS" made by the Berger Co. to initiate and monitor all of its functions (see enclosed description).

The complete electromechanical construction of the Embossing Unit in the PUMA VI can be subdivided into the following components:

- X-drive with a five-phase stepper
- Y-drive with a two-phase stepper
- Embossing drive with servomotor and own motor- and position monitoring
- Bottom embossing unit section with rotary magnets and sensors for the Autocorret System
- Inductive sensors for position monitoring

Note:

All the connectors in the PUMA VI are covered with a loop which checks the PUMA VI for connecting passage when switched on. The PUMA VI will not start if a connector is not properly closed!

The Drives

X-Stepper (X-Drive Motor)

The X-drive uses a 5-phase stepper made by the Berger Co. Detailed descriptions of the Berger stepper are attached to this documentation.

Stepper Y-Drive (Line Feed Motor)

The Y-drive uses a 2-phase stepper and is driven by its own circuit board (line feed module). The line feed board receives the necessary control signals from the CPU which are then processed for the Y-drive.

The Embossing Motor

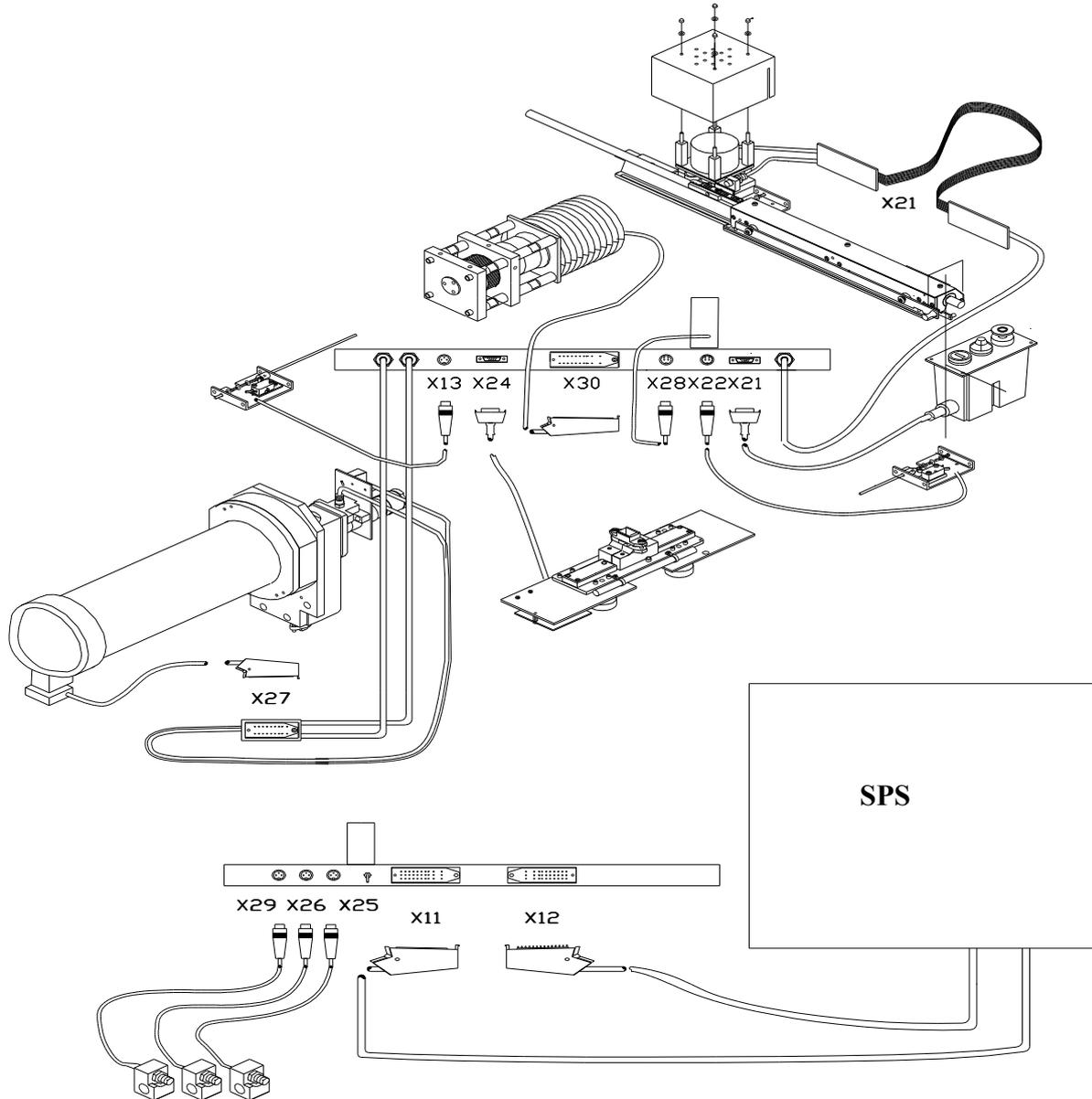
The embossing motor, a servomotor, has its own control unit. This receives a start pulse from the CPU, however, the actual motor drive (power and speed monitoring) and the embossing stamp position control via an incremental signal transmitter is initiated and monitored by this own control unit.

