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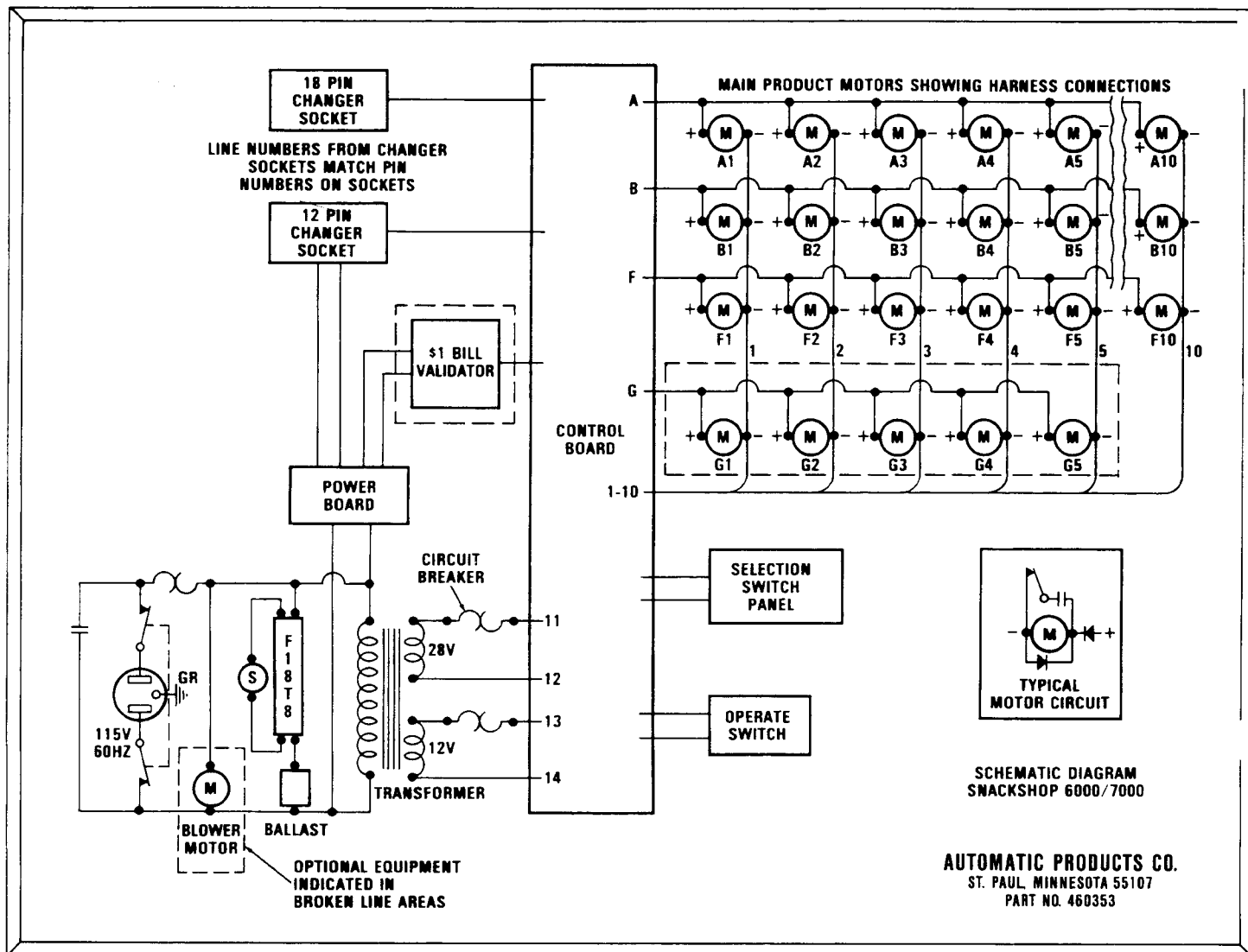
instruction manual for

SNACKSHOP	Model 7000
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75 WEST PLATO BOULEVARD • ST. PAUL, MINNESOTA 55107-2095

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WARRANTY

The Automatic Products Company warrants this vendor, manufactured by it, to be free from defects in material or workmanship under normal use. Our obligation under this warranty is to the original purchaser only and is limited to making good at our factory any part or parts thereof which shall, within two (2) years after delivery of such product to the original purchaser, be returned to us or to our authorized dealer or distributor from whom purchased with all transportation charges prepaid to our factory, and which our examination shall disclose to our satisfaction to have been defective.

This warranty does not extend: 1: To any of our products which have been subjected to misuse, neglect, accident, incorrect wiring, improper installation, or to use in violation of instructions furnished by us; 2: To units which have been repaired or altered outside of our factory; 3: To cases where the serial number of the product has been removed, defaced or changed; 4: To electrical components, lamps, tubes or circuit breakers; 5: To accessories not of our own manufacture used with our products. Any part manufactured by Automatic Products Company, found by us to be defective within the warranty period will be exchanged by Automatic Products Company or their

authorized dealer or distributor without charge to the owner.

This warranty applies only to our products which are used within the United States of America, and is in lieu of all warranties expressed or implied, including, but not limited to implied warranties of merchantability or fitness for a particular purpose, and no representative or person is authorized to assume for us any other liability in connection with the sale of our products.

The Automatic Products Company reserves the right to make any changes or improvements in its products without notice and without obligation, and without being required to make corresponding changes or improvements in products theretofore manufactured or sold.

AUTOMATIC PRODUCTS COMPANY
75 West Plato Boulevard
St. Paul, Minnesota 55107

Snackshop 7000 has been designed from superior engineering and with quality throughout. It has been built of rugged construction for many years of reliable trouble-free operation. Note: (For Indoor use only)

To achieve the most economical trouble-free operation from your Snackshop 7000, it is recommended that this service manual be thoroughly read and instructions followed pertaining to all loading and servicing, etc., of the vendor.

Should you have questions pertaining to this manual or the vendor, please contact your local Automatic Products Company distributor or write directly to:

Service Manager
Automatic Products Company
75 West Plato Boulevard
St. Paul, Minnesota 55107

SPECIFICATIONS

HEIGHT — 72" WIDTH — 38-7/8" DEPTH — 35"
FLOOR SPACE REQUIRED — 9.5 SQ. FT.
SHIPPING CONTAINER SIZE — 72.5 CU. FT.
POWER REQUIREMENTS — 115 V., 60 HZ.
STANDBY AMPERES — .7 OPERATING AMPERES — 3

capacities

Unless otherwise specified machine will be shipped with spiral assortment shown below.
Figures in circles represent capacities in each spiral.

10	10	10	10	10
10	10	12	12	12
12	12	12	12	12
12	12	15	15	15
15	15	15	15	15

MODEL 7525
Capacity as shown: 310 Units

10	10	10	10	10
12	12	12	12	12
15	15	15	15	15
15	15	18	18	18
18	18	18	18	18
24	24	24	24	24
12	12	12	12	12

MODEL 7530
Capacity as shown: 437 units

10	10	10	10	10
12	12	15	15	15
18	18	18	18	18
18	18	18	18	18
15	15	15	15	15
24	24	24	24	24
12	12	12	12	12

MODEL 7535
Capacity as shown: 551 Units

10	10	15	15	15
12	12	12	12	12
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	15	15
24	24	24	24	24
18	18	18	18	18

MODEL 7540
Capacity as shown: 677 Units

10	12	12	12	15
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	15	15
24	24	24	24	24

MODEL 7545
Capacity as shown: 775 Units

18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	15	15
24	24	24	24	24

MODEL 7550
Capacity as shown: 894 Units

10	10	10	10	10
10	10	12	12	12
12	12	12	12	12
12	12	12	12	12
12	12	15	15	15
15	15	15	15	15

MODEL 7630
Capacity as shown: 370 Units

10	10	10	10	10
10	10	12	12	12
12	12	12	12	12
12	12	15	15	15
15	15	18	18	18
18	18	18	18	18
24	24	24	24	24
15	15	15	15	15

MODEL 7635
Capacity as shown: 502 Units

10	10	10	10	10
12	12	12	12	12
15	15	15	15	15
18	18	18	18	18
18	18	18	18	18
15	15	15	15	15
24	24	24	24	24
12	12	12	12	12

MODEL 7640
Capacity as shown: 617 Units

10	10	10	10	10
12	12	15	15	15
18	18	18	18	18
18	18	18	18	18
15	15	15	24	24
12	12	12	12	12

MODEL 7645

Capacity as shown: 731 Units

10	10	15	15	15
12	12	12	12	12
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	24	24

MODEL 7650

Capacity as shown: 839 Units

10	12	12	12	15
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	24	24

MODEL 7655

Capacity as shown: 955 Units

15	15	15	15	15
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
18	18	18	18	18
15	15	15	24	24

MODEL 7660

Capacity as shown: 1062 Units

PRODUCT SIZE CAPABILITY

SHELVES	HEIGHT	WIDTH of Snack Shelves Only	WIDTH of Candy Shelves Only	DEPTH OF Snack Spirals Only Choice:	DEPTH OF Candy Spirals Only Choice:
Top	7-3/4"	2½" to 5¼"	1" to 2¼"		12 – Item Spiral 1-7/8"
Second	7-1/4"	2½" to 5¼"	1" to 2¼"	7 – Item Spiral 2-1/2"	15 – Item Spiral 1-5/16"
Third	6-5/8"	2½" to 5¼"	1" to 2¼"	10 – Item Spiral 2-1/16"	18 – Item Spiral 1-1/16"
Fourth	7-1/4"	2½" to 5¼"	1" to 2¼"	12 – Item Spiral 1-11/16"	24 – Item Spiral 3/4"
Fifth	6-3/4"	2½" to 5¼"	1" to 2¼"	15 – Item Spiral 1-5/16"	30 – Item Spiral 1/2"
Sixth	6-1/4"	2½" to 5¼"	1" to 2¼"		

Ten selection shelves for candy and other narrow items fit on all six positions.

Spiral of one item capacity can be freely interchanged with any other of the same diameter.

Boxed items may need slightly larger clearances to vend properly.

Movable spacers available to adjust widths to ranges shown in each selection.

