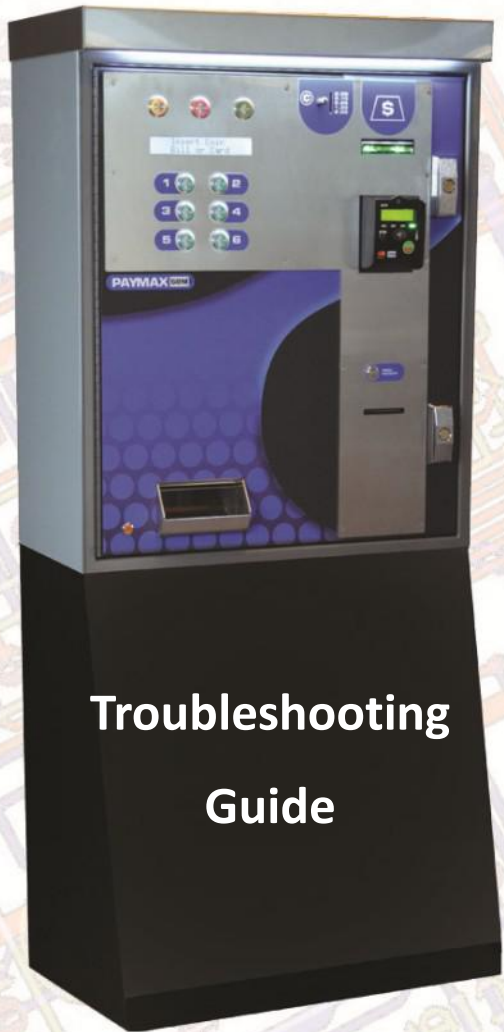


# CARD PAYMAX



## Troubleshooting Guide

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## Content

Content .....	3
Introduction.....	4
Machine is dead, no power .....	5
Machine is lit, does not accept any form of payment .....	6
Machine accepts coins and cards but does not accept bills .....	7
If you need to remove the bill acceptor.....	8
Machine accepts bills and cards but rejects coins.....	9
Coins inserted seem to go nowhere.....	10
Money inserted but selection button will not lit.....	11
Credit/Debit card presented but selection button will not lit .....	11
Payment accepted but not cards coming out.....	13
Payment accepted, card comes out, wrong change given out .....	14
To clear a jam in the mini-hopper .....	15
Receipt not issued .....	16
Technician section—Test Mode .....	17
Dump hopper (port) function.....	19
The event report.....	20
Replacing a MAX Controller.....	21
Parts listing .....	22
Personal notes .....	23

## Introduction

This troubleshooting guide is intended for a person having a minimum of technical skill and equipped with the basic tools.

This guide will take you in a step-by-step procedure on how to diagnose a problem, what is causing the problem, and what the remedy is.

### WARNING !!!

Shut power OFF before unplugging or plugging any element (dispenser, hopper, coin changer, bill acceptor, credit card reader). Failure to comply may result in damages to the controller and/or the element.

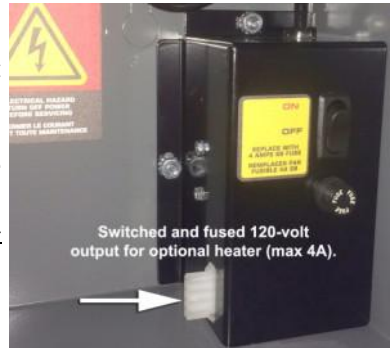
## Machine is dead, no power.

In a stand-by state, if all the dispensers have sufficient products (cards and coins), if the coin tubes have coins in it, the display of the machine will say Please insert coins, bills, or present card. The two selection blue buttons will be lit and so will be the orange language selection button. The bezel of the bill acceptor will scroll green LEDs and so will the credit/debit card reader bezel.

