

SERIES R-40



Polyvend[®]
INC



TABLE OF CONTENTS

	Page
GENERAL INFORMATION	1
SPECIFICATIONS	1
MACHINE CONFIGURATION	1
WARRANTY	2
INSTALLATION	3-4
SERVICE DOOR ADJUSTMENT	4A
PRODUCT LOADING	5-6
SPECIAL PRODUCT LOADING	7
GUM AND MINT LOADING	8
PRIMARY CABINET COMPONENT INFORMATION	9-10
HELIX TRAY REMOVAL	11
ELECTRICAL SERVICE SECTION (THEORY OF OPERATION)	12-13
ERROR CODES	13
KEYPAD FUNCTIONS	14
DETAILED OPERATION OF CONTROL BOARD	14-23
CLEANING INSTRUCTIONS	24
POLYVEND SHIPPING POLICY	25-26
TROUBLE SHOOTING CHART	27-29
DRAWING AND PARTS LISTS	30-56
CABINET ASSEMBLY	32-34
SERVICE DOOR ASSEMBLY	35-37
DELIVERY COMPARTMENT ASSEMBLY	38
CABINET WIRING ASSEMBLY	39-40
COMPLETE DRAWER ASSEMBLY	41-42
DRAWER ASSEMBLY WIRING DIAGRAM	43-44
PASTRY TRAY ASSEMBLY (5 SELECTION) (REMOVABLE DIVIDERS)	45-46
TRAY ASSEMBLY (10 SELECTION) (REMOVABLE DIVIDERS)	47
POWER BOX ASSEMBLY	48-49
POWER BOX SCHEMATIC	50
POWER BOX WIRING LAYOUT	51
HELIX ASSEMBLY	52
LAMP ASSEMBLY	53
GUM AND MINT ASSEMBLY (NEW STYLE)	54-55
MACHINE SCHEMATIC	56

POLYVEND INC. GLASS FRONT SERVICE MANUAL SERIES R-40 INTERNATIONAL

GENERAL

This automatic helix merchandiser has independent dispensing units, with each helix activated by a letter and number push buttons. The dispensing assemblies are installed on a plug-in, twist and lock basis from the front of the machine. This design provides easy access to displaying units on location. The dispensing units are supplied with helixes of various configurations that are available.

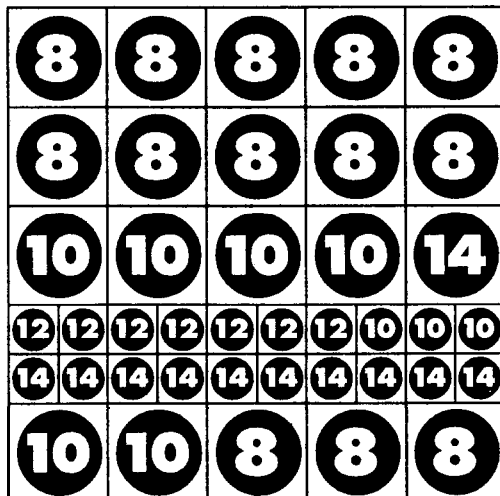
SPECIFICATIONS

HEIGHT 72"
 WIDTH 37"
 DEPTH 28 1/2"
 SHIPPING WEIGHT Approx. 625 lbs.

ELECTRICAL

PRIMARY VOLTAGE 110 VAC
 SECONDARY VOLTAGE 24 VAC
 MAX. CURRENT 3 AMP
 VOLTAGE TO CHANGER 24V
 VOLTAGE TO BILL VALIDATOR 24V

STANDARD CONFIGURATION



Capacity 432

Product Size Capability

	COUNT	PRODUCT THICKNESS
Snack Helix	14	1"
	10	1 1/2"
	8	1 7/8"
Candy Helix	14	1"
	12	1 1/4"
	10	1 1/2"

**Subject to change without notice.



WARRANTY LIMITED

Polyvend Inc. warrants this equipment to the ORIGINAL PURCHASER only, for a period of one (1) year from the date of shipment, to be free from significant defects in material and workmanship, three (3) years on electronic components and five (5) years on vending motors to the extent such parts are warranted to Polyvend Inc., except for filter cartridges, starters, light bulbs and fuses, which will be warranted for two months from date of shipment.

Should any part prove defective within the warranted period, Polyvend, Inc., will repair or replace (at its option) the defective component, but will not provide the labor, removal or reinstallation cost associated with such parts. All returned products or parts must be shipped freight prepaid to Polyvend and Polyvend will then prepay the shipping cost of the returned goods. Polyvend Inc. reserves the right to refuse any collect shipment. Any part returned under the terms of this warranty should be accompanied with a brief description of the defect or failure along with the model number and serial number.

The warranty applies only if the equipment is serviced and maintained in strict accordance with the instruction given in the Polyvend Service Manual that no unauthorized repair or disassembly has been done. Any defect caused by improper source of power supplied, abuse of the product, accident, alteration, vandalism, mineral build-up or improper cleaning or service technique will not be covered by warranty.

Polyvend service or repair to items not in warranty will be subject to the standard service charge for repair of the failed components. For warranty or service information call or write to Polyvend Service Department.

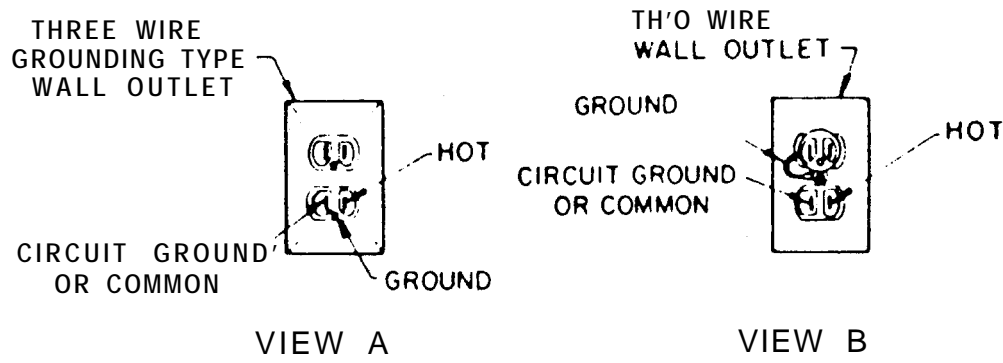
INSTALLATION

- Remove all external packing material.
- Inspect equipment for shipping damage, if evident file claim immediately with the carrier (See shipping procedures).
- Remove keys from product dispensing compartment (in small manila envelope), unlock the service door and remove the shipping cardboard.
- Save extra fuses, etc. found in envelope as spare parts.
- Check the operation of the service door and locking mechanism. They should operate smoothly and latch at all three locking plates.
- If optional Gum & Mint installed, remove the plastic ties covering the latch release on each side of the Gum and Mint tray.
- Place machine into position and adjust leveling legs so the machine is level and all the legs sit firmly on the floor.
- Plug service cord into 110VAC source using the three prong grounded plug provided. If a grounded outlet is not available, use a proper external ground on all locations.

NOTE: In order to comply with electrical safety regulations and Underwriters Laboratories requirements, all electrical equipment must be properly polarized and grounded. The Polyvend machine 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 vending machine will connect properly.

Shown in views A and B are two properly grounded and polarized wall outlets. One is a three wire grounded type wall outlet (See View A) and the other is a two wire wall outlet (See View B) with an adapter in place.

Should the polarity at the wall outlet appear any way other than that shown below, the outlet should be rewired by qualified personnel.



CAUTION: DISCONNECT POWER TO THE VENDING MACHINE BEFORE REMOVING THE CONTROL BOARD OR COIN CHANGER OR WORKING ON ANY COMPONENTS IN THE MACHINE.

Check to ensure that the power present 24VAC indicator light is illuminated on the right hand side of the control board located in the sliding drawer.

Test the coin mechanism to insure smooth operation. If the operation is not smooth, check to make sure that you have proper alignment of the changer with the coin return lever.

Load the coin tubes on the coin changer located in the pull out sliding drawer. It is very important to fill the 25c 10c and 5c tubes for proper changer payback. Note: The maximum amount of change a Coinco 9302LF changer will hold is \$38.60; \$22.50 in quarters, \$12.00 in dimes and \$3.40 in nickels. The maximum amount of change that a Mars TRC-601 OXV will hold is \$29.95; \$16.75 in quarters, \$9.80 in dimes and \$3.40 in nickels.

Operate each dispenser, using coins. Operation should be smooth.

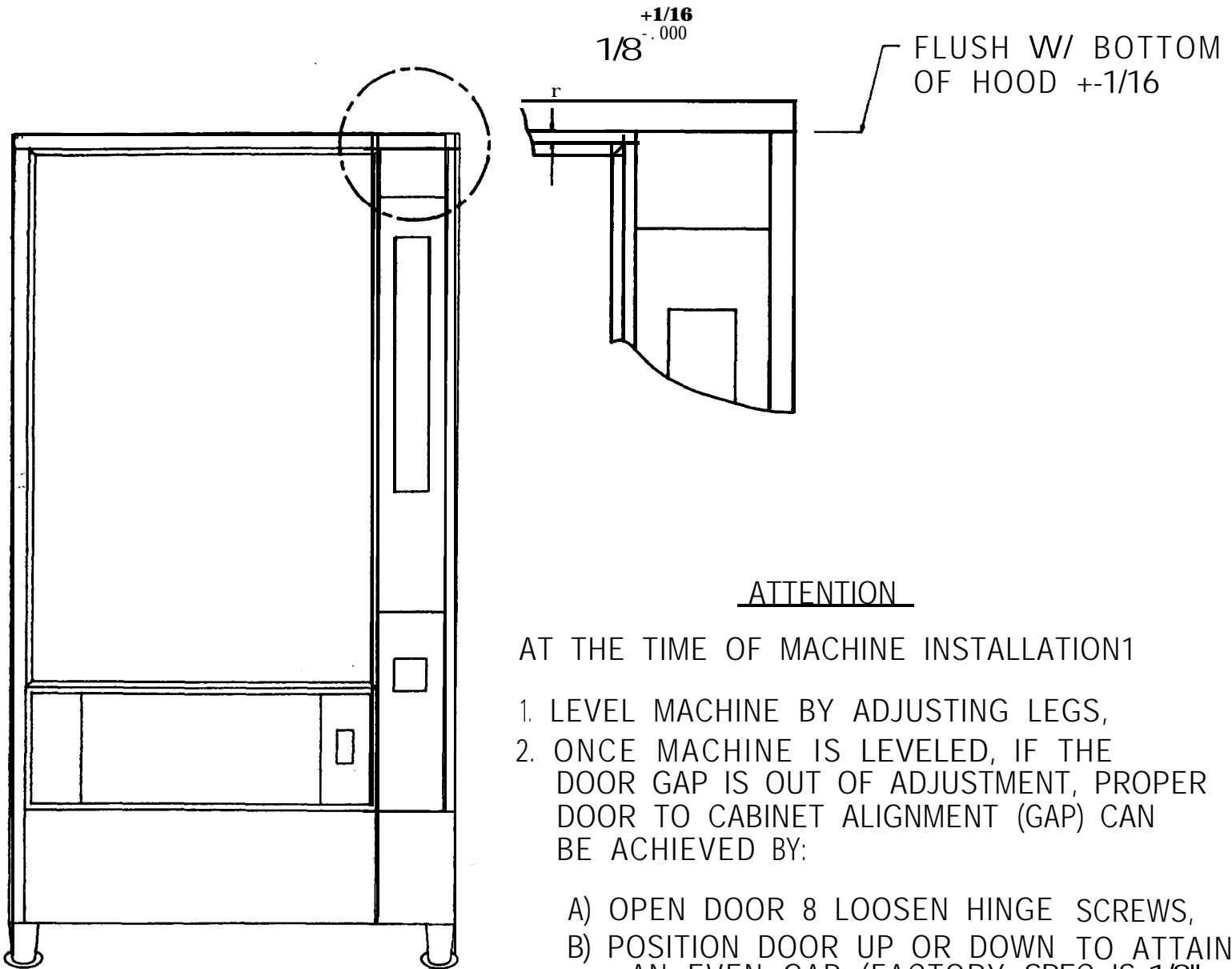
Load the machine with product (See section on product loading).