Gum-and-Mint Capacity. It is difficult to determine the true capacity due to variations of product size.
The average capacity for the Gum-and-Mint Shelf is 170 items.

unpacking

The Snackshop 7000 is assembled and packed so that a minimum amount of time is necessary for preparation to install it on location. The following steps are recommended to insure correct unpacking.

1. **Shipping Damage:** Thoroughly inspect the exterior of the carton for damage which may have occurred during shipment. Report any damage to delivering carrier and follow their instructions.
2. Remove staples from lower edge and those at top of carton, and slit carton vertically at the taped corner. Open and remove carton. Remove the remainder of the packing material. On machines shipped with lock in place, the keys are stapled to the carton base.
3. **Remove Vendor With A Fork Lift Truck:** Remove the carton from the vendor. Open the door on the vendor and remove the hold down bracket at the front center of the cabinet base and close the vendor door. From the front of the vendor tip the vendor backward and run forks under the cabinet.
4. **Removing Vendor Without A Fork Lift Truck:** Remove the carton from the vendor. Remove ¼" piece of plywood

located just behind the front legs, then open the door on the vendor and remove the hold down bracket at the front center of the cabinet base and close vendor door. From the front of the vendor tip the vendor back far enough to clear the wood strip across the front of the base. Slide vendor toward the back until the back legs are off the base and pull base out.

NOTE: Because the weight concentration is toward the back of the cabinet, trucking and lifting should be done from the back. CAUTION should be taken when trucking from side.

5. On machines with lock in place, unlock, and turn handle to open door. When no lock is furnished, remove tape and turn handle. Swing door to its full open position.
6. Remove all packing tape and paper from various areas of machine and the shipping strap.
7. **Warranty:** The warranty card is attached to the cover of this manual. It must be filled out in full and mailed at once to insure coverage.
8. **IMPORTANT:** A set of anchoring brackets are sent with each machine. The kit is located in the bottom of the machine complete with instructions. It is recommended that this kit be installed to prevent shifting of the machine.

installation

1. **GENERAL:** In some locations, due to the size of this machine it is not possible to move the fully assembled machine through doors or narrow hallways. For such locations the door of this vendor can be removed, thus reducing the clearance required down to 32 inches. For narrower doors the sliding panel can be pushed back inside the cabinet by removing the control stop (Item #23 Page 24).

DOOR REMOVAL: To remove the door, swing door to 90 degrees. Remove bolt and washer on door end of door stop. Disconnect light harness. The upper hinge is secured to the cabinet by one bolt extending through the hinge from the inside of the cabinet. Use a 1/2 socket to remove. Pull the door forward, the upper hinge will slide out of the top guide, freeing the door. Lift the door up and out of the lower hinge. Remove left side panel extension which is held by four screws. Remove the cabinet to door filler assembly which is held in by twelve screws. To install the door, reverse the above procedure.

2. **LEVELING THE MACHINE** on location is important for the proper function of the machine. The four leveling screws in the legs are the means of leveling the machine. After positioning the machine, level machine in front to rear and right to left directions. After leveling, turn front right (lock side) leveling screw in about one-half turn to drop this corner slightly to make the door easier to close and lock.
3. **THE MAIN POWER CORD** is shipped fully inside the machine. Extend it through the hole located in the base on the left (hinge side) of the machine behind the transformer. Install the plate with key hole slots over the two screws in the base by the cord hole and drive screws tight to hold cord in place. Plug the 3 pin grounded plug into a properly grounded 115V 60 HZ outlet only.

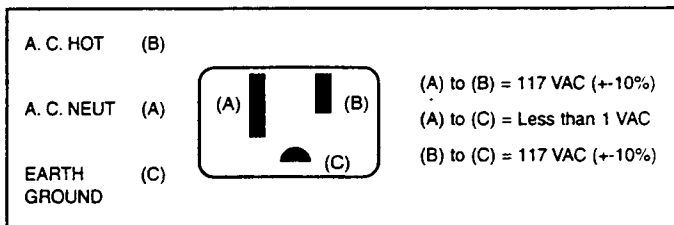
In order to comply with electrical safety regulations and Underwriters Laboratories requirements, all electrical

equipment must be properly polarized and grounded. The Snackshop 7000 is wired so that it is properly polarized in accordance with the electrical code. If the wall outlet is wired and grounded properly, then the vendor will connect properly.

Shown in View A & B are two properly grounded and polarized wall outlets. One is a three wire grounding type wall outlet (see View A) and one is a two wire wall outlet (see View B) with an adapter in place. To make a polarity check use a 115 volt neon test lamp as shown or a volt ohm meter. The hot side of the circuit should always be counterclockwise from the ground terminal (which should be at the bottom).

Should the polarity at the wall outlet show any way other than that shown below, the outlet should be rewired.

Using a voltmeter, perform the following checks from the illustration below.



NOTE: Should the readings be different from above, have a certified electrician correct the problem.

4. **LOADING SNACK SHELVES:** Open door to full open position, push down on white plastic lock lever (Figure 1) on right side panel by shelf to unlock shelf, holding lever down. Grasp the shelf slightly and pull forward until shelf reaches its stop. The shelves tilt down (do not drop) to make loading easier. Only one product shelf should be in the loading position at a time. When returning a shelf, be sure the shelf is in its full home or vend position. Begin loading with the top shelf. Move it to the loading position. The height spacing for items is greatest in this shelf and the tallest bagged items should be placed there. Soft items, such as pastry, pies, etc., should be placed in the lowest snack shelf, making the drop distance as short as possible.

IMPORTANT: Product must not be forced into the spiral spaces but should fit freely. If the product is too tight, use a larger pitch spiral. The bottom of the product should be placed on top of the spiral wire that rests on the shelf surface (see Figure 2). The width of the product must be greater than the diameter of the snack spiral. If it is smaller, the product may fall through when it is in the front, ready to vend position.

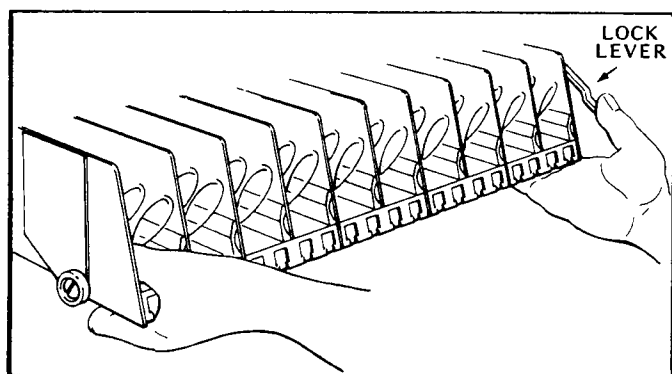


Figure 1. MOVING SHELF TO LOADING POSITION.

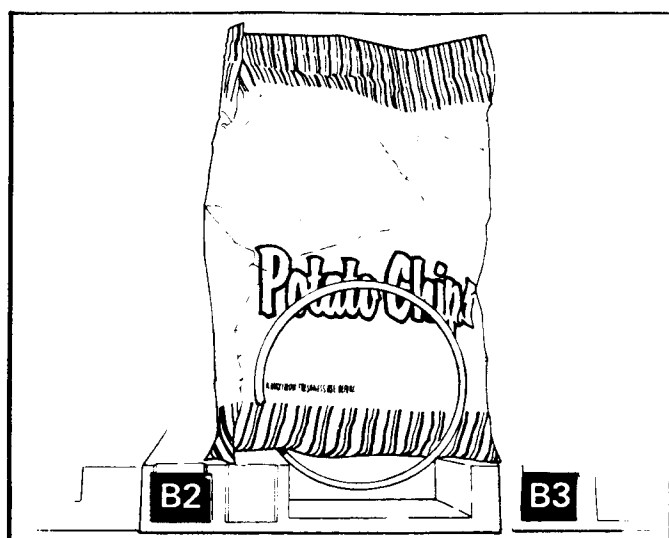


Figure 2. PLACEMENT OF PRODUCT ON MAIN PRODUCT SNACK SHELVES AND FRONT END POSITION OF SPIRAL.

5. **REMOVAL OF SPIRAL:** Grasp the front of the spiral and turn it clockwise. Lift the spiral up and off of the spiral lock. When replacing a spiral attach it around the tab on the spiral lock and turn the spiral counterclockwise to lock it in place. Be sure the front end of the spiral is positioned properly (with the front end of the spiral pointing downward on the left side) (see Figure 3). The spiral lock is attached between the spiral retainer tabs. Give a light forward pull on front of the spiral to check if it is locked in place.

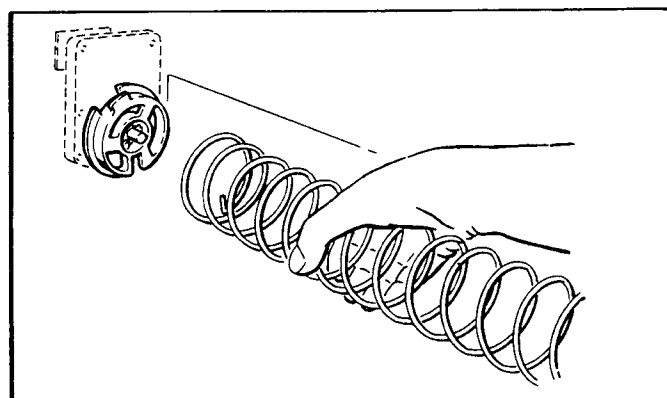


Figure 3. REMOVING AND INSTALLING SPIRAL.