If none of this shows signs of life, it means the machine has no power. Check for the following:

**Make sure power switch is ON.** This switch is located on the junction box, bottom back right of the cabinet.

**If power switch is ON, check for the fuse.** The fuse is located half-inch below the main switch. If blown, replace with a 250-volt, 4- amps Slo-Blo fuse. Replacing fuse with a higher value will cause damages to the machine. Check fuse with an ohmmeter.

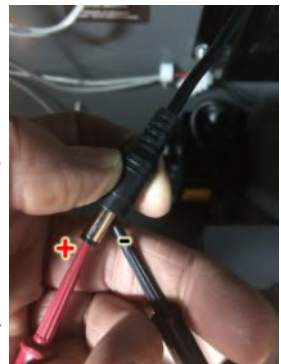


If fuse is OK, with a voltmeter set on **Vac**, insert the probes in the auxiliary output as seen on the right and turn power switch ON. If there is no power, it means power does not reach the machine.



**If everything is OK, check the circuit breaker** bringing power to the machine. You will need the electrician in charge to access the electrical panel.

If you have power, if the switch is ON, if the fuse is OK, **Check the power supply.** Make sure power cord between the junction box and the power supply is properly connected to the switching power supply located about four inches above the junction box. From the power supply, a black wire goes up to the MAX Controller. This cable ends with a black jack connecting to the controller, bottom left corner. With the voltmeter set on **Vdc**, check voltage in the jack. You must have 24-volt DC. If you don't, power supply is defective.



**Machine is lit, does not accept any form of payment.**

Rejects all coins, bill acceptor bezel and credit/debit card reader both look inert.

**Make sure you have products available for sale.**

You must have at least one card in at least one dispenser in order to have something to sell. Make sure the H shape metal weight is sitting on top of the card stack. If you are low on cards and the weight is not on top of the stack, the empty switch in the dispenser may not be activated.

**The machine is in a state of error.**

The blue display on the MAX Controller will prompt an error message. Such a message can be Port A, B, C, and/or D empty/jammed. Check the ports indicated on the display. If the port, in other words the dispenser is empty, remove the H shape weight, fill the dispenser with cards and put the weight back on top of the stack. The error message on the display will go away once the dispenser filled. If the error message persists, it means there is a jam. Check for a jam in the dispenser indicated and clear it (*see page 12 for more details about a card jam*). Once cleared, press and hold the Red button for few seconds and the MAX controller will perform a reboot. Shutting power OFF and putting it back ON will result in the same reboot process.

During the boot process, the bill acceptor and the coin changer will perform boot cycles. The card reader takes between 3 to 5 minutes to do its booting cycle, connect to the web server, and prompt the message to tap card.

## Machine accepts coins and cards but does not accept bills.

The acceptance of bills by the machine is directly linked to the coin level in the coin changer. If the tubes are empty, the MAX controller knows it cannot give change back and will therefore disable the bill acceptance.

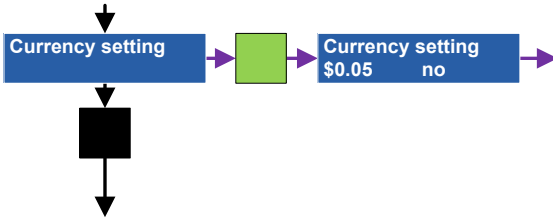
There is an obstruction in the bill path of the bill acceptor. The display of the MAX Controller will most likely prompt the message Bill Jammed or something similar. Clear the bill path by following these steps:

1. Push on the brownish tab.
2. Slide out the bill acceptor table
3. Check for obstructions (debris, paper, object, dirt)
4. If the clear windows (lenses) are dirty, a mild solution of detergent can be used for cleaning the lenses, as well as for general cleaning of the bill acceptor. Beverages or other water-soluble liquids which have been spilled on or into the bill acceptor can usually be removed with warm soapy water. External surfaces can be cleaned with a damp cloth.

