PORTABLE EMBOSSING SYSTEM

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NOTE: In the interest of higher quality and value, Panduit products are continually being improved and updated.
Consequently, pictures may vary from the enclosed product.

SETUP and INSTALLATION GUIDE

UNPACKING

The machine is delivered in a wooden packing case. This is due to its dimensions and weight and avoids the risk of damage to the machine.

		WARNING! THE MACHINE & CRATE WEIGHS 145 lbs. (66 Kg). The Dimensions are: 33" (830 mm) X 29" (730 mm) X 24" (600 mm). **All displacements should be done by a forklift or by at least two persons because the gross weight is approx. 145 lbs. (66 Kg).**

Uncrating the Unit.
    a. Remove the crate cover by removing the 8 phillips head screws that secure the cover to the pallet.
    b. Cut free the environmental shield covering from the unit, being careful not to cut through to the machine.
    c. The unit is secured to the pallet with two bolts located underneath the base. Using a wrench, remove the two bolts located in the lower part of the pallet.
    d. Lift the machine and place on a suitable surface.
    e. Save the crate and bolts for possible future use.

Retain Crate & Bolts

a.

b.

BOLT TO BASE OF UNIT

FORK LIFT - NOT PART OF CRATE
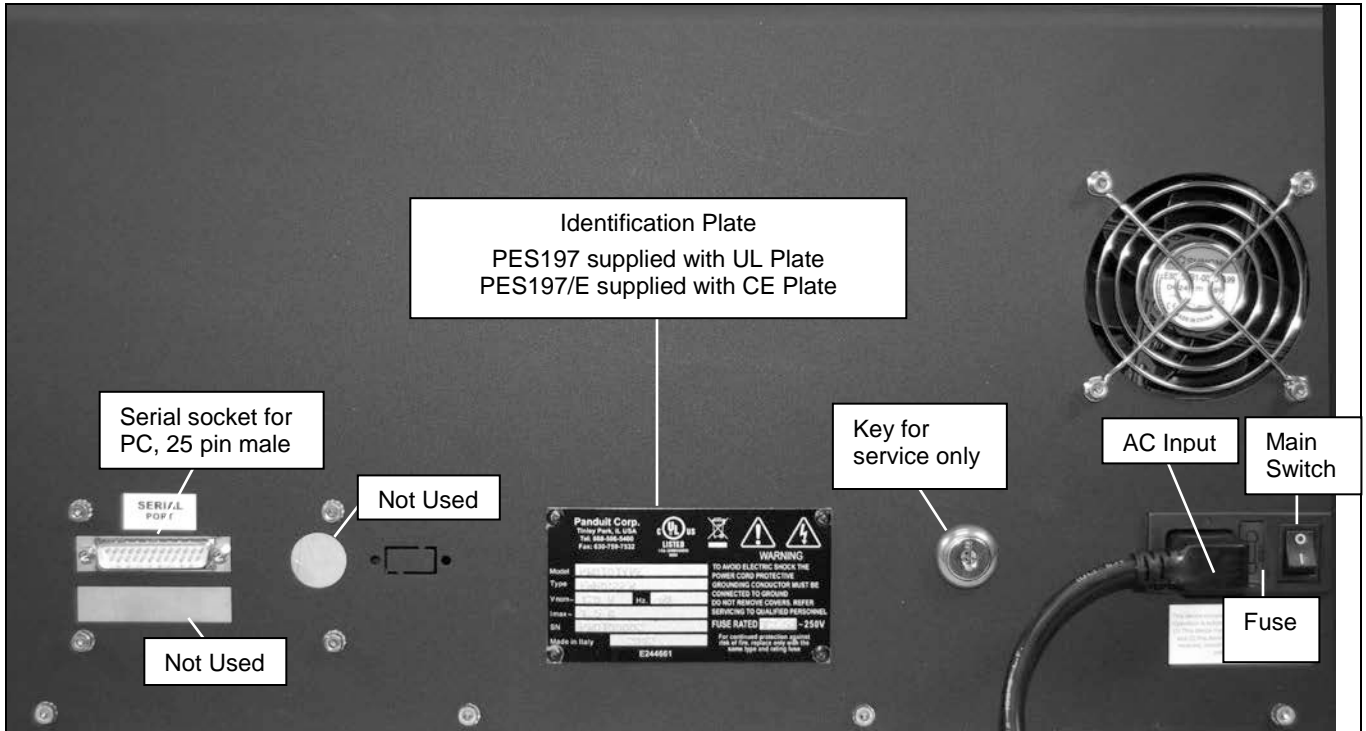
c.