Place the price stickers on the trays to the right of the selection stickers. Set the prices of the products. (See price setting)

Check to make sure that the Vend Options; i.e. forced vend, max. change and bill escrow (if a feature of the bill validator installed); are at the desired setting (See vend options).



SERVICE DOOR ADJUSTMENT SPEC.



ATTENTION

AT THE TIME OF MACHINE INSTALLATION1

1. LEVEL MACHINE BY ADJUSTING LEGS,
2. ONCE MACHINE IS LEVELED, IF THE DOOR GAP IS OUT OF ADJUSTMENT, PROPER DOOR TO CABINET ALIGNMENT (GAP) CAN BE ACHIEVED BY:
 - A) OPEN DOOR & LOOSEN HINGE SCREWS,
 - B) POSITION DOOR UP OR DOWN TO ATTAIN AN EVEN GAP (FACTORY SPEC. IS 1/8" FROM BOTTOM OF HOOD ON CABINET TO TOP OF DOOR,)
 - C) RE-TIGHTEN SCREWS IN TOP, MIDDLE & BOTTOM SEQUENCE,

PRODUCT LOADING

HELIX TRAY DISPENSER

There are several helix pitches (openings) available with Polyvend equipment. To insure proper operation and maximum capacity, the product size should closely match the opening between the windings of the helix. The product should fit between the windings of the helix so as not to be tight, but should fill most of the opening. If you can lift up on the product in the helix and the helix lifts up with the product, it is too tight and a larger opening needs to be used.

The helix sizes available are listed below

Candy Helix

14 count
12 count
10 count

Product Thickness

1" - thin product
1 1/4" - medium product
1 1/2" - large product

Snack/Pastry - Large Helix

14 count
10 count
a count
6 count

Product Thickness

1" - thin product
1 1/2" - medium product
1 7/8" - standard chip bag
2 1/2" - jumbo bag product

Snack/Pastry - Dual Helix

14 count
10 count
a count

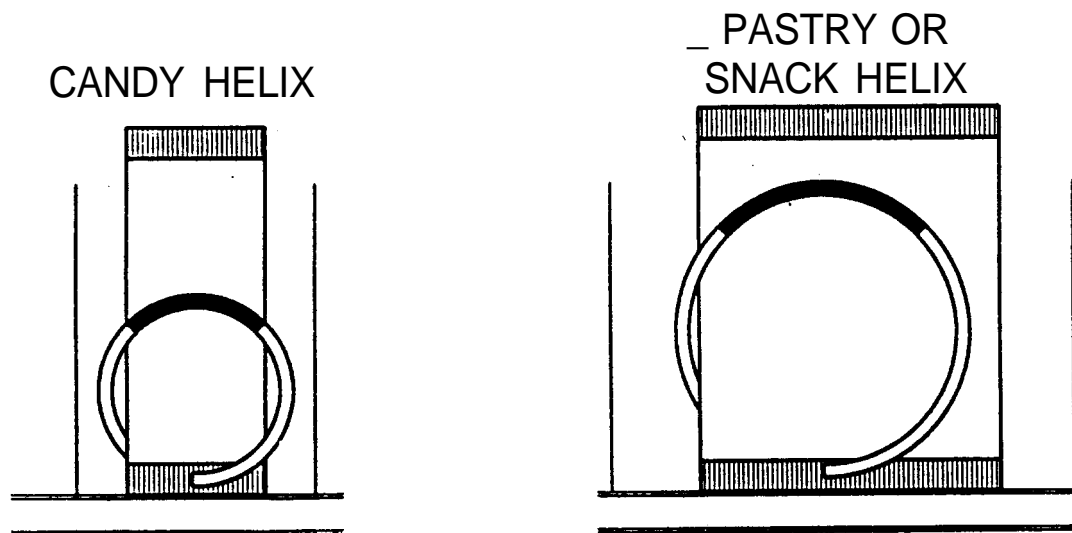
Product Thickness

7/8" - thin product
1 1/4" - medium product
1 5/8" - large product

PRODUCT LOADING

To load a tray, lift up on the tray front. Pulling the tray front up and out, pull the tray out until it comes to the tray stop, then let it tilt down into the loading position.

At this point, check that each helix is in its proper position. The figure below shows the proper position.



Starting at the front of the tray, insert a product between each winding of the helix so that the name of the product is displayed forward. Be sure to place the product all the way to the bottom of the tray and tilt free end at the top backwards. Fill from front to back and be sure not to miss any positions. Note: Product must rest on tray NOT on helix. Afterfilling the tray, lift the front of the tray, push it back in until the latch is engaged. Check that the latch is fully engaged by pulling forward on the tray and ensuring that the tray does not advance beyond the latch.

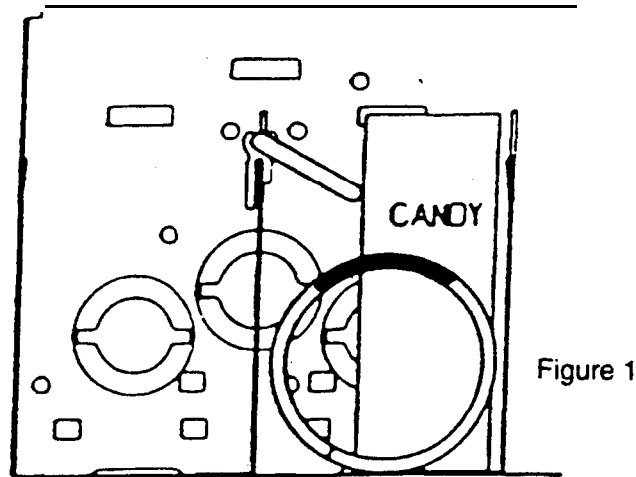


SPECIAL PRODUCT LOADING

NARROW PRODUCT LOADING

In order to keep narrow products positioned properly the use of one of the spacer rails may be required. For additional rails order part no. 23170.

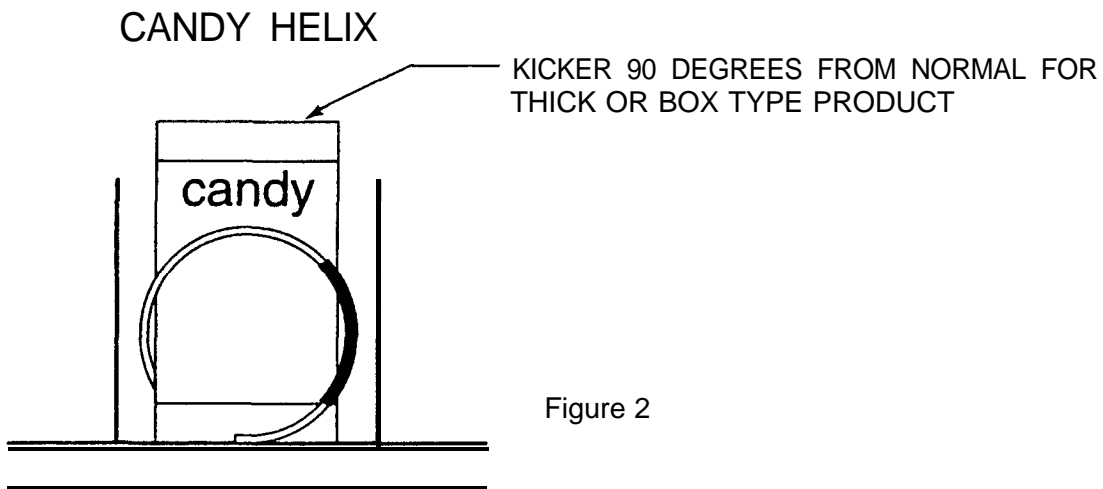
To install the spacer rail, press on to the tray divider as shown in Figure 1 below.



FLAT or SEMI-FLAT BOTTOM PRODUCT LOADING INSTRUCTIONS

NOTE: Instructions apply to candy tray only.

Certain candies and cigarettes have a flat or semi-flat bottom which is thick and wide. Polyvend Inc. has designed into our helix the flexibility to be 100% sure of the vending of this type of product. By moving the position of the helix, and thus the helix kicker 90 degrees, the best dispensing for boxed products is insured. You simply unlock the helix by twisting counter clockwise 10 to 15 degrees. Turn the helix counterclockwise 95 to 100 degrees, then engage and twist clockwise to lock in place. The helix should then be in the position shown below in Figure 2.



DOMESTIC

(OPTIONAL) GUM AND MINT TRAY LOADING SLIDE OUT DRAWER ASSEMBLY NEW STYLE

The four or five select gum and mint dispenser is available in kit form or can be factory installed. All machines are prewired from the factory so you can install the gum and mint kit at a later date. The harness for the gum and mint assembly plugs into the motor distribution board. This is the same board that the tray harness plugs into. The four select gum and mint dispenser is installed in the mid-size machine. The five select gum and mint dispenser is installed in the full-size machine. Each selection will hold up to 15 packs of gum (5 sticks per package) or roll candy up to 4 inches in length.

If a small diameter product of the anti-acid or breath mint type is to be vended, it will be necessary to use a pair of height adapters for each selection. These height adapters can be ordered from your local distributor or from the Polyvend Parts Department. There are two different heights available. The thinner adapter is normally used for anti-acid or breath mints. The thicker adapter is used for very small diameter products or in some cases very short rolls or packages of candy or gum. The short product will then go in between the height adapters and act as a guide to keep them in position.

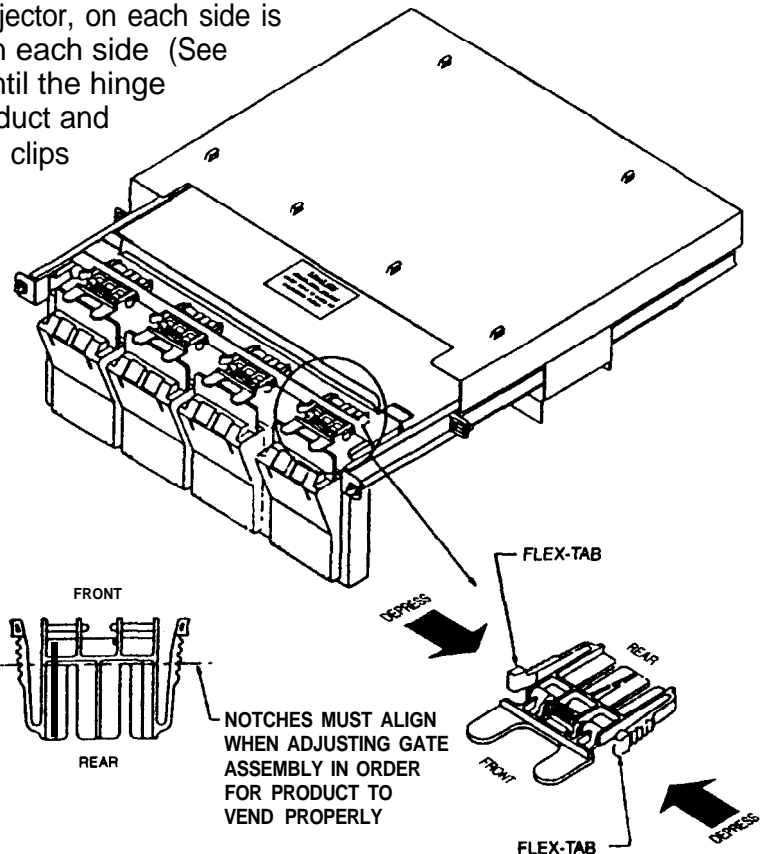
Each gum and mint assembly uses dividers that can be adjusted for the length of the product to be vended. They can be moved by pushing the divider towards the rear of the machine, unhooking the locking tabs and lifting the divider upward. Move the divider closer or farther apart depending on the length of the product to be vended. To lock the divider in place, allow the locking tabs on the divider to slip into the holes provided in the bottom of the tray and pull the divider towards the front of the machine locking it in place.

