GLASSFRONT VENDOR

SERVICE MANUAL

MODEL NUMBERS
3039
3044
3045
3046
3076
3077

P/N 4202376
REV. B
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INTRODUCTION:

The contents of this manual contain instructions, service and installation guidelines pertaining to the "GF" Series Glass Front Merchandiser Vendors. The following Models will be covered within this manual:

Model 3039  "GF19"  19 Select Vendor
Model 3044  "GF19"  19 Select Vendor
Model 3045  "GF25"  25 Select Vendor
Model 3046  "GF25"  25 Select Vendor
Model 3076  "GF35"  35 Select Vendor
Model 3077  "GF35"  35 Select Vendor

All "GF" Glass Front Merchandiser models are equipped with an electronic control system, which includes a wide variety of features that can be programmed into the logic of the controller and used by the customer as needs arise for specific locations. Some of the features are Programmable Message Center, Cash and Vend Accountability, Multi-pricing, Service Diagnostics, along with other features which allow the customer to maintain important records. Details of each feature, along with the settings will be explained within this manual.

The electronics within the controller allow all selections to be priced separately at various vend prices ranging from $.05 to $99.95 in five cent increments. All programming of the vend functions, pricing and features is done at the controller/keypad and changes can be made without the need of any additional accessories or remote parts.

Cash accountability provisions allow the owner/operator to retrieve information such as "Total Cash" transactions and "Total Vend" cycles that have been performed by the vendor. Information for individual selections, complete rows or total machine can be compiled and used for inventory and ordering records.

Electrical malfunctions are recorded by the controller and will be displayed to service personnel when the machine is placed in the "Service Mode".

The vending sequence of all "Glass Front" vendors is a "first-in,""first-out" procedure for each selection, eliminating the need for stock rotation to maintain fresh products in the vend area. Each selection has an individual motor and functional selections will continue to operate if other motors become nonfunctional.

Each machine will be identified by a model number and a specific serial number. These identification numbers will appear on the serial number plate attached to the inside and rear of the vendor. Record these numbers for your records. All inquiries and correspondence pertaining to this vendor should reference the model number and serial number.

It is recommended that this manual be read thoroughly to familiarize the service person with the functions of the components along with the features that are available. The initial setup of a machine is a very important step of insuring that the equipment operates in a trouble free manner. By following the instructions at the initial installation of the machine, service problems can be avoided and set-up time will be minimized.

Each "Glass Front" vendor has the capability of supporting a "Satellite" Can Vendor. Refer to the "Service Manual" pertaining to the specific Can Vendor for installation instructions.

Should you have any questions pertaining to information in this manual, replacement parts, or the operation of the vendor, you should contact your local distributor or Selectvend, Inc. / P.O. Box 488 / 165 North 10th Street / Waukee, Iowa 50263-0488.

SPECIFICATIONS

GENERAL SPECIFICATIONS

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</table>

COINAGE: Mars TRC6010
Coineo 9302L

PRICING: $.05 TO $99.95
UNPACKING

This machine has been thoroughly inspected before leaving the factory and the delivering carrier has accepted this vendor as their responsibility. Any damage or irregularities should be noted at the time of delivery and reported to the carrier. Request a written inspection report from the claims inspector to file any claim for damage. File the claim with the CARRIER (NOT THE MANUFACTURER) within 15 days after receipt of the machine.

Carefully remove the outside packing material in a manner not to damage the finish or exterior of the machine. Inspect the machine for concealed shipping damage. Report any damage hidden by the shipping carton directly to the delivering carrier on a "hidden damage report.

Record the model number and serial number of the vendor for your records. These numbers can be found on the Serial Plate located on the rear of the cabinet. Refer to these numbers on all correspondence and inquiries pertaining to this vendor.

Remove the "Knock-A-Way" Support by placing a 2 X 4 under the vendor, inserting a screwdriver into the groove of the "Knock-A-Way" and splitting it in two. Turn the leveling screws in as far as possible. (See Illustration #1)

Position the vendor in its place of operation. Leave at least six (6) inches of space between the back of the machine and any wall or obstruction for proper air circulation. Level the vendor, making sure all levelers are touching the floor. The vendor must be level for proper operation and acceptance of coins through the coin mechanism.

ILLUSTRATION #1

GROUNDING & ELECTRICAL

For proper operation of any equipment utilizing electronic controlled components, it is recommended that the equipment be placed on an isolated or dedicated circuit. The circuit should be a minimum 15 Amp, 115 Volt AC, 60 Hz, properly polarized and grounded. Shown in Illustrations #2 and #3 are two (2) properly grounded and polarized wall outlets. Illustration #3 is a two (2) wire outlet with a three (3) plug adapter in place. To verify that the receptacle is properly grounded and polarized, insert one probe of a Volt/Ohm meter (set to check AC line voltage), or a test light in the ground terminal (hole) and the other probe into the "hot" terminal of the outlet. You should read 115 VAC on the volt-meter or the test light should light.

NOTE: The "hot" side of the outlet should always be counter-clockwise from the ground terminal, with the ground terminal at the bottom.

If you find that the receptacle is not properly grounded, or polarized, you should contact a licensed electrician to correctly polarize and/or ground the receptacle to ensure safe operation.

Consult local, state and federal codes and regulations before installation of the vendor.

ILLUSTRATION #2

ILLUSTRATION #3
LOADING PRODUCTS

To load products, lift tray slightly and pull forward until the tray stops. The upper most trays will tilt for ease of loading.

Load products from front to back, making sure all items fit freely between the augers. Do not attempt to force oversize items or packages into the spaces. All spaces forward must have a product loaded into them; do not skip a space. The bottom of the item or package should be placed on the bottom of the compartment above the product augers, with the label facing the front of the machine for easy identification by the customer. (See Illustration #4)

When finished loading each tray, make sure the tray is returned to it's proper standby position. All trays must be pushed to the rear of the cabinet and properly seated in the "detent" position.

The size of the item being vended must be larger than the diameter of the auger being used to vend properly. Undersize items could cause vend problems. Various "pitched" augers are available. If the product does not fit the auger properly, it is recommended that a different "pitched" auger be used. Contact your local distributor or Selectivend, Inc., 165 No. 10th St., Waukee, IA., 50263 for the various augers and sizes that are available for this product line.

CONTROLLER FUNCTIONS

SALES MODE

The "Sales Mode" is the normal operating mode of the vendor. When in the "Sales Mode" the controller will communicate with the buying customer with instructions pertaining to the vend requirements along with displaying necessary steps to accomplish the vend.

During normal operation, the following messages will be displayed in the display while the vendor is in the "Sales Mode".

