

SNACKSHOP 500

SNACKSHOP 500

SNACKSHOP 500

instruction manual for

SNACKSHOP 500

MODELS

516

520

524

528

Automatic **PRODUCTS COMPANY**
75 WEST PLATO BOULEVARD • ST. PAUL, MINNESOTA 55107

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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 500 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.

To achieve the most economical trouble-free operation from your Snackshop 500, 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 — 30-5/8" DEPTH — 27-1/2"
FLOOR SPACE REQUIRED — 6 SQ. FT.
SHIPPING CONTAINER SIZE — 45.5 CU. FT.
POWER REQUIREMENTS — 115 V., 60 HZ.
STANDBY AMPERES — .7 OPERATING AMPERES — 3

Unless otherwise specified machine will be shipped with spiral assortment shown below.
 Figures in circles represent capacities in each spiral and the letter G indicates Gum and Mint selections

6	8	8	8
8	8	8	10
10	10	10	10
10	10	10	10

MODEL 516

Capacity as Shown:
144 Units

6	8	8	8
10	10	10	10
10	12	12	16
20	G	G	G
8	8	8	8

MODEL 520

Capacity as Shown:
208 Units

6	8	10	10
10	10	12	12
12	16	16	20
10	12	12	16
20	G	G	G
8	8	8	8

MODEL 524

Capacity as Shown:
280 Units

6	8	8	10
10	10	12	12
12	16	16	20
10	12	12	16
20	G	G	G
12	12	12	12
16	16	16	16

MODEL 528

Capacity as Shown:
354 Units

PRODUCT SIZE CAPABILITY

	HEIGHT	WIDTH	DEPTH Spiral Spaces
Top Shelf	9"	2-1/2" to 5-1/4"	6 Item Spiral 2-1/16"
Second Shelf	8"		8 Item Spiral 1-11/16"
Third Shelf	7-1/2"		10 Item Spiral 1-5/16"
Bottom Shelf with 4 Selections	7"		
Second Shelf with 8 Selections	8"	1" to 2-1/4"	10 Item Spiral 1-5/16"
Third Shelf with 8 Selections	7-1/2"		12 Item Spiral 1-1/16"
Fourth Shelf with 8 Selections	7"		16 Item Spiral 3/4"
			20 Item Spiral 1/2"

Eight selection shelves for candy and other narrow items fit only in the second, third and fourth 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: Gum and mint are vended from special small diameter 12 item spirals in compartments marked G above, additional gum and mint fillers and spirals can be added or removed on any eight selection shelf.

unpacking

The Snackshop 500 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 leg leveling bolts** from underside of crate base using a 1-3/8" socket wrench. Remove crate base and re-install leveling bolts into legs of machine.

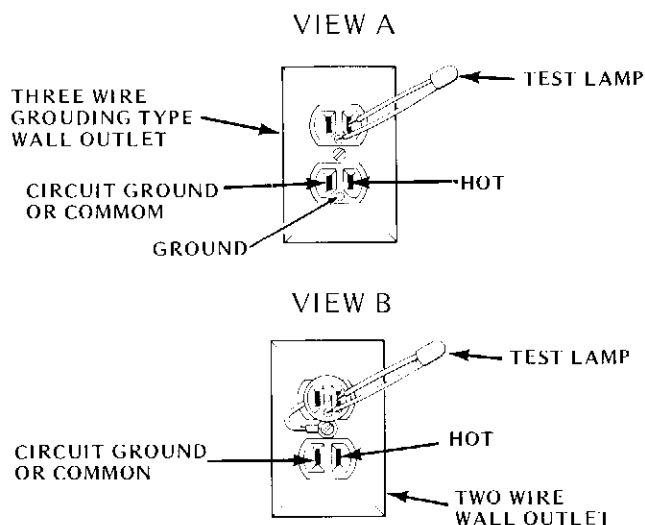
installation

1. **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.

2. **THE MAIN POWER CORD** extends out the back right rear of cabinet and is taped. The cord has a 3 pin grounded plug attached. Untape and plug cord 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 500 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 below 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



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.

4. **On machines with lock in place,** unlock and lift handle to open door. When no lock is furnished, remove lock handle retainer clip and lift handle. Swing door to its full open position.
5. **Remove all packing tape and paper** from various areas of machine.
6. **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.

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.

After machine is connected, turn on power in machine. The main power toggle switch (page 16, item 19) for the entire machine is located near the lower right front of the cabinet just above the cash box.

3. **LOADING SNACK SHELVES:** Open door to full open position, push down on white plastic lock lever (page 16, item 25) on right side panel by shelf to unlock shelf, holding lever down. Grasp the shelf under both front corners (see Figure 1), lift front of shelf slightly and pull forward until shelf reaches its stop. The two top shelves tilt down (do not drop) to make loading easier. The bottom two shelves remain horizontal. Only one product shelf should be in the loading position at a time. When returning a shelf, be sure 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.

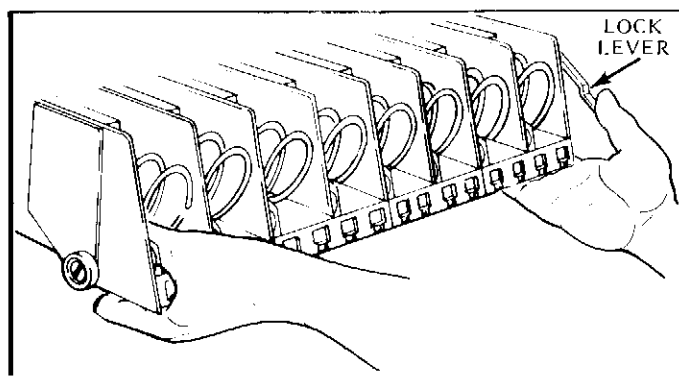


Figure 1. MOVING SHELF TO LOADING POSITION.

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.

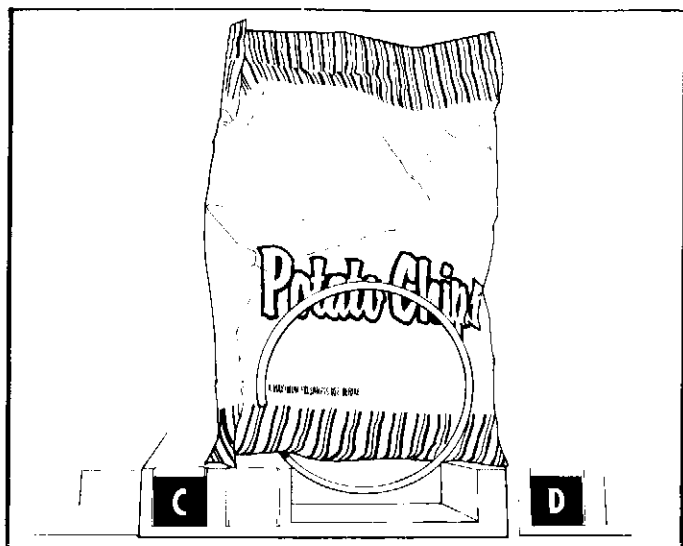


Figure 2. PLACEMENT OF PRODUCT ON MAIN PRODUCT SNACK SHELVES AND FRONT END POSITION OF SPIRAL.

4. **REMOVAL OF SPIRAL:** To remove a spiral, grasp the spiral near the rear of the shelf and pull forward. To install a spiral, align the hole in the cross strap, at the rear of spiral, with the motor shaft. (See Figure 3) Be sure the front end of the spiral is positioned properly (with the front end of spiral pointing downward on the left side) (see Figure 2); align strap between retainer tabs on spiral retainer (see Detail A, Figure 3) attached to motor shaft, push spiral to rear until both tabs snap over strap (see Figure 3). Give a light forward pull on front of spiral to check if it is locked in place.
5. **PRODUCT SPACERS-4 SELECTION SHELF:** A product spacer (page 18, item 9) is used to reduce the width of the product area and should be used on any 4-selection snack shelf where the product width is $4\frac{1}{2}$ " or less.

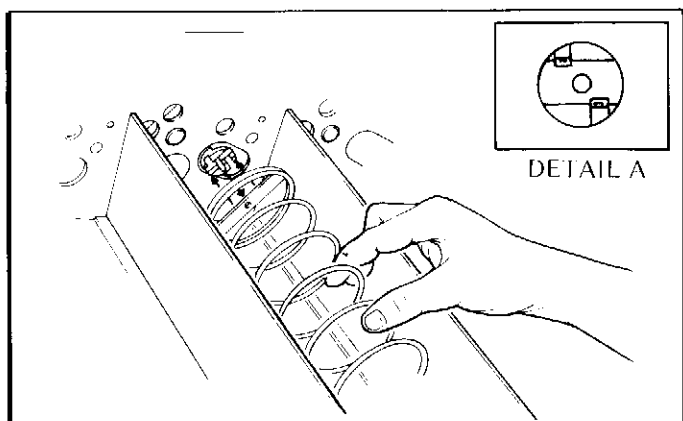


Figure 3. REMOVING AND INSTALLING SPIRAL.

Spacers should fit within $1/8$ " of the product but *should not* fit tight against the product. These spacers are packed and shipped in the bottom of the machine. 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 adjusting 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.

6. **LOADING MAIN PRODUCT CANDY SHELVES:** The 8-selection (candy type) shelves are loaded similar to the 4-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. 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).
7. **PRODUCT SPACERS 8 SELECTION SHELF:** The 8-Selection shelves are equipped with a product spacer (see Figure 6) that can be pivoted from the right side of

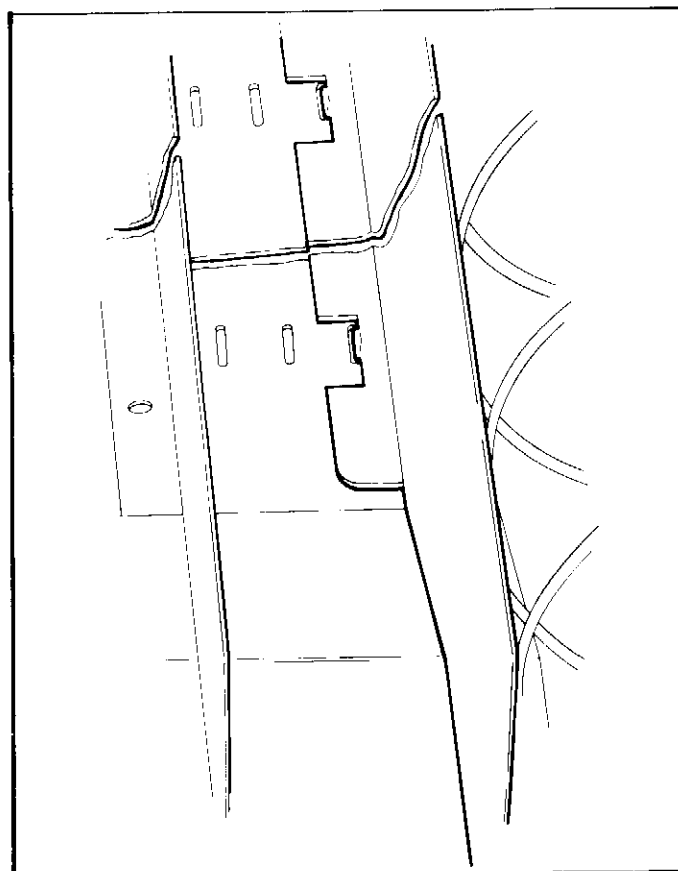


Figure 4. ALIGNMENT OF MOVEABLE PRODUCT SPACERS.

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.

8. **PRODUCT PUSHER:** Some products used in the 8-selection shelves may require the addition of a product pusher (see page 19, item 21). 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 product that has 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. Do not use this pusher on all products as it is not needed with most products. If you experience any product vending problem, install a pusher on that spiral only and test vend several times to see if it eliminated the problem.