LOADING INSTRUCTIONS

Take hold of the gum and mint assembly and pull the unit forward until the tray comes to a stop. To load push the cover toward the rear of the machine. Lay the gum or mint packs on their side with the label facing toward the front of the gum and mint assembly.

Each selection has a clear, hinged product ejector which may require adjustment for each type of product. To adjust this ejector, on each side is a small compression clip. Squeeze the clips on each side (See figure below), then slide the ejector in or out until the hinge knuckles are located entirely behind the first product and directly above the second product. Release the clips and ensure that the ejector is locked into place.

IMPORTANT: Before sliding the tray assembly back into the machine after loading, pull the cover forward over the product and under the retaining clips. Verify that both latches on the gum and mint assembly are engaged after the tray is pushed back into dispensing position.



GATE ADJUSTMENT

TO ADJUST GATE ASSEMBLY FRONT TO REAR, DEPRESS FLEX-TABS AS SHOWN. ADJUST GATE ASSEMBLY ALL THE WAY FORWARD FOR THE SMALLEST PRODUCTS I.E. GUM. ADJUST GATE ASSEMBLY TO THE REAR FOR LARGER PRODUCTS.

FOR BEST RESULTS ADJUST GATE ASSEMBLY AS FAR FORWARD OF PRODUCT AS POSSIBLE FOR EACH PRODUCT TO VEND.

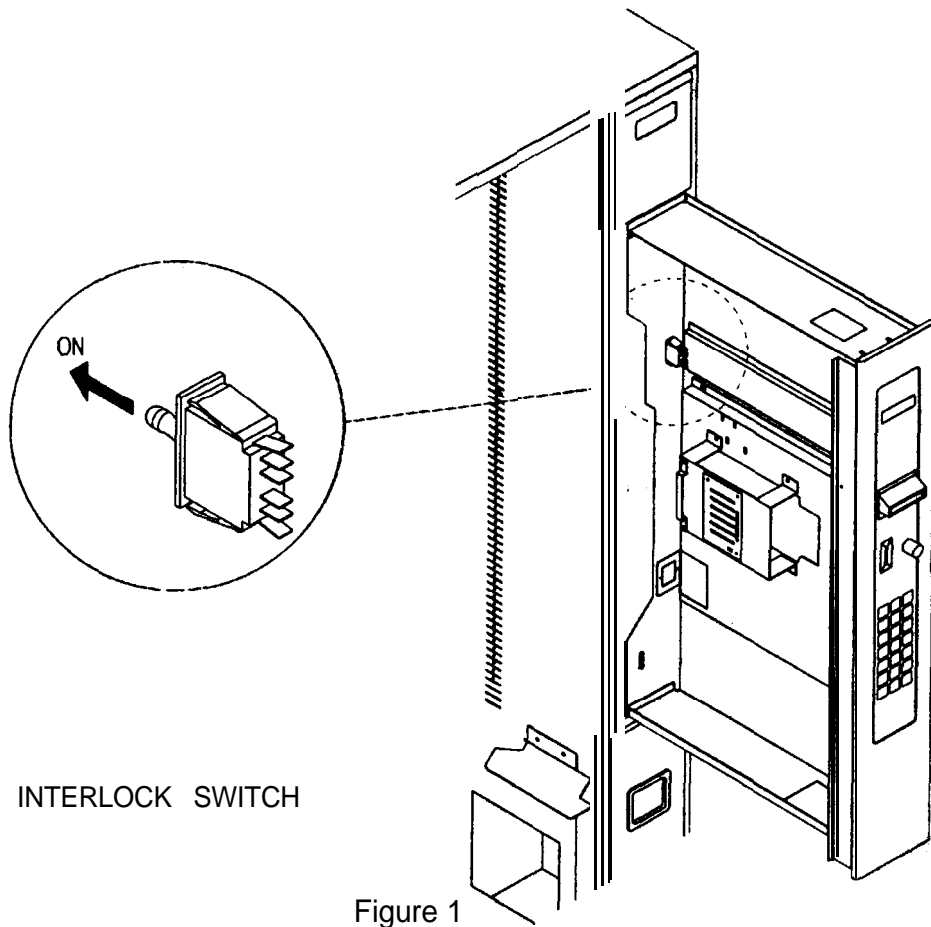


PRIMARY CABINET COMPONENT INFORMATION

SLIDEOUT CONTROL DRAWER

All electrical components in this compartment are low voltage (See Figure 1 below). Located in this panel are the control board, changer, dollar bill validator (when installed) and digital readout circuit board. The 11 OVAC transformer, light ballast and fuses are located in the high voltage electrical box in the back of the storage area attached to the right brace (Figure 2, Pg. 10).

Note: The safety interlock switch that turns on the power to the drawer is located in the rear, as shown below in figure 1.



REMOVAL OF SLIDEOUT CONTROL DRAWER

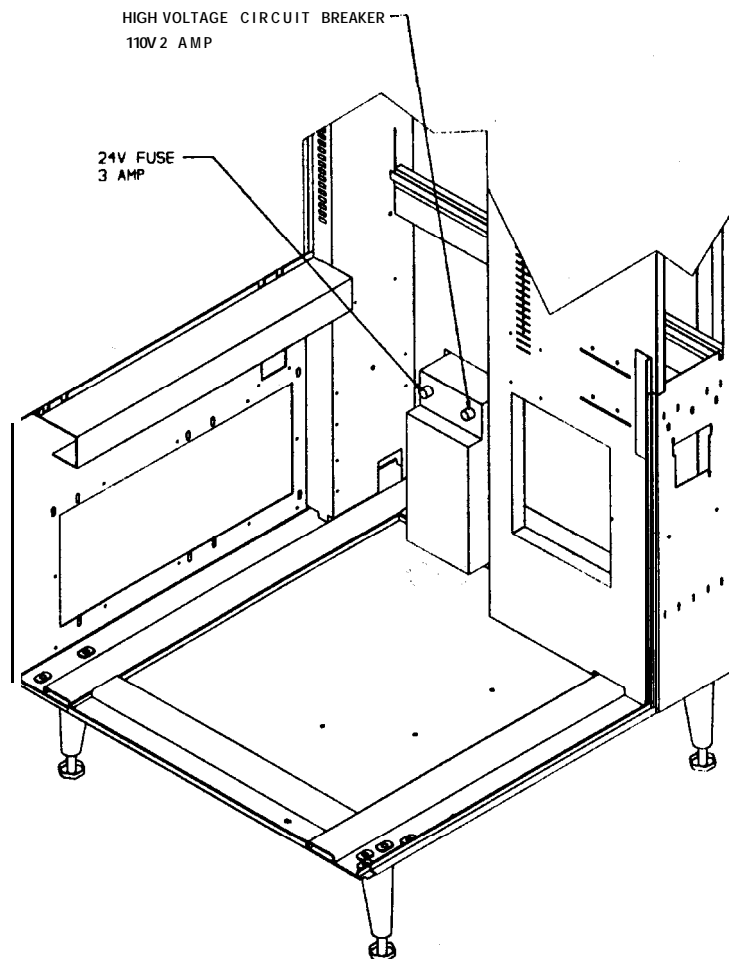
With the service door open, pull the slideout drawer to the stop. Reach up from the storage area to the rear of the slideout drawer and unplug the three harness connections from the rear of the drawer. Note: The slideout drawer may have to be pushed partially closed, in order to reach the back of the drawer and disconnect the wiring harness and disconnect the ground wire attached to the back of the drawer assembly, by removing the screw attaching the wire to the cabinet just above the power box assembly in the rear of the cabinet. After disconnecting the harness, pull the drawer to full open position. Remove the four (4) screws from the slide in the center of the drawer. Two of the screws must be removed through the large hole in the center of the slide section, Be careful and **DO NOT ALLOW THE DRAWER TO FALL** when removing these screws. Lift and remove the drawer from the guides. For installation of the drawer reverse the procedure.

HIGH VOLTAGE POWER SUPPLY

The high voltage power supply is located in the bottom of the machine, on the right hand side beside the coin box towards the rear of the machine (See figure below). The fuse for the 24 volt circuit and the circuit breaker for the 110 volt circuit are located on the front of the power supply. Also located inside the power supply are the ballast for the fluorescent light, the step down transformer and the RFI filter.

STORAGE COMPARTMENT

The storage compartment is below the product display area and is accessed by opening the front door. Additional products may be stored in this area. Be sure to leave room for the delivery compartment when using the storage area.



STORAGE COMPARTMENT
Figure 2



HELIXTRAY REMOVAL (FROM MACHINE)

Pull open the sliding drawer assembly, locate the correct tray harness to be unplugged. Loosen the two wing nuts holding the strain bar in place. Unplug the harness from the harness distribution board and slide the harness under the strain bar. Pull the tray harness up onto the tray, laying it on top. Lift the helix tray up and pull forward until reaching the stop that allows the tray to tilt down for loading. Lift up on the front of the tray until the tray is at approximately a 45 degree angle with the floor. The tray should then slide out of the machine. To clear the machine grasp the tray at the front and rear, lift it out and place it on a work surface.

To replace, reverse the operation. Grasp the tray, place the rear of the tray into the tracks and slide the tray in until the tray comes to the stops. Feed the tray harness around through the back of the drawer assembly under the strain bar and plug the harness into the junction board. Tighten the two wing nuts on the strain bar. Pull on the tray to ensure that the tray is latched into place.

INDIVIDUAL HELIX REMOVAL

An individual helix can be removed for cleaning, repair or replacement with a different pitch whether the tray is in or out of the machine. A helix used with the new snap-in hub feature can be removed by first grasping the helix close to the hub and pulling firmly on the assembly toward the front of the tray.

To re-install the helix assembly, note that the snap-in shaft is square shaped, so the helix must be properly positioned (product kicker in correct position). With the helix correctly positioned, align the shaft of the hub with the octagon shaped motor drive and push the helix into place. A positive lock-in position will be felt when the shaft is properly inserted and locked into place.

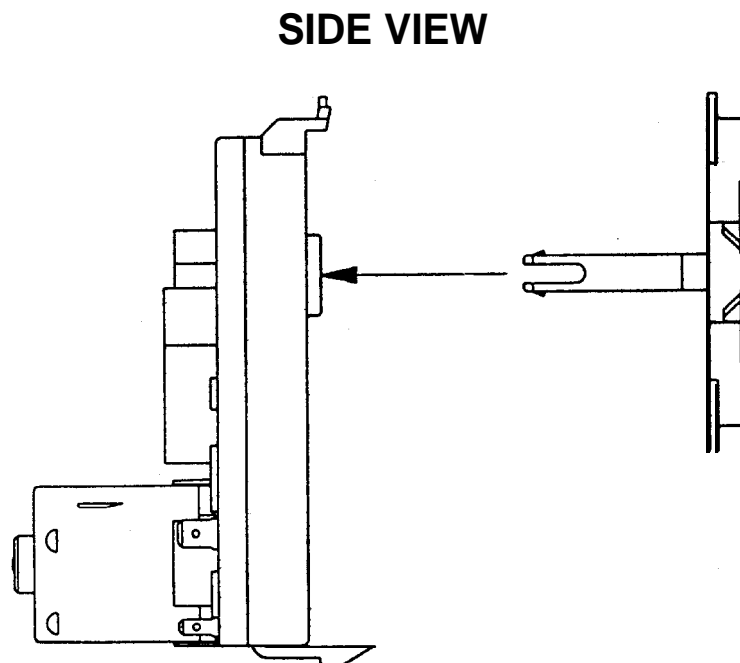


Figure 3

ELECTRICAL SERVICE SECTION

MODES OF OPERATION

The system will operate in one of two modes, sales or service. On power up (after completing configuration), the machine is in the sales mode. Service mode may be selected by pressing the mode switch mounted on the control board. The system will return to the sales mode if the mode switch is pressed again or after 25 seconds of no service mode activity.