1. "POINT OF SALES" MESSAGE" - If the changer has adequate change.
2. "EXACT CHANGE ONLY" - If the payout level of coins in the changer coin tubes are below the low level sensors.
3. "DISCOUNT AVAILABLE NOW" - Along with either 1 or 2 when the discount mode is activated. Either 1 or 2 above will also be displayed while in the discount mode.

POINT OF SALES MESSAGE

This message will be displayed in a scrolling format and will appear continuously while the machine is in the "Sales Mode" or a "stand-by condition" and the coin mechanism has an adequate supply of coins in the change tubes. If the change supply of the Coin Mechanism falls below the "low level" sensors in the payout tubes, the "EXACT CHANGE ONLY" message will appear.

The "Point of Sales" message is a programmable 130 character message and is usually an encouragement to the buying customer to purchase the products.

EXACT CHANGE ONLY MESSAGE

This message will be displayed when the change supply in the coin mechanism is below the "low level" sensors in the change tubes. When the payout tubes are low, the "EXACT CHANGE ONLY" message takes priority over the "Point of Sales" message and the "Discount Available Now" message.
DISCOUNT AVAILABLE NOW MESSAGE

This message will be displayed when the discount feature has been programmed into the controller and the feature becomes active. Refer to Discount Feature Section for instructions on setting the discount and activating this feature. When the "Discount Mode" Mode becomes active, the "Point of Sale" or the "Exact Change Only" message will also be displayed along with the Discount message.

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CONTROLLER FUNCTIONS

SERVICE MODE

The "Service Mode" will allow the service personnel access to the programming functions of the controller. The controller must be placed in the "Service Mode" to alter any programming, establish a new program, retrieve diagnostic information and other features.

When the controller is placed in the "Service Mode", faulty selections that have been recorded during the "Sales Mode" will appear in the display. Any Information displayed in the digital display should be recorded immediately. Any input or key depression on the key pad will remove this information from the controller's memory and the failures will not be displayed again until that specific failure has been repeated during normal vend cycles. See the Diagnostics and Trouble Shooting Sections for further details pertaining to motor failures.

In the "Service Mode" the keys on the key pad will perform different functions, depending on the specific mode, or requirements of the program to be accomplished. The "key" functions will be defined in detail under each mode description throughout this manual. Furnished in the Service Packet is a key pad overlay that can be placed over the key pad indicating the functions of individual keys while in the programming mode.

To place the controller in the "Service Mode", depress the service mode button on the control board. (See Illustration #5) Upon entering the "Service Mode" any electronic failures that occurred, since the last depression of the "Service Mode" button, will be displayed. If no diagnostics are displayed, no electrical problems with the motors were detected. If failures are displayed they should be recorded immediately. Any input or key pad depression will remove this information from the controller's memory.

The Controller will automatically exit the "Service Mode" after approximately 25 seconds if no keypad input is detected.
DIAGNOSTICS

Each time the controller is placed in the "Service Mode", failures pertaining to the electrical circuit to the vend motors will be displayed if a particular selection failed to vend when selected by the buying customer. If an item is selected and the vendor is unable to complete the vend cycle, the controller will display to the buying customer "MAKE OTHER SELECTION", and that particular selection will be removed from the program. The faulty selection will remain inoperative until cleared or repaired.

Each time the controller is switched in or out of the "Sales Mode" or "Service Mode", the motor circuits are scanned to determine the number of active or operational motors at that time. The diagnostics being displayed indicate the selections that were functional when the "Sales Mode" was last activated, however, due to failures or removal, are not in the circuit now. For instance, if a tray is not properly connected with the main cabinet harness, these selections would appear as faulty when the "Service Mode" is entered.

Faulty motor selection numbers will be displayed in a rotational sequence. If no selection numbers are displayed when the controller is first placed into the "Service Mode", no electrical problems with motors were detected since the last depression of the "Service Mode" switch.

It is IMPORTANT that the information displayed be recorded immediately. Any input or key depression of the key pad will remove this information from the controller's memory and the failures will not be displayed again until that specific failure has been repeated during a normal vend cycle.

The selection number indicates the area where the problem was detected and will assist service personnel in isolating the source or cause of the problem.

NOTE: Exiting the "Service Mode" or advancing to another step by depressing the key pad will remove the diagnostics from the controller's memory.

The following will define the standby condition of the Glassfront Merchandiser along with the step-by-step operation during a normal vend cycle with credit inserted to equal or exceed the vend price of the item selected.

MACHINE AT STANDBY - While at standby, the following messages will be displayed in the display.

- **POINT OF SALES**
  - Message is displayed
  - Normal message with adequate change in changer and discount off
  - Money is deposited into vendor
  - "THANK YOU" appears in display

- **EXACT CHANGE ONLY**
  - Message is displayed
  - Insufficient change in changer and discount off
  - Scrolling message disappears and credit appears in display

- **DISCOUNT AVAILABLE NOW**
  - Message is displayed
  - Discount price on – adequate change in changer
  - Selection buttons identifying the item desired depressed

- **DISCOUNT AVAILABLE NOW**
  - Message is displayed
  - Credit disappears and selection numbers appear in display

- **DISCOUNT AVAILABLE NOW**
  - Message is displayed
  - Credit balance appears in display
  - Credit balance is returned to customer

- **SELECTED ITEM IS DISPENSED**
  - Selected item is dispensed

Scrolling message re-appears in the display – MACHINE IS NOW AT STANDBY CONDITION
COIN DISPENSE MODE

In the "Coin Dispense Mode", coins that are stored in the coin mechanism payout tubes can be removed. To access the "Coin Dispense Mode" the controller must first be placed in the "Service Mode" by pressing the Service Mode button located on the Control Board.

Entering the "Coin Dispense Mode" is accomplished as follows:

1. Depress key "1" - "DISPENSE COINS" will scroll continuously on the digital display.

2. Depress key "A" - The Nickel payout tube in the coin mech. will be activated.

3. Depress key "B" - The Dime payout tube in the coin mech will be activated.

4. Depress key "C" - The Quarter payout tube in the coin mech. will be activated.

Pushing a payout key once will provide the payout of one coin. Pushing and holding a pay-out key will allow continuous coin dispense from the corresponding payout tube. Coins will continue to be dispensed from the payout tubes as long as it's activating key is depressed.

NOTE: To exit back to the "Sales Mode" press the control board "Service Mode" button once.

The Controller will automatically exit the Service Mode" after approximately 25 seconds if no keypad input is detected.