CHECKING THE ACCESSORIES

Before installing the machine check that all the accessories are present and that none have been damaged during transport. If any single element has been damaged the general working of the machine can be compromised. The following items are supplied with the Embosser:

ACCESSORIES	ITEMS INCLUDED WITH EMBOSSER
1 POWER SUPPLY CABLE	1 SOFT SIDED CASE
1 SERIAL CABLE + CANON PLUG 9-25 PIN	1 EXTERNAL HOPPER WITH MULTIPLE WIDTH INSERT; 1 EXTRA CAPACITY EXTERNAL HOPPER WITH MULTIPLE WIDTH INSERT

1 APPLICATION SOFTWARE CD + MANUAL	3 INTERNAL HOPPER INSERTS:
	   1 FOR WIDE PLATES,
	   1 FOR MEDIUM 540 PLATES
	   1 FOR NARROW PLATES,

2 KEYS FOR TECHNICAL SERVICE USE	1 WIDE PLATE WEIGHT
2 MACHINE COVER KEYS	1 MEDIUM 540 PLATE WEIGHT
TEST PLATES	1 NARROW PLATE WEIGHT

1 RS232 / USB CABLE	3 GUIDE RAIL SIZING BLOCKS:
	   1 FOR WIDE PLATES,
	   1 FOR MEDIUM 540 PLATES
	   1 FOR NARROW PLATES

CONNECTING CABLES

    a. Connect the Serial Cable between the machine and the computer.
    b. Connect the AC cable to the rear input of the machine and to the proper AC source. Be sure to verify the power required.

Identification Plate	
PES197 supplied with UL Plate	
PES197/E supplied with CE Plate	

Serial socket for PC, 25 pin male

Not Used

Not Used

Key for service only

AC Input

Main Switch

Fuse

WARNING! To avoid electric shock the power plate protective grounding conductor must be connected to a ground circuit that conforms to the National Standard.

WARNING! Remember to connect the serial cable to the machine while it is switched off to avoid damaging the circuits.

WARNINGS AND ADVICE DURING INSTALLATION

- The Identification Plate attached to the rear panel contains information about the serial number, the type of machine, the necessary power supply and maximum current.
- Before switching the machine on, be sure that all the cables have been connected correctly and that the local power supply corresponds to that stated on the plate. The plate layout is as follows:

Model : Machine model
Type : Embossing mode
Volt : Power Supply
Hz : Frequency supply
Imax : Maximum current (Amps)
SN : Serial Number
Manufactured on
Fuse rating

Model : Machine model (EUR)	
Type : Embossing mode	
Volt : Power Supply	
Hz : Frequency supply	
Imax : Maximum current (Amps)	
SN : Serial Number	
Manufactured on	
Fuse rating	

Easy-Mark™ SOFTWARE INSTALLATION

Insert the Easy-Mark™ Installation CD in the CD ROM driver.

> **NOTE: If the CD ROM driver does not launch the Autorun.exe file automatically,
> from the START menu of Windows®, select Run and digit:
> X:\Autorun.exe substituting the "X" with the letter of your CD unit**

Read carefully the **Readme.htm** file, paying particular attention to the system requirements and follow the software installation instructions.

When the installation is completed you will see the Easy-Mark™ icon on your desktop and the new "Easy-Mark" folder in the **Start-Programs** list.

INSTALL SOFTWARE FOR THE USB TO SERIAL ADAPTER (IF NEEDED)

SYSTEM REQUIREMENTS

- Windows XP SP2 (recommended), Windows 2000 SP4, Vista, Windows 7 and Windows 8
- CablesToGo USB to Serial DB9 adapter (recommended)
- Computer with available USB ports

INSTALL SOFTWARE FOR THE USB TO SERIAL ADAPTER

1. Insert the CD that came with the USB to Serial Adapter into the CD drive on the target computer.
2. If the auto start runs the installation go to step 6, if not continue.
3. Click on the My Computer icon, either on the desktop or click Start and then My Computer.
4. Double-click on the icon for the CD-ROM drive to display the files.
5. Find the Autorun.exe or Setup.exe file and double-click on it.
6. Select the option to install the USB to Serial Adapter you have with the Windows version you are running.
7. Connect the cable to one of the USB ports and reboot if prompted to reboot.

INTRODUCTION

The Panduit PES197 (110V) and PES197/E (220V) is an automatic personalization system for metal marker plates. It is computer operated and runs off of Panduit Easy-Mark™ software. (e.g.: PC compatible).

The Panduit PES197 machines stamp exclusively Panduit MMP350, MMP350H, MMP350W38 and MMP350HW54 Metal Marker Plates.

The characters on the drum are as follows: **A** through **Z**, numbers **0** through **9**, and special characters **!, @, #, $, %, &, *, (,), -, +, =, :, ", ,, ., /,'**, and **?**.