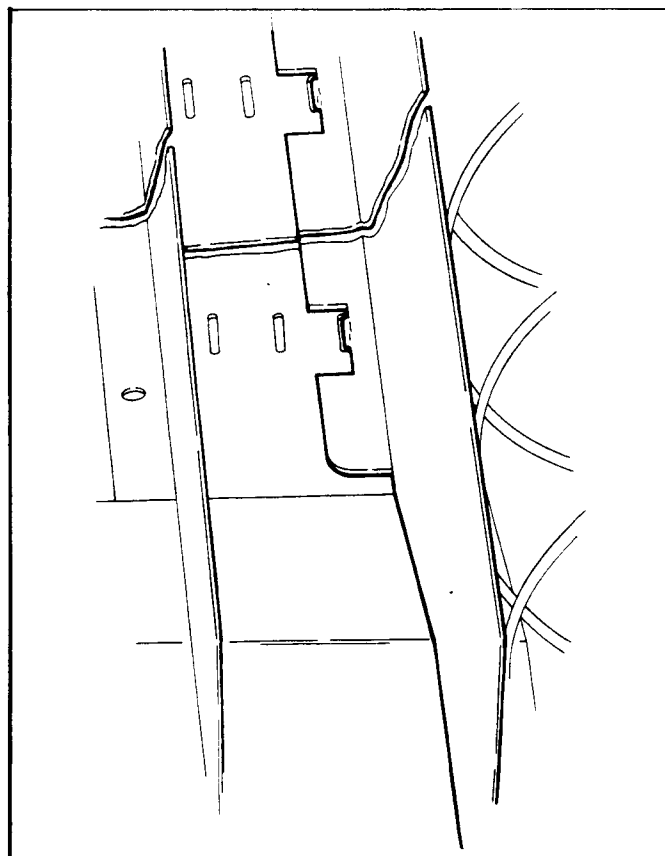


Figure 4. ALIGNMENT OF MOVEABLE PRODUCT SPACERS.

installation

6. **PRODUCT SPACERS—5 SELECTION SHELF:** A product spacer is used to reduce the width of the product area and should be used on any 5-selection snack shelf where the product width is 4½" or less. Spacers should fit within 1/8" of the product but should not fit tight against the product. There are three positions in each snack space where these spacers can be placed. To install the spacer, align the lock ears (on the lower edge of the spacer) with one of the three sets of slots (one front and one rear). (See Figure 4). Push the spacer to the rear to allow the ears to enter the slots, then allow the spacer to move forward. Be sure the ears are in the same set of slots, front and rear. (See Figure 4). Continue loading all spirals adjust with spacers where needed in the top shelf. Return the top shelf to the vend position and following this procedure load the remainder of the large spiral shelves. The shelf divider separating the right (lock side) column from the next column is movable to allow vending of products wider than 5½" in the second column. If this is used the right column must be used to vend a narrower product.
7. **LOADING MAIN PRODUCT CANDY SHELVES:** The 10-selection (candy type) shelves are loaded similar to the 5-selection shelves except that the bottom of the product sits on the shelf in front of the spiral wire (see Figure 5) that rests on the shelf. These products must also fit properly in the spiral space; do not force product into spiral.

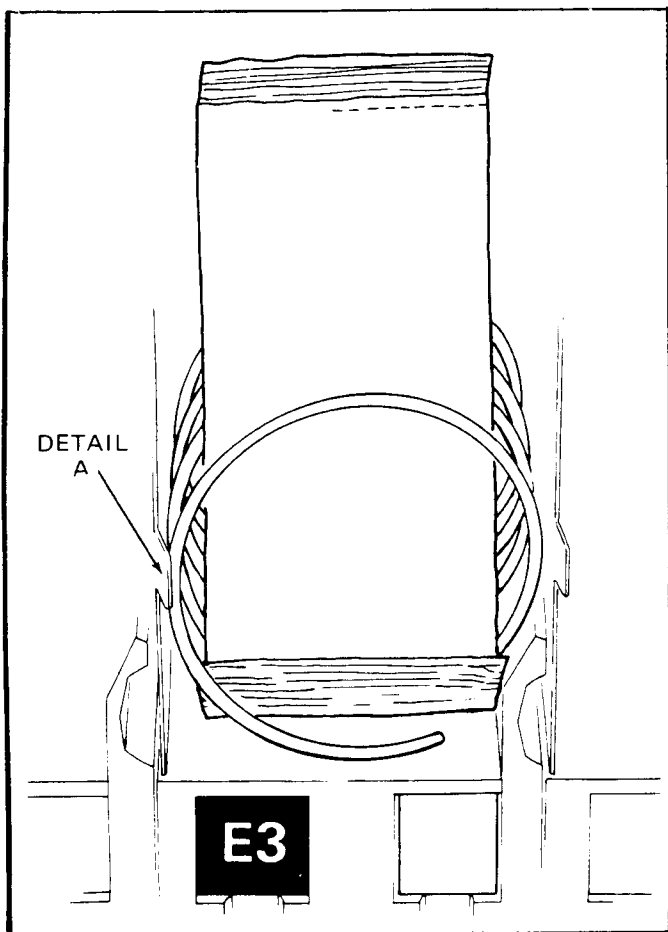


Figure 5. PLACEMENT OF PRODUCT ON MAIN PRODUCT CANDY SHELVES AND FRONT END POSITION OF SPIRAL.

These spirals are removed and installed the same as the large spiral (see Figure 3), except that the front end position is different (approximately 5 o'clock) (see Figure 5) and the front left side of the spiral must be behind the small tab located on the left side of the product space side wall (see Figure 5, Detail A).

8. **PRODUCT SPACERS—10 SELECTION SHELF:** The 10-selection shelves are equipped with a product spacer (see Figure 6) that can be pivoted from the right side of each product space. These spacers should be pivoted out to hold the product upright, but not tight against the product. Leave about 1/8" clearance between the spacer and the product.

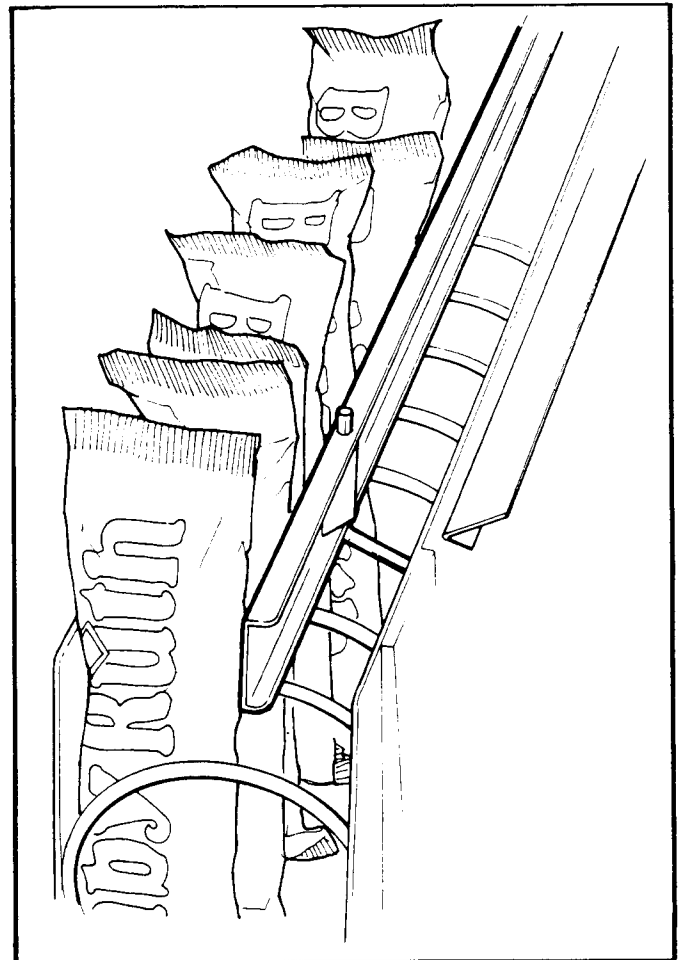


Figure 6. 10 SELECTION SHELF PRODUCT SPACER POSITIONED TO HOLD CANDY UPRIGHT.

9. **PRODUCT PUSHER:** The machine contains enough pushers for you to install a pusher on each candy spiral. This plastic part is designed to push the top of the product forward while it is vending, helping it fall from the shelf. It can also be used with products that have the wrapper end flap on the outside of the package. In this case, the pusher prevents these products from hanging on the spiral by spreading the flap. The pusher is installed approximately 210 degrees from the front end of the spiral with the tab extending forward (see Figure 7). Locate the pusher in its proper position, hold it against the spiral wire and push the semi-circular part around the spiral wire. Note: Not every selection spiral will need a product pusher. (Example—Box Items)

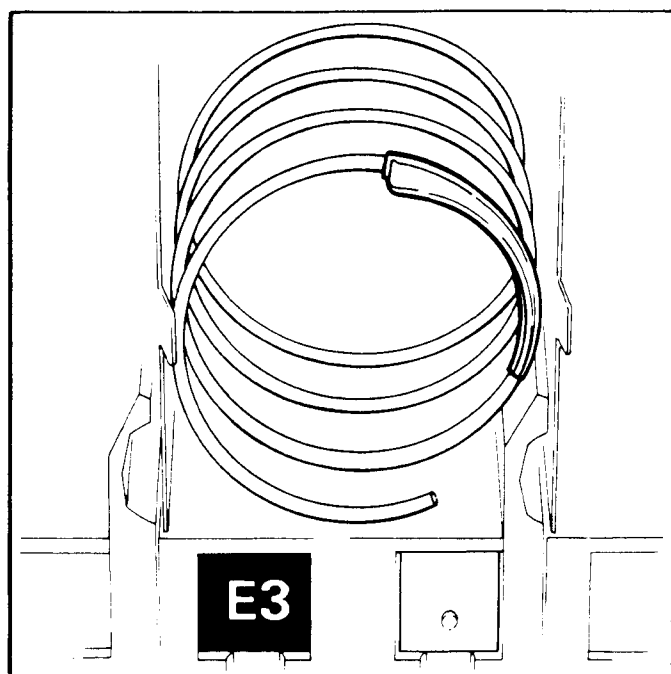


Figure 7. LOCATION OF PRODUCT PUSHER ON SPIRAL.