MOTOR COUNT MODE

The "Motor Count Mode", when operated, indicates the total number of functional motors configured within the machine. This number should agree with the total number of selections that are in the machine. Only the total functional numbers will be flashed, individual selection numbers will not be displayed.

Entering the "Motor Count Mode" is accomplished as follows:

1. Place the Controller in the "Service Mode" by pressing the Service Mode button located on the Control Board.

2. Depress key "2" on the selection key pad. - The number of functional motors will be flashed for approximately 3 seconds, then returns to Service Mode, allowing access of other service mode functions. This number should agree with the total number of selections in the machine.

If the motor count displayed does not agree with the total number of selections in the machine, this indicates that the electrical circuit of all motors is not complete. The service person should determine what motor(s) are not functioning. Listed below are suggested steps to be taken.

1. Were faulty motors displayed when placed in the service mode?
   Problem would be in the areas that were indicated in the display. A motor fault occurred during the Sales Mode operation or during an attempted vend.

2. Test vend all selections by pressing the "Service Mode" button and pushing the "0" key on the selection keypad.
   Problem: Faulty selections will not vend

3. Refer to Trouble Shooting section of this manual for further assistance.

   NOTE: To exit back to the "Sales Mode" press the control board "Service Mode" button once.

   The Controller will automatically exit the Service Mode" after approximately 25 seconds if no keypad input is detected.
VEND OPTIONS MODE

Vend options are available that can be programmed into the controller. When using any of the vend options, a battery back-up is required to maintain the setting. "SEE BATTERY BACKUP OPTION". The options allow the machine to be programmed to function as a changer without making a purchase, make multiple selections with single deposits, or vend a free item when selecting another product. The three (3) options that are available are identified as:

"FORCE VEND"
"MULTI VEND"
"PROMO VEND"

Each time the individual modes are entered the controller will alternate from "ON" or "OFF" position.

EXAMPLE: If a specific mode has been previously programmed to the "ON" position, the next time the controller is placed in this mode it will automatically toggle the mode to the "OFF" position.

FORCE VEND ON: When the "Force Vend On Mode" is selected, the controller will force the buying customer to make a purchase when a dollar bill is inserted, overriding the "coin return" command. When in the "Force Vend On Mode", coin return of 5¢, 10¢, and 25¢ coins is not affected.

FORCE VEND OFF (Non-Escrowing Validator): When in "Force Vend Off Mode" the controller will allow the buying customer to receive change from a dollar bill insertion when the coin return button is pressed. A purchase is not necessary.

FORCE VEND OFF (Escrowing Validator): When in the "Force Vend Off Mode" the controller reacts differently, depending on the maximum vend price within the machine.

EXAMPLE 1: Maximum Vend Price set at 95¢ or less. Dollar bill will be returned when the coin the return button is pressed. A purchase is not necessary

EXAMPLE 2: Maximum Vend Price set at $1.00 or more. The controller will allow the customer to receive change from a dollar bill insertion when the coin return button is pressed. A purchase is not necessary. This vend price must be set on an active motor.
MULTI VEND OPTION

To set the "Multi Vend" options, the controller must be placed in the "Service Mode" by depressing the Service Mode button located on the control board. Depress "3" plus "B" to enter the "Multi Vend Mode". The controller will alternate from "ON" to "OFF" each time the mode is entered.

MULTI VEND ON: When in the "Multi Vend On Mode" the "CREDIT" is flashed in the display at all times. In this mode, if the vend price of a selection is smaller than the established credit and that selection is vended, no change will be paid out. The customer can use the remaining credit to purchase other items, or push the "Coin Return" button to receive the balance. Multiple vends can be selected as long as adequate credit is available. When in this mode, to receive change on over-deposit the "Coin Return" button must be pushed.

PROMO VEND OPTION

The "Promo Vend" option allows the customer to receive an additional item "free" when purchasing another. Provisions have been made that item "A3" will be vended "free" each time item "A1" is selected, item "B3" will be vended "free" each time item "B1" is selected. Other selections in the machine will operate normally. Individual vends from items "A3" and "B3" can be obtained while in "Promo Vend" if these selections are depressed with adequate credit inserted.

To set the "Promo Vend" option, the controller must first be placed in the "Service Mode" by depressing the "Service Mode" button located on the control board. Depress "3" plus "C" to access the "Promo Vend" section. Each time this mode is entered, the controller will alternate from the "On" or "Off" position.

PROMO VEND ON: When in the "Promo Vend On Mode", item "A3" will be vended "free" when item "A1" is selected and item "B3" will be vended "free" when "B1" is selected.

PROMO VEND OFF: When in the "Promo Vend Off Mode" all selections will operate normally.

NOTE: Exit the "Vend Option Mode" by entering any other "function" key or by exiting the "Service Mode".

To exit back to the "Sales Mode" press the control board "Service Mode" button once.

The Controller will automatically exit the Service Mode" after approximately 25 seconds if no keypad input is detected.

NOTE: If the display flashes the credit, the machine is in the "Multi-Vend Mode ON" mode and any deposited credit will be refunded by pressing the "Coin Return Button".
LANGUAGE OPTION

This mode has been incorporated for machines located outside the United States or in areas where the English language is not used. All machines shipped from the factory will be programmed in the English language, unless otherwise specified on the initial order. To verify that the controller is in the proper mode for the English language, place the controller in the "Service Mode" by depressing the "Service Mode" button on the control board. Depress "4" plus "E" and return the controller to the "Sales Mode" by depressing the "Service Mode" button on the control board. The scrolling message will appear in the display.

If it becomes necessary to program the controller for a different language, place the controller in the "Service Mode" by depressing the "Service Mode" button on the control board. Follow the steps outlined below:

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SET PRICE

All pricing is controlled by the controller and must be programmed into the controller's memory. The vend prices can only be programmed while in the "Service Mode". Vend prices are programmed into the memory of the controller by using the selection keypad to input the commands or requirements.

A vend price must be established for each selection. On items that will be vended at the same vend price, the "Copy Price" function can be used to duplicate the vend prices.

To establish vend prices, complete the following steps:

1. Place the controller in the "Service Mode" by operating the Service Mode button located on the control board.

   **NOTE:** The display will indicate any faulty selections that have been recorded by the controller. These faults should be noted immediately. Refer to the **Trouble Shooting** section of this manual for additional information.

2. Enter the "Set Price Mode" by pushing the "5" key on the selection keypad. The message "MAKE SELECTION" will scroll on the digital display.

3. Enter the selection letter and number of the item to be priced. The selection number and current vend price of that selection will be displayed.

