

CUSTOMER SERVICE

Should you need repair, parts may be sent to:

Laurel Metal Products
3500 W. Touhy Ave.
Skokie, IL 60076

Please include phone number and return address.

LIMITED WARRANTY

Laurel Metal Products warrants that the goods described in this warranty are free from defects in workmanship and materials for the period of one (1) year.

For breach of the express warranty and any implied warranty on this product, you are limited to the following damages:

If within one (1) year from the date of purchase, this product fails due to a defect in materials or workmanship, Laurel Metal will repair or replace it free of charge. In no event shall Laurel Metal be liable for incidental or consequential damages. Laurel Metal' liability for any claims arising out of this warranty shall not exceed the purchase price of the product.

NOTE: some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty does not cover damage resulting from accident or from misuse or alteration of the product.

The term of this warranty begins on the date the product is purchased by you, and continues for a period of one (1) year from that date.

To obtain performance of any obligation under this warranty, you must return the complete product prepaid, together with a description of the problem, approximate date of purchase, your name, address and telephone number, to the address listed above.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

This warranty covers any electronic vender manufactured by Laurel Metal Products.

LAUREL
METAL PRODUCTS INCORPORATED

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MODEL 899-MAX

3-COLUMN ELECTRONIC VENDER



OPERATION & SERVICE MANUAL

ELECTRICAL HOOK-UP

The 24 volt AC power connection for the machine is on the circuit board of the coin mechanism. The terminal block for incoming power is located on the lower left corner of the circuit board. You will have to lift up the cover/instruction sheet to locate this black terminal block, which requires a small slotted screwdriver for the 2 lugs. Leave at least 24" of wire inside the vender to simplify future coin mechanism programming.

BE CERTAIN TO SUPPLY 24 VOLTS/AC

TRANSFORMER POWER REQUIREMENTS

The minimum power required for each vender is 1/2 amp (500mA). To run multiple venders on a transformer first determine the total amperage required, taking into account future additions. To determine the amperage output of a 24 volt transformer that is given in VA, divide the VA output by 24. For example, a 100 VA transformer would provide 4.2 amps ($100 \div 24$) of 24 volts AC power. This would be ample power for 8 venders.

INSTALLATION

Packed inside the carton pad at the top of the vender:

- 1 – Cabinet hanger bracket
- 1 – Bag of fasteners for the security frame
- 1 – Side bar - mounts on right side of cabinet

Mount the hanger bracket securely on the wall and note that the top edge of this bracket will go inside the open area at the back of the cabinet. Two people should lift the vender to hang it on the bracket. Open the door and note the two 3/8" diameter mounting holes in the lower left and lower right sides of the cabinet. Remove the coin mechanism to expose the right side mounting holes. To remove the coin mechanism, first unplug the white ribbon cable from the black switch pad and then loosen the two mounting screws (you do not need to remove these screws) and lift the coin mechanism upward to detach. There are two wire harnesses to unplug from the back of the coin mechanism. Now select desired mounting holes and mark the holes, remove vender, drill and install appropriate anchors. Re-hang the vender and secure the lower fasteners.

PRODUCT LOADING

The shelves can be easily and quickly reset into the vend position (horizontal) by running a finger or thumb up the shelves from the bottom to the top. This 'fanning' will take only seconds to reset all shelves. When loading any column, if there is not enough product to fill all 36 shelves, then load from top down. This ensures that the sold-out switch will activate when the last shelf (the top shelf) drops. If a customer chooses a selection that is empty, the display will flash **SOLD OUT, SORRY** and return the inserted coins.

TROUBLE SHOOTING

Display Out: power loss, check for 24 volts AC power (+/- 15%) at the terminal block of the Circuit Board where the incoming power comes in, this terminal block is at the bottom left corner of the Circuit Board. Power down for 5 – 10 seconds and power back up. If the display is still out then simultaneously press the **UP & DOWN** buttons on the Circuit Board. If this fails the Circuit Board is in need of repair.