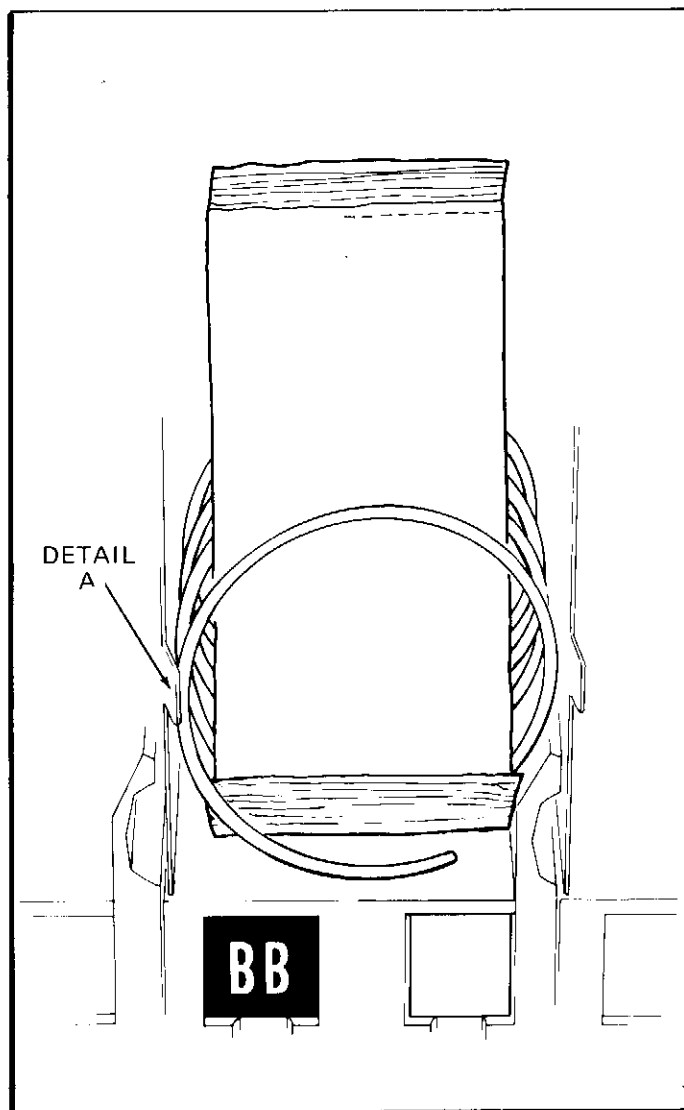


Figure 5. PLACEMENT OF PRODUCT ON MAIN PRODUCT CANDY SHELVES AND FRONT END POSITION OF SPIRAL.

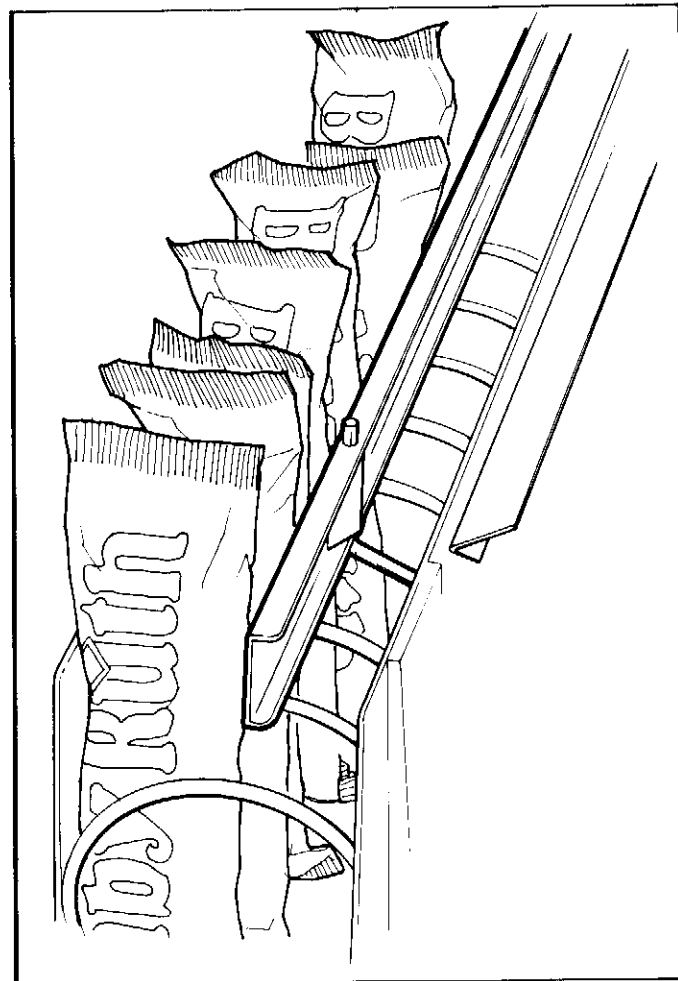


Figure 6. 8 SELECTION SHELF PRODUCT SPACER POSITIONED TO HOLD CANDY UPRIGHT.

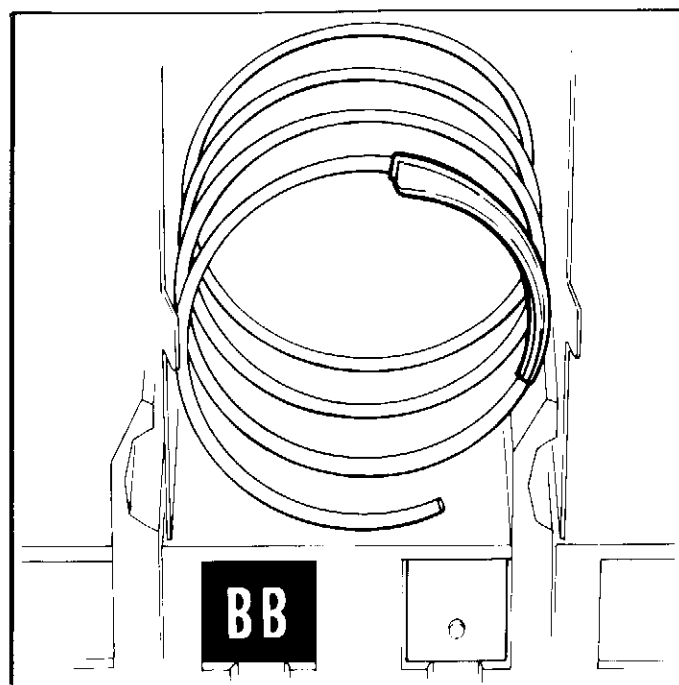


Figure 7. LOCATION OF PRODUCT PUSHER ON SPIRAL.

9. **BAGGED ITEMS** in the 8-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 on these types of product be folded forward and up (see Figure 8) next to the product before inserting into the spiral space.
10. **CIGARETTE VENDING FROM SNACKSHOP 500.** Cigarettes can be vended from the candy shelves using the (10 capacity) spiral for soft pack regular, king, 100MM or 120MM packs. The (8 capacity) spiral should be used for (box) packs.
11. **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 (page 16, item 28).
12. **INSTALL PROPER PRICE TABS** into price tab holder for each selection in the main product area. (See Figure 9.)
13. **GUM-AND-MINT:** Three gum and mint adapters are sent with each model 520-524-528. These adapters can be removed or additional ones added to any of the 8-selection candy shelves.
14. **LOADING GUM-AND-MINT:** The gum and mint spiral is loaded the same way as the candy spiral with the product placed on the adapter in front of the spiral wire. (See Figure 5.)
15. **CHANGER (4 and/or 10 price):** Use the supplement changer manual sent with vendor for all pricing and servicing, etc.

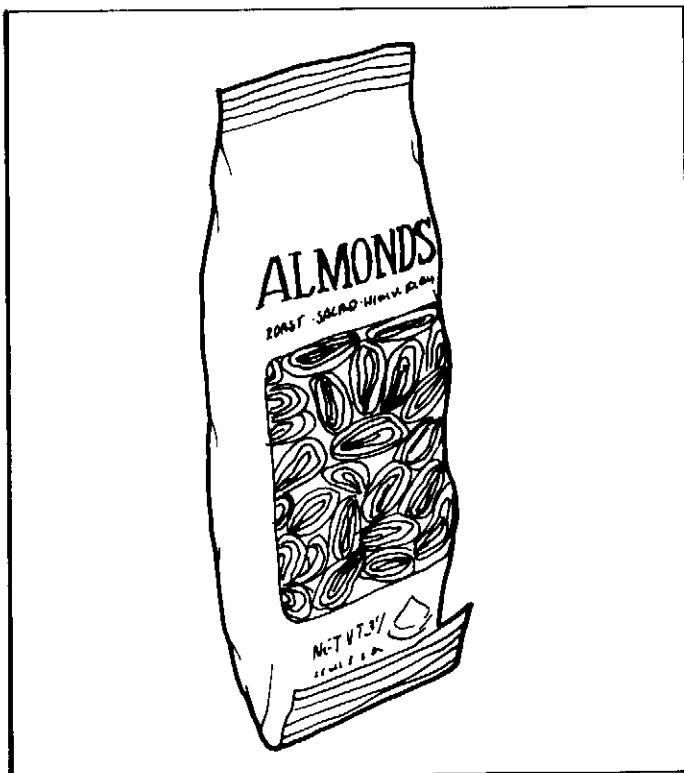


Figure 8. FOLD BAGGED ITEMS BOTTOM EDGE FORWARD AND UP.

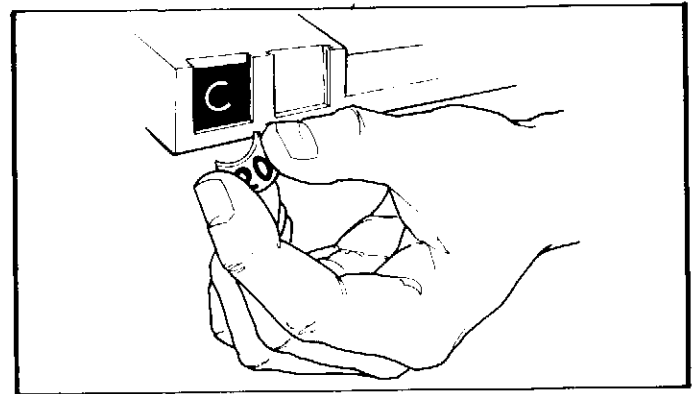


Figure 9. INSTALLING PRICE TABS.

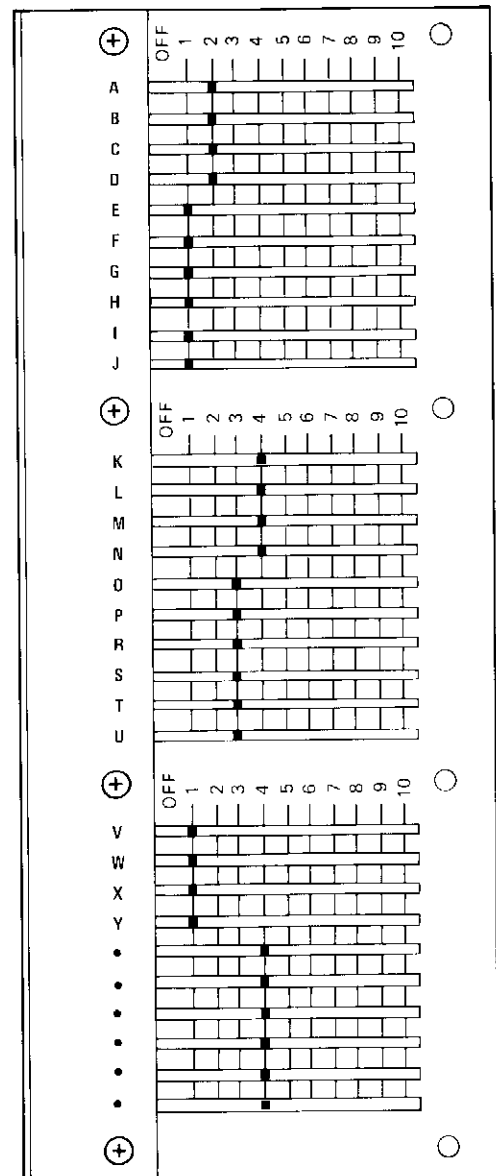


Figure 10. EXAMPLE OF HOW THE PRICE SETTING BOARD WILL LOOK WHEN PRODUCT PRICING SLIDERS ARE IN POSITION. FOR A MODEL 524