**Note:** *Petroleum-based and alcohol-based cleaners will damage plastic and some electronic components. Scouring pads and stiff brushes may harm circuit boards, will mar the plastic and render the lenses opaque, fuzzy, or scratched. They must never be used to clean the bill acceptor.*



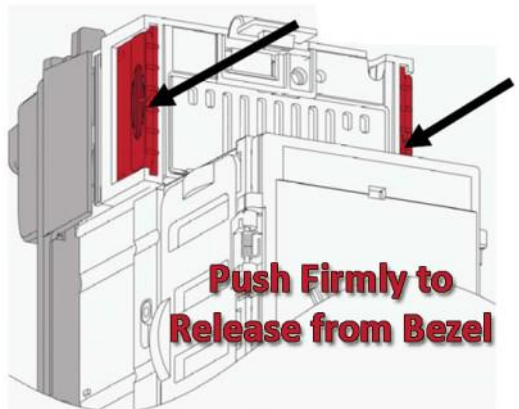
If you have sufficient coins in the tubes of the coin changer, if the bill path is not obstructed, then check the Currency settings in the MAX Controller. Press the black button until the display says Currency setting. Press the green button to enter. Press the green button until you see Currency setting \$5, \$10, and \$20. They must be set to YES. Use the red button to change from NO to YES.



If all these steps won't solve the problem, then the bill acceptor itself is defective and requires to be replaced.

If you need to remove the bill acceptor, follow these steps:

- **Shut power down if not already done.**
- Unplug the bill acceptor as seen in the image below.
- The bill acceptor uses a clip-on system. On both sides of the bill acceptor you will see two brownish sliding tabs. Push firmly on both to unlock the acceptor from its position and slide it out.
- To re-install, slide in the acceptor and push firmly on it to hear it clip. Try to pull it out to see if it is firmly clipped in place. It must not move.



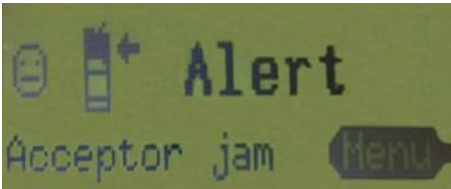


## Machine accepts bills and cards but rejects coins.

Slide out the coin changer from its position. Look at the small LCD display to see if there is an alert.



The image above tells there is an alert. The alert brings your attention to the coin cassette (darker zone left of the arrow) and informs you that B tube is Low. If the darker zone would be the top, it would tell there is a problem with the acceptor as seen below.



If you see this alert, check the coin acceptor for coin jam or foreign object.

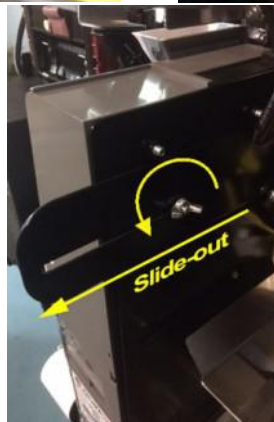
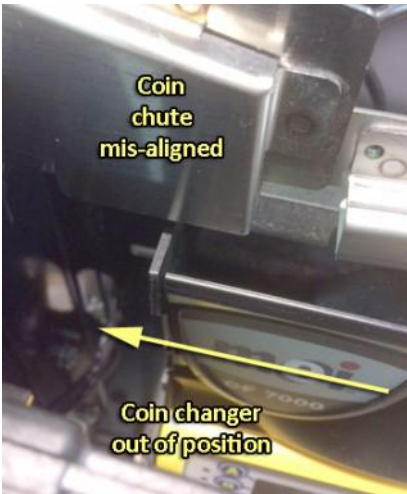


## Coins inserted seem to go nowhere.

If you insert coins and you do not hear it going either to the tube or the cashbox and if the amount inserted does not show on the display, you may have a coin jam.

Check for the following:

Make sure coin changer is correctly in place. As you must slide it out from its position in order to fill up the coin tubes, it also means it has to be pushed back properly in place with the wing nut tightened. If the wing nut is not tightened, there is a risk the coin changer may slide out thus resulting in a misalignment as seen in the images below. Also check for foreign object in the coin chute. If the coin chute is obstructed, any coin inserted by the front like a regular customer will not exit the chute.