SALES MODE

In the sales mode, the control board will control the dispensing of products according to customer credit and selection inputs. The control board will communicate with the coin mechanism and dollar bill validator (if installed); so, as credit is entered it will be shown on the scrolling display. If there is inadequate change available, the coin mechanism will indicate that an exact change situation exists and the control board will show on the scrolling display "PLEASE INSERT EXACT MONEY".

When a customer makes a selection on the key pad, buttons A thru G and (within 5 seconds) numbers 0 thru 9, the accumulated credit will be compared to the price set for this selection and if the credit is equal to or exceeds the set price, the corresponding motor will be energized. If the vend is successful, the price will be deducted from the credit value and the change returned.

The vend will be considered unsuccessful if the motor does not receive sufficient current or fails to reach the home position within six (6) seconds. The vend will not be attempted if the motor has already been detected as failed or if the selection made is not in the configuration of the machine. In any case, credit will not be deducted and the "MAKE ALTERNATE SELECTION", message will be on the scrolling display until a new selection is made.

If there is insufficient credit for the selection made, the selection and the price of that selection will be displayed for five (5) seconds, followed by the message "PLEASE INSERT MORE MONEY". This message will be displayed until either enough credit is added and the selection made again or a lower price selection is made. The correct selection and the selection price will be displayed during the vend.

If power should fail during a vend, the credit will be lost and the selected motor will not be re-energized when power returns, thus the next vend of this motor may be shorter than normal.

SERVICE MODE

The service mode can be entered by pressing the “MODE BUTTON” located on the control board just above the red power indicator light. By using the numbers and letters on the alphanumeric key pad, the operator can program and review the features of the control board. Upon pressing the “MODE BUTTON”, the display will sequence through (1.5 secs. each), the alphanumeric selection codes of any motors which the control board believes to have failed and an error code will appear on the right, telling the operator the reason for the failure. Pressing and holding the #13 button will abort this sequence display.

ERROR CODES

1. Error 1 = Too little motor current.
2. Error 2 = Too much time to complete the vend (6 seconds).
3. Error 3 = The control board has lost communications with the changer (changer has malfunctioned).
4. Error 4 = EEPROM sum check error. Display will scroll “Please Call Service”.

Note: Error 4 = Prices have been inadvertently altered and all prices have automatically been set to maximum by the control board. To clear these prices, reset pricing as desired.

KEYPAD FUNCTIONS

The following is a menu of the program modes available to the operator.

- KEY 0 Unused
- KEY 1 Dispense coins from changer.
- Press A = quarters dispensed.
 B = dimes dispensed.
 C = nickels dispensed.
- KEY 2 Display motor configuration.
- KEY 3 For reconfiguration of the machine,
- Cash accountability (Not a resettable counter).
 A = Total cash accountability (including dollar bill validator if installed).
 B = Total number of \$1 bills taken in by bill validator (if bill validator installed).
- KEY 5 Enter price setting mode.
- Then press 10 = individual price setting.
 11 = price setting by row.
 12 = price setting by entire machine.
- Service vend by individual selection.
- Service vend by row.
- Service vend by entire machine.
- Point of sales message programming.
- KEY 10 Selection of a language.
 Key also used with key 5 for individual price setting.
 Key also used with key E for time setting.
- KEY 11 Vend Options selection.
 Key also used with key 5 for price setting by row.
- KEY 12 Key used with key 5 for price setting by entire machine.
- KEY 13 Exit a mode, (i.e. price setting by row, price setting by machine, service vend by row or service vend by machine).

The operator can exit the service mode by pressing the "MODE BUTTON" on the control board or by allowing a period of inactivity in excess of 25 seconds to elapse. Either way, the machine will return to the sales mode of operation.

ELECTRICAL SERVICE SECTION

DETAILED OPERATION OF CONTROL BOARD

At the time of delivery from Polyvend Inc., the control board will be set as follows:

1. All vend options will be off.
2. The maximum change limit will be set to \$1 .00 and turned off.
3. The cash accountability will be set to \$00,000.00. Note: Due to factory testing the total will not be exactly \$00,000.00.
4. The total number of vends non-resettable will be 000000.
5. The time and date will be blank with the clock turned off.
6. The timed shut down intervals will be blank.
7. The promotional rows will be blank.

MODES OF OPERATION

The system will operate in one of two modes, sales or service. On power up (after completing configuration), the machine is in the sales mode. Service mode may be selected by pressing the mode switch mounted on the control board. The system will return to the sales mode if the mode switch is pressed again or after 25 seconds of no service mode activity.

ERROR CODES

1. Error 1 - Too little motor current
2. Error 2 - Too much time to complete vend
3. Error 3 - Loss of communications with changer (possible changer failure)
4. Error 4 - EEPROM sumcheck error. Display will scroll "Please Call Service".

NOTE: Error 4 = Prices have been inadvertently altered and all prices have automatically been set to maximum by the control board. To clear these prices, reset pricing as desired.

1. COIN DISPENSING

To dispense nickels, dimes and quarters from the changer, press the service mode button. Now press selection button #1 then press selection button "A" for quarters to be dispensed, "B" for dimes to be dispensed and "C" for nickels to be dispensed.

2. MOTOR COUNT

While in the service mode, press selection button #2 to display the total number of functioning motors. On the display the message "MOTORS" and the total number found in the machine will appear to the right.

3. MOTOR REMOVAL

To remove a motor from the configuration while in the service mode, press selection button #3. The control board will reconfigure to the currently functioning motors. The display will show "CONFIGURED."

ACCOUNTABILITY SYSTEM

1. CASH ACCOUNTABILITY

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button A to display the total value of all paid sales which will rollover after \$99,999.95. This is a non-resettable function.

2. DOLLAR BILL ACCOUNTABILITY

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button B to display the total number of dollar bills taken in by the bill validator which will rollover after \$99,999.95. This is a non-resettable function.

3. TOTAL NUMBER OF PRODUCTS VENDED

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button C to display the total number of products vended from this machine, which will rollover after 79,999,920. This function is non-resettable.

4. TOTAL NUMBER OF PRODUCTS VENDED (RESETTABLE FUNCTION)

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button D to display the total number of products vended since the last reset, which will rollover after 79,999,920.

5. RESET ALL RESETTABLE FUNCTIONS AT ONCE

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button E. The display will show "RESET." To reset all resettable functions only, press selection button F. All functions will reset to "0."

6. DOWNLOAD DEWUCS

While in the service mode press selection button #4. The display will show "ACCOUNTING." Press selection button #12. The display will show "DEX/UCS" and the control board will download the information to the hand held unit. Upon completion of the download of the resettable item, it will be necessary for the operator to then reset the function. The download of the control board does not automatically reset this item to 0.

To exit this mode, press selection button #13 or exit the service mode.

5. PRICE SETTING

A. PRICE SETTING OF THE ENTIRE MACHINE

To set the price of the entire machine while in the service mode, press button #5. The control board will display "SELECTION", then you may press any selection letter and number. The control board will display the selection letter, number and price. Using the numbers on the key pad, press the most significant digit first, then the less significant digits. Example: \$00.90. Press selection button #9, then press button #0. To save this price for the entire machine press button #12. To cancel an unwanted price before the fourth number is entered, press selection button #13.

B. PRICE SETTING BY ROW

To set the price of an entire row of selections press selection button #5. The control board will display "SELECTION." Then enter a selection letter and number from the row you want to set the prices on. The display will show the letter, number and current price. Using the numbers on the key pad, press the most significant number of the price first, followed by the less significant numbers. Example \$.90. Press the #9 button then press the #0 button. The digital display should read \$00.90. In order to save this and set the entire row, press button #11. To set the next row, press the #5 button, then enter the letter and number from the next row you want to set the prices on and repeat the price setting procedure. To cancel an unwanted price before the fourth number is entered, press button #13.

C. INDIVIDUAL PRICE SETTING

To set a single price on one item, while in the service mode, press button #5. The control board will display "SELECTION". Press the letter and number of the selection you wish to change. The selection letter and number will be displayed along with the current price. Using the numbers on the key pad, press the most significant digit first, then the less significant digits. Example: \$00.85. Press the #8, then the #5. The digital display should read \$00.85. To save this price, press button #10. To set another single price, press button #5 and repeat the above sequence. To cancel an unwanted price before the fourth digit is entered, press button #13.

NOTE: When the price is set to \$00.00, this is allowed and is a service vend (free vend). The machine can then be used as a display or show machine.

6. SERVICE VEND

A. SERVICE VEND BY INDIVIDUAL SELECTION

To service vend a single selection motor, while in the service mode, press selection button #6. The control board will display "SELECTION." Enter the desired selection letter, followed by the number. This will be displayed with the selection price, while a vend of the motor is attempted. If the vend is successful, the display will blank. If the vend is not successful, the control board will beep three times before blanking.

B. SERVICE VEND BY ROW

To service vend an entire row of selection motors, while in the service mode, press button #7. The control board will display "SELECTION." Enter the letter of the desired row. The control board will display the selection number and price while the vend is attempted, starting with the highest number selection in that row. If the vend is successful, the control board will continue with the next motor. If the vend is not successful, the control board will beep three times and continue with the next motor. This cycle will repeat until vends on all motors in the row have been attempted, then the display will blank. To exit this mode, either press selection button #13 and hold until the current vend is completed or exit the service mode.

C. SERVICE VEND OF ENTIRE MACHINE (ONE COMPLETE TEST)

To service vend the entire machine of selection motors one time, while in the service mode, press selection button #8. The control board will display the selection number and price as the corresponding vend is attempted. If the vend is successful, the control board will continue on with the next motor. If the vend is not successful, the control board will beep three times and continue with next motor. This cycle will repeat until vends on all motors in the machine have been attempted, then the display will blank.

To stop the vending of the motors press selection button #13 and hold until the current vend is completed or exit the service mode.

7. POINT OF SALES MESSAGE PROGRAMMING

The machine comes preset from the factory with the message “ENJOY ONE OF OUR FINE SNACK PRODUCTS”.

If you wish to change the Point of Sales message, press the service mode button on the control board, then press selection button #9. The control board will display “MESSAGE.” Using the keypad overlay (provided in the large manila envelope) and following the keypad definitions, enter the new message. Menu 1 is the default menu. After each key entry, from either menu, the keypad will return to menu 1. To use menu 2, the “NEXT MENU” key must be pressed prior to pressing a menu 2 key. If you enter the wrong letter, press BACK SPACE to remove that letter from message. Put two (2) spaces to indicate the end of the message. To save the message the “ENTER” button must be pressed from within menu 2.

Note: The maximum number of characters you can enter to form a message is 53 plus two spaces at the end of the message. A space between two words is one character.

MENU 1			MENU 2		
A	G	M	S	Y	4
B	H	N	T	Z	5
C	I	O	U	0	6
D	J	P	V	1	7
E	K	Q	W	2	8
F	L	R	X	3	9
SPACE	SHIFT	BACK	*	ENTER	\$
	(NEXT MENU)	SPACE			

EXAMPLE: “ENJOY OUR SNACKS.” Press button #9, “MESSAGE” appears on display. Using the overlay press the letter E, letter N, letter J, letter O, press SHIFT, press Y, press SPACE, press 0, press SHIFT, press U, press R, press SPACE, press SHIFT, press S, press N, press A, press C, press K, press SHIFT, press S, press SPACE, press SPACE, press SHIFT, press ENTER. The message should start scrolling when you press the mode switch.