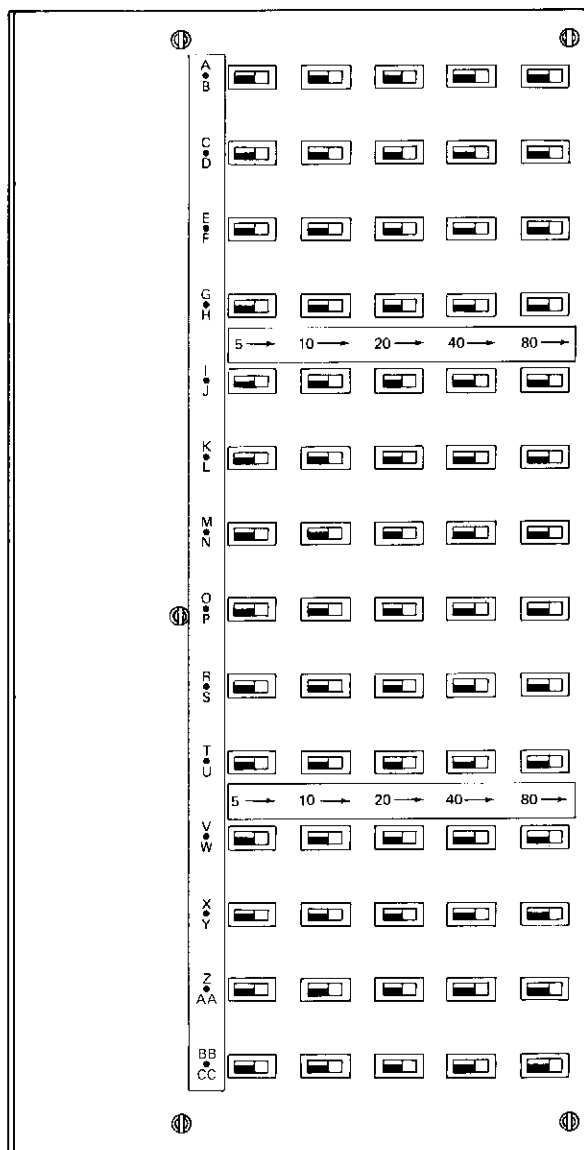


Figure 11. MULTI-PRICE PRICING PANEL FOR A MODEL 528

16. **PRICING: 4/10 PRICE CHANGERS:** The selection price setting board is located at the upper right side of cabinet (page 16, item 47) just above the sliding panel. Each selection has its own price setting slider on this board. Place the slider for each selection to its correct selling price as previously established in the changer. The far left line is number (1) price line from the changer, the second from the left is the number (2) price line, etc. See Figure 10.

17. **PUSH THE SLIDING PANEL** all the way back into machine. Close and lock door. Check delivery bin to be sure it is operating properly. Test vend several items to be sure price lines are set correctly and products are dispensing properly.

PRICING MULTIPRICE CHANGERS:

Setting the prices on a Snackshop 500 with a multiple changer is different from that of the 4 or 10 price changers.

The multiprice changer gives you the capability of selling from 1 to 31 different prices at one time.

To set prices you have a price setting panel that is separate from the changer (see figure 11). The letters running vertically down the panel indicate the product selection A, B, C, etc. The numbers running horizontal across the panel indicate the value for each of the price setting switches, 5¢ 10¢ 20¢ 40¢ and 80¢. Each selection having 5 price setting switches.

To set the price for selection A, use the set of white switches running horizontally next to the letter A. For example, let's say we want to set A selection on 15¢, move the far left switch 5¢ to the right and the second switch 10¢ to the right, all the rest of the switches for selection A should remain in the left or off position. This establishes a 15¢ vend price for selection A only. Then let's say we want to sell selection B for 25¢, selection B is priced with the set of black switches running horizontally across the panel next to the white switches used to set the price for selection A. To establish a 25¢ vend price for selection B move the far left 5¢ switch to the right and move the third switch from the left 20¢ to the right, this establishes a 25¢ vend price for selection B. Now continue in this same manner for each selection until the prices have been set for all columns.

components

1. **POWER SUPPLY:** The main power switch, fluorescent lamp circuit, blower motor if one is installed and the primary circuit to the transformer operate on 115 Volts. The remainder of the electrical components and wiring are operated on 24 Volts. When testing any of the components on the 24 Volt side of the circuit such as indicator lamps, motors, relay, changer, etc., **do not use 115 Volts. Test only with 24 Volts.** The main power switch (page 16, item 19) located on a bracket on the lower lock side of the cabinet above the cash box is used to open or close the circuit to the entire machine.

CAUTION: Turn main power switch off when working on any electrical component of machine.

The transformer (page 16, item 13) is located behind the cash box and is mounted to the base of the cabinet. The transformer is used to convert the 115 Volt circuit from the wall outlet over to 24 Volts.

The main (3 AMP) circuit breaker (page 16, item 18) is located on the same bracket with the toggle switch. The circuit breaker protects the 24-volt circuitry of the Snackshop 500, leaving the wall outlet fuse or circuit breaker to protect the 115-volt side of the line.

The only thing that should cause a three-amp circuit breaker to open is a short in the 24-volt circuit. This could result from a shorted component such as a motor, coil, or a bare wire touching a piece of metal. Keep this in mind any time you find the circuit breaker open. If you re-set it and the machine starts working again, before leaving the location the machine should be thoroughly tested. Be sure to operate all the selections.

2. **LIGHTING SYSTEM:** (Refer to page 14.) There is only one fluorescent lamp (item 9) in the Snackshop 500. The lamp is located in the top of the door, and lights the main product area. The start (item 23) is located on the

hinge side of the lamp. The ballast (page 16, item 16) for the circuit is located on a bracket on the lower right side of the cabinet above the cash box.

3. **PRODUCT SHELVES:** (Refer to page 18 and 19). There are four main product shelves per machine, each containing either four or eight selections. Each selection has its own motor (item 2) and motor hold switch (item 25) 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 and switches are the same on either type shelf.

REMOVAL OF PRODUCT SHELF:

- a. Lift up and push the lock lever toward the back of cabinet. See figure 1.
- b. Pull the shelf to its loading position.
- c. Grasp shelf in front and rear center. Lift front of shelf up above horizontal and pull shelf forward while lifting.
- d. To install shelf, reverse above procedure.

4. **PRODUCT SELECTION SWITCHES:** Refer to page 22). The main product selection switches (item 4) are in banks of four (See figure 12), and *cannot* be separated. Should one switch fail, it is necessary to replace a bank of four. To replace a switch bank or a selector button (item 6) remove the rear cover (item 8) from the switch assembly; it is a snap-fit to the switch mounting box (item 7). Unplug electrical harness at bottom of switch box. With the cover removed, the four mounting screws (item 9) (two top and two bottom) can be removed. The entire assembly can then be removed from the door and selection buttons and/or switch banks replaced.

5. **USE CORRECT CHANGE LAMP:** (Refer to page 14, item 4). The use correct change lamp is located on the door above the selection switches. Use only 24V lamps for replacement.

6. **DELIVERY BIN:** (Refer to page 20). 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 door become difficult to operate, place a small amount of grease on the arm tracks

REMOVAL OF DELIVERY BIN:

- a. Remove the screws (page 14, item 13) from the underside of the delivery bin and remove the two screws and brackets (page 20, item 17) at the top of the deliver bin.
- b. 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.

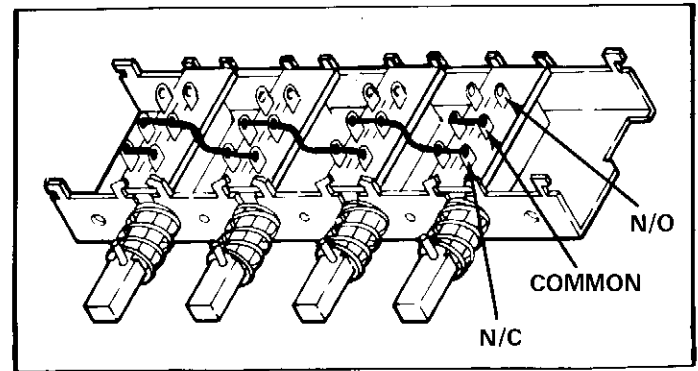


Figure 12. BANK OF FOUR SELECTION SWITCHES.

REPLACEMENT OF DELIVERY BIN:

- a. 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.
- b. Install the four screws and two brackets, to secure bin to door.
7. **COIN RETURN:** The coin return lever (page 10, item 16) located on the door and the coin return linkage (page 16, item 37) 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.
8. **COIN ACCEPTANCE:** A coin or coins (5¢, 10¢ or 25¢ coin) being deposited pass thru the rejector and into their respective coin paths in 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.
9. **CHANGER:** The changer used on the Snackshop 500 is an electronic multi-price unit and is located on the back of the sliding panel. Follow directions of changer manufacturer, furnished with changer, to set prices or when servicing the unit. For service we recommend contacting the manufacturer of the unit. The lower chutes on the changer bracket route the coins from the changer to the cash box or to the coin return cup.
10. **RELAY BOX:** (Refer to page 21). The vend relay box located on the sliding panel to the rear of the changer contains the relay and circuits to interface the changer with the remainder of the vendor. The cover (item 4) of the vend relay box is a snap fit and can easily be removed. All electrical connections from the box are by plugs or quick-disconnects. There are three types of relay boxes used.
 1. The relay box used with a four-price changer has only one relay (item 1). Wires coming from the lower right corner of the relay box attach by means of quick-disconnects to the pricing board.

components

2. The relay box used with a ten-price changer contains one relay (item 6), a resistor and a capacitor (item 11). There are no wires from this relay box to the pricing board. All price wires on a ten-price unit go directly from the changer socket to the pricing board.

3. The relay box used with a multi-price changer has only one relay (item 12). There are no wires from this relay box to the pricing board.

optional equipment

1. VENTILATING BLOWER: Kit No. 750080.)

The ventilating blower 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 blower. Installation instructions are sent with kit.

2. UNIFICATION KITS:

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

3. CHANGERS:

The Snackshop 500 is equipped to handle four (4) price, ten (10) price or multi-price electronic changers. It should be determined when ordering equipment what changer is to be used.

The difference between the four (4) price and ten (10) price changer is in the wiring of the relay box and changer receptacle. These parts can be changed in the field to convert a vendor with a four (4) price changer over to handle a ten (10) price changer or vice versa. A vendor shipped with a multi-price changer can not be converted to handle any other changer.

4. GUM-AND-MINT:

Gum-and-Mint adapters are available as an option with Snackshop 500 Vendors.

5. TEST PLUGS:

For trouble shooting a variety of test plugs have been developed and are available for testing various parts of the

Snackshop 500 to help isolate a problem. The test plugs can be ordered under the part numbers listed below:

- | | | |
|--------|---------------------|--------------------------|
| 750071 | Changer Bypass Plug | 4 price Changer only. |
| 750072 | Changer Bypass Plus | 10 price Changer only. |
| 750073 | Changer Bypass Plug | Multiprice Changer only. |

All of the changer bypass plugs function in the same way. These units are used to isolate a problem between the machine and the changer.

380138 Shelf Bypass Plug for all Snackshop 500 Models.

The shelf bypass plug allows the removal of one or more shelves from the Snackshop 500 and enables the remaining shelves to continue working, it requires one bypass plug for each shelf removed.

750076 Shelf Extension Harness for all Snackshop 500 Models.

The shelf extension harness allows a shelf to be removed and operated outside of the cabinet. The same harness will operate both the five and/or ten selection shelves.

660185 Cabinet Circuit Tester for machines that are wired for either a 4 or 10 price Changer.

660185-1 Cabinet Circuit Tester for machines that are wired for a Multiprice Changer.

The cabinet circuit testers are equipped with ten lights and will test the circuit feeding to the cabinet shelf receptacle for either the five or ten selection shelves. When a five selection shelf is being checked only the top row of lights will light.

NOTE: An instruction sheet describing the proper use of these testers will be sent with each tester.

cleaning

The Snackshop 500 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.