4. Enter the desired vend price using the number keys on the front panel key pad.

   **EXAMPLE:** If the numbers 1, 2 and 5 were entered, that item would have a vend price of $1.25.

5. Store the price in memory by depressing the "#" key on the front panel key pad, or use the "Copy Price Mode".

6. Continue setting prices for other selections by repeating **Steps 3 through 5** or by using the "Copy Price Mode" instructions.
7. After completing price setting, depress the "Service Mode" button located on the control board, the scrolling message will appear in the display. The machine is now in the "Sales Mode".

Check prices of items programmed by pushing the selection numbers on the selection keypad in the "Sales Mode". The vend price will be flashed in the digital display.

**IMPORTANT:** When establishing vend prices, make sure the price labels located on the product shelves agree with the vend prices programmed into the controller and that they are properly located below the item they are identifying.

The following "step chart" indicates the basic steps that are required when establishing vend prices on individual selections. If more than one selection is being vended at the same vend price, the "Copy Price" function can be used.

**STEP 1:** Set controller in "Service Mode"

**STEP 2:** Enter price mode, push "5" key.

**STEP 3:** Enter selection to be priced

**STEP 4:** Enter desired vend price

**STEP 5:** Store price into memory - push the "#" key, or push "*" key to copy price.

**STEP 6:** Continue setting prices - repeat steps 3 thru 5.

**STEP 7:** After completing price setting - press service mode switch on control board.

**STEP 8:** Scrolling message appears in display. Machine is in the "Sales Mode". Check vend prices on selections edited.

**NOTE:** Any time the controller is placed in the "Service Mode", it will automatically return to the "Sales Mode" in 25 seconds if no input or depression of the key pad is made during that time.
COPY PRICE MODE

When there is more than one selection to be vended at the same vend price, the "Copy Price Mode" can be used to duplicate prices for these selections. The "Copy Price Mode" can be accessed by following the instructions outlined below:

1. Place the controller in the "Service Mode". This is done by depressing the "Service Mode" button located on the control board.

2. Enter the "Price Mode" by depressing key "5" on the front panel key pad. The display will indicate "MAKE SELECTION".

3. Enter the selection letter and number to be priced. The selection number and current vend price will be displayed.

4. Enter the desired vend price using the number keys on the front panel key pad.

   **EXAMPLE**: If the numbers 1, 2, and 5 were entered, that item would have a vend price of $1.25.

5. Depress the "**" key on the front panel key pad.

6. Enter the desired selections to receive the "Copy Price". All selections entered will receive the same vend price.

7. Store the prices in memory by depressing the "#" key on the front panel key pad.

8. To continue to copy another price, repeat Steps 3 through 7.

9. After completing price setting, depress the "Service Mode" button on the control board. The scrolling message will appear in the display. The machine is now in the "Sales mode."

The following flow chart indicates the basic steps that are required when establishing vend prices using the "Copy Price" option. When establishing prices for individual selections, follow the instructions outlined under "SET PRICE".

VERIFYING VEND PRICES

The vend price for each selection can be verified at any time while the machine is in the "Sales Mode". To verify the price programmed into the controller, depress the specific selection letter and number and the current vend price will be displayed for approximately three (3) seconds. The price for each selection must also be identified by a "price label" on the tray under each product. Make sure the price programmed in to the controller agrees with the label affixed to the tray for each selection.
CASH ACCOUNTABILITY

Provisions have been incorporated into the controller that will allow the owner/operator to retrieve information such as "Total Cash" transactions and "Total Vend" cycles that have been performed by the vendor.

All money required for each vend is accumulated and will be displayed to the owner/operator when the "Total Cash Mode" is accessed. Total vends can also be retrieved when the "Vend Count Mode".

These amounts are accumulated and recorded in a running total and the amounts are not resettable. Two records are maintained by the controller:

TOTAL CASH
TOTAL VENDS

This information can only be retrieved while the controller is in the "Service Mode". Instructions for retrieving this information are as follows:

1. Set the controller in the "Service Mode" by depressing the "Service Mode" button on the control board.

2. Enter the "Vend Count Mode" by depressing key "6" on the front panel key pad. The display will indicate "ENTER (A) FOR TOTAL VENDS OR (B) FOR TOTAL CASH."

3. Depress key "A" - The total number of vends will be displayed.

4. Depress key "B" - The total amount of accumulated cash will be displayed.

POINT OF SALES MESSAGE MODE

Provisions have been incorporated into the controller for a "point of sales message" that will be displayed to the buying customer. This message can be used by the owner/operator as advertising or an encouragement to the buying customer to purchase the products. The point of sales message will appear continuously while the machine is in a standby condition as long as the coin mechanism has adequate supply of coins in the payout tubes. If the change supply in the coin mechanism is below the "low-level" sensor in the payout tubes, the "EXACT CHANGE ONLY" message will appear.

The sales message can be changed on location by accessing the "point of sales" message mode. Messages can include up to 130 characters including spaces. While in the programming mode the key pad will function similar to a typewriter keyboard. A key pad overlay is furnished in the service packet. By placing the overlay over the selection panel, the owner/operator can "type" the new message into the controller's memory.

To enter the programming mode, the controller must first be placed in the "Service Mode", then enter the "Point of Sales Mode". The following outlines the steps to be taken:

1. Set the controller in the "Service Mode" by depressing the "Service Mode" button on the control board.

2. Enter the "Point of Sales Message Mode" by depressing key "7" on the front panel key pad.

3. Type in the new message (maximum of 130 characters, including spaces) using the key-pad overlay for location of characters on the key-pad.

4. Enter the message into the controller's memory by depressing the "Next Menu" key twice.

NOTE: If the keys defined in Step 4 are not entered properly when the programming of the new message is complete, portions of the previous message may appear.

When exiting the "Point of Sales Mode" message, the scrolling message will appear in the display if adequate change is in the coin mechanism payout tubes.
NOTE: To exit back to the "Sales Mode" press the control board "Service Mode" button once.

The Controller will automatically exit the Service Mode after approximately 25 seconds if no keypad input is detected.

NOTE: When in the "Point of Sales Mode", the key pad buttons have a different function. Use the "Key Pad Overlay" for inputting the message.

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>E</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>F</td>
<td>*</td>
<td>#</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
<td>J</td>
</tr>
</tbody>
</table>

NOTE: When in the "Point of Sales Message Mode" the buttons have different functions, see sketch below for key functions.