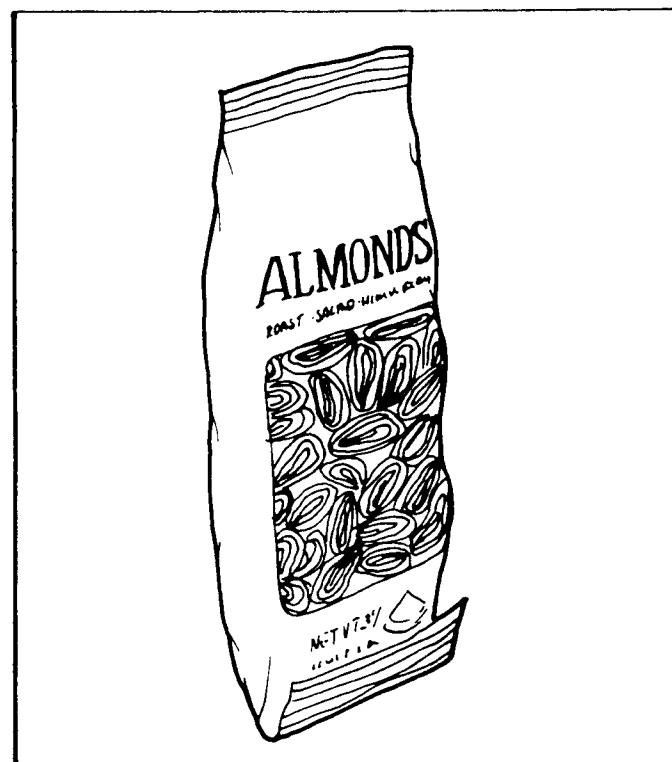


Figure 8. FOLD BAGGED ITEMS BOTTOM EDGE FORWARD AND UP.

10. **BAGGED OR BOXED ITEMS** in the 10-selection shelves if not loaded properly could be a problem. The sealed edge of the bag may get under the spiral wire causing the product to hang up after it has been vended. It is recommended that the lower edge of these types of product be folded forward and up (see Figure 8) next to the product before inserting into the spiral space. It is also recommended to use an 18 count spiral for bagged items because of the product settling to the bottom of the package.
11. **CIGARETTE VENDING FROM SNACKSHOP 7000:** Cigarettes can be vended from the candy shelves using the (15 capacity) spiral for the soft pack regular, king, 100mm or 120mm packs. The (12 capacity) spiral should be used for (box) packs.
12. **LOCK PRODUCT SHELVES.** After all the product has been loaded be sure all shelves are returned to their vend position behind the front roller guide.
13. **INSTALL PROPER PRICE TABS** into price tab holder for each selection in the main product area. (See Figure 9.)
14. **LOADING GUM AND MINT.** The Gum and Mint shelf is located below the Snack Shelves (optional). Unlatch the shelf by pulling forward the two metal latches located to the right and left of the shelf and pull forward. The cover can be pushed back to the rear for easy loading. The shelf contains five individual selections.
The first selection on the left contains two fillers for use with thin mints. (Roloids - certs, etc.). These fillers can be removed for standard gum or mints.

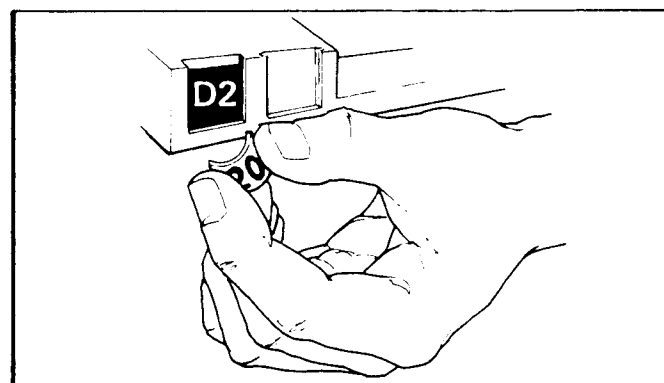


Figure 9. INSTALLING PRICE TABS.

The two selections on the right of the Gum and Mint shelf also have fillers. These selections can be used for standard size gum and mints or the fillers may be removed for larger gum and mint products.

Each selection has a display hinge assembly which should be adjusted after the shelf is loaded. To adjust the display hinge, loosen the wing nut and slide the spring hinge of the flipper over the second product and fasten tightly.

INTRODUCTION

The Snackshop 7000 represents a new concept in vending. There are no pricing switches, vend relays or individual selection switches. All of the machine functions are managed by a control board located on the sliding panel. The control board operates much like a computer. In addition to controlling normal machine functions the control board has a memory and micro processor for the incorporation of an M.I.S. (Management Information System). M.I.S. was designed to give the operator an accurate and up-to-date view of product movement through the machine (product inventories, cash inventories, service time, etc.). Although M.I.S. is an invaluable tool for the operator, it is not necessary for normal machine operation. The following instructions deal with the functioning and set up operations of the machine with and without the use of M.I.S. Read the instructions from beginning to end to get a complete understanding of all machine functions and the interrelationship of components.

1. POWER SUPPLY

The 115 VAC power cord from the wall outlet comes into the machine and plugs into the left side of the main interlock box located on the bottom hinge side of the machine. The other four connections on the interlock box are for the transformer, lights, fan (optional) and power plug to the control board. All these connections are different so you cannot plug them in wrong. The 115 VAC cord goes to the toggle switch inside the box and then to the circuit breaker. The 115 VAC goes to the transformer which supplies two output voltages 28 VAC (11 & 12) and 12.6 VAC (13 & 14). These voltages then pass through their circuit breakers and all three voltages go up to the control board. The 115 VAC (15 & 16) goes to the power board to the left of the main control board. The 28 VAC and 12.6 VAC goes to the top left plug on the main control board.

The voltage used on the vend motors is 24 VDC. Do not test them with AC voltage and be sure polarity is correct or damage will result.

When removing any component be sure the power is off. Take special care when removing the control board. Do not lay the board on a metal surface.

2. CHANGER

The Snackshop 7000 can use either a Mars (MC-5000) or (TRC-6000) or Coinco (C300E 9234) or (9300L) changer. The changer is to be mounted on the changer mounting bracket located on the sliding panel. Remove the changer hold down screw which has been installed in this bracket for shipment. Hang the changer on the shoulder studs provided. Re-install the hold down screw to lock the changer in place. After securing the changer to the changer mounting bracket, plug the changer into one of the two receptacles located below the control board. The changer plug will determine which receptacle should be used. Be sure the changer cord is clear of the coin return lever operation. Load change into the payout tubes and turn the power switch on.

3. MODE SWITCHES

The mode switches are located on the control board. They allow for control of the following machine functions: Set price mode, check price mode, test vend mode, service mode and set serial number mode (see Figure 10). The

operate mode switch is located by itself on the front face of the sliding panel above the selection panel.

IMPORTANT: When operating the machine in any mode other than the operate mode, the door must be open. The machine is automatically put in the operate mode when ever the door is closed.

NOTE: Before closing the door push the operate button to home any motors which may be out of position.

- A. **Operate Mode**—Normal machine operation featuring total control of coin mechanism operation and accountability.
- B. **Set Price Mode**—Used to program each selection with a price and/or product code.
- C. **Check Price Mode**—Used to check prices and/or product codes of programmed selections.
- D. **Test Vend Mode**—Allows normal machine operation as in the operate mode except management data is recorded separately from data recorded in the operate mode.
- E. **Service Mode**—Indicates the operational condition of all L.E.D. displays and vend motors.
- F. **Product Data Number Mode**—Machine identification number for M.I.S. accountability.

4. BILL VALIDATOR MODE SWITCH

The switch located just below the "product data mode" switch is for use with a dollar bill acceptor. This dual switch has an on and off position for both price lines. Price line #1 in the **off** position will accept a dollar bill and if a selection is made will pay back the difference in change. If for some reason the coin return lever is pressed instead of making a selection the customer will receive back that individual dollar.

NOTE: To use the machine as a dollar bill changer at least one selection in the machine should be set for over \$1.00. Example set A6 for a vend price of \$1.10. Therefore, if your machine is used as a dollar bill changer price line #1 should be set to the **off** position. When a dollar is accepted and the coin return lever is pushed it will pay back a dollar in change. Price line #1 in the **on** position will accept a dollar bill and if the coin return is pushed pay back that individual dollar.

Price #2 in the **off** position will accept a dollar bill and if a selection is made pay back the difference in change. In the **on** position (shoppers mode) after a dollar bill or change is inserted will register that amount on the digital display. When a selection is made the amount on the digital display will deduct the price of that selection. At this time the total cash will be displayed of the amount left of that dollar so that another selection may be made without inserting more money. You, therefore, can push the coin return for your change or make as many selections you want to until the digital display reads below the lowest selling price in the machine, then the rest of the money will be paid back automatically.

NOTE: When using the shoppers mode, there is also a delay time incorporated on the control board. If a customer does not make another selection after a period of 10-15 seconds the changer will pay back automatically.

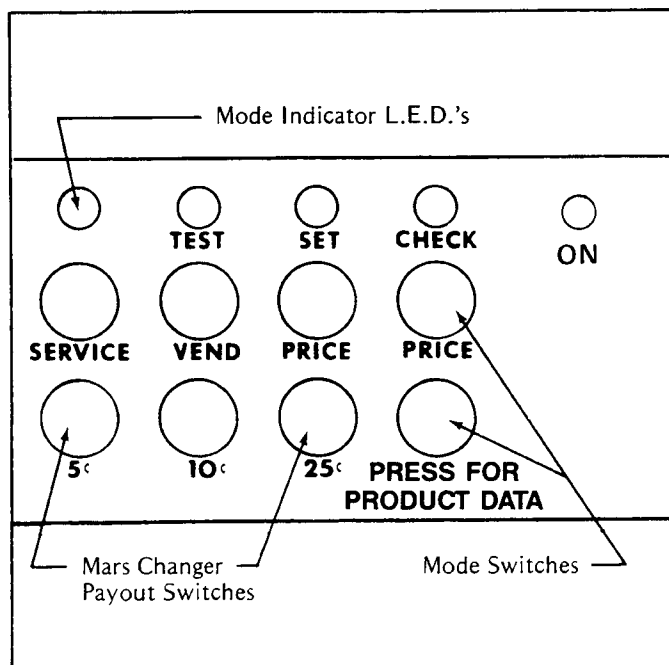


Figure 10. MODE SWITCHES.

5. SELECTION PANEL

The selection panel (Figure 11) on the Snackshop 7000 incorporates the use of a self enclosed membrane switch panel. This eliminates the need for individual switches and wiring. The membrane switch panel is housed in a stainless steel panel with individual buttons protecting the switch face. The casting front also houses the instruction and digital display glass (Figure 12). Included on the instruction glass are three messages for customer instruction when the machine can not complete a vend for an item selected (Figure 12). If this condition occurs, an audible signal is given to the customer and an L.E.D. next to the proper instruction will flash until the customer takes further action.