MMP350 18 CHARACTERS MAX. per line 3 lines max	3.5" (89 mm) .75" (19 mm) Easy Feed humps .010" (.25 mm)
MMP350H 16 CHARACTERS MAX. per line 3 lines max	3.5" (89 mm) .75" (19 mm) Easy Feed humps .010" (.25 mm)
MMP350W38 18 CHARACTERS MAX. per line 1 line max	3.5" (89 mm) .375" (9.5 mm) Easy Feed humps .010" (.25 mm)
MMP350HW54 16 CHARACTERS MAX. per line 2 lines max (See accessories) .02" plate -- special machine setup	3.5" (89 mm) .54" (13.7 mm) Easy Feed humps .012" (.30 mm)

SYSTEM SPECIFICATIONS

Electrical Specification

	PES197 & PES197/E
Power Supply	117V 60Hz PES197
	230 V 50 Hz PES197/E
Current Absorption	4 A max
Absorbed Power	250 W
Fuse (5x20)	T 4 A
Logic	16 bit Microprocessor
Backup	Lithium Battery 3.6 V
PC Interface	RS 232 Asinc. Prog.
Baud Rate	Programmable (supplied at 4800 Baud)
Working Noise	Lower than 73 dB (A)
Display	LCD 2 line for 40 Chars.
Keyboard	21 Programmable keys

Production Capacity

	PES197 & PES197/E
Loading Hopper Capacity	Capacity 200 Plates
Unloading Hopper Capacity	Capacity 100 Plates
Plate Production Rate	90 Plates per hour, 20 Character Plate

Equipment Classification and Standard Reference

	PES197 & PES197/E
Installation Category	II
IP Protection	IP 20
Standard reference	IEC EN 50081-1
	IEC EN 50082-1
	IEC EN 60950 ed. 4th
	IEC EN 60204-1
RoHS Certification	2011/65/EC

Working Condition

	PES197 & PES197/E Listings in ( ) are metric.
Operating Temperature	+50° – +95° F (+10° ÷ +35° C)
Relative Humidity	20% – 85%
Storing Temperature	+32° – +122° F (0 ÷ +50° C)

Dimensions and Weight

	PES197 & PES197/E Listings in ( ) are metric.
Height	11.5" (292 mm)
Width	21" (534 mm)
Depth	19" (483 mm)
Weight	95 lbs. (43 Kg)

Safety Regulations and Operating Precautions

⚠️	• The machine should work in a closed room protected from dust and excessive humidity. The machine should be positioned in such a way that its distance from the walls, doors, windows, other machines or working positions guarantees immediate access in case of emergency, maintenance or repairs.
	• Do not install this Machine in the neighborhood of other Operating Machines which produce dust since dust can deposit itself inside the machine and cause damage to the internal electrical parts
⚠️	• The Machine is furnished with special safety guards which protect the operator from coming into contact with the mechanical and electrical parts inside the machine. Only those persons who are specialized in repairs and maintenance and who have been authorized should have access to the above mentioned parts. Simple general maintenance can be safely performed by the operator so long as the machine has been stopped and the electrical power supply has been disconnected.

⚠️	• The Machine has been made with fire resistant materials thus diminishing the risk of fire. Short circuit protection has been implemented so that the power supply is immediately isolated thus avoiding unwanted current absorption from the external power line.
	• Do **Not** place liquids on the machine cover since it is not waterproof. It is particularly important to avoid high humidity conditions which would add to the wear and corrosion of the mechanical parts.

The machine has labels that indicate any danger areas.
The meanings of these labels are explained below.

Panduit cannot be held responsible for the consequences of not abiding
by these safety rules when using the machine.
Therefore, in the case of breakdown, please call for Technical Assistance.

UNDER NO CIRCUMSTANCES REMOVE OR MODIFY THE INTERNAL COMPONENTS.

🚫	**DO NOT REMOVE SAFETY GUARD** These safety guards should be removed only by specialized and authorized technical persons who take care to adopt all security measures to avoid any risk of danger and injury.
⚠️	**BE CAREFUL OF YOUR HANDS! RISK OF BEING CRUSHED OR STRUCK** The machine in the wooden package weighs 145 lbs. (66 Kg) and the net weight is 95 lbs. (43 Kg); therefore all lifting should be done with two persons present.
⚠️	**DANGER! HIGH VOLTAGE** Do not perform any maintenance work while the machine is connected to the power supply. To replace a fuse or do internal maintenance, disconnect the power supply.
⚠️	**ATTENTION! MOVING MACHINE COMPONENTS** If any maintenance work has to be done the technician must disconnect the power supply and work on the machine only when it has been stopped.
⚠️	**ATTENTION! DANGER** The machine when at work has several moving units. Do not work on the inside of the machine. Do not remove the cover or guards except for the front cover which is used to load the plates.
⏚	**GROUNDED (EARTHED) CABLES** This symbol indicates that all the connected cables have been grounded (earthed).

MACHINE SETUP FOR PRODUCING PLATES

- Unlock cover with cover key and open machine cover. (The cover will "latch" into the open position.)

