MODEL 899-MAX

3-COLUMN
ELECTRONIC VENDER

LAUREL
METAL PRODUCTS INCORPORATED

INSTRUCTION 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÷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.

TROUBLESHOOTING

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 scrolling: 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 scrolling 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

LANGUAGE SELECTION: To access the language choices press MODE, then press the UP or DOWN buttons to scroll through the language choices. Press MODE when desired language choice appears.

CURRENCY SYMBOL: To access the currency symbol choices press MODE two times and then use the UP or DOWN buttons to scroll through the currency symbol choices.

PRICE CHANGE: To access press MODE three 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 four times, then press the UP or DOWN buttons to toggle between the high and low settings.

VEND COUNTER: To access the vend counter press MODE five times, scrolling display prompts you to PUSH any selection button to display total sales for that individual column. Repeat for any or all columns.

CHOOSE PAYMENT TYPE: To select the payment options of; **COIN** or **CARD** or **BOTH**
COIN: coin acceptance only
CARD: credit card acceptance only
BOTH: coin or credit card acceptance

PROGRAMMING TIPS

After pressing **MODE** to enter the programming menu when you make a change to any setting (Language, Price, etc.) if you wait 15 seconds the change will be activated and there will be 4 audible beeps to indicate programming has ended and the machine has returned to normal operation.

If you are making multiple changes, like changing the language and changing the vend price, you can step through the programming sections by each tap of the **MODE** button and make multiple changes.

If the display is in a foreign language the easiest way to change it back to English is to not press any buttons for at least 20 seconds so the machine can return to normal operation mode. Now press the **MODE** button once which will take you into the Language Selection settings. Now press the **DOWN** button multiple times until you reach English, which is at the bottom of the language choices. Wait 15 seconds and after the 4 audible beeps the machine will then display English 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.***

MA850 – 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 MA850 instruction manual for programming instructions if tokens or any other coins are to be accepted.
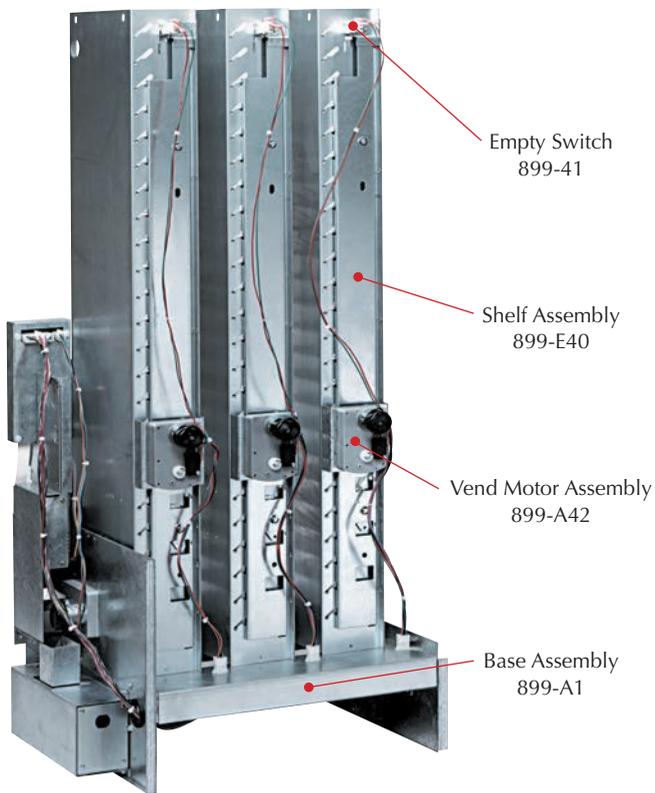
When programming in any new coins, it is recommended to remove the acceptor from the coin mechanism frame and drop the 6 sample coins in by hand. Optimal programming will be obtained by dropping the coins in the acceptor by hand rather than by running the sample coins down the metal coin chute.

To remove the MA850 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 MA850 in place and pull it out to begin the programming. ***Do not unplug the MA850 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 preprogrammed 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.***

Empty Switch
899-41

Shelf Assembly
899-E40

Vend Motor Assembly
899-A42

Base Assembly
899-A1

Side Bar
2100-64

Shelf Assembly
899-E40

Cover Instruction
Sheet
899-75

Circuit Board-
Digi-Max
899-77

Ribbon Cable
599-15

Coin Acceptor
Slugbuster 399-102
MA850 399-64
Microcoin 399-101

Coin Mechanism
Slugbuster 899-B30MAX
MA850 899-B30MA
Microcoin 899-B30MAX-QL

Coin Box w/Lock
81-B80

Coin Box Door
81-96

Security
Frame
81-85-Max

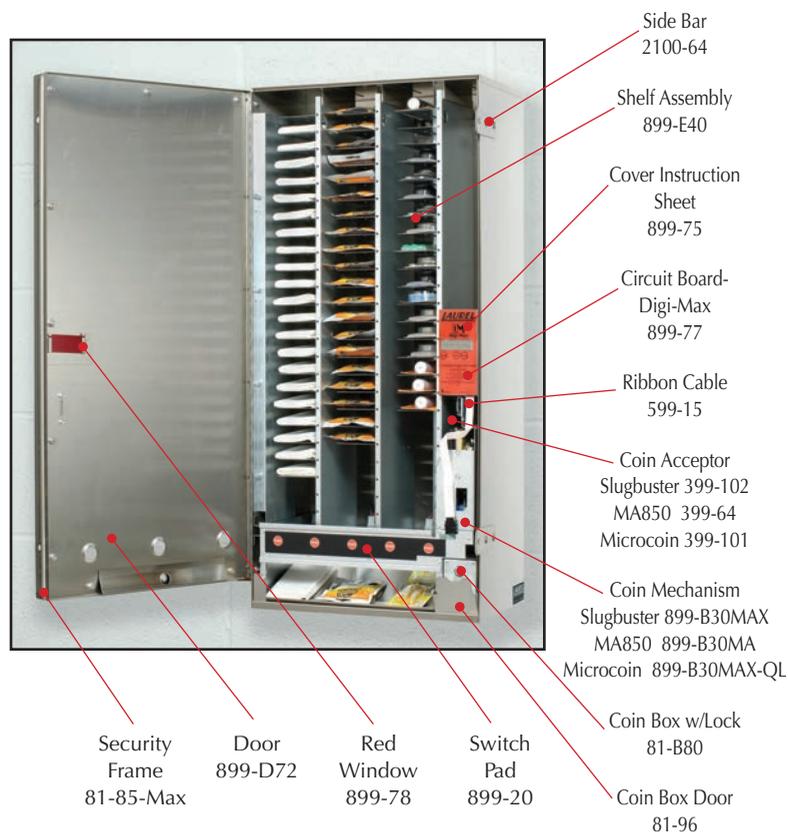Door
899-D72

Red
Window
899-78

Switch
Pad
899-20

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.

Circuit Board
Digi-Max
899-77

Ribbon Cable
599-15

Coin Mechanism
Slugbuster 899-B30MAX
MA850 899-B30MAX-MA
Microcoin 899-B30MAX-QL

Coin Acceptor
Slugbuster 399-102
MA850 399-64
Microcoin 399-101

Switch Pad
899-20

Coin Cup
Motor Assembly
899-B19

Coin Box
81-B80