6. VEND MOTORS

The Snackshop 7000 incorporates the use of a high RPM DC Motor. The new DC Motor has an 85% greater starting torque over the Snackshop 400/500 AC Motor, yet weighs only 40% of the AC Motors weight. Due to the new design, the vend motor may no longer be homed by hand. **DO NOT TRY TO TURN THE SPIRALS BY HAND. DAMAGE TO THE MOTOR WILL RESULT.** Any necessary homing will be done by the machine. It is also important to check polarity before applying current to the motor. Two diodes and a capacitor are used to prevent circuit feedback and may have to be checked when trouble shooting motor problems.

7. PRICE SETTING WITHOUT USING M.I.S.

Pricing is done through the selection panel in conjunction with the mode switches.

- A. Press the mode switch "set price" button on the control board (Figure 10). The L.E.D. above the set

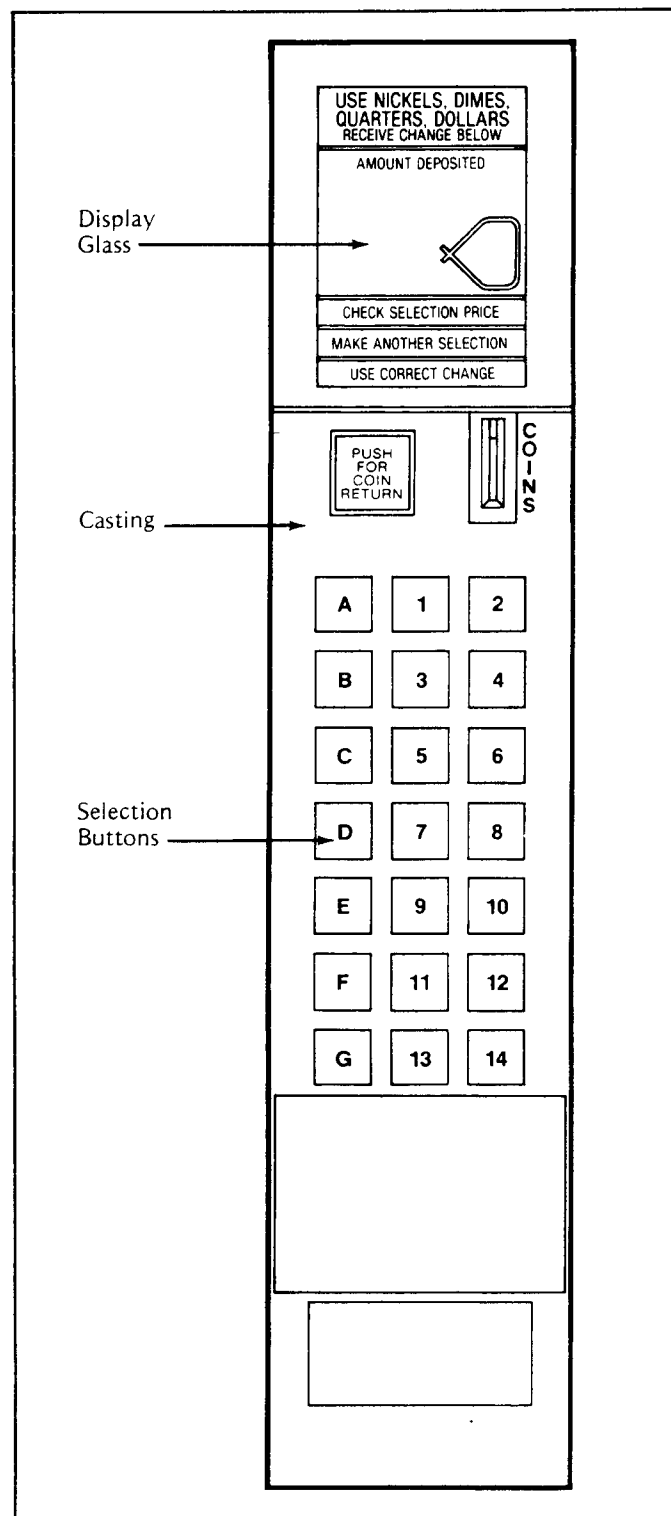


Figure 11. SELECTION PANEL

price will light and the display located on the selection panel will be blank. Any selection programmed at this reading will be removed from the operating program. This would be used when shelves are moved or the number of selections changed to remove those selections not present in the machine from the program.

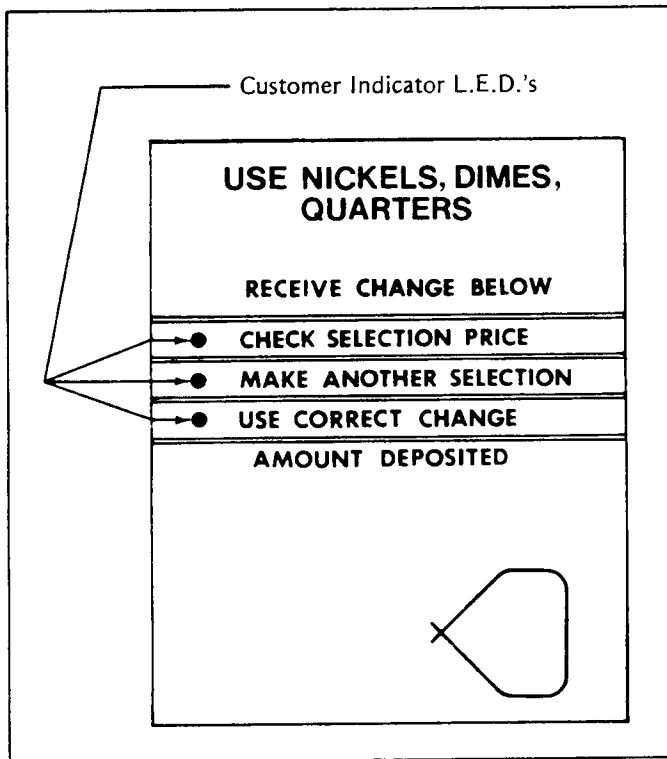


Figure 12. INSTRUCTION AND DIGITAL DISPLAY GLASS.

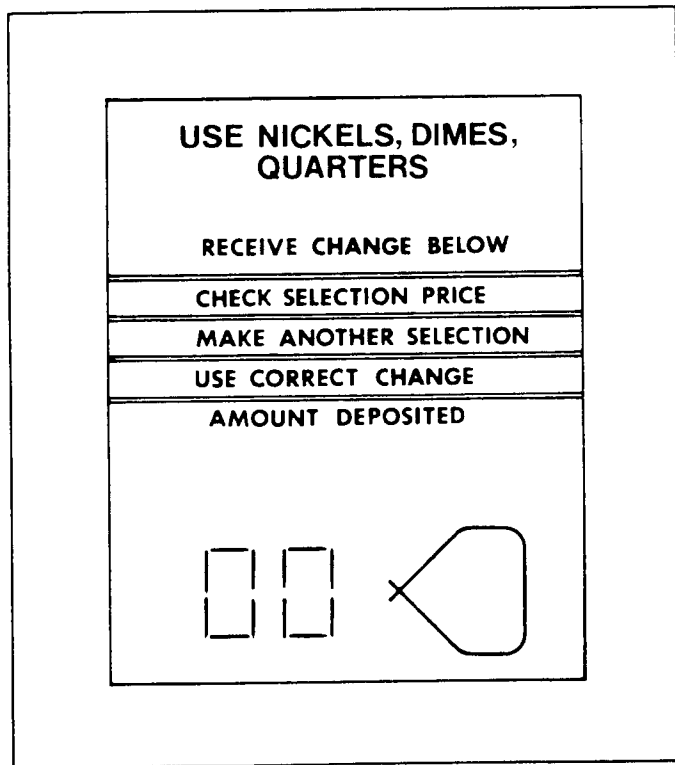


Figure 13.

- B. Press button 11 on the selection panel and the display will show "00.00" (Figure 14) along with three audible beeps will be heard. This is the price display and can be incremented up by pressing button 11 and down by pressing button 12. Increments are 5¢ and each increase will produce one audible beep.

CAUTION: Any selection programmed at "00.00" will free vend.

- C. With the selling price displayed, press first the letter, then the number for each selection to be sold at that price. Increment to your next price and enter those selections. Repeat until all selections have been programmed with their proper price and product code.
8. **PRICE CHECKING WITHOUT USING M.I.S.**
After all prices have been programmed, they should be checked to verify that each selection has been programmed correctly.

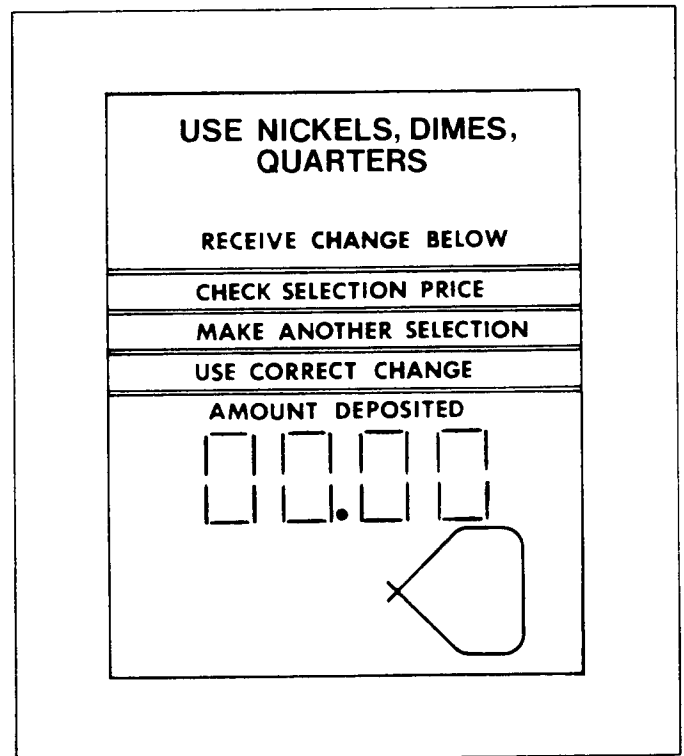


Figure 14.