ADJUSTING THE LOADING UNIT

Height Adjustment:
Adjust both height adjustment bars by loosening bar adjustment knobs ½ turn. Insert guide rail sizing block. Position height adjustment bars against the back of the guide rail sizing block. Tighten bar adjustment knobs to lock in place. Remove guide rail sizing block. (See Figs. 1 and 2)

**Guide Rail
Sizing Blocks**

**3/8" (9.5 mm)
Or
1/2" (13.7 mm)
Or
3/4" (19 mm)**

Figure 1

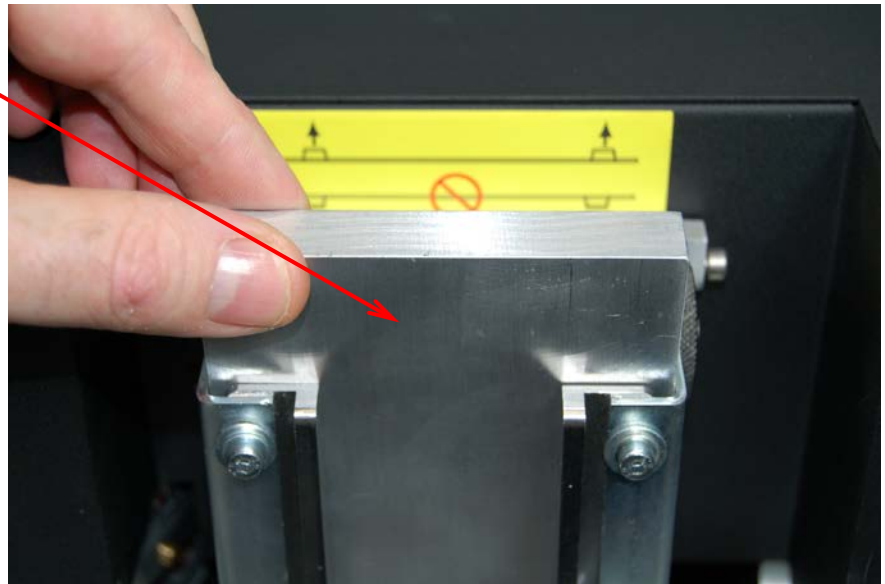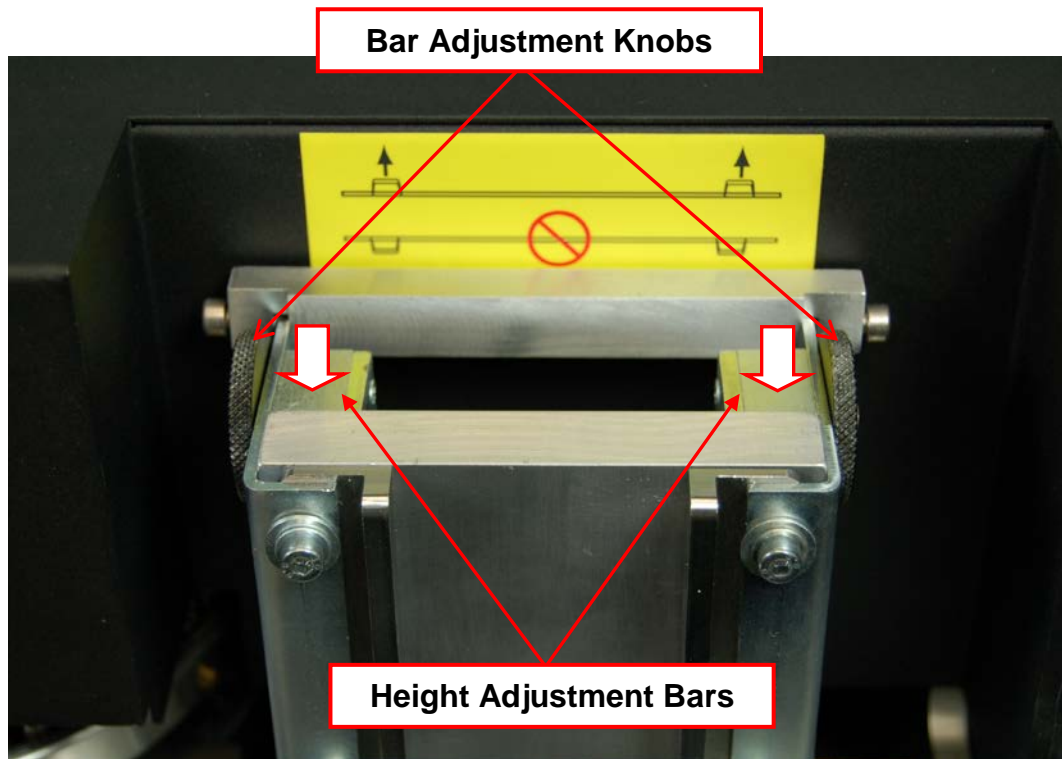**Bar Adjustment Knobs**