Check for a coin jam in the coin acceptor itself. Consult previous page for details.

**Money inserted (coins, bills) but selection buttons will not lit.**

On stand-by, each selection button is lit if there is at least one card into the dispenser. If a dispenser is empty or jammed, its corresponding selection button will be OFF. At the very moment you start inserting money, all selection buttons will go OFF. It will lit again if the amount inserted is equal or higher than the vend price set for that selection and if the selection is available of course. If the amount inserted and visible on the display is equal to what the signage indicates but the selection button does not lit, it means the price of the selection is higher than the amount inserted. The display will also prompt the user to insert the difference (i.e. \$20 inserted, price set at \$25, display will say Add \$5.)

**Credit/Debit card presented but selection buttons will not lit.**

On stand-by, each selection button is lit if there is at least one card into the dispenser. If a dispenser is empty or jammed, its corresponding selection button will be OFF. When you present a card to the reader, a communication is established with the payment gateway. If the card is valid, the reader will send a preauthorized amount to the MAX controller of the machine. This preauthorized amount has to be equal or higher than the price of the selection(s). If it is lower, you must contact the credit card reader manufacturer in order to increase the preauthorized amount. You must have your merchant number to do that. If there is no link between the card reader and the gateway, the display of the reader will prompt to use Cash only.

**Please note:**

If the preauthorized amount is lower than the price of the selection, you cannot insert cash to cover the difference. A card transaction will disable the cash acceptance and vice-versa. A cash transaction will disable the card acceptance.

### Payment accepted, no cards coming out.

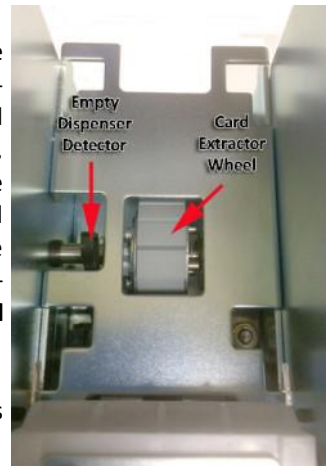
Customer inserts cash or make a card transaction. Selection button(s) will lit, customer presses on the button, no cards is coming out.

### Check for the following:

- Card is stuck in the delivery chute. Remove and clean chute if needed.
- Card is stuck in the dispenser itself as seen in the image below. If so, this dispenser is not available anymore until the jammed card has been removed.

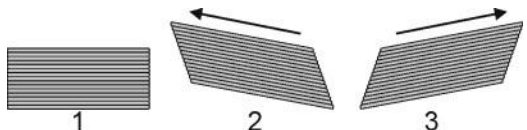


Remove all the cards from the stack to access the card jammed. Slide the card out by pushing it forward. Once the blocked card out, check the Card Extractor Wheel and make sure it is clean. If it is not, clean it. Use a mild soap to remove dirt and make sure it is completely dry once cleaned. You must feel adherence when touching the wheel. It must not be shiny or feel slippery as it will not grab the card adequately to slide it out. **DO NOT USE any oil-based product to clean the wheel.**



Once clean, go in the Test mode and dispense cards from this selection.

- Check the cards to make sure they do not stick together.

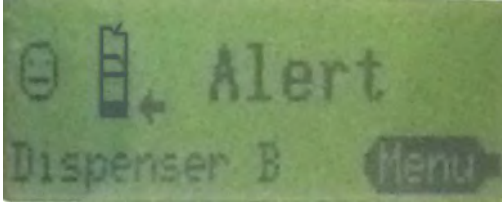


## Payment accepted, card comes out, wrong change given out

Customer inserts cash. Selection button(s) will lit, customer presses on the button, a card comes out but the change dispensed is not accurate.

### Check for the following:

- Check vend price of each selection. Adjust if required.
- Look at the display of the coin changer for a potential alert as seen below:



The arrow points towards the base of the coin changer bringing your attention that something is wrong in the payout section. Just below, it tells you dispenser B is in problem.