8. LANGUAGE SELECTION

To select the message language, while in the service mode, press selection button #10. The scrolling display will display "LANGUAGE." Press the letter of the language you wish to program (See list below). The language selected will be displayed.

- Press button #10 + button A = Italian
- Press button #10 + button B = Dutch
- Press button #10 + button C = Spanish
- Press button #10 + button D = Danish
- Press button #10 + button E = English
- Press button #10 + button F = French
- Press button #10 + button G = German
- Press button #10 + button 11 = ADD MESSAGE

Under button #11 , the control board will display "MESSAGE n." Using the same overlay for the point of sales programming, enter the message in the same way and complete the message by pressing ENTER on the overlay. The first message that you will enter will be PLEASE INSERT EXACT MONEY in the language you desire. The second message should be PLEASE INSERT MORE MONEY in the language you desire. The third message should be MAKE ALTERNATE SELECTION in the language you desire. The fourth message should be PLEASE CALL SERVICE in the language you desire. The maximum length of messages 1 and 2 is thirty characters including spaces. The maximum length of messages 3 and 4 is 25 characters including spaces.

9. VEND OPTIONS

To enable or disable the vend options, while in the service mode, press selection button #11 . The control board will display “OPTIONS.” Press one of the appropriate letters listed below. After the letter has been pressed, the current state of the option will be displayed. The option may be changed by following the instructions pertaining to that option.

A. FORCE VEND

This option (when turned “ON”) will force the customer to complete a purchase once they have deposited money of any form. If a vend is attempted and the motor fails during this vend, the customer will be allowed to escrow the credit, regardless of the force vend status. To access this option, press selection button #11 then press selection button "B." The feature will then be displayed with its present status. To change the status press selection button "B" again.

B. MAXIMUM CHANGE RETURN

This option will limit the amount of change returned to the customer. The change above the limit will be given as credit toward another purchase, i.e. a multi-vend situation. To access this option press selection button #11 , then press selection button “C.” The status of the option will be shown. If the option is “OFF,” press selection button "C" again to turn it on. After enabling the option, wait for one second and the current limit will be displayed. This limit may be changed by pressing the most significant digit first and then the less significant digits. Press selection button #11 to lock in this limit.

NOTE: The only time that the control board will display the amount of the limit is when the feature is turned “ON.” In order to check the amount set, turn the feature “OFF” and then “ON.”

To exit this mode, either press selection button #13 or exit the service mode by pressing the service mode button.

C. BILL ESCROW

This option will allow the last bill accepted to be returned, provided the bill acceptor is capable of such a feature.

To access this option, press selection button #11 , then press selection button “A.” The current status of this option will be displayed as “ESCROW xxx.” To change the status press selection button “A” again.

To exit this mode, press selection button #13 or exit the service mode.

D. TO SET CONTROL BOARD TIME AND DATE

This option will allow the control board to set the time and date for timed operations.

To access this option press selection button #11 , then press selection button “D.” The current time of day will be displayed in a 24 hour format (1 PM would be 1300) as “TIME hh.mm.” A new time may be entered by pressing the selection buttons on the front of the machine and will be displayed as they are pressed. The most significant digit is followed by lesser significant. Example: 1325 would be entered by pressing selection button #1, selection button #3, selection button #2, then selection button #5. To save this entry, press selection button #10. The current month will then be displayed in a numeric

format as "MONTH mm." A new month may be entered by pressing the selection buttons. As each button is pressed it will be displayed on the display. The most significant digit should be entered followed by lesser significant digit. It is not necessary to enter the leading zeros and only the first two numbers will be used. To save this entry press selection button #10. The current day will now be displayed as "DAY dd" in a numeric format. A new day may be entered by pressing the selection number keys which will be displayed as they are entered. Enter the most significant digit followed by the less significant. It is not necessary to enter leading zeros and only the first two numbers will be used. To save this entry press selection button #10. The current year will now be displayed as "YEAR YYYY" in a numeric format. A new year may be entered by pressing the selection number keys which will be displayed as they are entered. The most significant digit should be entered first followed by the less significant. To save this entry press selection button #10. To cancel unwanted setting before saving, press selection button #13 or exit the service mode.

E. SETTING TIME SHUT DOWN OF MACHINE

This option will allow the control board to shut down the entire machine four times during a 24 hour period. During these time intervals the point of sales message will read "VENDING OPERATION TO RESUME AT hh.mm."

To set this option after going into the service mode, press selection button #11 , then press selection button "E." The current on/off setting will be displayed as "TIMES xxxx." To change the current on/off setting press selection button "E" again. With the setting to the "ON" position, to program the start, stop and active day times, wait one second and the display will continue to "1 STRT hh.mm". A new start time for this interval may be entered by pressing the selection numbers, which will be displayed as the number buttons are pressed. The most significant digit is entered first followed by the lesser significant digits. Only the first four numbers will be used. To save this entry press selection button #10. The display will continue to "1 STOP hh.mm." A new stop time for this interval may now be entered by pressing the selection button numbers, which will be displayed as the number buttons are pressed. The most significant digit should be entered first followed by the lesser digits. Only the first four digits will be used and can be saved by pressing selection button #10. The display will continue to the daily on/off status shown as 1 DY xxxxxxx. The x's will be either a '0' for off or a '1' for on. The first 'x' will show the status of Sunday, the next 'x' for Monday, and so on, until Saturday. The daily status may be changed by pressing the '0' or '1' keys. Each digit will be rotated in from the left side. It is not necessary to enter leading zeros and only the first seven numbers will be used. To save this entry press selection button #10. The display will continue by increasing the leading '1' in the above examples to show the next shut down time. When all four intervals have been programmed the control board will return to the service mode.

To cancel an unwanted setting before saving, press selection button 13 or exit the service mode.

F. ONE FREE PRODUCT SETTING

This option will allow a free product to be given to the customer at a preprogrammed interval. Setting this interval to '1' provides a free vend at every transaction, '0' disables the option and the maximum valid interval is 255.

To access this option press selection button #11 , then press selection button "F." The current interval will be displayed as "FREE xxx." A new interval may be entered by pressing the selection button numbers, which will be displayed as they are entered. The most significant digit is entered first followed by the lesser significant digits. It is not necessary to enter leading zeros and only the first four numbers will be displayed and used. To save this entry press selection button #10.

To cancel an unwanted setting before saving, press selection button #13 or exit the service mode.

G. PROMOTIONAL VEND SETTING

This option will allow a promotional product to be given to a customer for free in response to their purchase of another product. When enabled, purchasing selection "1" from one of the two possible promotional rows will result in both selection "1" and a promotional item of that row to vend sequentially.

To access this option press selection button #11, then press selection button "G". This will toggle the on/off state. To program the promotional rows, after enabling the option as above, wait 1 second and the display will continue to "ROWS a a". New rows may be entered by pressing the alphabetic selection buttons. The first entry will effect the center character and the second will effect the right most character. To save these entries, press selection button #10 after entry. Pressing selection button "12" before "10" will clear both entries.

To cancel an unwanted setting before saving, press selection button "13" or exit the service mode.

CLEANING INSTRUCTIONS

PAINTED SURFACES

All painted surfaces and the vinyl covered product delivery door can be cleaned with a clean cloth and any common brand of household detergent. Do not use harsh abrasive materials on these surfaces, they will scratch the paint or vinyl.

GLASS ITEMS

The glass product loading door may be cleaned with any commercial window cleaner.

TRAY SURFACES

Quite often wax and oil will build up on the tray surface area. To remove this, use a wax and paraffin remover solution.

POLYVEND SHIPPING POLICY

The following information is to assist you in assuring safe delivery of your merchandise and in expediting of freight damage claims.

Our terms of sale are F.O.B. our factory. The responsibility for damage in transit is the carrier's whether it be visible or concealed damage. We have taken every precaution to ensure safe arrival of this equipment, but our responsibility ceases the moment the shipment is turned over to the carrier.

Acceptance of this shipment by the carrier is an acknowledgement that the equipment was delivered to them in good condition and properly packed. The carrier who delivers this merchandise to your door is responsible for its safe delivery.

PROCEDURE FOR VISIBLE DAMAGE

1. IT IS VERY IMPORTANT TO INSPECT ALL FREIGHT DELIVERIES, WHETHER MACHINES OR PARTS, IMMEDIATELY. If there is any visible damage you have the right to either refuse the merchandise or accept the damaged shipment. If you accept it, make certain that you have the delivery personnel note the nature and extent of damage on the freight bill.

2. After you determine the extent and cost of the damage, notify the delivering carrier's office by phone and confirm with a written notice within 15 days requesting an inspection of the damaged merchandise. Keep a copy of the inspection request for claim purposes. Do not destroy the packing material until shipment is inspected and claim is settled.

3. When the inspector arrives, ask for a claim form. In filing a claim, you may make a cash settlement with the carrier for the full invoice price of the merchandise or contact Polyvend Inc., at 1-800-643-8250 and make arrangements to have merchandise returned for repair and file a claim for repair charges. Do not return "DEADHEAD." Do not claim more than the cash price of the machine, plus freight.

PROCEDURE FOR CONCEALED DAMAGE

1. If there is no visible damage, YOU MUST OPEN THE SHIPMENT WITHIN 15 DAYS AND INSPECT FOR CONCEALED DAMAGE. If there is concealed damage, notify the delivering carrier by phone immediately asking for an inspection. Confirm the request in writing and keep a copy for claim purposes. If you fail to notify the carrier within 15 days of delivery by telephone and in writing, the freight company is no longer liable for damage and will probably refuse your claim. Do not destroy packing material until shipment is inspected and claim is settled.

2. After inspection by the carrier, file a claim for damages at once. On concealed damage, unless it can be proven that the carrier is responsible for the damage, they will probably want to settle on a compromise basis. Therefore, the faster you inspect your delivery and notify the carrier, the better the chances for full settlement. If the claim is disallowed, check on the possibility of a compromise.

PROCEDURES FOR SHORTAGES

1. If the shipment delivered to you is not in accordance with the quantity of cartons shown on your receipt, do not accept it until shortages are noted on the Freight Bill or Bill of Lading and signed by the truck driver. Failure to do this releases the carrier from any responsibility.
2. If the shorted item is not delivered within a reasonable time, file a claim with the delivering carrier for the invoice or cash price of that item.

NOTE: Claims for loss or damage will NOT BE DEDUCTED FROM YOUR INVOICE while you wait adjustment of such claims.

TROUBLE SHOOTING CHART

CAUTION

DISCONNECT ANY POWER TO MACHINE (BEFORE CHANGING, DISCONNECTING OR CONNECTING ANY ELECTRICAL COMPONENTS) BY TURNING OFF THE INTERLOCK SAFETY SWITCH OR UNPLUGGING THE MACHINE.