The Bottom Embossing Section (Magnet Unit)

The bottom embossing section has six rotary magnets which are directly driven by the CPU. The rotary magnets lift the embossing pins over an inclined plane to the embossing position and lock.

On the embossing unit are installed the sensors for the Autocorrect Systems. These six sensors monitor the movements of the embossing pins with their electronics. The embossed character is regenerated from the movement of the embossing pins and compared with the character previously sent from the PC to the PUMA VI. If there is a difference, The PUMA VI tries to emboss this character correctly or it stops the embossing process and outputs an error message (see pages 14, 15).

Connectors and Drives



Note:

The drawing gives you an overview of connections, drive and sensors of predecessor PUMA Vb. As PUMA VI consists of similar components and the same way, we took over the sketch.

The embossing Process

The timing for the embossing process can be subdivided into two main steps as follows (see circle diagram):

- Plate movement to the next character position and
- the actual embossing time.

After the PUMA VI has been switched on, the embossing stamp is located in the upper dead centre. As soon as the start button is pressed to start embossing in the PC mode, the CPU sets the corresponding pins for the character to be embossed by driving the rotary magnets. Then the servomotor control receives the command to start the embossing process.

Then the embossing stamp moves from the upper to the bottom dead centre. The embossing stamp

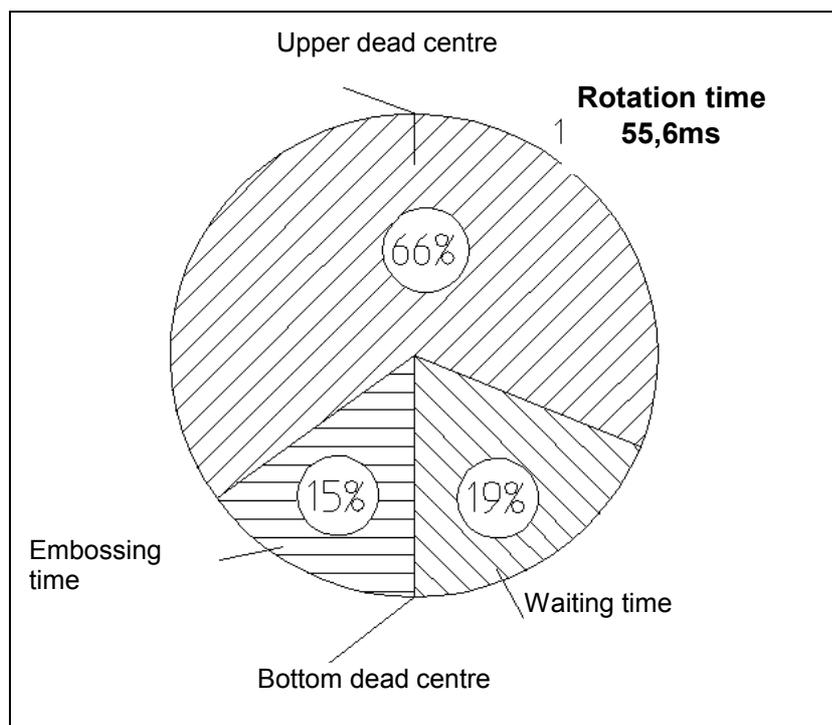
touches the plate approx. 8 ms before the bottom dead centre and it has embossed the character when reaching the bottom dead centre. When reaching the bottom dead centre, the

servomotor control sends a signal to the CPU. The CPU clears the rotary magnets and sends

the next character to be embossed to the rotary magnets. After a waiting time of approx. 10.5 ms after the bottom dead centre, the embossing stamp leaves the plate. Now the X-motor

is started and moves the plate to the next character position. After approx. 37 ms the plate reaches the new position. In the PC mode, the embossing stamp is not stopped

in the upper dead centre and immediately runs against the plate after it is stopped. And the embossing process resumes for the next braille character.



Computerized Operation

The serial port RS 232

In order to send a document from a PC to the PUMA VI, the PC must be first connected to the PUMA VI via a serial port (RS 232). The port in the PC should be configured as follows.