Remove the coin cassette. Press twice on the Yellow button. Each dispensing arm will make a homing cycle, starting with the one that was jammed, in this particular case, dispenser B.



Put cassette back in place, let the coin changer evaluate the coin level in each tube and then press again on each button to dispense coins. If a coin is not coming out again, remove cassette, check the tube for either coins not standing flat in the tube or a broken spacer. If a spacer is broken, you need to change the cassette or the tube itself (see next page).



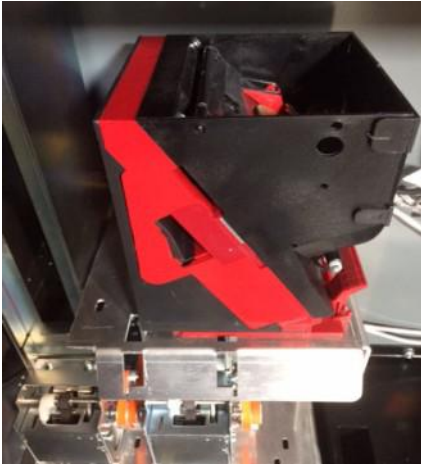
Coin cassette seen from under with colored spacers.

Coins not flat in the tube will cause a wrong dispense of change and block dispenser arm.



- Check that the coins in the tube match the value of the tube itself. If you have \$1 in a \$2 tube, the coin changer will short change the customer every time it dispenses from this tube.
- If your machine is equipped with a mini-hopper, you may have a jam thus disabling the payout from this hopper. Note that the mini-hopper serves as a back-up and will only dispense when the matching tube in the coin changer is empty (i.e. \$2 tube empty in the changer, \$2 in the mini-hopper = dispensing from the mini-hopper.) If you suspect a coin jam in the mini-hopper, **MAKE SURE THERE IS NO POWER IN THE MACHINE BEFORE SERVICING THE MINI-HOPPER** and follow the instruction next page.





Mini-hopper on Port D



Removing a Mini-hopper

### To clear a jam in the mini-hopper:

- Remove the mini-hopper from its position by unclipping it as seen above.
- Disconnect the cable (**WITHOUT POWER**).
- Empty the content in another container, bag, or recipient.
- Remove the two Phillips screws.
- Open the mini-hopper carefully.
- Remove the jam if any.
- Make sure the coin sensor is not obstructed with dirt.
- Reassemble carefully.
- Put coins back in the hopper (at least 50 coins).
- Reconnect cable and put mini-hopper back and clipped in place.
- Apply power.
- Go in the Test mode to dispense from the proper Port, most likely Port D.

Phillips #2  
screws



## Receipt printer not issued:

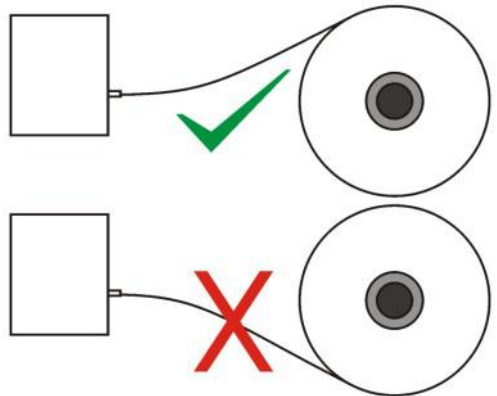
Check for the following:

Can you print the audit ? If yes, the printer is not the problem. If no, check the printer itself for a paper jam, an out-of-paper situation. Check the printer cables on the printer itself and on the MAX controller.

If the printer works for the audit but you can't have a transaction receipt on credit card, check the following:

- Check the Receipt button if the light goes ON.
- Check the connection of the button
- Check the Receipt time-out setting in the Technician section of the parameters. If the time-out is too short (i.e. 1 second) customer will not have the time to ask for his receipt. Default value is 15 seconds and should not go lower. A "0" value in this setting mean automatic print out of receipt on each transaction.