SYMPTOM.	PROBABLE CAUSE	CORRECTIVE ACTION
<p>1. All coins deposited are rejected.</p> <p>In service mode, shows error 3.</p>	<p>Machine not level.</p> <p>Defective coin mech.</p> <p>Display blank, power indicator light not illuminated.</p> <p>Defective control board.</p>	<p>Level cabinet.</p> <p>Replace coin mech.</p> <p>Check fuses, power at wall outlet and transformer.</p> <p>Replace control board. See note 1 below.</p>
<p>2. Selection motor fails to run.</p> <p>In service mode, display shows selection and error 1.</p>	<p>Insufficient credit established.</p> <p>Defective motor assembly.</p> <p>Defective control board.</p>	<p>Check to see that selection price is same as deposited amount. Note message on display.</p> <p>Service vend bad motor. Replace if defective. See note 2, pg. 29</p> <p>Replace control board. See note 1 below.</p>
<p>3. All selection motors do not run.</p> <p>(Test or service vend). Power indicator light illuminated.</p>	<p>Defective control board.</p> <p>Wire connection broken.</p>	<p>Replace control board. See note 1</p> <p>Trace wire harness. For color code see note 3, page 29.</p>
<p>4. Selection motor does not complete cycle. In service mode, display shows error 2.</p>	<p>Defective full cycle switch or defective motor.</p> <p>Defective components on motor PC board assembly.</p> <p>Defective control board.</p>	<p>Replace motor assembly. See note 2, pg. 28.</p> <p>Replace motor assembly. See note 2, pg. 28.</p> <p>Replace control board. See note 1 below.</p>

Note 1: When you replace the control board always disconnect power to the equipment. After the control board is installed, reapply power, go into the service mode, press button #2, then press button #3. You have now aligned the control board with the motors.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
5. Selection motor continuously cycles shows error code 2 in service mode.	Defective full cycle switch. Defective control board.	Replace motor assembly Replace control board.
6. Two motors run simultaneously.	Defective control board. Defective motor. Defective motor in gum and motor circuit. Shorted harness or wire connector.	Replace control board. See note 1 pg. 27. Replace motor assembly. Locate and replace defective motor. Repair or replace.
7. Unable to make a selection. Either no selection number on display or wrong number.	Selector pad bad. Attempt to change price of a selection. Unable to change price.	Replace selector pad.
8. Insert dollar bill, shows credit. No product dispensed.	Defective control board.	Replace control board. See note 1 pg. 27.
9. Dollar bill validator will not accept dollar bills.	Bill scanners dirty.	Clean scanner area.
0. Insert dollar bill, does not show credit, cannot make a selection.	Defective bill validator.	Replace bill validator.
1. Display is blank, power indicator light not on. Fluorescent light on.	Blown fuse.	Check fuse at power panel in storage area.
2. Display is blank, power indicator light on.	Defective control board. Defective digital display.	Replace control board. See note 1 pg. 27. Replace digital display.
3. Coin mech. returns nickels and dimes with no product vended. In service mode display shows error 3.	Defective control board. Defective changer	Replace defective control See note 1 pg. 27. Replace changer.
Note 2: When replacing a bad motor, always service vend the new motor to tell the control board that a new motor has been installed.		

Note(3): The motors in the machine are arranged in a 7 X 10 matrix. This means that all motors have a wire common to all other motors in that row. Example: All motors in horizontal row "A" have a white wire with a black stripe in common. Likewise, all the motors in a vertical column have a wire in common. Example: All motors in column 2 have a red wire in common.

The following is the wire color guide for the motor matrix:

	<u>Wire Color</u>
Row "A"	White/Black
Row "B"	White/Brown
Row "C"	White/Red
Row "D"	White/Orange
Row "E"	White/Yellow

The following wires are located in the separate two pin plug of the harness that plugs into the pull out drawer.

Row "F"	White/Black
Row "G"	White/Orange

Tray harnesses use only the White/Black wire since they can be used in any row.

Column "0"	Black
Column "1"	Brown
Column "2"	Red
Column "3"	Orange
Column "4"	Yellow
Column "5"	Green
Column "6"	Blue
Column "7"	Violet
Column "8"	Grey
Column "9"	White

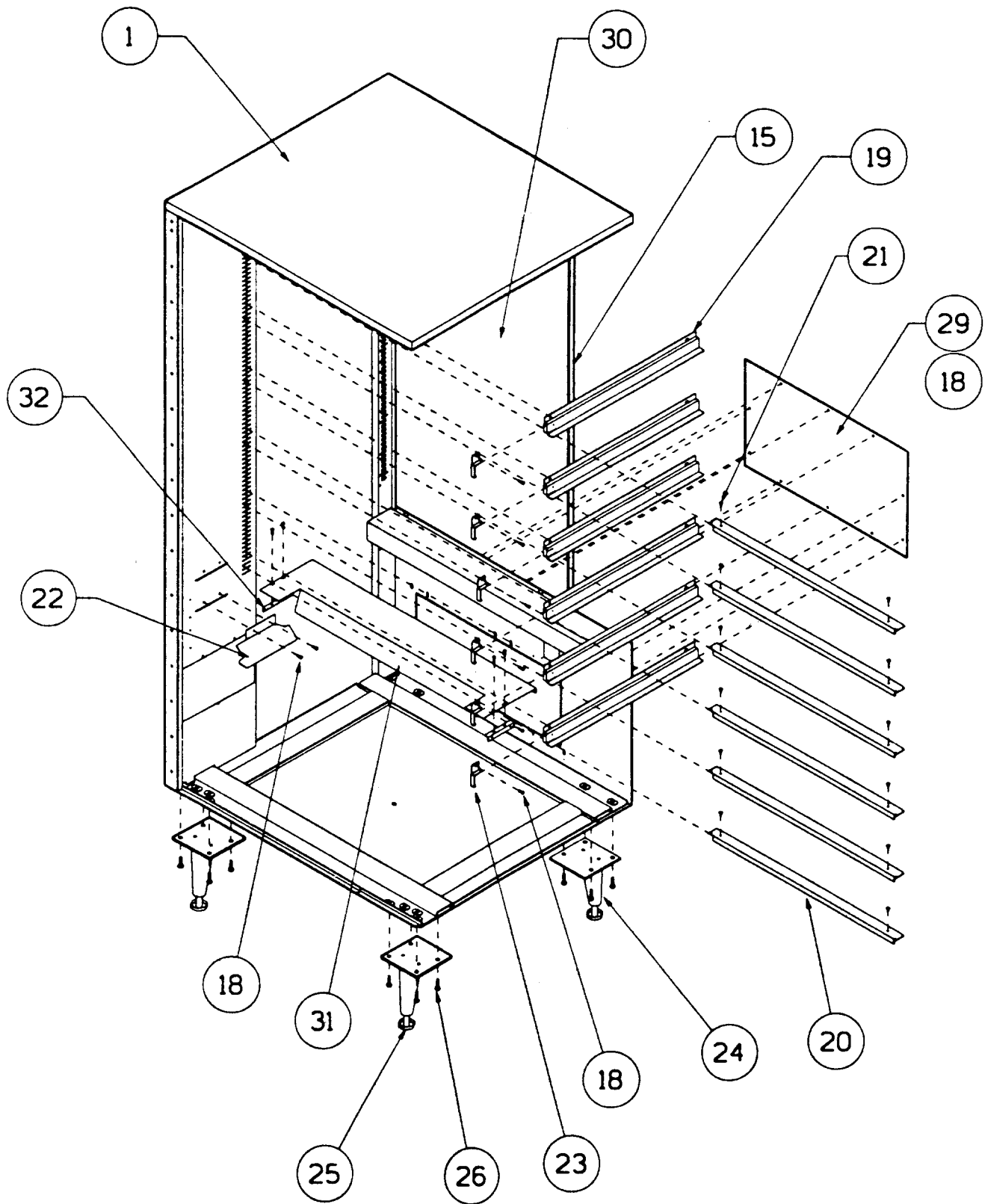
ERRORCODES

1. Error 1 = Too little motor current.
2. Error 2 = Too much time to complete the vend (6 seconds).
3. Error 3 = The control board has lost communications with the changer (changer has malfunctioned).
4. Error 4 = EEPROM sum check error. Display will scroll "Please Call Service".

Note: Error 4 = Prices have been inadvertently altered and all prices have automatically been set to maximum by the control board. To clear these prices, reset pricing as desired.