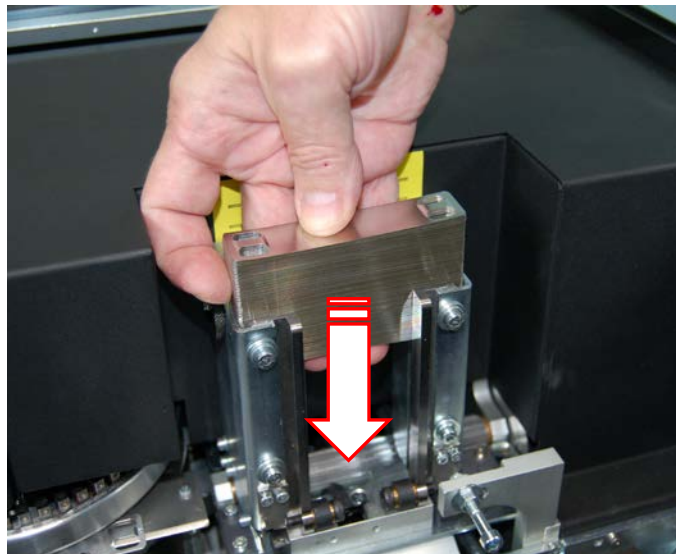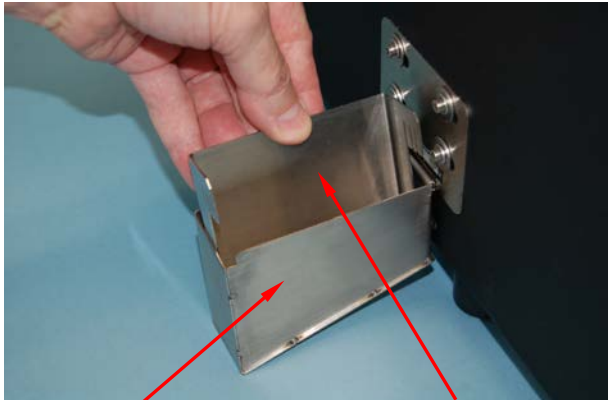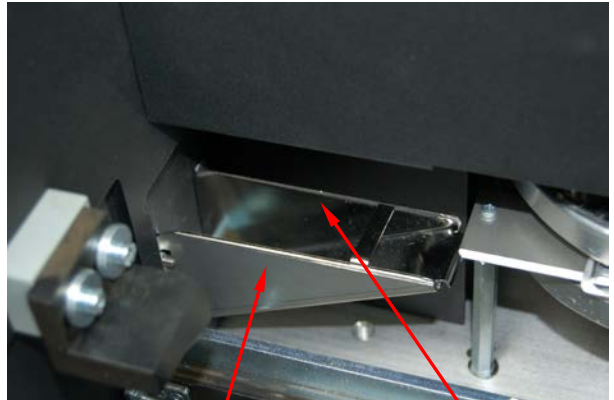**Height Adjustment Bars**

Figure 2

Figure 3

- Insert plates for embossing in the loader on the right side of the machine.

- **NOTE: The plates must be arranged in the loader with the Easy Feed humps facing up.**

HOPPER INSTALLATION

| EXTERNAL HOPPER - NARROW TAG INSERT | INTERNAL HOPPER - WIDE TAG INSERT |

a. Install External Hopper (see photo).
b. Install proper External and Internal hopper inserts to match marker plate height. (see photo).
c. Place appropriate plate weight on top of stack. **Close machine cover by unlatching lock mechanism located in the left rear of inside cover.**

SWITCHING ON AND CONTROLLING THE DISPLAY

The machine can be switched on with the main switch (located in back of machine).
NOTE: Prior to switching "on", make sure cover is closed.
The display will appear with the message as shown below:

E-00 PWR-ON STAND-BY STATUS – PRESS START

Press the **PAUSE/START** key on left side of the front panel beside the display. This activates a general reset which, when completed, will leave another message on the display to indicate the Ready state of the machine.

PANDUIT METAL EMBOSSER V.#.##
READY

If the machine does not start, check that the power supply is correctly set and that the main fuse has not been shorted.

If error message appears, please refer to the "Error Messages and Problem Solving" section.

NOTE: If the display is turned on but nothing appears on the screen, switch the machine off and call for Technical Assistance. (see Regional Contact Information on Page 18)

The machine is now ready to run.

Open Panduit Easy-Mark™ software.

Start Easy-Mark™ with a double click on the Easy-Mark™ icon present on the desktop.
Insert the Password when requested by Login. Password is located on the CD.
Click OK to start the first work session with Easy-Mark™.

a. Click FORMAT and select.
b. In "Quick Find" box, type in the plate number you are going to emboss.
    (MMP350, MMP350H, MMP350W38 or MMP350HW54)
c. Type desired information onto marker plate.
d. Press PRINT. Follow software prompts.
e. Select communication port number (check the communication port number by going to the Windows Device Manager).