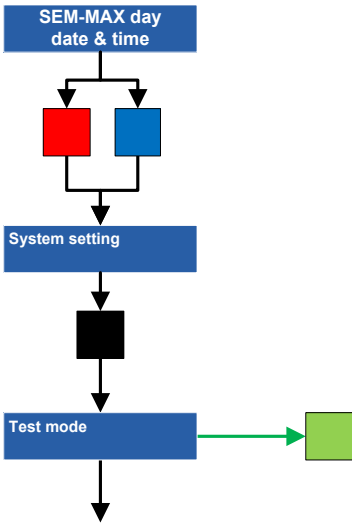
If the printer issues paper but nothing printed on it, check if the paper is properly inserted into the printer.



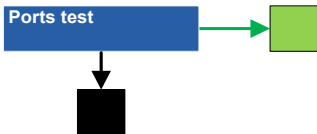


## Technician section—Test mode

The test mode is a tool for the technician. When Test Mode is visible on the display, press on the **Green button**.

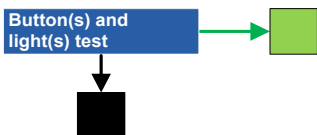


### Ports test



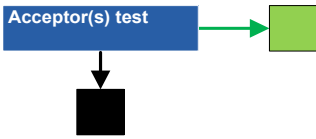
This allows you to dispense a product from each port without having to perform an actual transaction. When the good port is on the display, press on the green button. To change port, press on the red button. Press on the black button to get out of the port test mode. Any product delivered in the port test mode will NOT increase the audit of the machine.

### Button(s) & light(s) test



This is to test the different push buttons of your machine. The button you press will prompt a message on the blue display and the corresponding light will activate on the button itself (i.e.: Key - Receipt). Press on the **black button** to exit.

## Acceptor test



This is to test the good acceptance of the bill and/or coin acceptor. In this test mode, the audit ignores any money inserted and no sales will take place. Therefore, if you go on site following a complaint from a customer saying the machine has difficulties accepting money, use this test menu instead of making real sales.

All acceptance tests done outside this test mode will affect the audit thus creating a discrepancy in your accounting. Press on the black button to exit. This test mode disables the credit/debit card reader and therefore you cannot test it, as it would result in a real transaction visible on your monthly credit card statement.

## Dump Hopper (port) function

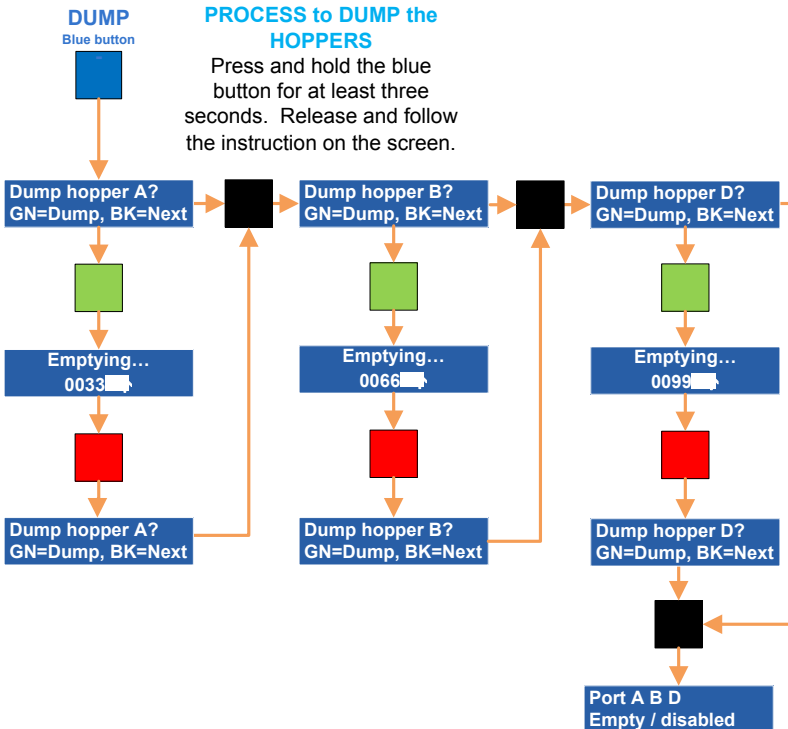
The MAX controller allows you to dump the contents of each port to zero for physical inventory purposes. A port can be a card dispenser or a coin hopper.