- A. Press the mode switch "check price" button on the control board (Figure 10). The L.E.D. above the check price button will light and the selection panel display will be blank.
- B. Press the letter and then the number for the first selection to be checked. The price display will show the price that selection is programmed for (Figure 15). Check the displayed price against the price tab on the shelf for that selection.
- C. Continue to check prices until all selections have been checked. Follow "Price Setting Without Using M.I.S." instructions to correct any errors found.

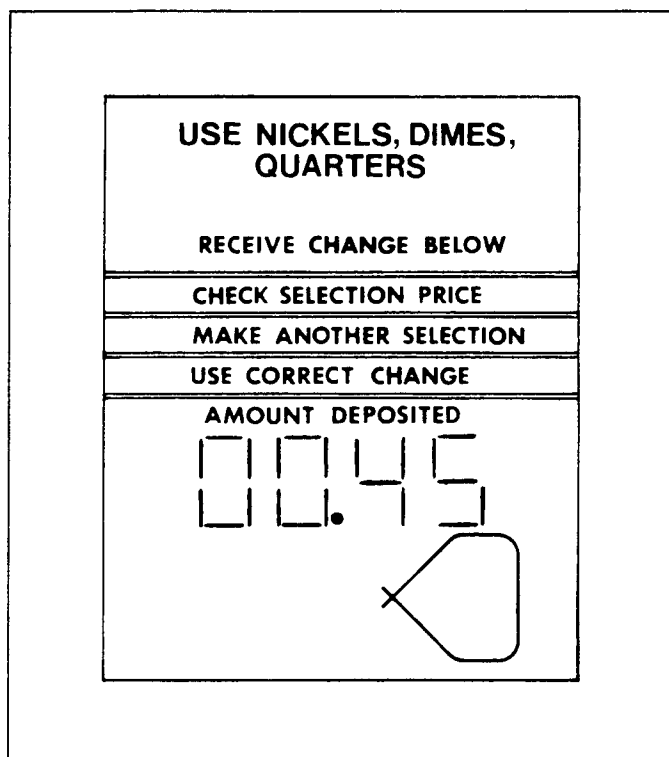


Figure 15. SHOWING A SELECTION PROGRAMMED FOR 45¢

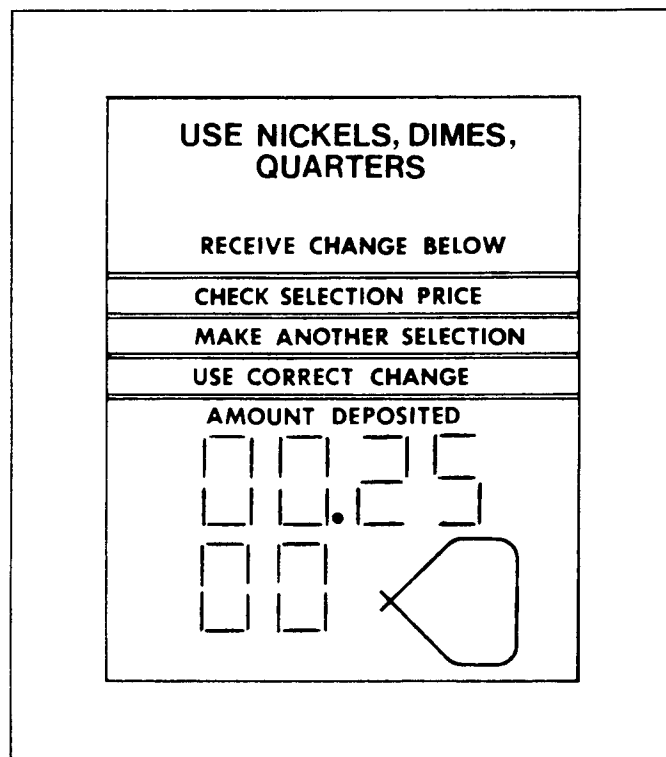


Figure 16.

9. MANAGEMENT INFORMATION SYSTEM (M.I.S.)

The Snackshop 7000 is equipped with the data collecting capabilities and the hardware to function as part of the Management Information System. When you are using the M.I.S., the price setting and price checking require the use of a product code. This gives the operator the versatility to use the product codes in any way to best fit his operation.

A product code is a number (00 through 69), used to identify a specific product or group of products. The product code need only be used when M.I.S. is being used. The product code gives the operator total control of individual product sales or product group sales.

The M.I.S. records by product code, the number of vends and total dollar amount vended for each product code programmed. This gives the operator the versatility to program a product code for each selection in the machine or one product code for all selections within the machine.

10. PRICE SETTING USING M.I.S. AND PRODUCT CODE

Pricing is done through the selection panel in conjunction with the mode switches.

- A. Press the mode switch "set price" button on the control board (Figure 10). The L.E.D. above the set price button will light and the display located on the selection panel will be blank. Any selection programmed now will be removed from the operating program. This would be done when shelves are moved or the number of selections change (Example: Replacing a five selection shelf for a ten selection shelf.).

Press button 13 and a two digit display "00" will appear on the selection panel which is the product code, (Figure 13). Pressing button 13 the display will change by increments of one, going up. By pressing button 14 the increments will come down by one.

- B. Press button 11 on the selection panel and the display will show "00.00" (Figure 17) along with three audible beeps will be heard. This is the price display and can be incremented up by pressing button 11 and down by pressing button 12. Increments are 5¢ and each increase will produce one audible beep.

CAUTION: Any selection programmed at "00.00" will free vend.

- C. With the product code and selling price displayed, press first the letter, then the number for each selection to be sold at that price and product code. Increment to your next price and/or product code and enter those selections. Repeat until all selections have been programmed with their proper price and product code.

11. PRICE CHECKING USING M.I.S.

After all prices and/or product codes have been programmed, they should be checked to insure that each selection has been programmed correctly.

- A. Press the mode switch "check price" button on the control board (Figure 10). The L.E.D. above the check price button will light and the selection panel display will be blank.

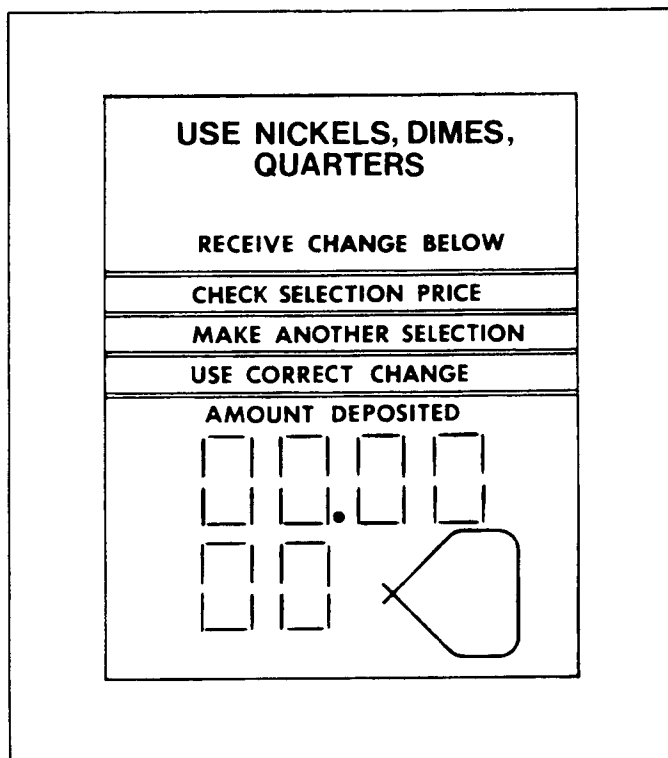


Figure 17.

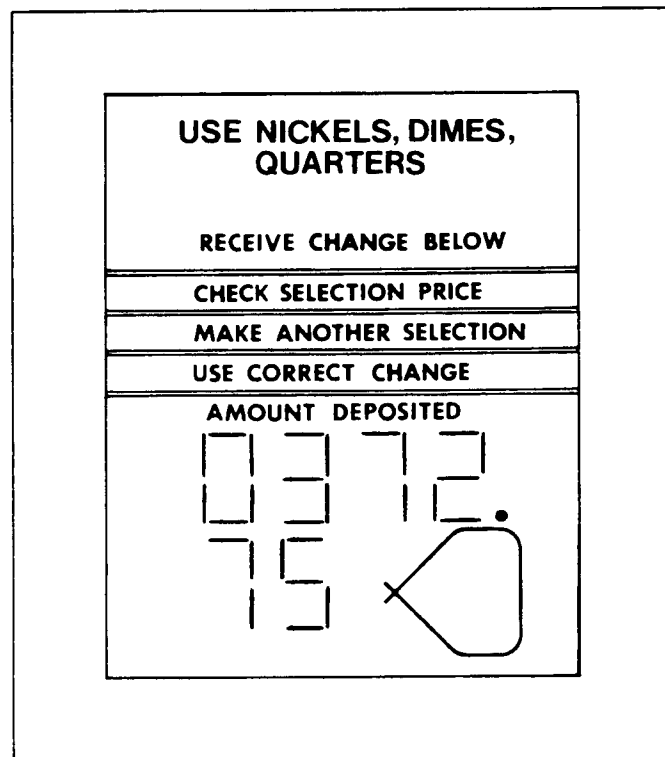


Figure 18. SHOWING \$372.75

- B. Press the letter and then the number for the first selection to be checked. The display will show the price and product code that selection is programmed for (Figure 16). Check the displayed price against the price tab on the shelf for that selection.
- C. Continue to check prices and product codes until all selections have been checked. Follow "Price Setting Using M.I.S." instructions to correct any errors found.

12. CASH ACCOUNTABILITY DISPLAY

A running total of dollars vended by the machine may be displayed on the selection panel display without the use of the M.I.S. The door on the machine must be closed for cash accountability and inventory reporting functions. The cash accountability may not be changed by anyone and represents an accurate cash meter.

- A. Press the mode switch "check price" button on the control board (Figure 10). The L.E.D. above the check price button will light
- B. Press button 14 on the selection panel and the total dollars vended by the machine will be displayed (Figure 18).