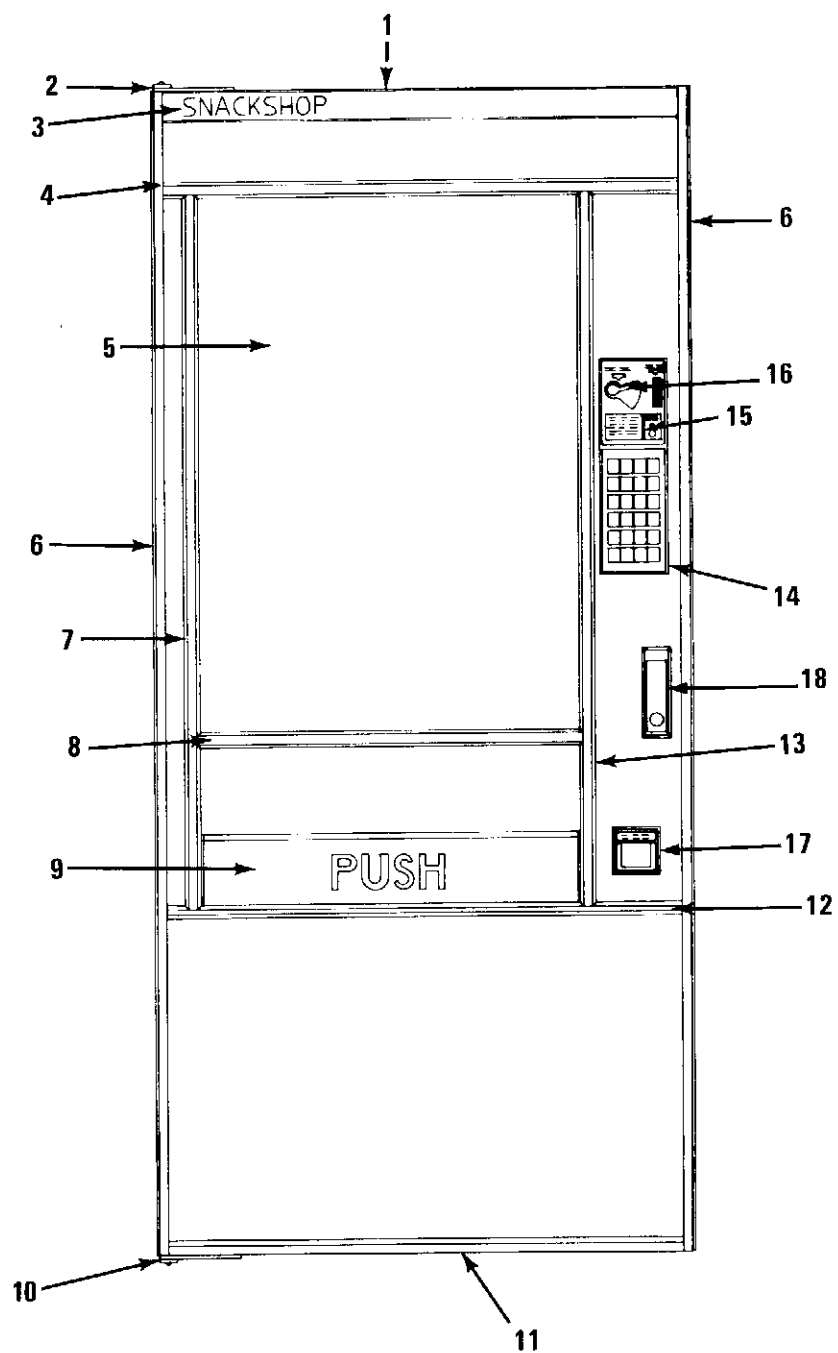
CAUTION:

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 3 for removal of spirals and page 3 for removal of product spacer. 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 be rejected. Follow recommended cleaning procedures as described by the manufacturer.

TROUBLE	CAUSE	REMEDY
MACHINE COMPLETELY INOPERATIVE—LIGHT OUT—C.R.E.M. COILS NOT ENERGIZED.	<ol style="list-style-type: none"> 1. Power cord not plugged in. 2. Building fuse or circuit breaker open. 3. Main power switch off or defective. 	<ol style="list-style-type: none"> 1. Check for plug damage and plug in. 2. Replace fuse or reset breaker. 3. Turn on or replace switch.
MACHINE WILL NOT ACCEPT COINS — LIGHT ON — C.R.E.M. COILS NOT ENERGIZED.	<ol style="list-style-type: none"> 1. Machine circuit breaker tripped or faulty. 2. Plug loose on relay box. 3. Loose connection on Vend Relay. 4. 24 Volt power plug under shelf loose. 5. Defective motor hold switch. 6. Wire off motor hold switch or loose plug. 7. Product motor in half cycle. 8. Gum and Mint motor in half cycle. 9. Defective or open transformer. 10. Defective changer. 	<ol style="list-style-type: none"> 1. Reset or replace. 2. Check both plugs. 3. Check connections and resolder if necessary. 4. Check plug. 5. Replace switch. 6. Replace wire, plug in properly. 7. Defective motor, wire off motor coil, motor binding. 8. Defective motor or motor hold switch. 9. Replace transformer. 10. Replace changer.
MACHINE WILL NOT ACCEPT COINS—LIGHTS ON—C.R.E.M. COILS ENERGIZED.	<ol style="list-style-type: none"> 1. Defective acceptor. 2. Machine not level. 3. C.R.E.M. coils out of adjustment. 4. Vend relay contacts not closing. 	<ol style="list-style-type: none"> 1. Adjust or replace acceptor. 2. Level machine. 3. Adjust or replace. 4. Adjust contact.
MACHINE ACCEPTS COINS—WILL NOT VEND ON ANY ITEM.	<ol style="list-style-type: none"> 1. Wrong price set on changer. 2. Wrong price set at pricing switch. 3. Defective changer. 4. Wire off selector switch. 5. Faulty selector switch. 6. Vend relay contacts not closing. 	<ol style="list-style-type: none"> 1. Set to correct price. 2. Set to correct price. 3. Replace changer. 4. Replace wire. 5. Selection switch not making normally closed contacts. Selection would work to that point but not beyond.
MACHINE ACCEPTS COINS — ONE COLUMN WILL NOT VEND.	<ol style="list-style-type: none"> 1. Wrong price setting at pricing switch. 2. Wrong price set in changer. 3. Defective changer. 4. Defective selection switch. 5. Defective motor hold switch. 6. Motor coil open or loose connection. 7. Loose wire or defective gum and mint empty switch. 	<ol style="list-style-type: none"> 1. Set to correct price. 2. Set to correct price. 3. Replace changer. 4. Check connections or replace switch. 5. Replace switch. 6. Check connections — replace motor. 7. Check connections — replace switch.
JACKPOTTING OF ONE SELECTION — MOTOR CONTINUES TO RUN.	<ol style="list-style-type: none"> 1. Defective motor hold switch. 2. Clutch action on motor failing. 	<ol style="list-style-type: none"> 1. Replace switch. 2. Check for motor bind — correct or replace motor.
GUM-AND-MINT MOTOR CYCLES CONTINUOUSLY.	<ol style="list-style-type: none"> 1. Motor hold switch stuck on. 	<ol style="list-style-type: none"> 1. Replace switch.
PACK OF GUM OR MINTS PICKED UP BY EJECTOR BUT NOT DELIVERED.	<ol style="list-style-type: none"> 1. Defective clutch. 2. Ejector binding. 	<ol style="list-style-type: none"> 1. Replace clutch. 2. Replace ejector or determine cause of bind.



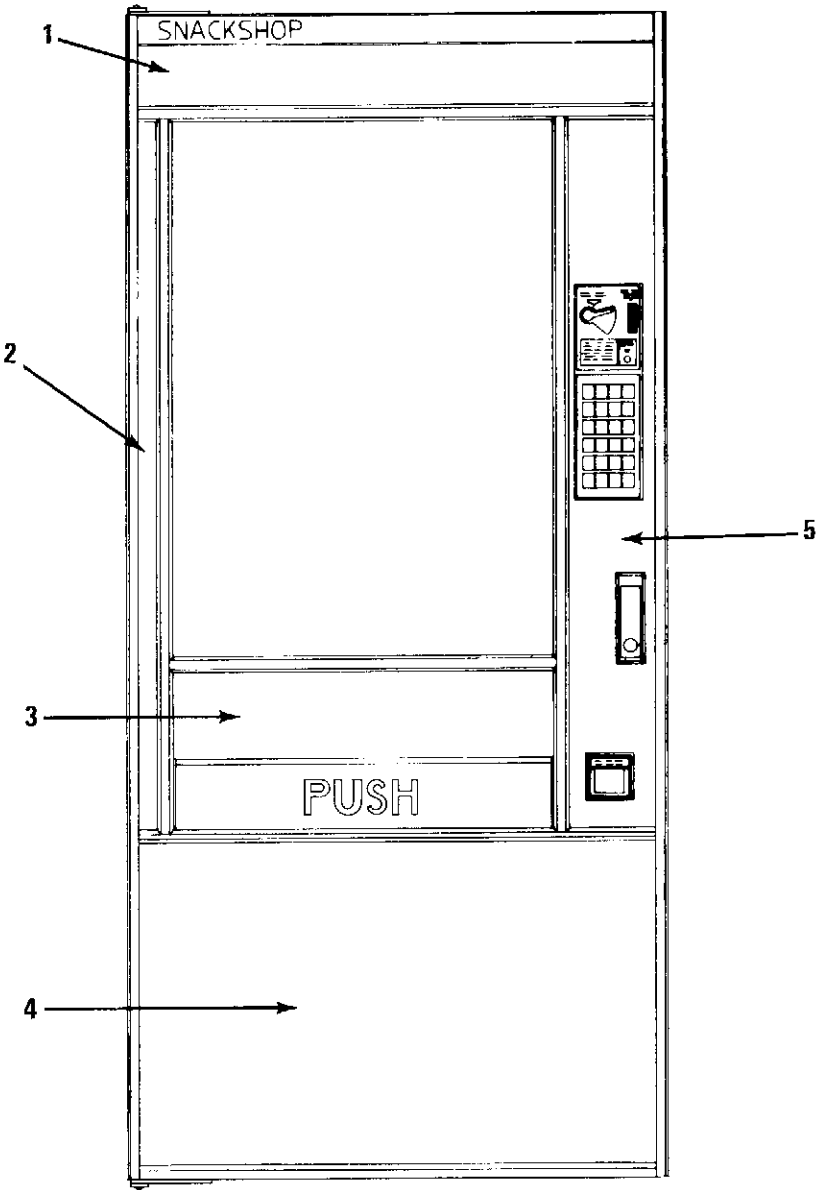
Item No.	Part No.	Description
1	340044-2	Trim, Top.
2	640015-1	Top Hinge Assy.
3	200982	Insert, Top Trim.
4	340054-12	Trim, Top Window.
5	440163	Window Front.
6	340053	Trim, Outside Vertical. (Right & Left).
7	340054-13	Trim, Window Vertical (Left).
8	340054-11	Trim, Bottom Window.
9	660202	Delivery Bin Assy. Complete.
10	740012	Bottom Hinge Assy.
11	340055-4	Trim, Outside Horizontal.

Item No.	Part No.	Description
12	340054-12	Trim, Delivery Tray Bottom.
13	340054-13	Trim, Window Vertical (Right)
14	320051-1	Trim, Button & Instr. Panel (16 Selection)
	320051-2	Trim, Button & Instr. Panel (20 Selection)
	320051-3	Trim, Button & Instr. Panel (24 Selection)
	320051-4	Trim, Button & Instr. Panel (28 Selection)
15	440209	Glass, Instruction. 5-10-25 (Out of Service)
	440208	Glass, Instr. 5-10-25-\$1.00 (Out of Service)
16	320046	Coin Return Lever.
17	320011	Trim Coin Return Cup.
18	640089	Assembly Complete. Lock Handle.
	420071	Lock, W/2 Keys, Specify Number.