Baud Rate:	9,600
Parity:	none
Data Bits:	8 Bit
Stop Bits:	1

The data transfer is checked using the software handshake with X-on/X-off. The PUMA VI has the capability of buffering up to 7 pages of braille before embossing.

The PUMA VI is equipped with a 9-pin Sub-D connector with the following pin assignment:

Pin 2:	RxD receive data
Pin 3:	TxD transmit data
Pin 5:	GND

The Data Coding

Text to be printed out must first be converted into the so-called transparent code before it is sent from the PC to the PUMA VI by character. The conversion of the characters into the transparent code is done according to the following rules:

A braille character (dots 1 through 6) is represented as a Byte:

1	o	o	4	Dot 1 =	2^0	(LSB)
2	o	o	5	Dot 2 =	2^1	
3	o	o	6	Dot 3 =	2^2	
				Dot 4 =	2^3	
				Dot 5 =	2^4	
				Dot 6 =	2^5	
				Controlbit =	2^6	
				Controlbit =	2^7	(MSB)

If a braille dot is contained in a braille character, then the Bit corresponding to the dot is set to 1. Dots that do not exist in a braille character are encoded with 0.

Example 1: The character "s" is represented in braille by the dots 2, 3, 4. Thus, the Byte corresponding to the "braille s" is encoded as follows:

2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
0	0	0	0	1	1	1	0

The Byte corresponds in Hexadecimal code to the value 0E hex.

Example 2: The character "y" is represented in braille by the dots 1, 3, 4, 5, 6. Thus, the Byte corresponding to the "braille y" is encoded as follows:

2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
0	0	1	1	1	1	0	1

The Byte corresponds in Hexadecimal code to the value 3D hex.

The ASCII codes of the print characters must be converted in the PUMA VI printer driver software into the hexadecimal values of the corresponding braille characters.

Example 1: The print character "s" is stored in the PC in ASCII code as 73 hex. Assigned to the 73 hex in the ASCII-braille table is the value 0E hex.

Example 2: The print character "y" is stored in the PC in ASCII code as 79 hex. Assigned to the 79 hex in the ASCII-braille table is the value 3D hex.

Special Codes:

The PUMA VI requires special control characters which are encoded as follows:

Character	ASCII - value in hex	Braille - code in hex
Blank	20	80
Form Feed	0C	83
Carriage Return / CR	0D	81 (85 / 87 *)
Letter "e"	65	91 (see Note)
Letter "h"	67	93 (see Note)

* The PUMA VI initiates the line feed on its own as soon as it receives the carriage return character at the end of each line. The carriage return can be performed with the three following characters, where the value

81	performs a line feed of	4 feed units (standard line feed)
85	performs a line feed of	3 feed units
87	performs a line feed of	2 feed units.

A feed unit corresponds to the dot spacing in the braille cells. For example 2.5 mm in medium print, 2.7 mm in large print or the dot spacing of a cell size made to customer's specification. The different line feeds allow the PUMA VI to also emboss 8-dot braille in interpoint using an appropriate PC program, where the individual 8-dot braille cells are divided into two characters to first be embossed as 6-dot characters. After a smaller line feed, dots 7 and 8 can then be added in the next line, for example with pins 1 and 2 of the embossing head.

Note: 11 hex and 13 hex are the ASCII characters for X-on and X-off. If the indicated code is not used for "e" and "h", then the PUMA VI interprets each "e" and "h" as X-on/X-off. This would absolutely cause errors in communication between the PC and the PUMA VI and provide erroneous print-outs!!

Autocorrect System Defaults

During data transfer, the Autocorrect System in the PUMA VI always checks the braille page to be embossed for its embossing area already before the embossing takes place characters per line, lines per page).

Therefore each line must be closed with a CR (81 / 85 / 87 hex) and the last line of each page finished with an end-of-page character only (83 hex).

The selected embossing format presets the embossing area for the PUMA VI. If the embossing area sent from the PC to the PUMA VI does not correspond to the preset one, then no embossing will take place. In this case the PUMA VI outputs an error message using signal lamps H1 through H3 (see page 15).

The PUMA VI monitors the embossing area by counting each character sent via the port. Fill characters, such as 00 hex or FF hex, are also counted and not skipped or cleared.

Using Older Printer Drivers

There are two alternatives for the PUMA VI to operate using an existing PC program, e.g. for the PUMA V:

1) Changing the software of the existing program

Change the older printer driver program as follows:

- a) Handshake from hardware handshake with DTR to software handshake with X-on / X-off.
- b) In the ASCII braille table, change the code for "e" from 11 hex to 51 hex and the code for "h" from 13 hex to 53 hex.