INVENTORY REPORTING

- A. Press the product data switch on the control board.
- B. To display identification number press selection button C. The number of the machine will be displayed. Once you have recorded the identification number press button C again.

- C. To display number of vends by any product code. For example, enter the product code (63) then the letter G. The number of vends and the product code will be displayed. Repeat until all desired information has been displayed and recorded.
- D. To clear the vends press A, B and G. This will clear the vends and leave the product codes set on their originally set selections.

13. TEST VEND MODE OPERATION

The test vend mode was incorporated in the Snackshop 7000 to allow machine servicing and testing without affecting the management data or cash accountability of customer vends and customer dollars received. When M.I.S. is not used, the test vend mode prevents service and test vends from being included in the cash accountability readout. When M.I.S. is being used, the test vend mode records the number of vends and dollar amounts received, in a separate category from that same information which is recorded in the operate mode. This gives the operator total control over all product amounts sold and dollar amounts within the machine.

- A. Press the mode switch "test vend" button on the control board (Figure 10). The L.E.D. above the test vend button will light and the display located on the selection panel will be blank. The machine is now ready to operate exactly under the same conditions as in the operate mode, so you will have to use money for the testing. After all servicing and testing has been made return the machine to the operate mode. The machine is now ready for normal customer usage.

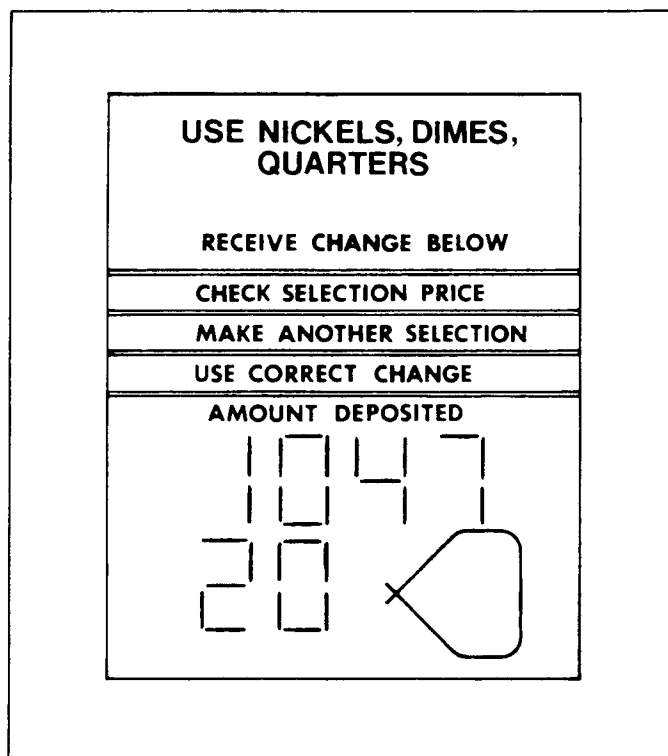


Figure 19. SHOWING A SERIAL NUMBER OF 104720

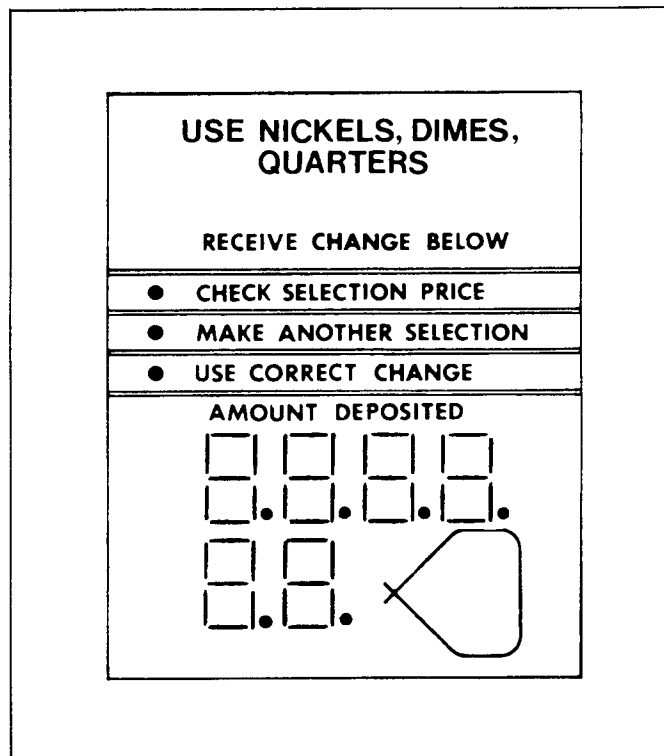


Figure 20.

14. MACHINE IDENTIFICATION NUMBER FOR USE WITH M.I.S.

With using the M.I.S. each machine may or can have an identification number.

- Press the "product data" mode switch. Pres the letter "C" on the selection panel. The old identification number (if there is one) will be displayed.
- Change or enter a new whole number by pressing the panel numerals. Numeral #10 equals 0 (Figure 19).

15. SERVICE DIAGNOSTIC DISPLAY

Incorporated in the Snackshop 7000 series machine is an automatic circuit check. When the machine is engaged in the "operate" mode a scan is made to check the operating condition of all selection motors. If any non-functional motors are in this scan there will be three audible beeps and can now be trouble shooted for corrections.

- Press the mode switch "service" button located on the control board (Figure 10). The L.E.D. above the service mode button will light and the selection panel L.E.D.'s will all light (Figure 20). This tells the service person if all L.E.D.'s are in operating condition and that the Control Board is operating.
- Press button 14 on the selection panel. If any of the motors are not functioning (jammed, bad switch, bad harness, etc.) the first non-functioning motor in the series will be displayed on the selection panel display (Figure 21).

- If a non-functioning motor exists, record the selection on paper and repeat step B. Continue this procedure until all non-functioning selections have been displayed, recorded and the selection panel display reads all 8's (Figure 20).
- If all motors are operational the selection panel display will read all 8's.
- Inspect and repair the selections recorded from the service diagnostic display.
- After servicing the non-functioning selections return all shelves to a vend position and press the mode switch "operate" button located on the front side of the sliding panel. A delay will occur before the operate L.E.D. will light. This delay is the machine making the automatic circuit scan. At the time the scan is taking place any motors not in the start position automatically are homed. **DO NOT TRY TO TURN THE SPIRALS BY HAND. DAMAGE TO THE MOTOR WILL RESULT.**
- To insure that all serviced selections are operational, repeat steps A and B.

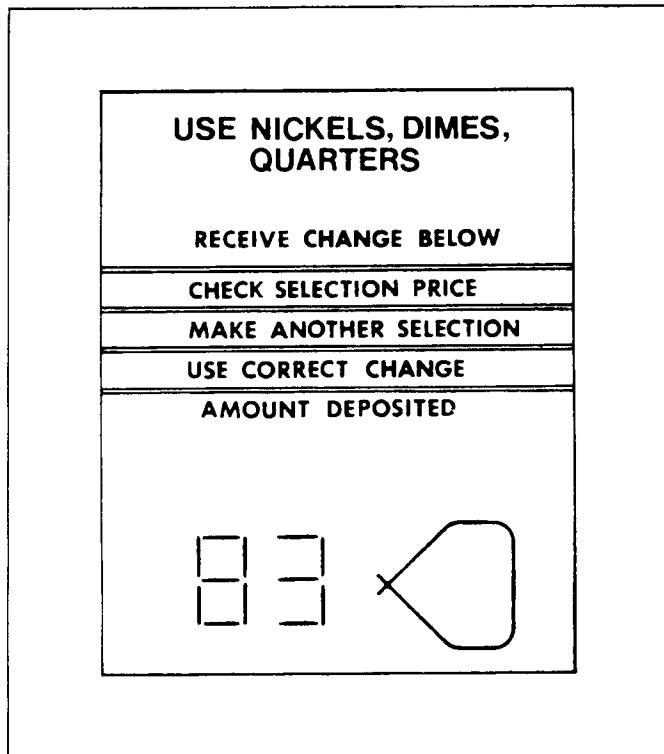


Figure 21. SHOWING SELECTION B3 NOT OPERATING

16. LIGHTING SYSTEM:

There is only one fluorescent lamp in the Snackshop 7000. The lamp is located in the top of the door, and lights the main product area and the product sign, if used. The starter is located on the hinge side of the lamp. The ballast for the circuit is located on the main interlock box.

17. MAIN PRODUCT SHELVES:

There are five or six main product shelves per machine. Each containing either five or ten selections. Each selection has its own motor mounted to the back of the shelf. Every shelf has its own harness and plug for connecting to the remainder of the circuit through the cabinet receptacle, located in the rear center of the cabinet. The motors are the same on either type shelf. It is now possible in the Snackshop 7000 to exchange a five selection shelf with a ten selection shelf or visa versa. You also have the capability to gain 1/2 inch either up or down on the second and/or fifth shelf. To do this the shelf should be removed and the cabinet back harness receptacle lowered or raised. The six rollers on that particular shelf then should be lower or raised also.

NOTE: When exchanging the shelves, you will not need any parts, but you will have to reprogram the machines for prices and selections.

REMOVAL OF PRODUCT SHELF:

- Lift up and push the lock lever toward the back of cabinet. See Figure 1.

- Pull the shelf to its loading position.

- Grasp shelf in front and rear center. Lift front of shelf up above horizontal and pull shelf forward while lifting.

- To install shelf, reverse above procedure.

18. DELIVERY BIN:

This is located below the display window on the door and is mechanically operated. The linkage on the outside ends of the delivery bin may require occasional lubrication. Should the door become difficult to operate, place a small amount of grease on the arm tracks.

REMOVAL OF DELIVERY BIN:

- Remove the screws from the underside of the delivery bin. These screws fasten into the lower door brace and remove the two screws and brackets at the top of the delivery bin.
- Grasp delivery bin on both sides and lift up and pull back. Should bin be tight, rock it by lifting on one end, then the other.

REPLACEMENT OF DELIVERY BIN:

- Locate lip on front edge of delivery bin over lower edge of opening in door and behind trim. Press down along lip to make sure it is fully engaged between door and trim.
- Install the four screws and two brackets, to secure bin to door.