<table>
<thead>
<tr>
<th>A</th>
<th>G</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Y</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>H</td>
<td>O</td>
</tr>
<tr>
<td>Q</td>
<td>Z</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>I</td>
<td>P</td>
</tr>
<tr>
<td>U</td>
<td>Ø</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
<td>J</td>
<td>R</td>
</tr>
<tr>
<td>V</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>E</td>
<td>L</td>
<td>S</td>
</tr>
<tr>
<td>W</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>F</td>
<td>M</td>
<td>T</td>
</tr>
<tr>
<td>X</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>SPACE</td>
<td>NEXT MENU</td>
<td>BACK SPACE</td>
</tr>
<tr>
<td>*</td>
<td>ENTER</td>
<td>$</td>
</tr>
</tbody>
</table>

TEST VEND MODES

The operational functions of the vendor can be verified by running various test vends. The machine can be tested by individual selections, a complete row, or all selections in the entire machine. When the test commands are entered, the controller will check the motor circuit and run the selection through one complete vend cycle if the circuit is complete and the motor is functional. If the motor is not functional, or the motor circuit is not complete on a particular selection or row, the test function will not be made.

The testing functions and vending of the products while in the "Test Vend" modes will not affect the records maintained by the controller pertaining to any of the cash or vend counters of the accounting software.

The test vend modes are very useful in helping to identify any faulty motors or motor circuits and, when used in tandem with the Trouble Shooting section, can quickly point a service technician to the problem area.

TEST VEND SINGLE SELECTION

Single selections can be test vended to verify that they are functioning properly. The controller will check the motor circuit and run the selection through a complete vend cycle if the circuit is complete and the motor is functional. Vending items while in the "Test Vend Modes" will not affect the records maintained by the controller pertaining to any of the cash or vend counters of the accounting software.

To test vend a single selection, perform the following steps:

1. Place the controller in the "Service Mode" by operating the Service Mode button located on the control board.

2. Depress the "$" key on the selection keypad. A single "beep" will sound and the message "MAKE SELECTION" will be scrolled on the display.

3. Enter the letter and number of the selection to be tested. A single "beep" will acknowledge the input, the vend price of the selection and the selection number will be displayed, and a single product will be dispensed.
NOTE: If the test vend is successfully completed, the display will remain blank and the system will remain in the "Service Mode" waiting for the next service command.

If the product dispense cycle is unsuccessful, the display will remain blank, three "beeps" will sound and the system will remain in the "Service Mode" waiting for the next service command.

To test vend another selection, repeat steps 2 & 3.

NOTE: To exit the "Service Mode", depress the Service Mode button located on the control board. To enter another function mode, depress that particular function mode button.

The Controller will automatically exit the Service Mode" after approximately 25 seconds if no keypad input is detected.

---

TEST VEND COMPLETE ROW

All selections in a complete row can be tested to verify that they are functioning properly. The controller will check the motor circuits and run each selection in a single row, starting with the number "1" selection, if the circuit is complete and the motors are functional. Each motor will be run through a complete vend cycle and the controller will acknowledge a functional selection with a single "beep". If a selection is not functional, three "beeps" will sound indicating that the command cannot be performed and the controller will continue to the next selection.

While using the "row" test functions, it will be necessary to observe the testing of the selections to verify the operation, as the controller will skip any motor(s) that is not sensed in the motor circuit prior to beginning the row test.

Vending items while in the "Test Vend Modes" will not affect the records maintained by the controller pertaining to any of the cash or vend counters of the accounting software.

To test vend a complete row of motors perform the following steps:

1. Place the controller in the "Service Mode" by operating the Service Mode button located on the control board.

2. Depress key "9" on the selection keypad. The message "MAKE SELECTION" will appear in the display.

3. Pushing a "row" (alpha) letter on the selection keypad will start the test vend sequence, beginning with the first motor of that row. As each motor runs in sequence, the display will show the number of the selection being tested along with the vend price for that selection.

NOTE: If the product dispense cycle is successful, the display will remain blank and the system will remain in the "Service Mode" waiting for the next service command.

To test vend another row, repeat steps 2 and 3. Remember than any motor that will not function properly, due to a fault or a bad connection, will be skipped by the test procedure.

NOTE: To exit the "Service Mode", depress the Service Mode switch located on the control board. To enter another function mode, depress that particular function mode button.

The Controller will automatically exit the Service Mode" after approximately 25 seconds if no keypad input is detected.

---

TEST VEND COMPLETE MACHINE

All selections in the entire machine can be tested to verify that they are functioning properly. The controller will check the motor circuits and run each selection, starting with the first motor in the first row, if the circuit is complete and the motors are functional.

While using the "machine" test function, it will be necessary to observe the testing of the selections to verify the operation, as the controller will skip any motor(s) that is not sensed on the motor circuit prior to beginning the machine test. If none of the motors are sensed when the test vend sequence starts, the controller will automatically return to the "Service Mode" and await further input.

(Continued after Schematic)
Vending items while in the "Test Vend Modes" will not affect the records maintained by the controller pertaining to any of the cash or vend counters of the accounting software.

To test vend the machine, perform the following steps:

1. Place the controller in the "Service Mode" by operating the Service Mode button located on the control board.

2. Depress key "0" on the selection keypad. The machine test will begin immediately starting with selection "A1".

**NOTE:** All functional selections will be run through one complete vend cycle and a product will be dispensed. The machine test may be stopped at any time by depressing any "Alpha" key, otherwise all selections will be cycled.

If the product dispense cycle for individual selections is successful, the controller will sound a single "beep", the vend price will be displayed along with the selection number, and a product will be dispensed. When the entire machine has been tested, the display will blank and the system will remain in the "Service Mode: waiting for the next service command.

If the product dispense cycle of an item is unsuccessful, the controller will sound three "beeps" and continue to the next selection. At the end of the entire machine test, the display will blank and the system will remain in the "Service Mode" waiting for the next service command.

Using the "Machine Test" function it will be necessary to observe the testing of the selections to verify the operation as the controller will sound three "beeps" for selections that are not functional or configured in the machine.

**NOTE:** To exit the "Service Mode", depress the Service Mode switch located on the control board. To enter another function mode, depress that particular function mode button.

The Controller will automatically exit the Service Mode after approximately 25 seconds if no keypad input is detected.

The following chart can be used as a 'quick reference' for entering or changing programs in the Glassfront Merchandiser. Complete details and steps for individual modes are outlined throughout the service manual.

Place the controller in the "Service Mode" by depressing the "Service Mode" button located on the control board.