To access the DUMP function press and hold the **Blue button** for about 3 seconds and release. The first port available will be A. Follow instruction on the display as seen below.

It stops dispensing when the port is empty or if you press the red button. If a port is empty, it automatically transfers to the following port available.

Careful when using the dump function. Dispensers and/or hopper will dispense non-stop so make sure you can catch what is being dispensed, especially if dispensing from the coin hopper. This little hopper is quite fast.

If you are using the Inventory setting, it will take into consideration what is being dump and adjust the inventory accordingly.



## The event report

This report is a useful diagnosis tool informing you of any events happening in your machine that is not a transaction or related to a transaction. An event can be a bill cassette removed, an out-of-paper situation, a card jam, a token jam, a dispenser empty, etc. It will not mention that the bill acceptor rejected a note or that the gateway processor rejected a card transaction.

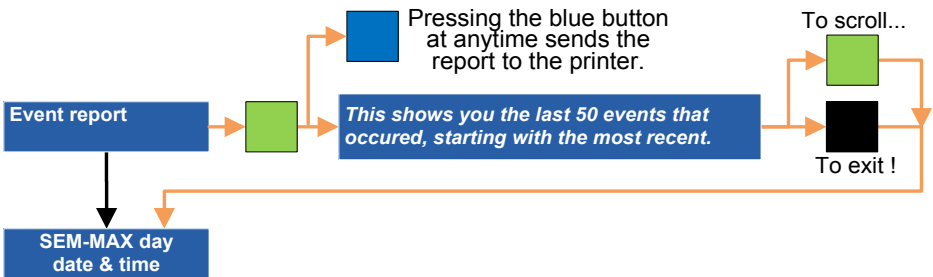
The report holds up to 50 events starting with the most recent. If the log is full, the earliest will push the oldest out. Along with the description are the date and the time it happened. This report can be printed at any time by pressing on the **Blue button** while you are consulting it. Here is an example of event:

**2017-11-22 13:07**  
**Printer out of paper**

**2017-11-11 09:29**  
**Coin not remit. \$0.05**

If the error description is too long, the display toggles to show the entire description. Press on the **Green button** to scroll throughout the report. When you reach the last event, the MAX controller comes back to the stand-by message.

To access the event report, press on the black button until the display says Event report and then press the green button. Every time you press on the green button a different event will appear. The scroll starts with the earliest.



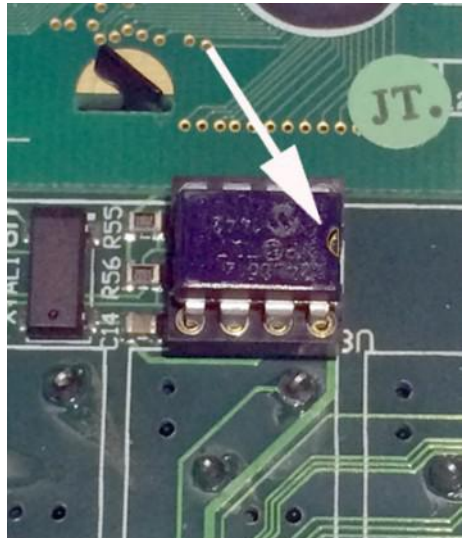
## Replacing a MAX Controller

The MAX Controller of your machine is a very reliable circuit assembly. However, it may require, one day, to be replaced for some reasons. If it ever comes, you will greatly appreciate the memory transfer feature unique to all SEM products.