Display is not alternating: This typically indicates a short in the Switch Pad (the strip with the 5 buttons). Unplug the white Ribbon Cable from the Switch Pad and if the display returns to alternating the problem is in the Switch Pad and should be replaced. The Switch Pad is affixed to the metal plate with double faced adhesive so it can simply be peeled off the metal plate to remove it.

Inserted coins being rejected: Coins can be returned to the delivery tray by the coin acceptor rejecting the coin where the coin immediately falls into the delivery tray after insertion. The coin acceptor may need reprogramming in this case. Coins can be returned also by the coin cup motor running and returning the coins to the delivery tray if the customer has not inserted the correct amount for the product selected since the machine does not make change and will not allow an overpay or an underpay.

When the display says:

Sold Out, Sorry: The machine is empty or the main wire harness at the back of the Circuit Board is not plugged in properly. The large plug of this wire harness can push the Circuit Board forward when you are plugging it in so it is necessary to hold the Circuit Board in place with your finger when the main wire harness is plugged in.

Out of Order, Come Back Later: There is likely a problem with the Coin Cup motor. Remove the Coin Mechanism by loosening the 2 screws and unplugging the Ribbon Cable from the Switch Pad. Lift the Coin Mechanism up and off the 2 mounting screws to be able to see the Coin Cup motor assembly, check that there are no coins stuck on the side or bottom of the Coin Cup which would restrict it from spinning around. Power down for 5 – 10 seconds and power back up to reset.

Problem with Column 5: Press the **UP & DOWN** buttons simultaneously while this is displayed to reset the vend motor.

**See the Troubleshooting Guide at
www.laurelmetal.com for more information**



VEND COUNTER

Unit sales for each column are tracked with the vend counter. The counter is non-resetting and will roll over after 99999 vends. To access the counter; press **MODE**, scrolling display prompts you to **PUSH** any selection button to display total sales for that individual column. Repeat for any or all columns.

Machine will return to the normal run mode after 20 seconds – this is the same for any programming step.

PRICE CHANGE

To change the price setting for any column press **MODE** two times, scrolling display prompts you to **PUSH** a selection button – the current price setting will display for that specific column – change price by using the **UP** or **DOWN** buttons.

DISPLAY BRIGHTNESS

To access the display brightness setting press **MODE** three times, then press the **UP** or **DOWN** buttons to toggle between the high and low settings.

LANGUAGE SELECTION

To access the language selections press the **MODE** button four times, then press the **UP** or **DOWN** buttons to select the desired display language.

COIN ACCEPTORS

SLUGBUSTER – SINGLE COIN



This acceptor sends 1 credit pulse to the display for every coin or token entered. The factory setting is \$0.25 for every credit. This can be changed if quarters are not accepted. For instance, if a token with \$0.50 value is only to be accepted, then the coin credit value (the 'A' value) must be changed to 0.50. To change this value, press and hold the **MODE** button until the display reads **SET PULSE VALUE**. Now use the **UP** or **DOWN** buttons to change. Press the **MODE** button to return to the run mode. If dollar coins are only to be accepted, then follow the same steps and change the 'A' value to 1.00. **Remember to insert a sample coin into the coil of the Slugbuster.**

MA-800 – MULTI-COIN



This acceptor will take up to 6 different coins, or tokens, and the value of any coin can be programmed in. Quarters are pre-programmed in switch #6 and dollar coins in #5. Refer to the enclosed MA-800 instruction manual for programming instructions if tokens or any other coins are to be accepted.

When programming in any new coins, it is recommended to remove the acceptor from the coin mechanism frame and drop the 6 sample coins in by hand. Optimal programming will be obtained by dropping the coins in the acceptor by hand rather than by running the sample coins down the metal coin chute.