Follow the steps outlined below:

<table>
<thead>
<tr>
<th>MODE KEY</th>
<th>FUNCTION/MODE</th>
<th>TO PROGRAM – ENTER THE FOLLOWING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COIN DISPENSE</td>
<td>1 + A = 5c 1 + B = 10c 1 + C = 25c</td>
</tr>
<tr>
<td>2</td>
<td>MOTOR COUNT</td>
<td>2 = NUMBER OF MOTORS</td>
</tr>
<tr>
<td>3</td>
<td>FORCE VEND</td>
<td>3 + A = FORCE VEND &quot;ON&quot; 3 + A = FORCE VEND &quot;OFF&quot;</td>
</tr>
<tr>
<td></td>
<td>MULTI VEND</td>
<td>3 + 3 = MULTI VEND &quot;ON&quot; 3 + 3 = MULTI VEND &quot;OFF&quot;</td>
</tr>
<tr>
<td></td>
<td>PROMO VEND</td>
<td>3 + C = PROMO VEND &quot;ON&quot; 3 + C = PROMO VEND &quot;OFF&quot;</td>
</tr>
<tr>
<td>4</td>
<td>LANGUAGE</td>
<td>4 + E = ENGLISH</td>
</tr>
<tr>
<td>5</td>
<td>SET PRICE</td>
<td>5 + (SEL.) + (PRICE) + #</td>
</tr>
<tr>
<td></td>
<td>COPY PRICE</td>
<td>5 + (SEL.) + (PRICE) + * + (SEL.) + (SEL.) + #</td>
</tr>
<tr>
<td>6</td>
<td>VEND COUNT</td>
<td>6 + A = TOTAL VENDS 6 + B = TOTAL CASH</td>
</tr>
<tr>
<td>7</td>
<td>MESSAGE</td>
<td>7 + (MESSAGE) + NEXT MENU + ENTER</td>
</tr>
<tr>
<td>8</td>
<td>TEST VEND SEL.</td>
<td>8 + (SEL.)</td>
</tr>
<tr>
<td>9</td>
<td>TEST VEND ROW</td>
<td>9 + (ROW)</td>
</tr>
<tr>
<td>10</td>
<td>TEST VEND MACH.</td>
<td>0 = TEST VEND</td>
</tr>
<tr>
<td></td>
<td>SET TIME (CLOCK)</td>
<td>* + A + (TIME OF DAY) + #</td>
</tr>
<tr>
<td></td>
<td>SET TIME (DISC.)</td>
<td>* + B + (TIME) + # = START 1  * + C + (TIME) + # = STOP 1  * + D + (TIME) + # = START 2  * + E + (TIME) + # = STOP 2  * + F + (TIME) + # = START 3  * + G + (TIME) + # = STOP 3</td>
</tr>
<tr>
<td></td>
<td>DISCOUNT CONTROL</td>
<td># + A = DISCOUNT &quot;ON&quot;  # + A = DISCOUNT &quot;OFF&quot;</td>
</tr>
<tr>
<td></td>
<td>SET AMOUNT</td>
<td># + B + (AMOUNT) + #</td>
</tr>
<tr>
<td></td>
<td>SET ROW/ROWS</td>
<td># + C + (FIRST ROW) + #</td>
</tr>
</tbody>
</table>
BATTERY BACKUP OPTION

The Glassfront Merchandiser has provisions for a battery backup option that can be added to maintain time-related programs in case of power failure or any interruption of the main power source. The battery must be a rechargeable 9 volt nickel-cadmium (transistor-style) and is capable of maintaining programmed backup functions for approximately 12 hours. A charging circuit is supplied on the control board and will restore the battery when A.C. power is supplied to the vendor.

A battery backup system must be incorporated to maintain memory for the following features:

1. Real Time Clock
2. Discount Sales Programs
3. Force Vend Options
4. Multi Vend Options
5. Promo Vend Options

If the A.C. power source is interrupted or lost and a battery backup is not utilized the following will occur:

1. Clock settings will be lost.
2. Discount Sales Programs will be lost – features will default to "OFF".
3. Force-Vend Option will default to "OFF".
4. Multi-Vend Option will default to "OFF".
5. Promo-Vend Option will default to "OFF".

Other modes or settings do not require the battery backup in case of a power failure. The last program or input will be retained in the memory of the controller when the power is restored.

BATTERY INSTALLATION

To install the battery proceed as follows:

1. Turn-off or unplug the electrical power to the vendor.
2. Place battery in the clip provided on the circuit board with the battery connections aligning to the mating circuit board connectors. (See Illustration #21)
3. While supporting the circuit board terminal bracket, press down on the battery until contacts lock together.

CAUTION: When pressing down on the battery, be careful not to damage the power component on the circuit board.
SET TIME MODE
BATTERY BACK UP REQUIRED

The controller is equipped with a time clock. The time will not be displayed while the vendor is in the "Sales Mode". The purpose of the clock is to control the discount program. The clock controls the start and stop times of the discount time period. In the discount program, three (3) time intervals may be selected during a 24-hour day.

The clock operates in the military format. Midnight is represented as "0000", noon is "1200", 1:00 P.M. is 1300, etc.

HOW TO SET THE TIME OF DAY

To set the time of day, place the controller in the "Service Mode" by depressing the Service Mode button located on the control board. (See Service Mode Section)

Press the "*" key on the front panel key pad to enter the "Time Set Mode". The message center will display "SET TIME MODE" in a scrolling format.

Press key "A" on the front panel key pad. The message center will indicate the current time setting programmed into the controller's memory.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>0</td>
<td>#</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enter the current time of day. For example, if the time is 2:15 P.M., press buttons 1, 4, 1 and 5 consecutively. The number will appear in the display as they are entered. When the last digit "5" is entered, the message center will display "SET TIME MODE" in a scrolling format. Enter the time by depressing the "#" key on the front panel key pad.

This concludes the time setting function and indicates that the current time is entered into the controller's memory.

The current time can be checked at any time while the controller is in the "Service Mode".

To check the time proceed as follows:

1. Press "*" key – "SET TIME MODE" will be displayed.
2. Press "A" key – Current time is displayed.
3. Press "#" key – This exits the controller from "Set Time Mode".

NOTE: Press the "#" key to abort the time setting functions. The "#" key must be depressed after checking the time or your next entry may alter the time setting.

Any time the "Time Setting" functions or "Discount" functions are to be utilized, a battery backup is required to retain the programming in the controller's memory in case of a power failure to the vendor.

NOTE: When setting the time all four digits must be entered. To set the time at 8:00 A.M. you must enter "0800", not just 800.

SET TIME MODE
DISCOUNT PROGRAMMING

The controller provides the owner/operator with the ability to discount products to the buying customer. The discount programs can be made inoperative when not desired by placing the controller in the "Discount Off Mode". The vend prices of the desired items will be reduced during the time the owner chooses.