There is a small 8-pin memory chip on the circuit board containing the entire memory of the machine. That includes the audit, all the programmable parameters, plus the internal hidden configuration. In the unlikely event that you need to replace the MAX controller, **shut power OFF**, remove the MAX controller from its position, locate the microchip, carefully remove it and install it onto the new circuit. This microchip **MUST** be inserted into its socket the proper way. There is a half-moon shape groove on the chip itself.

As seen on the images below, when looking at the back of the MAX Controller, with all four port connectors pointing down, the half-moon groove is on the right of the microchip. **Failure to comply with the above may result in losing all the data on this microchip, including the audit and all the multiple settings.**

Pressing and holding on any button while booting, will prompt the internal configuration code on the display, something like **000-03-10-02-004**.



### **WARNING !!!**

**Shut power OFF before unplugging or plugging any element (dispenser, hopper, coin changer, bill acceptor, credit card reader). Failure to comply may result in damages to the controller and/or the element.**

## Parts Listing

Description	P/N	Qty
36-inch MDB Harness Extension from Controller to Peripherals	A03610	1
Azko Mini-Hopper Harness to Controller	A08860	1
Azko SEM Generic Mini-Hopper	X00490	1
Blue Selection Button	A09540	2
Cable Tie-Clip 0,500	G00815	12
Cage Nut 1/2-13 for T-Handle	B00290	2
Extended AS-CD1000-30m Card Dispenser	Q00435	1
MEI 5-tube Coin Changer (5-25-100-100-200¢)	7512I-DAE	1
Harness to external Light Indicator	A05530	1
Kept Nut 1/4-20	B00610	27
Kept Nut 6-32	B00490	13
Kept Nut 8-32	B00520	30
MAX Controller w/Housing	A08760	1
MDB Down Stack Canadian Banknote Acceptor	VX73D34CA00	1
Nayax Card Reader VPOS Black w/AMIT GSM	500015	1
Orange 24-V Tab Light Indicator	E01200	1
Orange Language Selection Button	A09570	1
Paymax BV Stopper UP	S06504	1
Paymax Card Dispenser Harness to Controller	A07411	2
Paymax Coin Box	S06020	1
Paymax Coin Box Bracket	S06030	1
Paymax Coin Box Chrome Button	S04110	1
Paymax Coin Changer Bracket	S06000	1
Paymax Coin Insert Assembly w/Plunger	S06100	1
Paymax Delivery Bin	S05070	1
Paymax Display/SV6 Module Assembly	A09700	1
Paymax Door Assembly w/NAMA Internal Plates	S05060	1
Paymax Heater Kit DIN w/Thermostat	A09730	1
Paymax Kalypso Printer Assembly w/Harness	A09720	1
Paymax Lower Dispenser Shelf	S05080	1
Paymax MDB Display Harness & Printer Power	A09740	1
Paymax Power Supply 115/230-24VDC 2,5A desktop	E04350	1
Paymax Power Supply Assembly	K01630	1
Paymax Power Supply Holding Bracket	S06045	1
Paymax Stainless Steel Door Chute	S05090	2
Paymax Standard Housing	S05050	1
Paymax T-Handle Secure Internal Plate	S06090	2
Paymax Upper Dispenser Shelf	S05085	1
Red Cancel Button	A09560	1
Standard AS-CD200-30m Card Dispenser	Q00430	1
T-Handle 5500/N9900 5,5 without Lock	S04640	2
Thermal Paper for Axhiom Printer 60mm	M00540	1
VAN Lock Key ( <i>specify key encoding</i> )	K5	2
VAN Lock Plug-Lock Standard for T-handle ( <i>specify key encoding</i> )	4275S	2



Our technical department wrote this manual. Even though the utmost attention was given to writing this manual, errors may have slipped by unnoticed. Any comments, suggestions, or errors should be sent directly to:

[gilbert.guinard@sem.ca](mailto:gilbert.guinard@sem.ca)

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