PRODUCTION - HOPPER

The production cycle finishes with the unloading of the plate on the left of the Embosser. If the cycle is error free, the Embosser returns to the initial READY STATE.

If errors have occurred during the cycle, the machine will signal the error code on the display and will still unload the plate before stopping; the incorrect plate must be removed manually.

Please refer to the section on "Error Messages and Problem Solving" for a description of the errors that can arise.

CONSOLE

The console of the PES197 and PES197/E has two units: a front display and a membrane keypad.
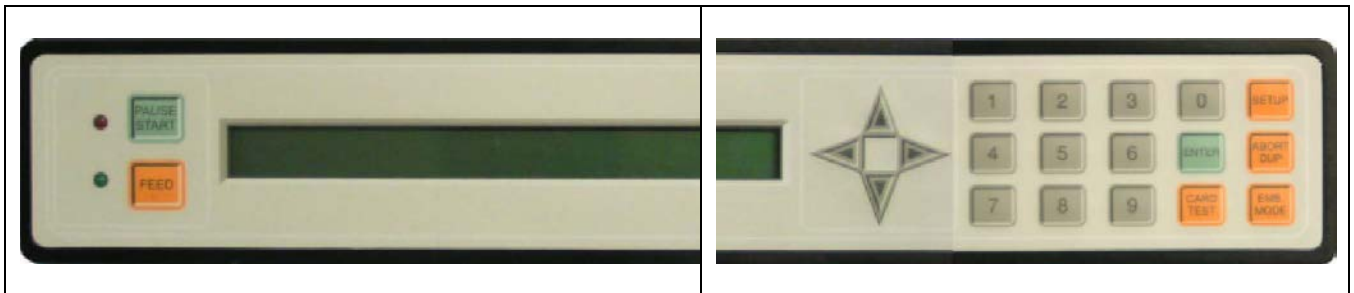
The following list describes the structure of the front control panel:
- An **LCD** display (2 rows with 40 characters per row), which is used to indicate the operating status of the machine.
- A **PAUSE/START** key
- A **FEED** key
- A **red** colored **LED** (top) to signal any error
- A **green** colored **LED** (bottom) to signal that the machine is switched on

The following list describes the structure of the Keyboard:
- **10** numeric keys (0 – 9)
- **6** function keys which enable the diagnostic functions of the machine
- **4** direction keys (•   '   '   ") for moving the cursor in the desired direction
- **1 ENTER** key which is used to confirm the commands

KEYBOARD DESCRIPTION

The following list describes the 6 function keys and their actions:

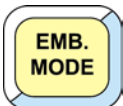|	
SETUP	**SETUP:** This key is used to access the programming menu or other internal functions of the machine. A Password enables this command.
CARD TEST	**CARD TEST:** This key enables the production of test plates with a pre-determined format. It is done without the aid of the computer. Select desired test below; then press **ENTER** to produce the plate.
	The CARD TESTS for this machine are as follows: **NOTE: Test plates must be run on either MMP350 or MMP350H plates.** **CARD TEST 0 –** Embosses all the characters in the drum. It will use three plates to do this since the plates are small and only so many characters fit on each plate. **CARD TEST 1 –** Embosses an "L" in each corner of the plate. **CARD TEST 5 –** Will emboss the Mechanical Parameters from the SETUP FILE using two plates. **CARD TEST 6 –** Embosses Letters on the plate. **CARD TEST 10 –** A drum test embossing characters on two sides of the drum, going back and forth. **CARD TEST 11 –** Embosses the numbers in the drum. **CARD TEST 14 –** Will load and pick the plate, then unload the plate. No embossing.
ABORT DUP	**ABORT:** If this key is pressed the current operating cycle will be halted and the plate will be unloaded. **DUP:** If this key is pressed during a READY state and it is followed by ENTER, the machine will repeat the last processed plate.
PAUSE START	**PAUSE:** If this key is pressed the current operating cycle is blocked. Press START to continue. **START:** Clears any error condition which may have occurred during the current operating cycle. A corresponding error message will be displayed on the LCD.
FEED	**FEED:** This key permits the operator to repeat the last plate should there be an error during the production phase. Pressing this key will complete a paused cycle.

EMB. MODE	**EMB. MODE:** This key selects the operational mode of the embossing cycle. It is used for tests and there are 8 choices based on the combinations of the following 3 modes:
	CONTINUOUS: Repeats the last processed plate continuously *WITHOUT PLATE:* Runs the operating cycle without controlling for the presence of a plate *PAUSE:* Executes each operation in response to the user input. The key to activate each movement is START
⚠	**ATTENTION!** If there are errors on the plate (X motor Error, & Motor Error, etc.) there are two possible solutions: ☞ Pressing **PAUSE/START** clears the error condition without reproducing the plate. ☞ Pressing **FEED** activates the plate duplication procedure.