Background information: 11 hex and 13 hex are the ASCII characters for X-on and X-off. If the characters "e" and "h" are not changed as described, the PUMA VI interprets each "e" / "h" as X-on / X-off. This would cause communication errors between the PC and the PUMA VI as well as erroneous print-outs.

A Printer Driver

The PUMA VI can also be operated using our older printer driver software for the PUMA Vb. This printer driver is always included. Therefore,

- to load the program, enter **PUMA.EXE**.
- When the logo PUMA V appears on the screen, press <RETURN> and the following StatusLine will appear on the screen:

StatusLine: | Help Alt-H | COM1: 9600,n,8,1 | EXIT Alt-D

COM1:9600,n,8,1 shows the standard settings of port COM1 for PUMA VB / VI. COM2 can also be activated from the help menu with (Alt-H).

Alt-D returns you to leave the program. Additionally, however, you will be asked to confirm:

REALLY, YOU WANT TO LEAVE Y/N?

According to your confirmation, you will leave the program or return to the StatusLine.

Alt-H With this command you will obtain the following help menu:

PUMA V - HELP

Port output	Alt - A
Show ASCII - Braille Table	Alt - B
Load the Reference Table	Alt - C
Leave PUMA V	Alt - D
Send file	PgDn

- Alt-A activates COM1 or COM2.
- Alt-B Calls up the ASCII - Braille Table, in which are declared/assigned the braille dot combinations to the corresponding characters in the ASCII Table. This table is also called User Table, since the assignments may be changed by the user. Multiple codings are possible. To enter a change, open the table by pressing F5, type the number of the ASCII character to be encoded and press the <RETURN> key. Then enter the encoded value for the corresponding braille dot combination according to the example below. Assigned to the braille dots is a fixed valence:

Dot 1 = 1
Dot 2 = 2
Dot 3 = 4
Dot 4 = 8
Dot 5 = 16
Dot 6 = 32

Example: X = braille dots 1,3,4,6 = 1+4+8+32 = 45

The values of the respective dot combination for the braille character are added and entered as a sum. Then press the <RETURN> key. Each entry must be activated again with F5 to avoid any unwanted change in the table. To leave the table, press <ESC>.

Then you will be asked to confirm: SAVE Y/N?

- Alt-C calls up the reference table contained in the program. When called up, the reference table overlays the user table and restores the original ASCII - braille assignment.
- PgDn Pressing this key initiates sending a file from the PC to the PUMA V / PUMA VI. Then you will be asked to

ENTER FILENAME:

If you fail to enter the correct filename, the following message appears on the screen:

FILE NOT FOUND ! Continue with |RET|.
Cancel with |ESC|.

|RET| returns you to: ENTER FILENAME

|ESC| returns you to the StatusLine

If an available file has been entered correctly, you will be asked to enter the numbers of the start page and the last one:

from page: to page:

and the possibility to cancel

Cancel with |ESC|;

This returns you to the StatusLine.

If the page entered has been correct, the following message will be displayed:

Page x found ! Start with |RET| Stop with |SpaceBar|

|RET| sends the text to PUMA V. Then the machine starts embossing.

|SpaceBar| Pressing this key during the embossing process will cause the machine to emboss the text contained in the buffer memory of PUMA Vb / PUMA VI and stop when finished.

Maintenance Information

Embossing Unit Care Information

During the embossing process, only the bottom embossing unit section of the PUMA VI is subject, with its translating parts and embossing pins, to mechanical wear and permanent soiling in particular. Embossing the dots and moving the metal plate cause rubbed-off parts of material mixing with oil and forming sticky dirt in the pins guide. Therefore the embossing pins in the bottom embossing unit section should be cleaned after regularly. The dirt depends on the material in use. Therefore, we recommend that you first clean the PUMA VI once per month or every two months maximum and then decide yourself how often the machine should be cleaned.

Rubbed-off parts from the plates also stick in the holes of the embossing stamp. Therefore, we recommend that you always watch the holes with a mirror and remove the dirt when cleaning the embossing pins. To this end, the stamp should be dismantled. The dirt can easily be removed with a 1.9 mm diameter drill (for medium print) and a 2.0 mm diameter drill (for large print).

Trouble-Shooting

If the PUMA VI does not emboss what it should do, despite regular maintenance of the embossing pins and built-in safeguarding systems (embossing area monitoring, Autocorrect System), start the PUMA VI again and emboss a test page while watching the embossing process. Does it emboss the customary test pattern? Do all the dots (1 through 6) have the same height? If any of the signal lights H1 through H3 shows an error in the test mode and you are unable to remove the error, then please contact us by MAIL, PHONE, FAX or EMAIL as indicated below:

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