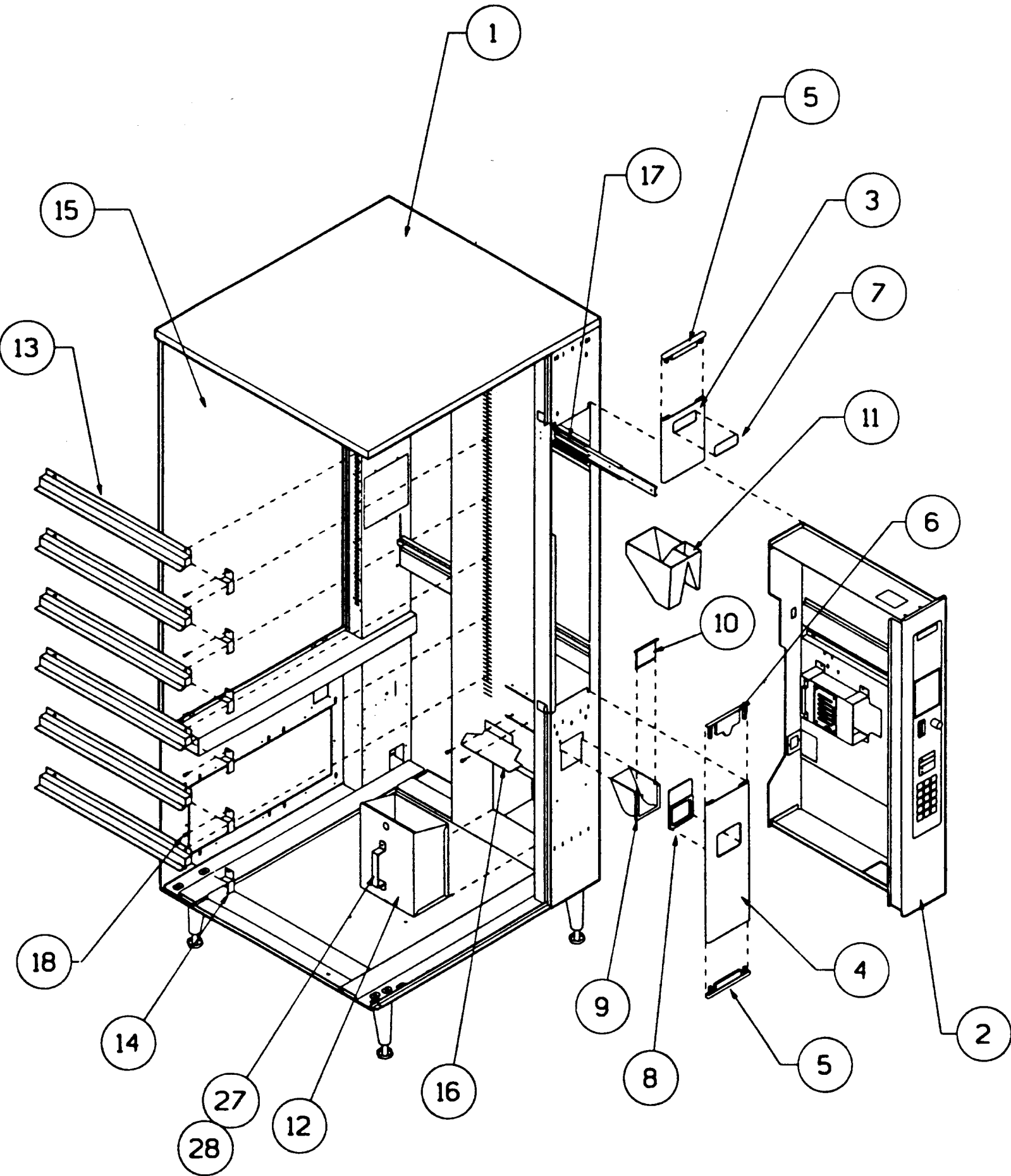


DRAWINGS AND PARTS LISTS



R40 CABINET ASSEMBLY - LEFT SIDE VIEW

TO BE USED IN CONJUNCTION WITH PAGE 34

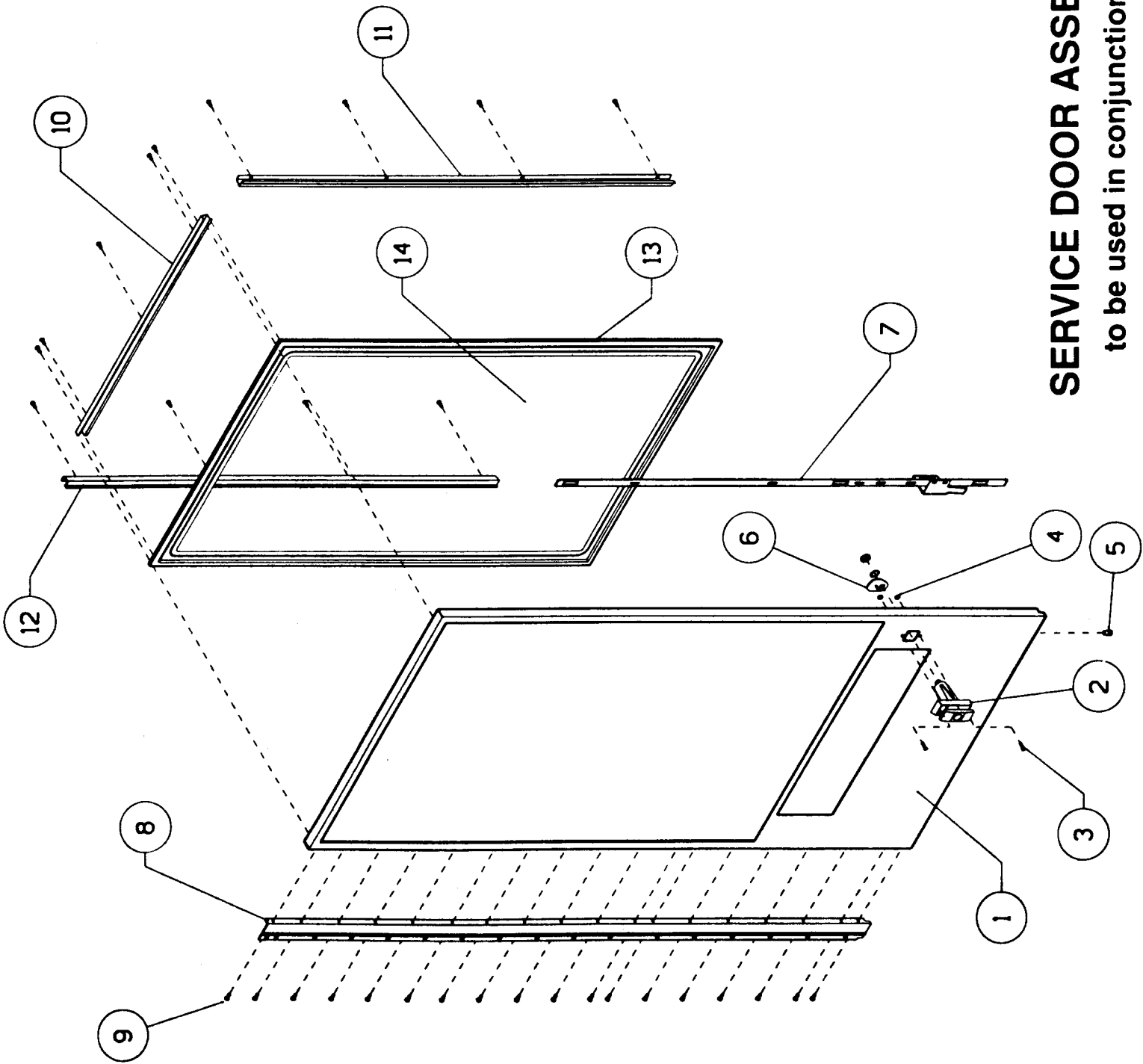


R40 CABINET ASSEMBLY - RIGHT SIDE VIEW

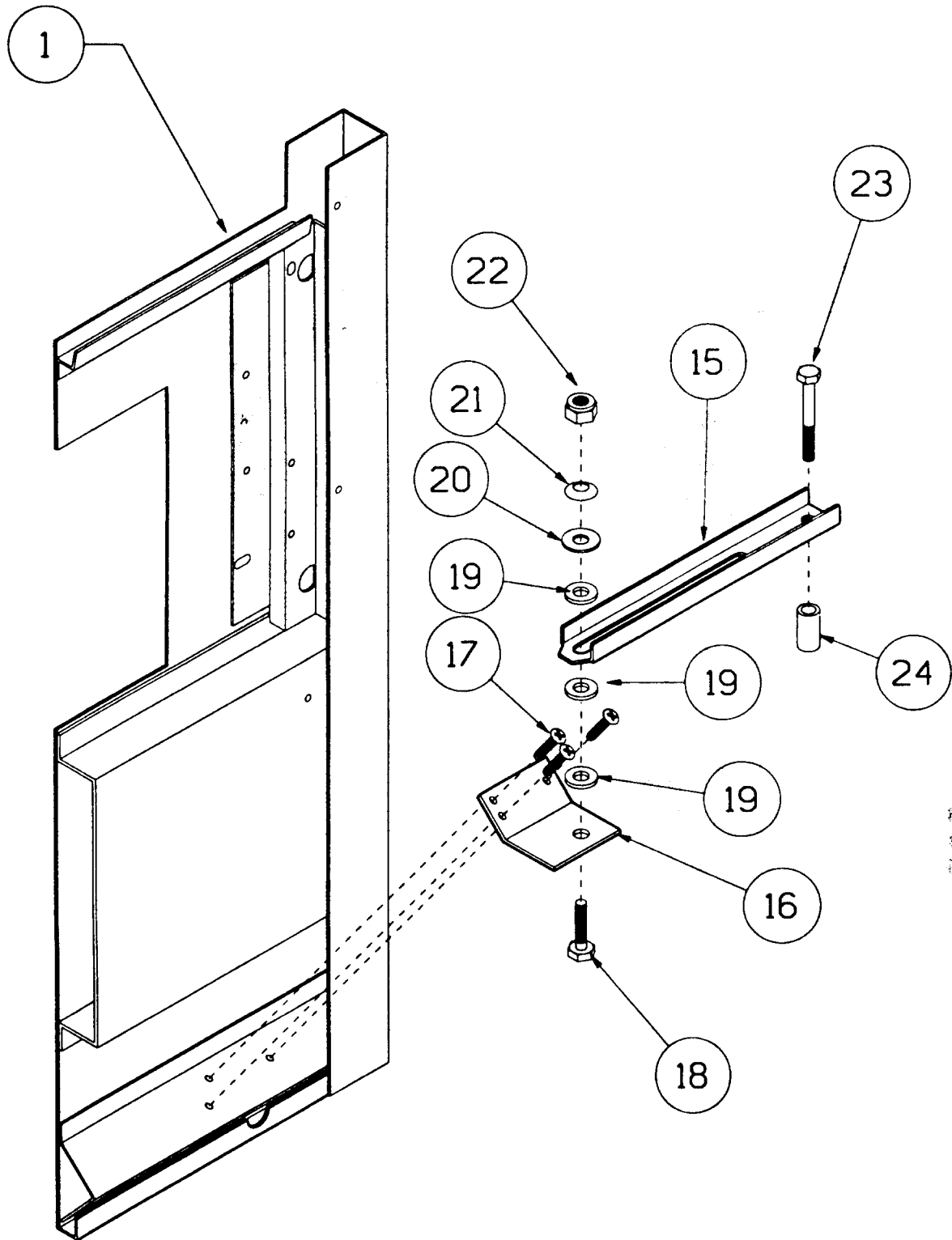
TO BE USED IN CONJUNCTION WITH PAGE 34

R40 CABINET ASSEMBLY PARTS LIST

ITEM	DESCRIPTION	R-40 Series PART NO.	QTY.
1	SHELLASSEMBLY - R40, SGB	23923SGB	1
2	DRAWER ASSEMBLY - -INTL CONTRLR. W/DVB	2353008	1
3	PLATE - ESCUTCHEON - UPPER	23125	1
4	ESCUTCHEON - LOWER	23151	1
5	CAP - ESCUTCHEON	17917BLK	1
6	CAP - MIDDLE - ESCUTCHEON	17916BLK	1
7	CAP - MIDDLE - ESCUTCHEON	17916BLK	1
8	TRIM - COIN RETURN	17868BLK	1
9	CUP-COIN RETURN, BLACK	17866BLK	1
10	DOOR - COIN CUP	17865BLK	1
11	HOPPER, COIN	17823	1
11A	COIN HOPPER LOCKING PLATE	20132	1
12	COIN BANK	2307101	1
13	RAIL - RIGHT HAND, BLACK	2346801	6
14	STIFFENER - RIGHT HAND, BLACK	2337 102	6
15	COVER PLATE, REAR	23922	1
16	PRODUCT DEFLECTOR, R.H.	20128BLK	1
17	SLIDE - DRAWER, #370-18	17964	1
18	SCREW, #8-18 X 3/8"	01298BLK	20
19	RAIL - LEFT HAND BLACK	2158401	6
20	SUPPORT-TRAY, FRONT	2145801	6
21	PLASTIC CANOE CLIP	210-8012	24
22	PRODUCT DEFLECTOR, R.H.	20127BLK	1
23	STIFFENER -TRAY SUPPORT, L.H., BLACK	2337703	6
24	LEGS -TAPERED, WELD ASSEMBLY	2307701	4
25	LEVELER - LEG, 1/2-13X 3	19765	4
26	BOLT, 5/16-18 X 5/8	19302	16
27	HANDLE - COIN BOX	21470	1
28	RIVET, POP	00729	2
29	COVER PLATE	22512	1
30	INSULATION, REAR	233001	1
31	FALSE BOTTOM	2148902	1
32	MOUNT - FALSE BOTTOM	21479	2