Three time intervals are provided and will operate during a 24-hour day. These programs will be repeated each day of the week when in the "Discount On Mode". The programs can be changed as often as required and can be switched "ON" or "OFF" when desired.

When the vendor is received from the factory the controller will be in the "Discount Off Mode". If the discount function is to be utilized, the following must be programmed:

1. Time intervals the discount will become active.
   • Three time intervals are available. See instructions on "How To Set Start/Stop Time".
2. The amount the product will be discounted when the program is activated. See instructions on "How To Set Discount Amount".
3. The items that will be discounted. See instructions on "How To Set Discount Row".

In order for the "Discount" feature to function properly, the correct time must be set. See instructions on "How To Set The Time Of Day". The battery back-up option must be utilized to retain the setting in case of a power failure.

When activating the "Discount" feature all three (3) time intervals must be programmed, as all intervals become active when the controller is in the "Discount On Mode". When the discount is in effect, the message center will display "DISCOUNT AVAILABLE NOW" in a scrolling format. If a time interval is not utilized, the following start/stop times must be programmed:

START = 0000 "Time"

STOP = 0000 "Time"

LISTED BELOW ARE THE KEY PAD BUTTON FUNCTIONS AT THIS TIME:

Key "B" = Start.Time, Interval #1
Key "C" = Stop Time, Interval #1
Key "D" = Start Time, Interval #2
Key "E" = Stop Time, Interval #2
Key "F" = Start Time, Interval #3
Key "G" = Stop Time, Interval #3

**SETTING INTERVAL #1**

**START TIME**

Press selection button "B". The message center will display the current discount setting start time in military format (Example: 0700). Enter the time the first discount period is to start. Each digit will be displayed as it is entered. Enter all four digits of the time.

<table>
<thead>
<tr>
<th>START TIME INTERVAL #1</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>D</td>
</tr>
<tr>
<td>E</td>
</tr>
<tr>
<td>F</td>
</tr>
<tr>
<td>G</td>
</tr>
</tbody>
</table>

**STORE TIME**

Press key "#" on the front panel key pad to store the entry in the controller's memory.
**SETTING INTERVAL #1 STOP TIME**

Press selection button "C". The message center will display the current discount setting stop time in military format (Example: 0730). Enter the time you want the first discount period to stop. Each digit will be displayed as it is entered. Enter key "#" on the front panel key pad to store the entry in the controller's memory.

**SETTING INTERVAL #2 STOP TIME**

Press selection button "E". The message center will display the current discount setting stop time in military format (Example: 1130). Enter the time you want the second discount period to stop. Each digit will be displayed as it is entered. Enter all four digits of the time.

**SETTING INTERVAL #2 START TIME**

Press selection button "D". The message center will display the current discount setting start time in military format (Example: 1100). Enter the time you want the second discount period to start. Each digit will be displayed as it is entered. Enter all four digits of the time.

**SETTING INTERVAL #3 START TIME**

Press selection button "F". The message center will display the current discount setting start time in military format (Example: 1400). Enter the time you want the third discount period to start. Each digit will be displayed as it is entered. Enter all four digits of the time.

Press key "#" on the front panel key pad to store the entry in the controller's memory.
SETTING INTERVAL #3
STOP TIME

Press selection button "G". The message center will display the current discount setting stop time in military format (Example: 1415). Enter the time you want the third discount period to stop. Each digit will be displayed as it is entered. Enter all four digits of the time.

Press key "#" on the front panel key pad to store the entry in the controller's memory.

The following flow chart will indicate the basic steps and key inputs required for establishing the "Start" and "Stop" times for the three time intervals necessary for the discount feature:

NOTE: The "#" key MUST be depressed after each time setting or the next entry may alter the previous entry.
HOW TO SET DISCOUNT "ON/OFF"

The controller provides the option for you to set the discount program "ON" or "OFF" as desired. When the discount program is activated, the vend prices of selected items will be reduced by the amount previously determined during the time intervals that have been programmed. When the "Discount" is in effect, the message center will display "DISCOUNT AVAILABLE NOW" in a scrolling format.

To program the "ON" and "OFF" options of the discount functions the controller MUST be put in "Service Mode" by depressing the button located on the control board. (See Service Mode Section)

Follow the steps below for programming:

1. Enter the "Service Mode". Depress Service Mode button. (See Service Mode Section)
2. Enter the "Discount Mode". Depress key "#" and the message center will display "DISCOUNT MODE".
3. Depress key "A". The "Discount Mode" will be toggled "ON" or "OFF" each time entered.

   DISCOUNT AMOUNT
   A  1  2
   B  3  4
   C  5  6
   D  7  8
   E  9  0
   F  *  #
   G  H  J

4. Enter the discount amount. Each digit is displayed as it is entered.

   DISCOUNT Toggles "ON" & "OFF"

   A  1  2
   B  3  4
   C  5  6
   D  7  8
   E  9  0
   F  *  #
   G  H  J

5. Depress "#" key to store the input in the controller's memory.

EXAMPLE: If you want to discount the items 25¢, enter 2 and 5. The message center will display $00.25.

4. Enter the discount amount. Each digit is displayed as it is entered.

NOTE: Exit the "Discount Mode" by depressing the "Service Mode" button on the control board (See Service Mode Section). If no other service related function is required, or introduce a new service command.

HOW TO SET DISCOUNT AMOUNT

When utilizing the "Discount" feature the amount must be programmed into the controller. When the "Discount" is in effect, the message center will display "DISCOUNT AVAILABLE NOW" and the original vend price will be reduced by this amount each time a vend is made.

To program the amount the items will be discounted the controller must be put in "Service Mode" by depressing the Service Mode button located on the control board. (See Service Mode Section)

Follow the steps below for programming:

1. Enter the "Service Mode". Depress Service Mode button. (See Service Mode Section)
2. Enter the "Discount Mode". Depress key "#".
3. Depress key "B". The message center will display the current discount amount.

4. Enter the discount amount. Each digit is displayed as it is entered.

   EXAMPLE: If you want to discount the items 25¢, enter 2 and 5. The message center will display $00.25.

5. Depress key "#" to store the input in the controller's memory.

NOTE: Exit the "Discount Mode" by depressing the "Service Mode" button on the control board (See Service Mode Section). If no other service related function is required, or introduce a new service command.