DOOR OUTSIDE FRONT—SPECIAL TRIMS

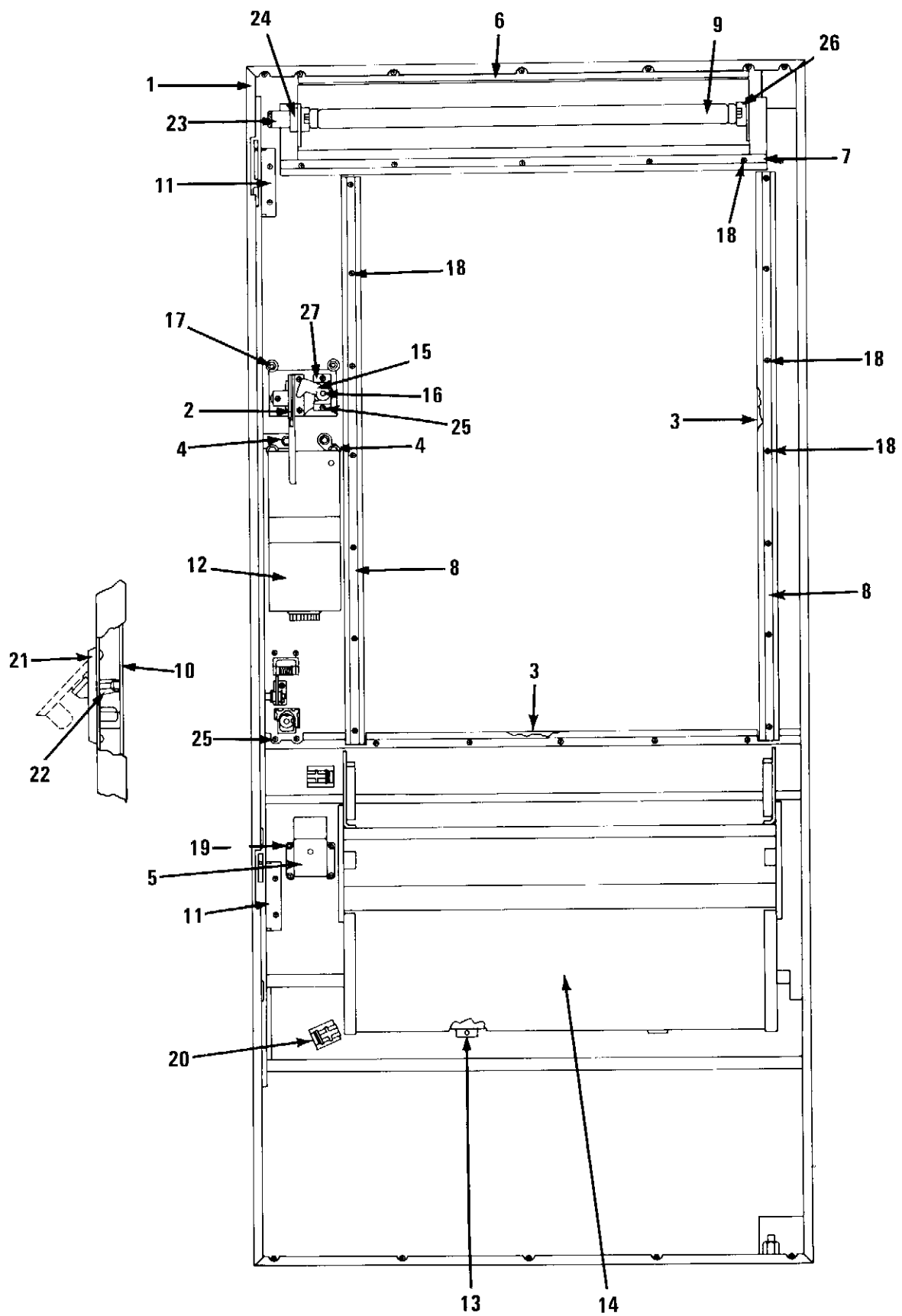
GOLD I STYLING		
1	340055-5	Trim, Top Only. Bronze.
4	340054-16	Window, Top Trim. Bronze.
6	340053-2	Trim, Vertical Outside. Right or Left. Bronze.
7	340054-18	Trim, Vertical Inside. Left. Bronze.
8	340054-17	Window, Bottom Trim. Bronze.
11	340055-5	Trim, Bottom Only. Bronze.
12	340054-16	Trim, Delivery Tray Bottom. Bronze.
13	340054-18	Trim, Vertical Inside Right. Bronze.
FURNITURE II STYLING		
1	660231-5	Trim, Top Only. Bronze.
3	440168-2	Frame, Top Trim.
3A	440169	Frame, Top Inner.
3B	440174	Frame, Top Inner Insert.
3C	660226-2	Panel, Decorative Assy. (Cane)
6	340053-2	Trim, Vertical Outside. Right or Left. Bronze.
7	340054-23	Trim, Vertical Inside Left. Bronze.
8	340054-17	Window, Bottom Trim. Bronze
11	660231-5	Trim, Bottom Only. Bronze
12	660231-5	Trim, Delivery Tray Bottom. Bronze.
13	340054-3	Trim, Vertical Inside Right. Bronze.
	440170-2	Furniture II. Bottom Frame.
	460237	Furniture II, Handle Decal.
	660227	Furniture II, Lower Panel. (Cane)

AWARD STYLE		
1	340042-2	Trim, Top Only.
3	200526-6	Insert, Top Trim.
4	340054-19	Window, Top Trim. Black.
6	340053-1	Trim, Vertical Outside. Right or Left. W/Black Stripe
7	340054-21	Trim, Vertical Inside Left. Black
8	340054-20	Window, Bottom Trim. Black.
12	340054-19	Trim, Delivery Tray Bottom. Black
13	340054-21	Trim, Vertical Inside Right. Black.
VENDURA STYLE		
1	340040-2	Trim Top Only.
4	340054-12	Window, Top Trim.
6	340053	Trim, Vertical Outside. Right or Left.
7	340054-13	Trim, Vertical Inside Left.
8	340054-11	Window, Bottom Trim.
12	340054-12	Trim, Delivery Tray
13	340054-13	Trim, Vertical Inside Right.
IMPERIAL STYLING		
1	660231-4	Trim, Top Only. W/Black Stripe.
3	440159	Frame, Plastic.
3A	440154	Frame, Plastic Insert.
3B	200976-7	Panel, Decorative Vinyl. Presidential.
4	660231-16	Window, Top Trim.
6	340053	Trim, Vertical Outside. Right or Left.
7	340054-15	Trim, Vertical Inside. Left.
8	340054-11	Window, Bottom Trim.
11	660231-4	Trim, Bottom Only. W/Black Stripe.
12	660231-4	Trim, Delivery Tray Bottom. W/Black Stripe.
13	340054-14	Trim, Vertical Inside Right.



Item No.	Part No.	Description
1	200976	PANEL TOP
		Painted, Specify Color.
	200976-1	Vinyl. Presidential Walnut.
	200976-2	Vinyl. Teak
	200976-3	Vinyl. Regency Walnut.
	200976-4	Vinyl. Kashmir Walnut.
	200976-5	Vinyl. Imperial Rosewood.
2	200976-6	Vinyl. Spanish Oak.
		PANEL VINYL, LEFT SIDE VERTICAL
	200792-7	Presidential Walnut.
	200792-8	Imperial Rosewood.
	200792-9	Teak.
	200792-10	Regency Walnut.
	200792-11	Kashmir Walnut.
3	200792-12	Painted, Specify Color.
	660216-5	Burlap.
	200792-14	Spanish Oak.
		PANEL VINYL, DELIVERY TRAY
	200793-8	Presidential Walnut.
	200793-9	Imperial Rosewood.
	200793-10	Teak.
4	200793-11	Regency Walnut.
	200793-12	Kashmir Walnut.
	200793-13	Painted, Specify Color.
	200793-14	Spanish Oak.
		LOWER HORIZONTAL USED W/LOWER TRIM.
	200296-27	Presidential Walnut

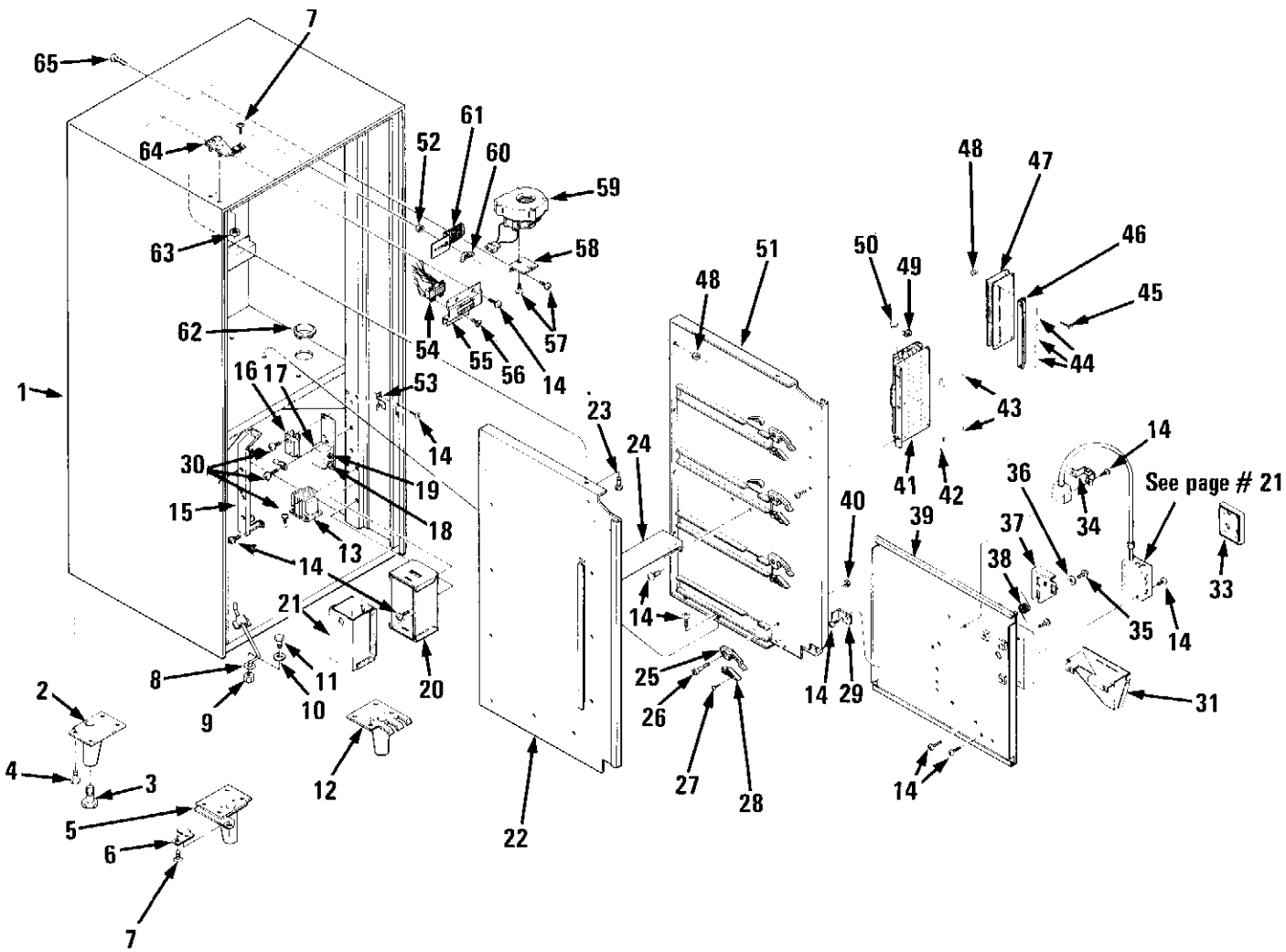
Item No.	Part No.	Description
	200296-28	Imperial Rosewood.
	200296-29	Teak.
	200296-30	Regency Walnut.
	200296-31	Kashmir Walnut.
	200296-32	Painted, Specify Color.
	200296-33	Spanish Oak.
		PANEL, LOWER HORIZONTAL USED W/O LOWER TRIM.
	200720-13	Painted, Specify Color.
	200720-14	Presidential Walnut.
	200720-15	Imperial Rosewood.
	200720-16	Teak.
	200720-17	Regency Walnut.
	200720-18	Kashmir Walnut.
5	200720-19	Spanish Oak.
		RIGHT SIDE VERTICAL
	200958	Presidential Walnut.
	200958-1	Imperial Rosewood.
	200958-2	Teak.
	200958-3	Regency Walnut.
	200958-4	Kashmir Walnut.
	200958-5	Painted, Specify Color.
	660217-7	Burlap.
	200958-7	Spanish Oak.



Item No.	Part No.	Description
1	600276	Door only. Specify Color.
2	600279	Coin Chute.
3	460150	Insulation Rubber. Order number of inches needed.
4	750015-1	Lamp, Correct Change.
	200255	Bracket, Lamp Mounting.
	200255-1	Bracket, Lamp Mounting. (Out of Service)
5	660008-4	Cup, Coin Return.
6	200059-3	Clamp, Upper.
7	660173-1	Complete Assy. Brkt & Harness.
	600241-1	Top Lamp & Window Bracket.
8	200951	Clamp, Display Window.
9	380022-5	Lamp Fluorescent, F18-T8, K-24.
10	600271	Assembly, Door Latch Bar.
11	200973	Bracket, Locking Bar Support.
12	660200-1	Main Switch Bracket & Harness. Model 516.
	660200-1	Main Switch Bracket & Harness. Model 520.
	660200-2	Main Switch Bracket & Harness. Model 524.
	660200-3	Main Switch Bracket & Harness. Model 528.