DISPLAYING THE COUNTERS OF THE PRODUCED PLATES

The statistical data of the production is available in the partial and total counters. The latter cannot be modified. The value indicates the total number of operating cycles with and without error.

To start the counters, run the following command sequence from machine console:

SETUP

The following is displayed:

SETUP EMBOSSER **PASSWORD ?**

No action required; **continue with command sequence:**

●	1	ENTER

The following is displayed:

METAL MARKER PLATEXXX PLUS V.Y.YY **CNT = 0000000001   TOTAL = 0000000001**

CNT: is the partial counter for the operator   TOTAL: is the total counter.

The counters are removed from the display using the same keystrokes.

To reset counters; run the following command sequence from machine console:

SETUP

The following is displayed:

SETUP EMBOSSER **PASSWORD ?**

No action required; **continue with command sequence:**

●	0	ENTER

The counter is Reset.

ERROR MESSAGES

In case of breakdown or operator error, the machine will show what caused the machine cycle interruption on the display and on the monitor.

Contact technical support if code is not in table

ERROR	MESSAGE	CAUSE	SOLUTION
E-00	PWR-ON STAND BY STATUS-PRESS START	MACHINE EXPECTING THE RESET COMMAND	PRESS START, ANY OPEN EASYMARK PRINT JOB MUST BE CANCELLED AND RESTARTED
E-01	OUT OF CARDS-PRESS START/FEED	THE LOADER IS EMPTY PLATES LOADED UPSIDE-DOWN	FILL THE LOADER LOAD PLATES WITH EASY FEED HUMPS FACING UP
E-02	CARD MISFEED-PRESS START/FEED	THE CLAMP HAS NOT PICKED UP THE PLATE BRIGHT LIGHT ABOVE EMBOSSER	CHECK FOR ANY DAMAGED AND/OR MISFED PLATES AND REMOVE TURN OFF LIGHT OR SHADE THE SENSOR
E-03	PUNCH MOTOR ERROR-CALL SERVICE	EMBOSSING MOTOR BLOCKED	CALL TECHNICAL SUPPORT
E-04	EMB. WHL ERR-CHECK CARD/PRESS START	DRUM BLOCKED	CONTROLS THE PUNCHES, IF PROBLEM PERSISTS CALL TECHNICAL SUPPORT
E-05	X MOT. ERR-CHECK CARD/PRESS START	PROBLEM ON THE CLAMP'S TROLLEY	CLEAN AND OIL THE TROLLEY GUIDE AND CHECK THAT IT MOVES FREELY
E-06	Y MOT. ERR-CHECK CARD/PRESS START	PROBLEM ON CLAMP	CLEAN AND OIL THE TROLLEY GUIDE AND CHECK THAT IT MOVES FREELY
E-10	PAUSE EMBOSSING-PRESS START	THE FRONT COVER HAS BEEN OPENED	CLOSE THE COVER AND PUSH START
E-13	PUSHER MOTOR ERROR	DIRTY SENSOR	CLEAN SENSOR, CALL TECHNICAL SUPPORT
E-50	DRUM WHEEL ERROR-PRESS START	DRUM MOTOR BLOCKED	CHECK THE PUNCHES AND RETRY, IF PROBLEM PERSISTS CALL TECHNICAL SUPPORT

TROUBLE SHOOTING

Contact technical support for assistance with the following adjustments:

Gate Adjustment:
Factory set to .014 ± .002". (Stainless Steel)
Factory set to .016 ± .002". (Aluminum)

Marker Plate Hold Down Adjustment
Factory set to .015 ± .003". (Stainless Steel and Aluminum)

OPTIONAL ACCESSORIES

1. Embosser for .020" thick metal marker plates: Consult factory

GENERAL MAINTENANCE

The operator should make a habit of doing general maintenance on the Embosser so as to ensure a correct and long lasting functioning of the system.

⚠️	**ATTENTION! DANGER** The machine when at work has several moving units. Do not work on the inside of the machine. Do not remove the cover or guards except for the front cover which is used to load the plates. The maintenance should be done with the machine switched off.

Routine maintenance as listed below must be followed:

- After the first 8 hours of embossing work, switch off the machine and remove the power supply cable. Lift up the front cover and proceed as follows:

⚠️	**ATTENTION! DANGER** **IMPORTANT:** Do not remove the cover and the guards that are present inside the embossing machine.