HOW TO SET THE DISCOUNT ROW

When utilizing the "Discount Options" the items that will be discounted must be programmed into the controller. During the discount "ON" periods all items in the row selected (and all rows following) will be discounted during the time intervals that have been selected. When the discount is in effect, "DISCOUNT AVAILABLE NOW" will be displayed. When an item included in the discount is selected, the vend price will be reduced by the amount programmed. During the discount periods, the discount vend price can be verified by depressing the specific selection number. The discounted vend price will appear in the display.
HOW TO SET SELECT ROW OPTION

1. Place the controller in the "Service Mode" by depressing the Service Mode button located on the control board. (See Service Mode Section)

2. Depress key "#" on the front panel key pad. "DISCOUNT MODE" will appear in the display.

3. Depress key "C" on the front panel key pad. "SELECT ROW" will appear in the display.

4. Enter the "Alpha" character of the row the discount is to apply to. The row selected and all rows below the one selected will be included in the discount programs.

EXAMPLE: Press selection button "F". Rows "F", "G", "H" and "J" will be discounted.

5. Depress key "#" located on the front panel key pad to store the input into the controller's memory.

NOTE: Exit the "Discount Mode" by depressing the "Service Mode" button on the control board. (See Service Mode Section). If no other service related function is required a new service, or introduce a new service command.
COIN MECHANISM

The Coin Mechanisms utilized in these machines are "controller controled", with all logic and commands being supplied by the Controller. The following coin mechanisms have been approved for use in standard applications:

**Coinco 9302L**  
**Mars TRC6010**

These are 24 VDC Coin Changers, accepting U.S. nickels, dimes, quarters and dollar coins. The nickels, dimes and quarters that are accepted are stored in "self loading" coin tubes and used to refund change on over deposit. All change refunded will be in the least number of coins available.

<table>
<thead>
<tr>
<th>COIN TUBE CAPACITY</th>
<th>5¢</th>
<th>10¢</th>
<th>25¢</th>
<th>OPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hi 25¢</td>
<td>Low 25¢</td>
</tr>
<tr>
<td>Full Level</td>
<td>68-69</td>
<td>98-99</td>
<td>66-67</td>
<td>8-9</td>
</tr>
<tr>
<td>Low Level</td>
<td>7-8</td>
<td>10-11</td>
<td>8-9</td>
<td>8-9</td>
</tr>
</tbody>
</table>

**CAUTION: DO NOT PLUG OR UNPLUG CHANGER WITH POWER "ON"**

**OPTION SWITCH SETTING**

The coin changer "option switches" have been factory set in the following positions:

- **#1**: OFF
- **#2**: OFF
- **#3**: OFF

Should a different setting be desired, or a new changer installed, the following switch setting instructions are provided:

A. Open the main door to turn the power "OFF" to the Controller

B. Remove the "coin acceptor" (upper section) portion of the coin mech.

C. Locate the coin changer option"dip" switches and select from the following optional settings:

1. **USA/CAN ON**: U.S. and Canadian coins will be accepted  
   - **OFF**: Canadian coins will be rejected

2. **LO 25¢ ON**: Quarters are diverted to the cash box once the change tube has inventoried approximately 8 quarters  
   - **OFF**: Quarters are diverted into the change tube until the change tube is full

3. **$ ACPT....ON**: Dollar coins will be accepted  
   - **OFF**: Dollar coins will be rejected
DOLLAR BILL VALIDATOR

The Glass Front Merchandisers are designed to operate with Dollar Bill Validators. The coin mechanism must have adequate change in the payout tubes before the validator will accept a dollar bill. Both the nickel and quarter coin tubes "low level" sensors must be covered to enable the "bill accept circuit" at the controller. Without an adequate supply of nickels and quarters, the Validator motor will not run. When the supply of nickels in the nickel tube drops below the "low level" sensor, the controller will display "EXACT CHANGE ONLY" and bills will not be accepted. Orientation or direction of the bill being inserted is critical. The bill must be inserted properly for the "photo sensors" to detect the information required.

VALIDATOR OPERATION

When a bill is inserted, the carrier motor rotates and the bill is drawn in on a belt past the photo sensors. The information detected by the photo sensors and magnetic sensor is sent to the control board for discrimination.

If the bill is authentic, a vend signal is output to the controller and the bill is accepted by the validator and stacked in the "Stacker".

If the bill is counterfeit, the carrier motor will rotate in reverse and the bill is returned to the buying customer and no signal is sent to the controller.

If authentic $1 bills will not accept or is rejected after insertion, push up the latch and pull down the stacker. If full of bills, remove them. Remove any bills or foreign matter clogging the stacker.

REMOVING BILLS FROM STACKER

Push up on the latch and pull down on the stacker. Take hold of the bills and pull them out of the stacker. Return the stacker to its original position, pushing in on the stacker firmly until it latches.

INSPECTION AND CLEANING

WARNING:

OPEN THE MAIN DOOR TO TURN THE MAIN POWER SWITCH TO THE "OFF" POSITION and DISCONNECT THE BILL VALIDATOR FROM THE POWER HARNESS

The bill validator must be free of dust and/or dirt to operate properly. Remove or disconnect the power to the validator prior to disconnecting or removing any parts from the validator. Open the bill validator and inspect the magnetic heads, belts and rollers for dirt or foreign matter. Listed below are instructions as to how to clear specific areas.

1. Clean the bill insertion opening with a mild detergent and a soft cloth.

2. Clean the magnetic heads and photo sensor by using a cotton applicator and a small amount of denatured alcohol.

3. Wipe the chute roller and belt with a soft cloth.

4. Use a soft brush to remove any loose foreign matter from inside the validator.

5. Inspect latches and levers for smooth operation.

Reconnect validator the the vendor, restore power and test the unit.
1. All shipping brackets, packing material and tape have been removed from the vendor.

2. Vendor is properly located for access to power source outlet and vendor is level.

3. All components are installed on the vendor and are in good condition.

4. Service cord plug in receptacle is grounded or ground adaptor has been installed.

5. All vend prices are set correctly.

6. All selections have been properly loaded and all items in each selection correspond to the vend price and selection labels.

7. All options and features offered have been properly programmed into the controller. Refer to sections:
   a) FORCE VEND ON/OFF
   b) MULTI VEND ON/OFF
   c) PROMO VEND ON/OFF
   d) POINT OF SALES MESSAGE
   e) SET TIME
   f) DISCOUNT OPTIONS
   g) LANGUAGE OPTIONS

To eliminate minor service problems caused by human error and to familiarize the owner/operator with the features and operation of the vendor, review the following with the owner and/or service personnel that will be responsible for the machine at the location.

1. Loading procedure and proper location and adjustments of spacers if they are included.

2. Price-setting procedure for changing prices if necessary.

3. Basic diagnostic messages displayed and the meaning or cause.

4. How to enter and exit the “Service Mode”.

5. Test vend procedure.

6. Removal of money from both the coin mechanism and validator.

7. Basic operation and function of the vendor.