See
page 22
for
item-
ized
parts

Item No.	Part No.	Description
13	276-8R6	Screw, Pan Head Self Tap. 8-32 X 3/8".
14	660202	Delivery Bin. Assembly complete— see page 20 for itemized parts.
15	440175	Coin Return Extension Arm.
	400067	Spring, Coin Return Lever.
16	116-8-6	Screw, Pan Head Machine. 8-32 X 3/8".
17	420011	Palnut.
18	200-6R6	Screw, Trim Round Head Phillips. 6 X 3/8".
19	420014	Nut, Push.
20	420096	Adhesive Backed Cable Guide.
21	640089	Assembly Complete, Lock Handle.
22	200654	Cam, Lock Handle.
	420010-7	Washer, Brass.
	420070	Roller.
23	380023	Starter FS-25.
24	380080	Socket, Starter.
25	335-8R6	Screw, Pan Hd. Phillips. Taptite No. 8-32 x 3/8.
26	680138	Lamp Harness, Assembly Complete. Not Shown.
27	200795	Coin Extension Arm & Spring Mtg. Brkt.



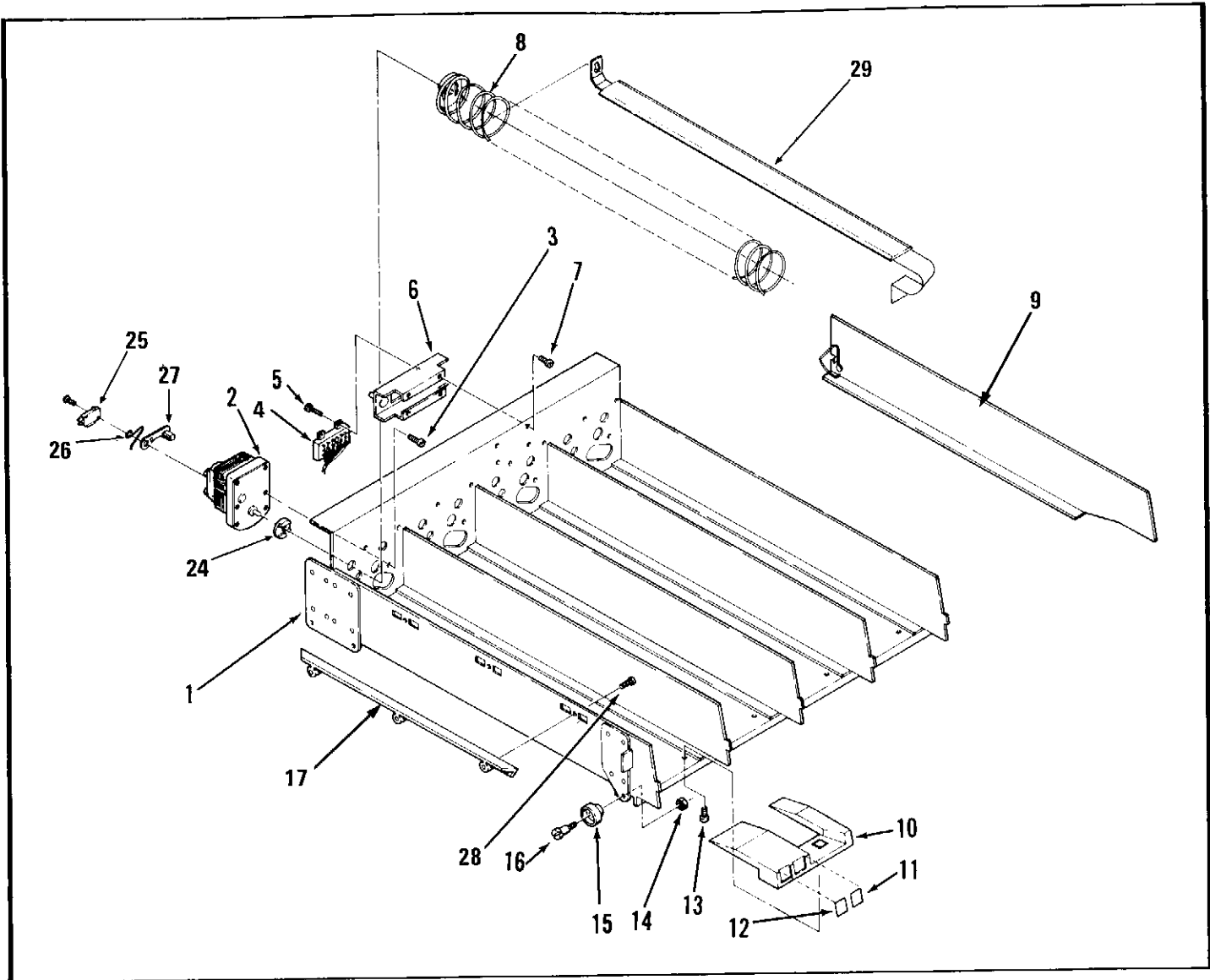
Item No.	Part No.	Description
1	750066-1	Assy. Cabinet w/Legs. Specify Color.
2	600195	Leg Assy. Rear.
3	300103	Leg Leveler.
4	114-51-12	Screw, Hex. Hd. 5/16-18 x 3/4.
5	600196	Leg, Front. Hinge Side.
6	640012	Lower Pivot Assy.
7	420003	Flat Head Screw (1/4-20 x 3/4) Allen.
8	400090	Door Stop
9	300151	Nut, Special. Door Stop Anchor.
10	420010-10	Washer.
11	114-41-8	Screw, Hex. Hd. Machine (1/4-20 x 1/2).
12	600197	Leg, Front. Lock Side.
13	750116	Transformer, 24 Volt.
14	276-8R6	Screw, Pan Hd. Self-Tap Phillips (8-32 x 3/8).
15	600281	Extension, Coin Chute.
16	680074	Ballast.
17	200852	Bracket, Circuit Breaker & Switch Mounting.
18	380101-1	Circuit Breaker.
19	380126	Toggle Switch.
20	200674-1	Bracket, Cash Box Mounting.
21	600179	Cash Box.
22	660197	Assy. Complete Left Side Panel.
	600274	Left Side Panel Only.
23	277-10R8	Screw, Pan Hd. Phillips (10-32 x 1/2).
24	200830-1	Spacer, Right & Left Side Panel.
25	440161	Shelf Lock.
26	300137	Screw, Shelf Roller.
27	276-8R12	Screw, Pan Hd. Phillips (8-32 x 3/4)
28	440130	Front Roller Guide.
29	200968	Bracket, Panel Stop.
30	276-8R6B	Screw, Pan Hd. #23 Sem Phillips (8-32 x 3/8).
31	600282	Chute, Coin acceptance & Return.
33	200841	Relay Box Cover.
34	200867	Plug Mounting Bracket.
35	116-8R6	Screw, Pan Hd. Phillips Machine (8-32 x 3/8).
36	420010-9	Washer.
37	200959	Slide, Coin Return.
38	400091	Spring, Coin Return Slide.
39	600283	Panel, Sliding.

Item No.	Part No.	Description
40	437-41	Nut, Keps (1/4 x 28).
41	660208	Pricing Panel (Multiprice) 528.
	660208-1	Pricing Panel (Multiprice) 524.
	660208-2	Pricing Panel (Multiprice) 520.
	660208-3	Pricing Panel (Multiprice) 516.
42	460215	Label Selection Letters 528. (Multiprice)
	460216	Label Selection Letters 524. (Multiprice)
	460217	Label Selection Letters 520. (Multiprice)
	460218	Label Selection Letters 516. (Multiprice)
43	460219	Price Setting Labels. 5-80.
44		Selection Letter Labels (4 pr. & 10 pr.).
	460220	A to J
	460227	K to U
	460228	K to P
	460229	V to CC
	460230	U to Y
45	100-8-22	Screw, Rd. Hd. Mach. (8-32 x 1-3/8).
46	200985	Pricing Panel Hanger.
47	660209	Price Panel Assy. (4 price & 10 price). 516
	660209-1	Price Panel Assy. (4 price & 10 price). 520
	660209-2	Price Panel Assy. (4 price & 10 price). 524
	660209-3	Price Panel Assy. (4 price & 10 Price). 528
48	404-8	Nut. #8.
49	380143	Switch.
50	380144	Diode.
51	660198	Assy. Complete. Right Side Panel.
	600275	Right Side Panel Only.
52	406-8	Nut, Hex. (8-32).
53	200974-1	Catch, Door Lock.
54	380099	Main Product Shelf Receptical.
55	200835	Receptical Mounting Bracket.
56	420089	Screw, 100 Flat Head (6-32 x 3/8).
57	277-10R6	Screw, Pan Hd. Phillips.
58	201021	Blower, Support.
59	750080	Kit, Blower. Complete Assy.
	680217	Blower. 115 Volt Only.
60	420023	Wing Nut. (8-32).
61	600305	Blower Screen Assy.
62	420040-7	Plastic Bushing (2").
63	438-41	Nut, Locking (1/4-20).
64	640015-1	Upper Hinge Assy.
65	420006-9	Weld Screw.

product shelves

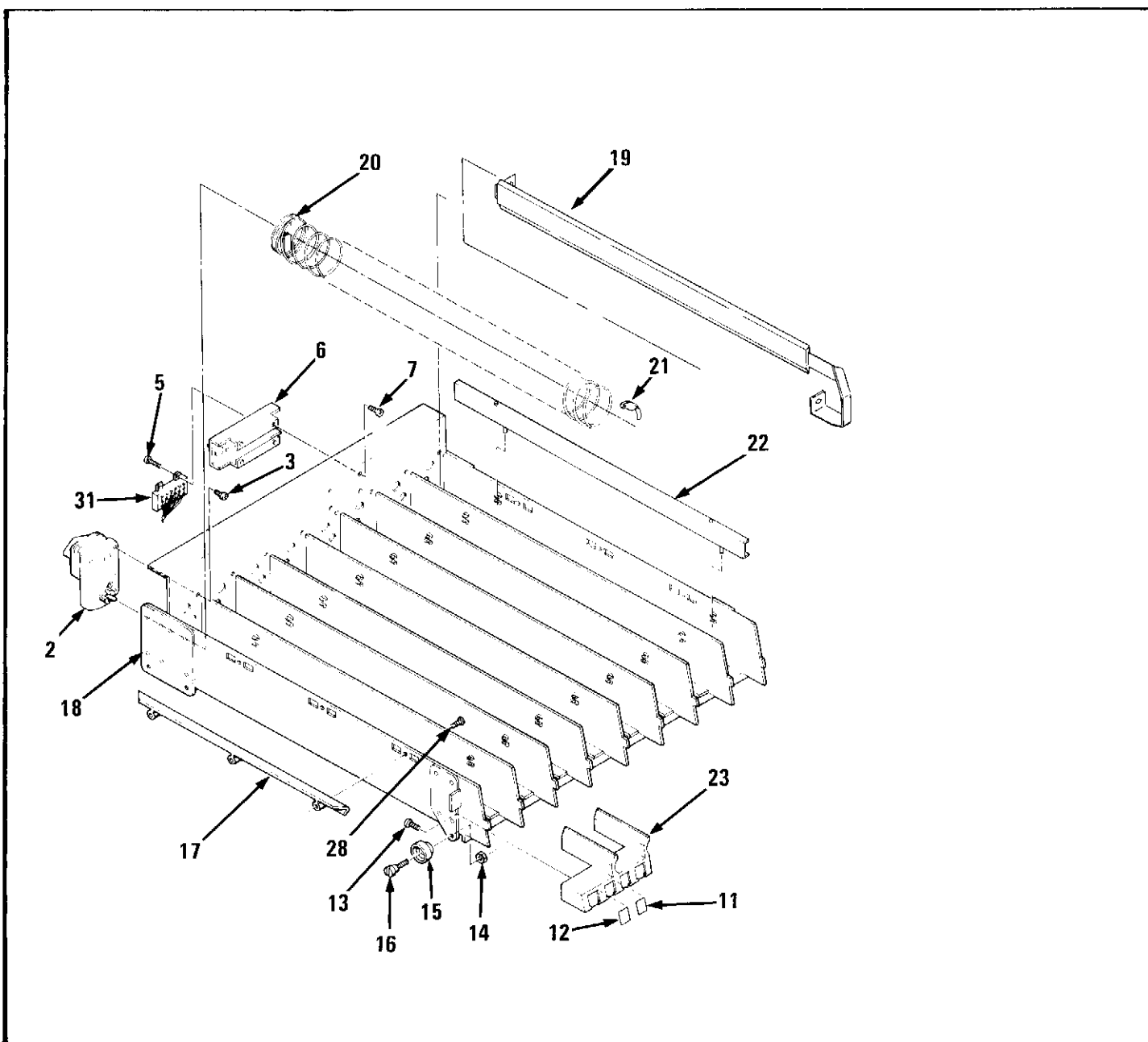
Item No.	Part No.	Description
	750064-2	Snack Shelf Ass'y. Complete W/O Delivery Spirals.
	750064-3	Snack Shelf Ass'y Complete W/O Delivery Spirals. (Multiprice)
	740065-2	Candy Shelf Ass'y Complete W/O Delivery Spirals.
	750065-3	Candy Shelf Ass'y Complete W/O Delivery Spirals. (Multiprice)
1	600267	Snack Shelf.
2	360056	Vend Motor Ass'y. Complete.
3	335-8RG	Screw, Pan Hd. Phillips. Taptite No. 8-32 x 3/8.
4	680175	Assy. 4 Selection Shelf Harness.
	680176	Assy. 4 Selection Shelf Harness. Multiprice.
5	420089	Screw, 100° Flat Hd. No. 3-32 x 3/8.
6	600246	Plug Mounting Bracket.
7	276-8R4	Screw, Pan H. Phillips, Self Tap. 8-32 x 1/4.
		No. 8-32 x 1/4.
8	600264	6 Space Snack Spiral.
	600264-1	8 Space Snack Spiral.
	600264-2	10 Space Snack Spiral.