19. COIN RETURN:

The coin return lever is located on the sliding panel and the coin return linkage is located above the changer, scavenges the slug rejector. Actuation of the coin return lever will clear the rejector of any damaged coins and will also cancel all credit on the changer, returning that amount to the customer.

20. COIN ACCEPTANCE:

A coin or coins (5¢, 10¢ or 25¢ coin) being deposited pass thru the rejector and into their respective coin paths in the changer establishing the credit. The coins then enter either the self-load change tubes on the changer or the cash box. Actuation of the coin return lever prior to making a selection will cancel all credit on the changer and will return the amount of deposit back to the customer.

21. REMOVAL OF GUM AND MINT MOTOR AND/OR EJECTORS:

Disconnect the two wires going to the motor and remove the four screws holding it to the shelf. The components attached to the front base can also be replaced. These consist of the gum and mint shelf front (Price tabs and selection), gum and mint shelf front base, gum and mint display front stop (plastic) and the gum and mint ejector. **NOTE:** Before replacing the gum and mint motor it would be helpful to tap the motor first with the screws. Assemble the four components together and mount them to the motor making sure that the head crank of the motor is inserted into the ejector. Replace the four screws and test vend that selection for proper operation.

22. REMOVAL OF GUM AND MINT SHELF:

Below the gum and mint shelf remove the two screws holding the gum and mint receptacle harness bracket (Page 24 Item 15). Loosen the other two screws on each end of the gum and mint pusher stop strap (Page 34, Item 20) and disengage it from the cabinet. Grasp the shelf and pull the shelf straight out. With the shelf out you can replace the gum and mint pusher (Page 34, Item 31) by removing the screw (Page 34, Item 21). Reverse the procedure to replace the shelf. Pay special attention when you put the gum and mint pusher stop strap back on that all the gum and mint pushers have spring tension and are behind the strap.

23. REMOVAL OF CONTROL PANEL:

The entire control panel can be removed from the machine by using the following procedure:

- A. Pull panel to its full position.
- B. Remove the control board cover and power board cover.
- C. Disconnect main cabinet harness and power plugs off the control board.
- D. Remove the wrap harness screw and ground screw to the control panel.
- E. Remove the top stop bracket located on the upper side of roller channel assembly.
- F. Grasp panel to support its weight and pull forward and lift upward. Be careful that the roller channel does not fall off the panel.

REPLACEMENT OF CONTROL PANEL:

- A. Engage the lower edge of the panel to the lower guide channel.
- B. Guide the roller channel onto the upper track and lift and push panel and channel into the cabinet.
- C. Reinstall stop bracket. This bracket must be installed in back of the channel in top of the cabinet, as this bracket is what stops the sliding panel in its forward position.
- D. Replace the cabinet and plug harnesses to the control board.

- E. Replace the tie wrap harness and ground screws.
- F. Replace the control board cover.
- G. Push panel back into the cabinet.

The Snackshop 7000 will do the best merchandising job for you if it is kept clean. The display window can be cleaned with any good glass cleaner. The exterior and interior surfaces should be cleaned with warm water and mild detergent. Rinse thoroughly and dry all surfaces.

CAUTION:

Do not use any cleaners containing silicon as this could cause electrical failures.

The main product shelves can be best cleaned with the spirals and product spacers removed. Refer to page 5 for removal of spirals and page 6 for removal of the product spacer. We do have cleaner available that we feel is superior to any other

cleaners we have tried in the past. The cleaner (Part # 460386) comes in a 20 ounce aerosol can and is used by spraying a good coating over the surface to be cleaned, then letting the cleaner set for 3 to 3½ minutes and wiping it off. After the shelf has been cleaned a neutralizer (Part # 460387) should be sprayed on and wiped off. The neutralizer will have to be transferred to a smaller bottle with a sprayer. There are openings in each end of the delivery bin at the back for cleaning out dirt.

Clean the acceptor on the changer frequently as accumulated dirt in this area can cause coins to hang or not be accepted. Follow recommended cleaning procedures as described by the manufacturer.

cleaning

optional equipment

1. VENTILATING FAN: (Kit #750102)

The ventilating fan operates on 115 volts and keeps a steady flow of fresh air moving through the vendor cabinet.

Installation of the ventilating blower takes but a few minutes and requires no additional wiring; all the vendors are wired with a plug for the fan. Installation instructions are sent with the kit.

2. BASE KITS:

Base kits are available to make the vendor compatible with other manufacturers.

3. GUM-AND-MINT:

Gum-and-Mint units are available as an option with Snack-ship 7000 vendors.

For information pertaining to loading or servicing gum-and-mint unit, refer to this service manual for loading instructions and for service instructions.

4. SPECIAL SPIRALS:

Special candy spirals are available for use in the five (5) selection snack shelves. For the sake of identification, the back end of these spirals are colored RED and should never be used in the ten (10) selection candy shelves.

These spirals allow vending products that are too wide for the standard candy columns but may be too thin for the

regular snack spirals. A product pusher and spacer should be used where required. Part numbers for these special spirals are as follows:

400139	12 space special spiral
400140	15 space special spiral
400141	18 space special spiral
400142	24 space special spiral
400143	30 space special spiral

NOTE: The difference between the standard candy spiral and the special candy spiral used in the wide snack columns is in the overall length of the spiral. The special spiral is shorter than the standard candy spirals.

CAUTION: Do not attempt to use the special candy spirals in a ten (10) selection shelf.

5. SOUP DISPENSER. (Kit 750083)

A canned soup dispenser is available as an option for use in the five selection snack shelves. The dispenser is easy to install and holds up to nine cans in the unit.

6. DOLLAR BILL VALIDATORS:

There are two kinds of validators available Ardac (Part #420147-4) and Mars (Part #420147). The validators take but a few minutes to install and may also be purchased through the manufacturer of that unit.

troubleshooting

TROUBLE	CAUSE	REMEDY
Motor runs (2½ turns).	1. Capacitor discharging current. 2. Defective motor, control board or motor switch. 3. Loose wire on motor.	1. Resolder capacitor or replace motor. 2. Replace motor, control board or motor switch. 3. Replace wire.
Motors appear defective.	1. Defective transformer. 2. Defective circuit breaker. 3. Pin connection.	1. Check for 28 volts from transformer to control board. 1. Replace board.
Spirals turn continuously.	1. Defective control board.	1. Check each individual motor for loose or pinched wire and replace it.
Motors run on same number throughout machine A1, B1, C1, D1, E1, F1.	1. One of the motor wires is shorting out.	
Cannot set prices in machine.	1. Defective selection switch panel. 2. Defective control board.	1. Replace selection switch panel. 2. Replace board.
Push A & A1 turns. Push B & B1 turns.	1. Selector switch panel shorting out.	1. Replace selector switch panel assembly.
No L.E.D. lights on control board.	1. Check plugs on control board. 2. Defective control board.	1. Plug in. 2. Replace board.
Press the service mode but cannot empty changer.	1. Check plugs on the control board. 2. Defective changer.	1. Plug in. 2. Replace changer.
Machine will not accept coins.	1. No power to machine. 2. Defective changer. 3. The changer will accept only logical amount of money above the vend price. 4. Changer should be installed with power off. 5. Machine accepts only one coin. 6. Defective power board. 7. Defective circuit breaker (115 volt).	1. Check wall outlet. 2. Replace changer. 3. Check pricing. 4. Turn power off—then on. 5. Check prices in the machine. Check for defective circuit breakers. 6. Replace power board. 7. Replace circuit breaker.
G&M selection shows "Make another selection"	1. Defective motor.	1. Replace motor.

bill validator — instructions for installation

The Service Envelope in the bottom of the machine contains different mounting brackets and decals for use with and without bill validators.

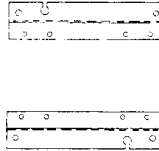
The machine, if ordered with a dollar bill validator, will already have the unit mounted (Mars or Ardac). If for some reason you wanted to exchange units or not use a validator at all, we have provided these brackets and decals.

MARS: When installing a Mars Validator use the dollar decal and brackets shown on the right. It would be easier to install the brackets to the panel with the hex nuts and use the dollar “empty” light as a guide. Take the four screws and mount the Mars Validator to the bracket with the identification label facing out. The harness then can be plugged into the bottom of the validator, to the stacker and plugged into the bottom pins of the power board, and to the bottom left side pins of the main Control Board.

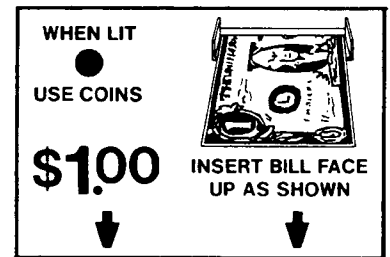
ARDAC: When installing an Ardac Validator use the decal and plate shown on the right. Using the dollar “empty” light as a guide mount the plate with the four hex nuts. Mount the validator to the plate with four more hex nuts. Insert the stacker in the validator (making sure it is locked into place). Mount the control box onto the studs provided to the left of the coin cup chute and fasten it on to the panel with two screws. The 15 pin plug on the left side of the control box goes over to either one of the stacker plugs. The 15 pin plug on top of the control box goes over to either one of the plugs on the validator. The 120 volt plug on the top of the control box goes to the bottom two right pins on the power board. The 21 pin plug goes up to the bottom left pins of the main Control Board.

NO VALIDATOR: Use the decal and bracket as shown. The short solid bracket is used to fill the hole on the control panel. Insert this bracket and hold it against the panel with the Ardac mounting plate.

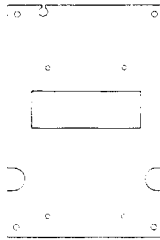
Bronze
(Part #201433)



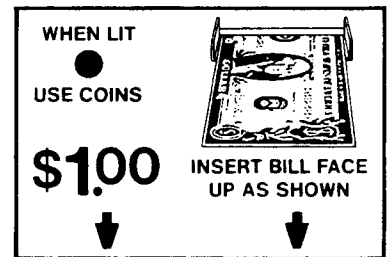
(Part #460361)



(Part #201463)



(Part #460358)



(Part #201418)



(Part #460359)