OILING THE TROLLEY TRACK AND CLAMP GUIDE

- Apply light oil at the clamp's trolley track (X travel guide – top and bottom), moving the trolley by hand back and forth to assure an even distribution of the oil and to control the fluidity of movement.
- Apply light oil at the clamp guide (Y travel guide – both sides), moving the clamp by hand back and forth to assure an even distribution of the oil and to control the fluidity of movement.
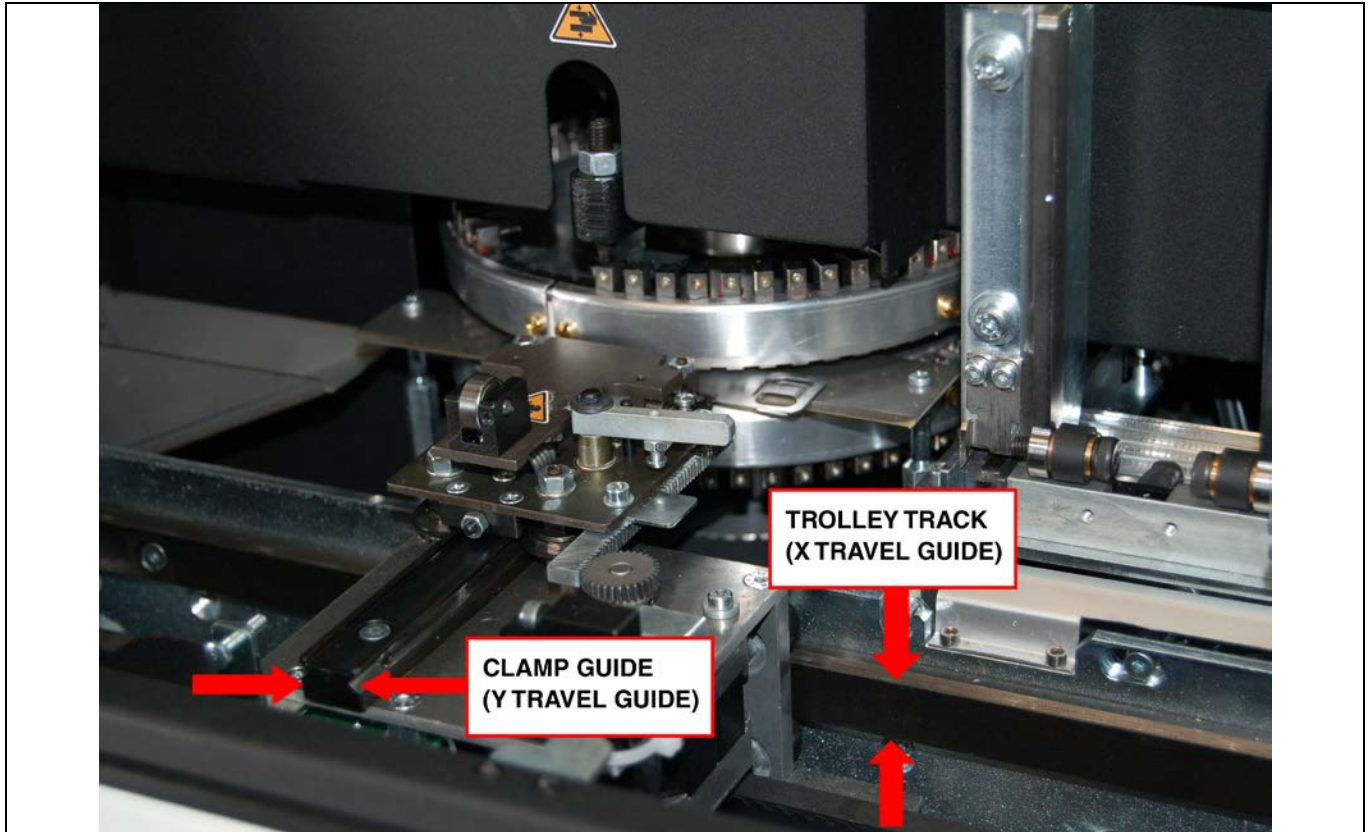
Lubricate	Every 6 months, or as needed	Every year	Lubricant
X & Y Guides	Yes		3-in-One Oil ®
Contact Panduit Tool Service for the maintenance items listed below:			
Carriage Bearing		Yes	High temperature red lithium grease
Dies		Yes	High temperature red lithium grease
Punch Cams		Yes	High temperature red lithium grease
Input Hopper pushers		Yes	3-in-One Oil ®

1. Heavy users and dusty environments need to be cleaned and lubricated more often based on contamination.
2. X and Y guides: Clean grooves then use 3-in-One® oil.
   Run "Card Test 14" on continuous to spread lubricant.

When the general maintenance is finished switch the embosser on and make sure that the front cover does block all operations. If this is not the case, call for Technical Assistance, as one or more safety devices could be damaged.

CONTACT INFORMATION • For Technical Support:

Panduit USA – Corporate Headquarters, Tinley Park, IL
USA Tel: 888-506-5400, ext. 83255
Website: www.panduit.com • E-mail: techsupport@panduit.com

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Latino America Tel.: 52 (333) 666 2501 • Fax.: 52 (333) 666 2510
Website: www.panduit.com • E-mail: cs-la@panduit.com

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