Item No.	Part No.	Description
9	640101-1	Spacer, Snack Shelf.
10	440128	Price & Selection Tab Holder.
11	460155	Price Tabs. 5¢ - 1.50.
	460155-1	Price Tabs. Sheet of 100. 20¢ & 25¢.
	460155-2	Price Tabs. Sheet of 100. 30¢ & 35¢.
	460155-3	Price Tabs. Sheet of 100. 40¢ & 45¢.
	460155-4	Price Tabs. Sheet of 100. 50¢ & 55¢.
	460155-5	Price Tabs. Sheet of 100. 60¢ & 65¢.
	460155-6	Price Tabs. Sheet of 100. 70¢ & 75¢.
	460155-7	Price Tabs. Sheet of 100. 80¢ & 85¢.
	460155-8	Price Tabs. Sheet of 100. 90¢ & 95¢.
	460155-9	Price Tabs. Sheet of 100. \$1.00 & \$1.05.
	460155-10	Price Tabs. Sheet of 100. \$1.10 & \$1.15.
	460155-11	Price Tabs. Sheet of 100. \$1.20 & \$1.25.
12	460154	Item Tabs. A-JJ.
13	305-8R6	Screw, Pan Hd. Phillips. Plastite. No. 8-16 x 3/8.



Item No.	Part No.	Description
14	437-41	Nut, Keps. 1/4-28.
15	440123	Roller, Shelf.
16	300137	Screw, Shelf Roller.
17	440162	Shelf Guide.
18	600268	Candy Shelf.
19	660296-1	Product Guide. For use w/Thin Mints.
20	600265	20 Space Candy Spiral.
	600265-1	16 Space Candy Spiral.
	600265-2	12 Space Candy Spiral.
	600265-3	10 Space Candy Spiral.
	600265-4	8 Space Candy Spiral.

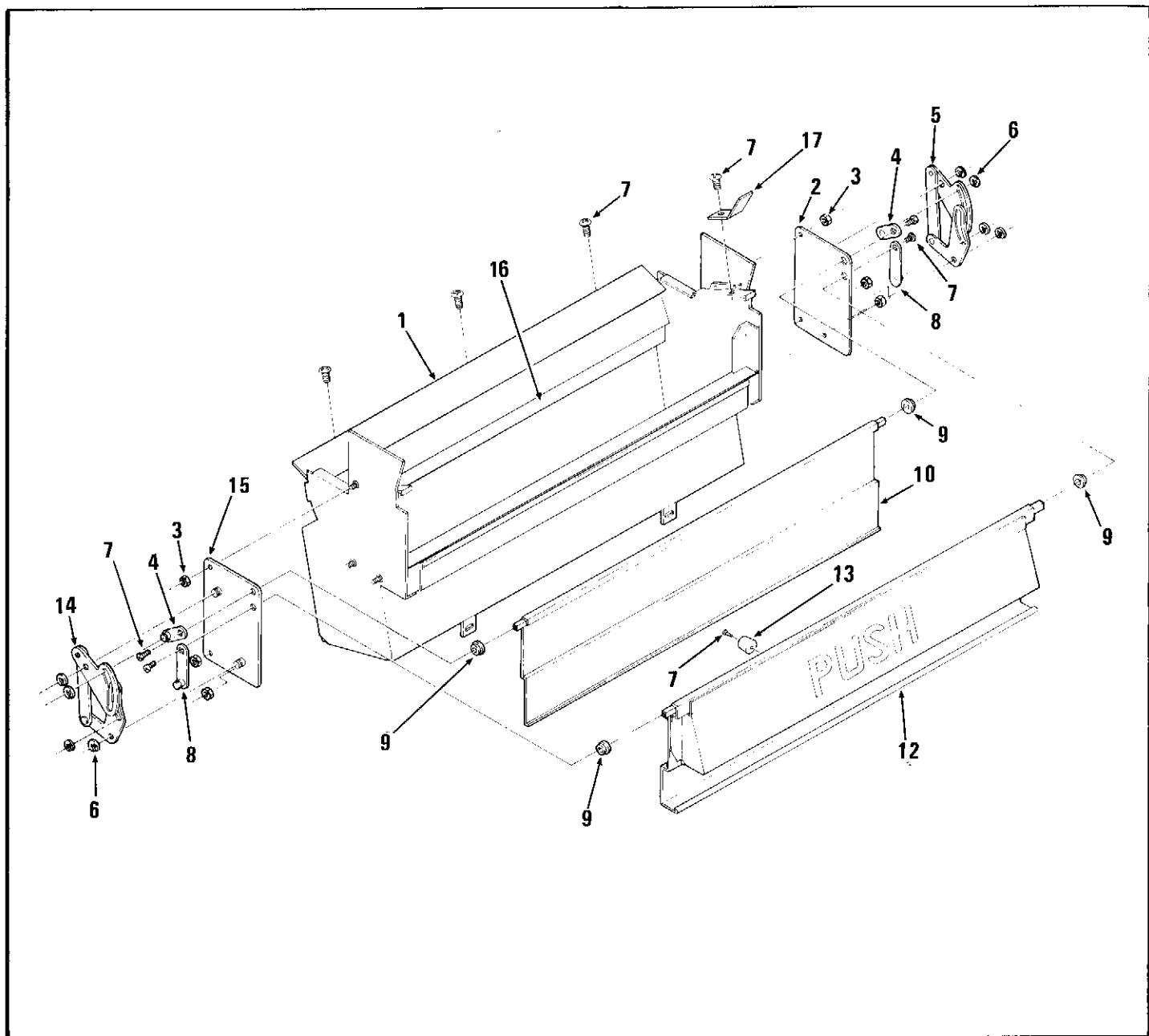
Item No.	Part No.	Description
21	440141	Candy Product Pusher.
22	660178-2	Candy Spacer Ass'y.
23	440127	Price & Selection Tab Holder.
24	440125	Spiral Retainer, Only
25	380160	Switch Only.
26	400072	Spring.
27	320050	Brake, Die Cast.
28	420092	Screw, Drive #8-Type LL.
29	660191-2	Product Rail Ass'y. For use w/Candy Spiral.
	660191-3	Product Rail Ass'y. For use w/Snack Spiral.
30	600299	Spiral Guide, Gum and Mint.
31	680177	Ass'y. 8 Selection Shelf Harness.
	680178	Ass'y. 8 Selection Shelf Harness. Multi Price.



delivery bin

Item No.	Part No.	Description
1	660202	Delivery Bin Ass'y. Complete.
2	600277	Deliver Bin.
3	640099	Arm Mounting Bracket (Lock Side)
4	438-8	Nut, Keps. No. 8-32
5	640098	Inner Door Bin Arm.
6	640100	Bin Door Drive Ass'y. (Lock Side)
7	751-37	Retaining Ring No. 37
8	276-8R6	Screw, Pan Hd. Phillips. Self Tap. No. 8-32 x 3/8.
9	640097	Door Drive Arm.

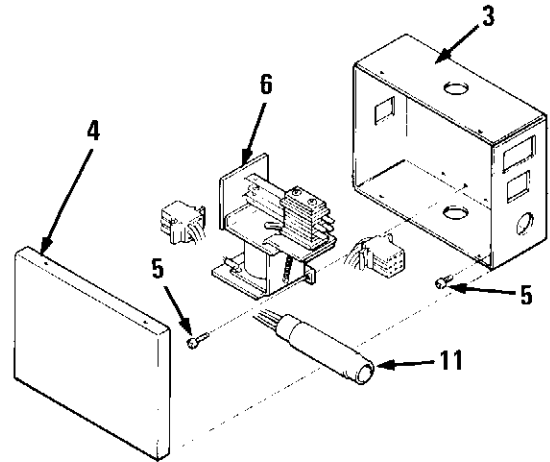
Item No.	Part No.	Description
9	440129	Door Bearing.
10	200763-1	Inner Door.
12	600258-1	Door, Delivery Bin.
13	420029	Rubber Bumper
14	640100-1	Bin Door Drive Ass'y. (Pivot Side)
15	640099-1	Arm Mounting Bracket. (Pivot Side)
16	200902-1	Baffle, Rear Delivery Bin.
17	200906	Delivery Bin Anchor Strap



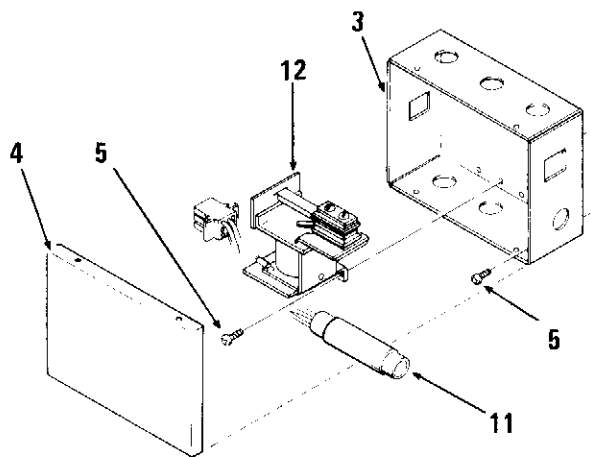
Item No.	Part No.	Description
1	380170-2	Relay (4 Price).
2	420040-2	Bushing.
3	200840	Box — Relay.
4	200841	Cover — Relay Box.
5	276-8R4	Screw, Pan Hd. Phillips Self Tap No. 8-32 x 1/4.
6	380170-1	Relay (10 Price).
11	660189-1	Time Delay Pack.
12	380170	Relay Multiprice