To remove the MA-800 acceptor from the coin mechanism frame, loosen the 2 mounting screws on the front face of the coin mechanism, unplug the white ribbon cable, then lift up the coin mechanism to detach it. Remove the 2 screws holding the MA800 in place and pull it out to begin the programming. **Do not unplug the MA-800 from circuit board when programming, as it needs power to operate.**

MICROCOIN QL – MULTI-COIN

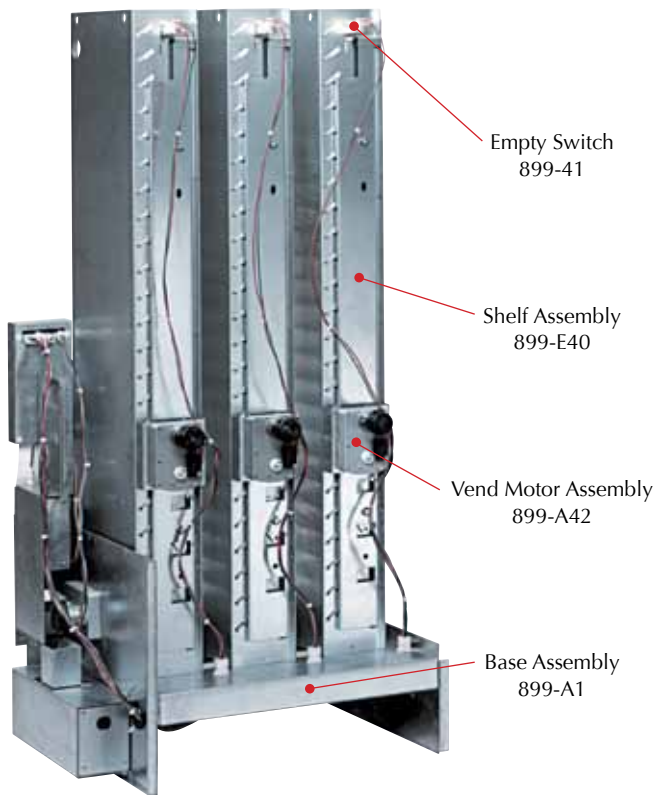


This acceptor will take up to 12 different coins, or tokens, and the value of any coin can be programmed in. Quarters are pre-programmed in switch #10 and dollar coins are in #11. Refer to the enclosed QL instruction manual for programming instructions if tokens or any other coins are to be accepted. **Do not unplug the QL from circuit board when programming, as it needs power to operate.**

MAGIKIST ICOIN – MULTI-COIN



This acceptor is preprogrammed to take quarters and/or dollar coins in addition to 3 other coins or tokens where the value can be programmed in. Refer to the enclosed iCoin instruction manual for programming instructions if tokens or other coins are to be accepted. **Do not unplug the iCoin from the circuit board when programming, as it needs power to operate.**



VEND OPERATION BASICS

Exact change is required for a vend to initiate, the machine does not make change. When a selection button is pressed and the credit amount on the display does not match the vend price of that selection the inserted coins will be returned to the customer in the delivery tray.

Inserted coins first pass through the coin acceptor, are credited on the display and then held in a coin cup. Not until the product has vended does the coin cup run and deposit the coins in the coin box below. There will be one audible beep for every credited coin inserted and 4 audible beeps when the vend motor is running to drop the product off the shelf.

USING TOKENS OR COINS INSTEAD OF QUARTERS

There is a setting in the circuit board that is changeable for situations where quarters are not accepted and the coin or token value is higher than \$0.25. To access this setting press and hold in the **MODE** button on the circuit board until there is a beep and **SET PULSE VALUE** appears on the display followed by \$0.25. Use the **UP** or **DOWN** buttons to change this value. The typical change is for tokens valued at \$1.00 where you would use the **UP** button to change from \$0.25 to \$1.00.

DOT MATRIX DISPLAY OPTIONS

1. If all vend sections are priced alike the display will be; **Insert... Coins... Pay... \$1.25...**
2. If there is different pricing for even 1 selection the display will be; **Insert... Coins... Pay...**

Important note: You must program all 5 selections at the same price even if you are doing this to a 3 selection machine if you want the display to read like the first example above.