TEN PRICE RELAY BOX ASSEMBLY COMPLETE

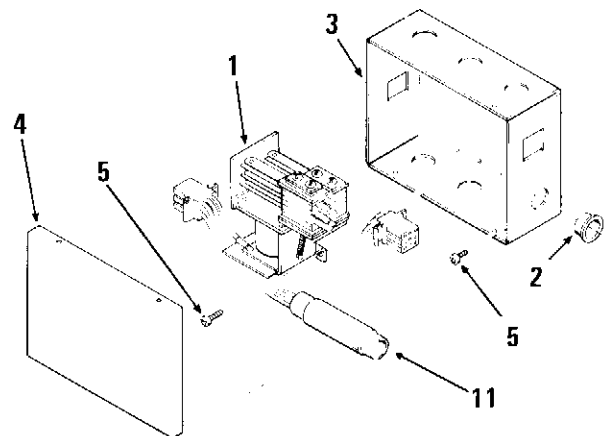
PART NO. 660204-1

**MULTIPRICE RELAY BOX ASSEMBLY COMPLETE**

PART NO. 660204-2

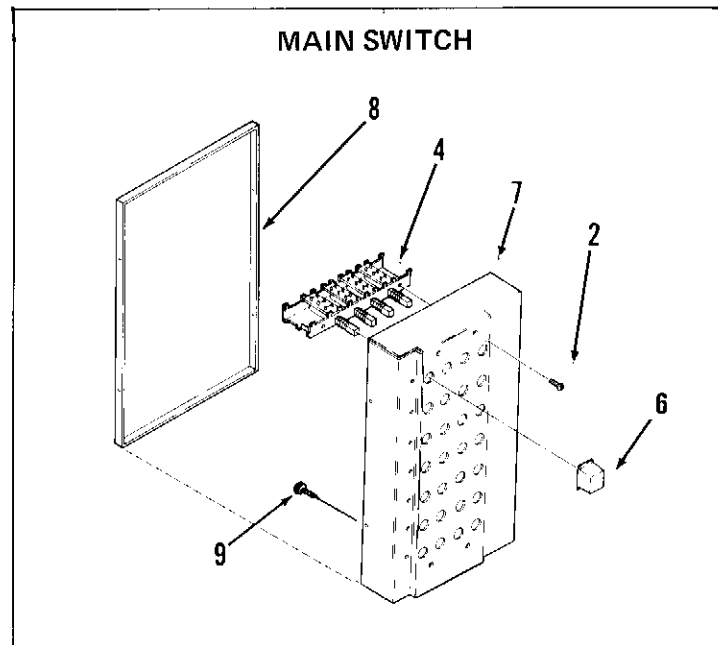
**FOUR PRICE RELAY BOX ASSEMBLY COMPLETE**

PART NO. 660204



selection switches

Item No.	Part No.	Description
	660200	Main Switch Bracket & Harness Assembly Complete for Model 516.
	660200-1	Main Switch Bracket & Harness Assembly Complete for Model 520.
	660200-2	Main Switch Bracket & Harness Assembly Complete for Model 524.
	660200-3	Main Switch Bracket & Harness Assembly Complete for Model 528.
2	100-45	Screw, Round Hd. No. 4-40 x 5/16.
4	750085-2	Switch — Push Button.
6	660176-4	Button Ass'y Set (A-P, 16 Selection.)
	660176-5	Button Ass'y Set (A-U, 20 Selection.)
	660176-6	Button Ass'y Set (A-Y, 24 Selection.)
	660176-7	Button Ass'y Set (A-CC, 28 Selection.)
7	200949	Switch Bracket — Main.
8	200950	Cover — Main Switch Bracket.
9	335-8R6	Screw, Pan Hd. Tap Tite, 8-32 x 3/8.



electrical harnesses

Part No.	Description
680175	4 Selection Shelf Harness.
680176	4 Selection Shelf Harness. (Multiprice)
680177	8 Selection Shelf Harness.
680178	8 Selection Shelf Harness. (Multiprice)

Part No.	Description
680142	Under Shelf Harness.
680158	Under Shelf Harness. (Multiprice)
680187	Cabinet Back Harness.
680188	Cabinet Back Harness. (Multiprice)



CABLE TIE
460044



**MOUNTING TYPE
CABLE TIE**
380078



**ADHESIVE BACKED
CABLE GUIDE**
420097



IN LINE CONNECTOR
380021



**TERMINAL
QUICK DISCONNECT**
3/16" - 380001
1/4" - 380003
5/32" - 380086



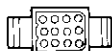
**TERMINAL
MOLEX RECEPTACLE**
LARGE 380004
SMALL 380129



**TERMINAL
MOLEX PLUG**
LARGE 380005
SMALL 380130



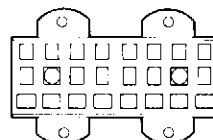
**QUICK DISCONNECT
FOR SWITCHES**
380075



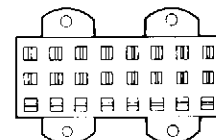
MOLEX PLUG
2 PIN - 380102
3 PIN - 380034
6 PIN - 380106
9 PIN - 380108
12 PIN - 380110
15 PIN - 380112
36 PIN - 380114



MOLEX RECEPTACLE
2 PIN - 380103
3 PIN - 380035
6 PIN - 380107
9 PIN - 380109
12 PIN - 380111
15 PIN - 380113
36 PIN - 380115



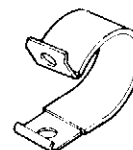
**MAIN PRODUCT SHELF
RECEPTACLE - 380099**



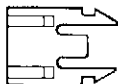
**MAIN PRODUCT SHELF
PLUG - 380098**



**EDGE CONNECTOR
TERMINAL 380139**



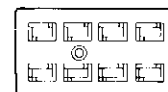
METAL CABLE CLAMP
420088



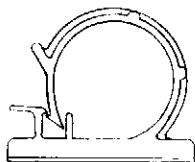
POLARIZING KEY
380140



DUAL EDGE CONNECTOR
18 DUAL POSITIONS 380141-2
8 DUAL POSITIONS 380141-1

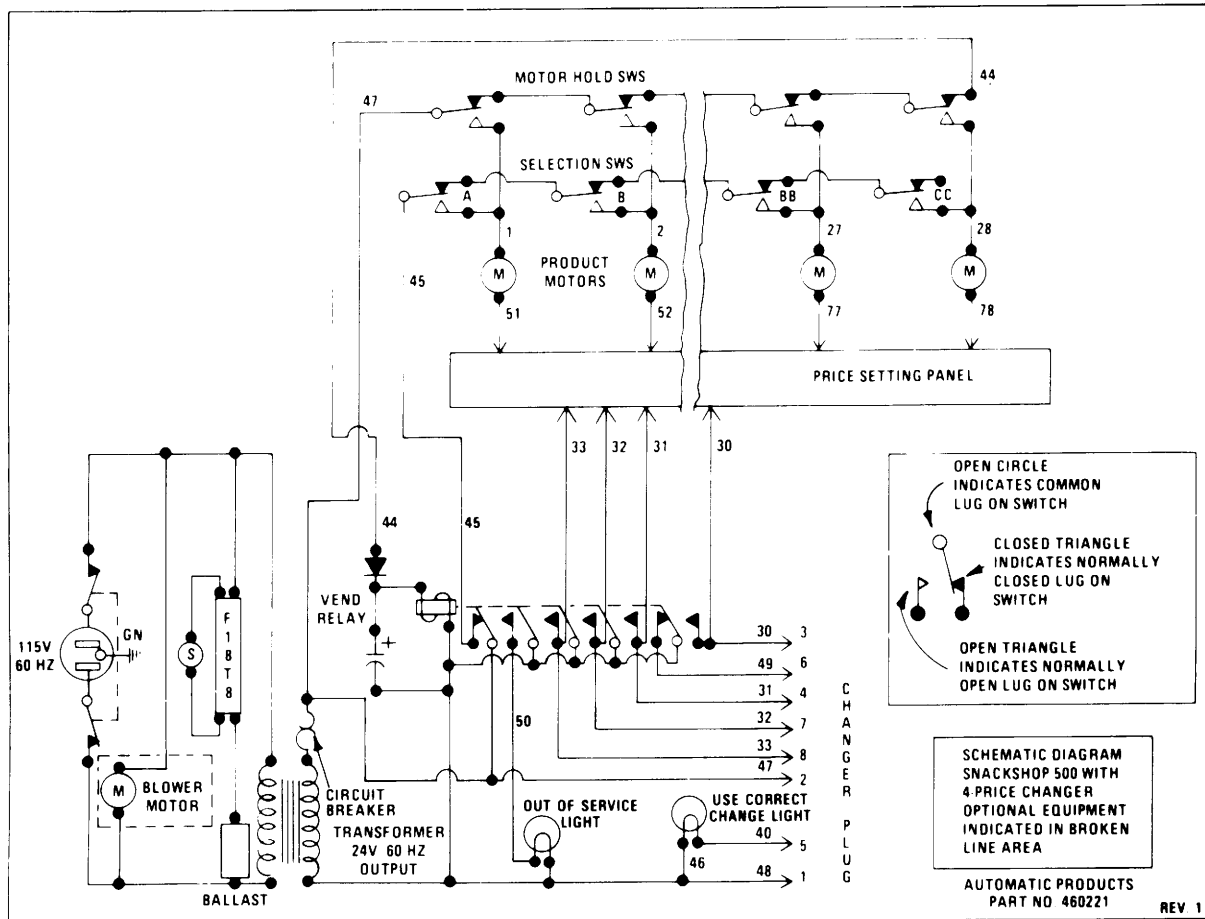


**CHANGER RECEPTACLE
AND COVER**
4/PRICE, 8 PIN - 380121
COVER - 380124
10/PRICE, 18 PIN - 380122
MULTIPRICE, 18 PIN - 380142
COVER - 380125

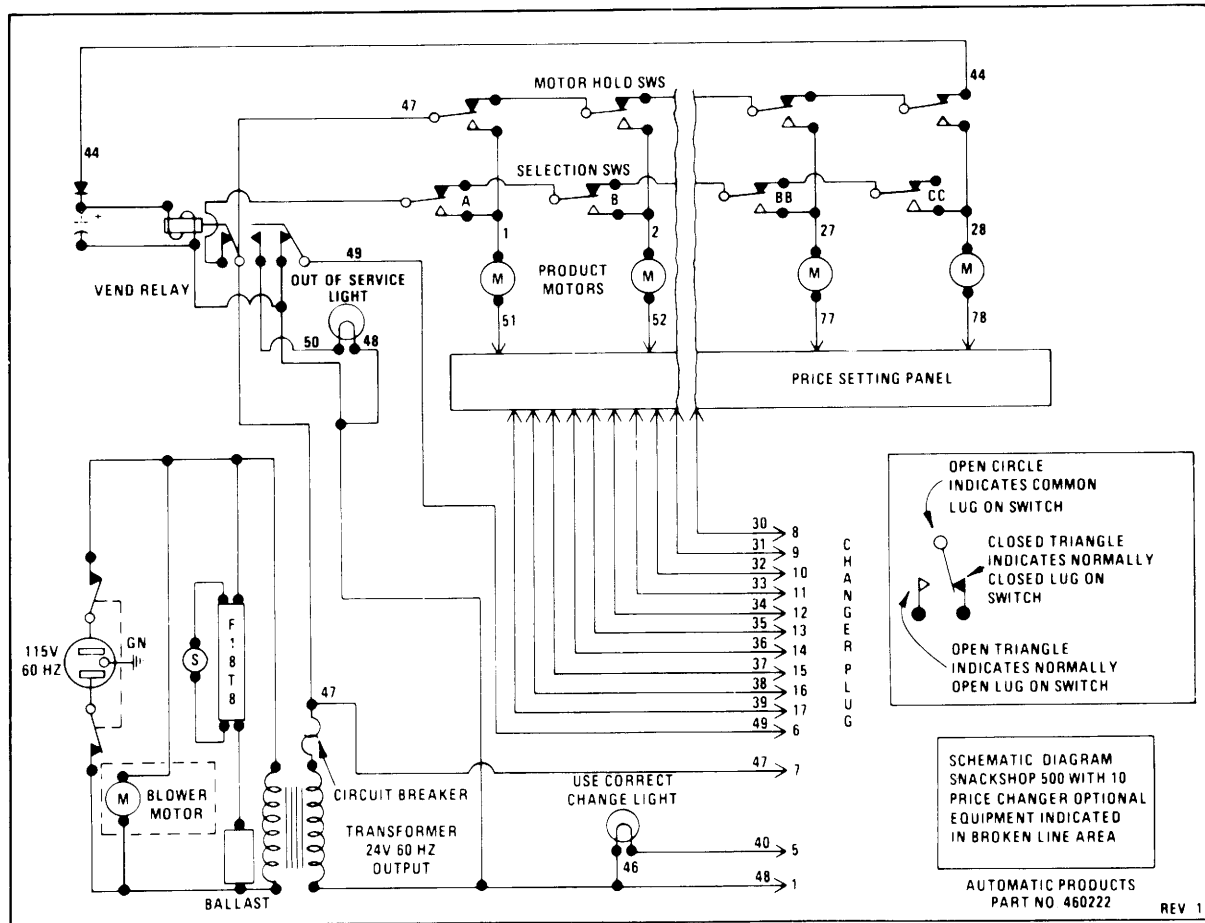


CLAMP
420096

SCHEMATIC - 4 PRICE CHANGER



SCHEMATIC - 10 PRICE CHANGER



SCHEMATIC - MULTIPRICE CHANGER