SERVICE DOOR ASSEMBLY R40
to be used in conjunction with p. 37

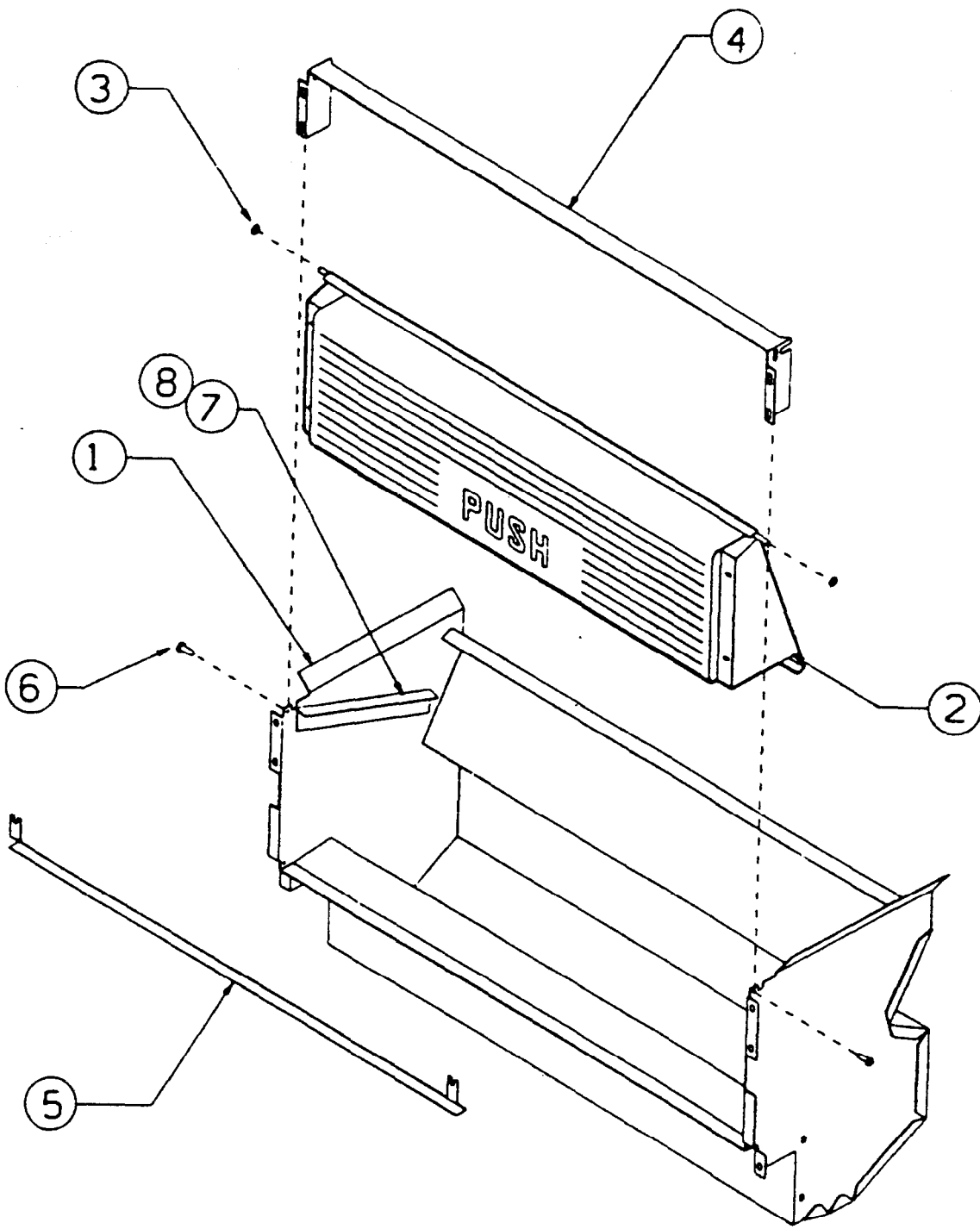


SERVICE DOOR ASSEMBLY R40
to be used in conjunction with p. 37

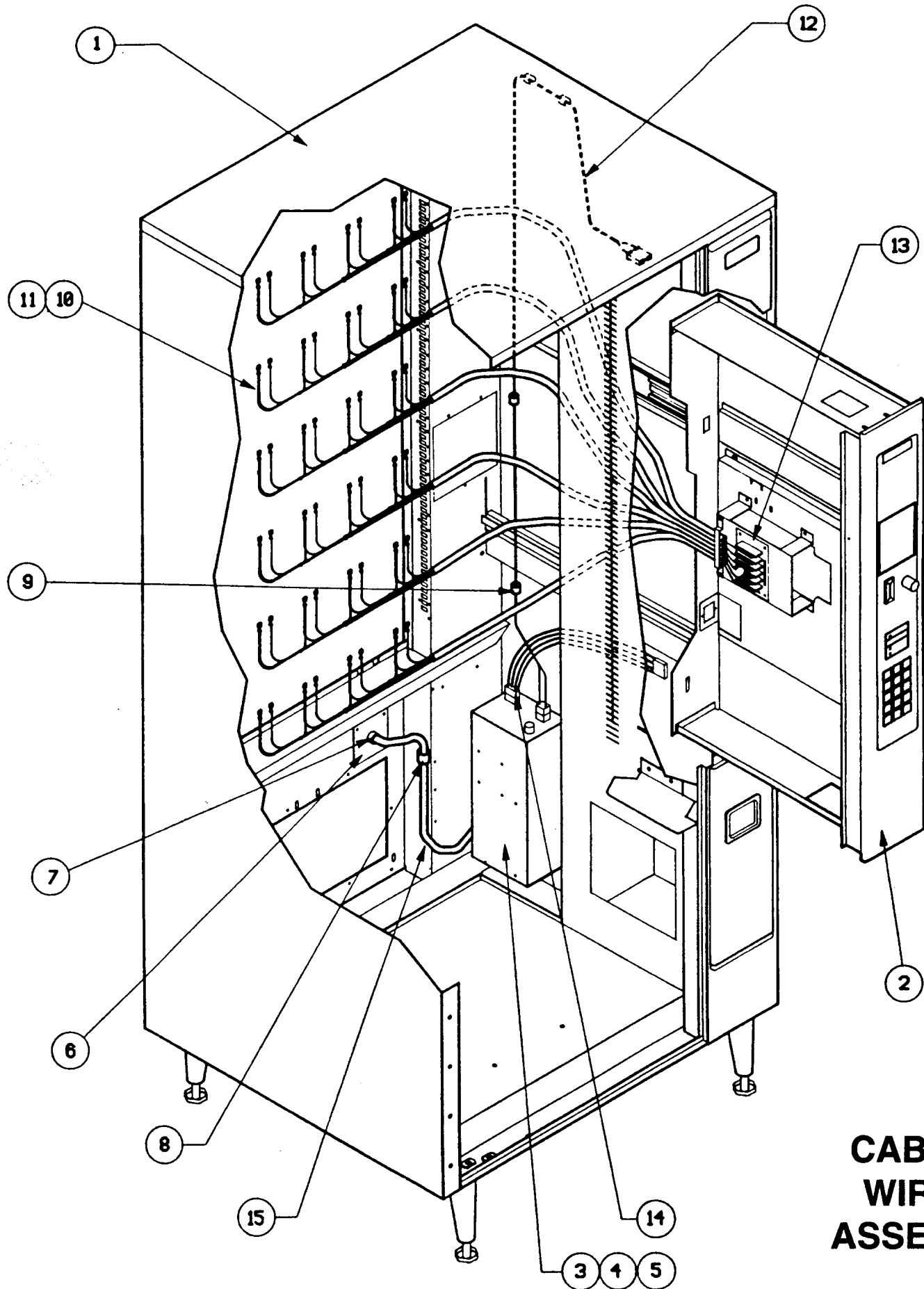
**SERVICE DOOR ASSEMBLY R40
PARTS LIST**

ITEM	DESCRIPTION	PART NO.	QTY.
1	SERVICE DOOR W/A - R40	23918SGB	1
2	LARGE HANDLE DOOR LOCK	19379BLK	1
3	BOLT, CARR., #10-24 X 3/4	15249	2
4	NUT, STARLOCK, #1 O-24	19566	2
5	RETAINING PLUG	18442	1
6	CAM - LOCK	17457BLK	1
7	BAR W/A - LOCKING	18001 BLK	1
8	HINGE - SERVICE DOOR	22030SGB	1
9	SCREW, #8-14 X -1/4	01868BLK	29
10	HOLDER - GLASS - TOP	17934BLK	1
11	HOLDER - GLASS - L.S.	17954BLK	1
12	HOLDER - GLASS - R.S.	17954BLK	1
13	GASKET - SERVICE DOOR	17970	12.6 FT.
14	GLASS - SERVICE DOOR	18222	1
15	DOOR STOP CHANNEL	20175	1
16	BRACKET, DOOR	20182	1
17	SCREW, #10-24 X 5/16	13140	3
18	BOLT, HHD. 3/8-24 X 1 1/4	20176	1
19	WASHER, NYLON	20180	3
20	WASHER, PRECISION	20178	1
21	WASHER, BELLEVILLE	20179	1
22	NUT, LOCK - NYLON INSERT	20196	1
23	BOLT, HHD. 5/16-18 X 1 1/4	23109	1
24	SPACER, DOOR STOP	20181	1
25	STRIPPING - NEOPRENE	1824500	2.33 FT.

DELIVERY COMPARTMENT ASSEMBLY



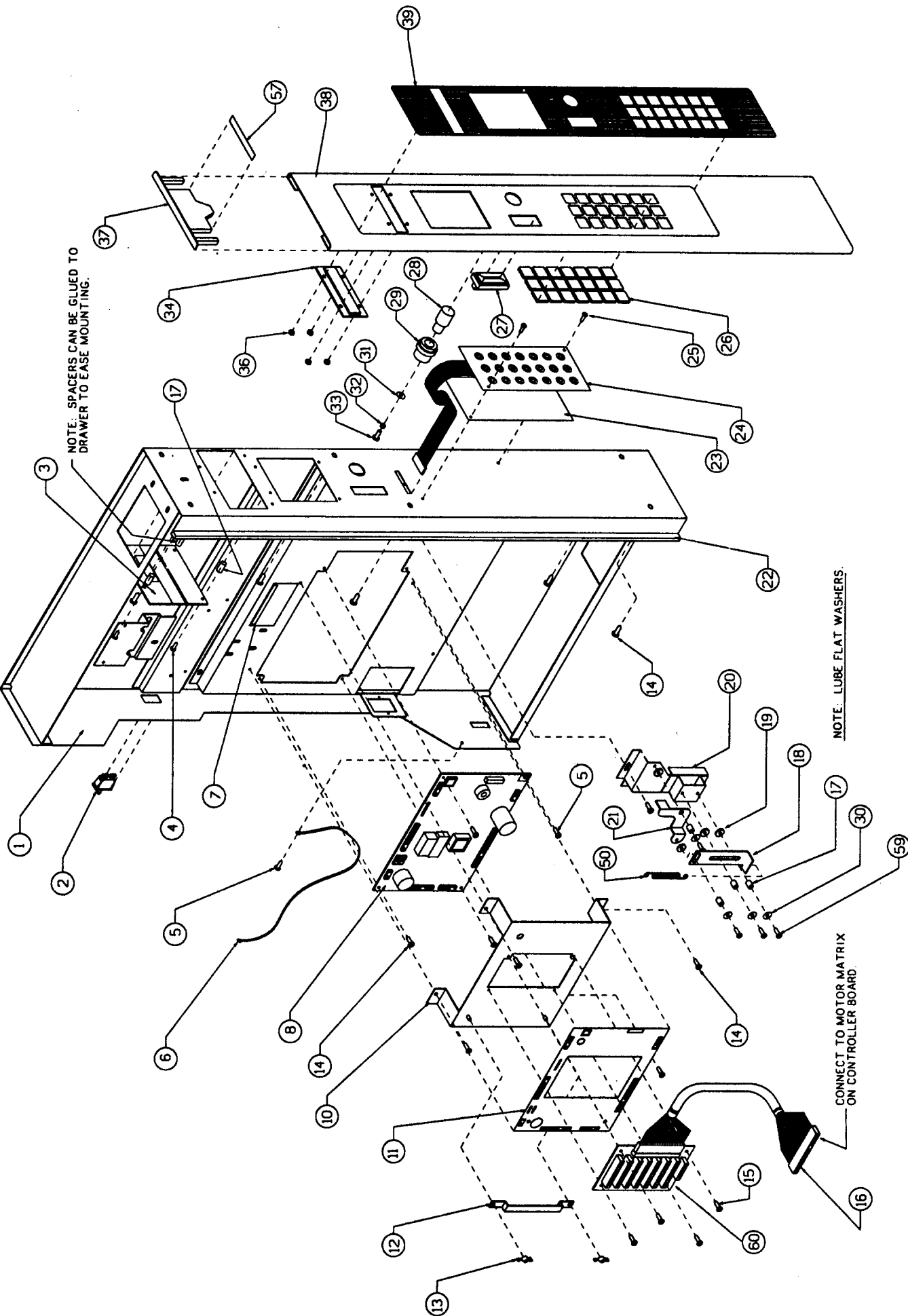
ITEM	DESCRIPTION	PART NO.	QTY.
1	DELIVERY COMPARTMENT ASSEMBLY	19580	1
2	DOOR ASSEMBLY - DELIVERY COMPARTMENT	19986E	1
3	WASHER - 1/4" NYLON	18684	2
4	RETAINER - DELIVERY DOOR	18672	1
5	DEFLECTOR - PRODUCT	-20126FBK	1
6	SCREW, #8-18 X 3/8"	01298BLK	2
7	BRACKET, ANTI-THEFT	20961 BLK	2
8	RIVET, POP	00729	4



**CABINET
WIRING
ASSEMBLY**

**CABINET WIRING ASSEMBLY
PARTS LIST**

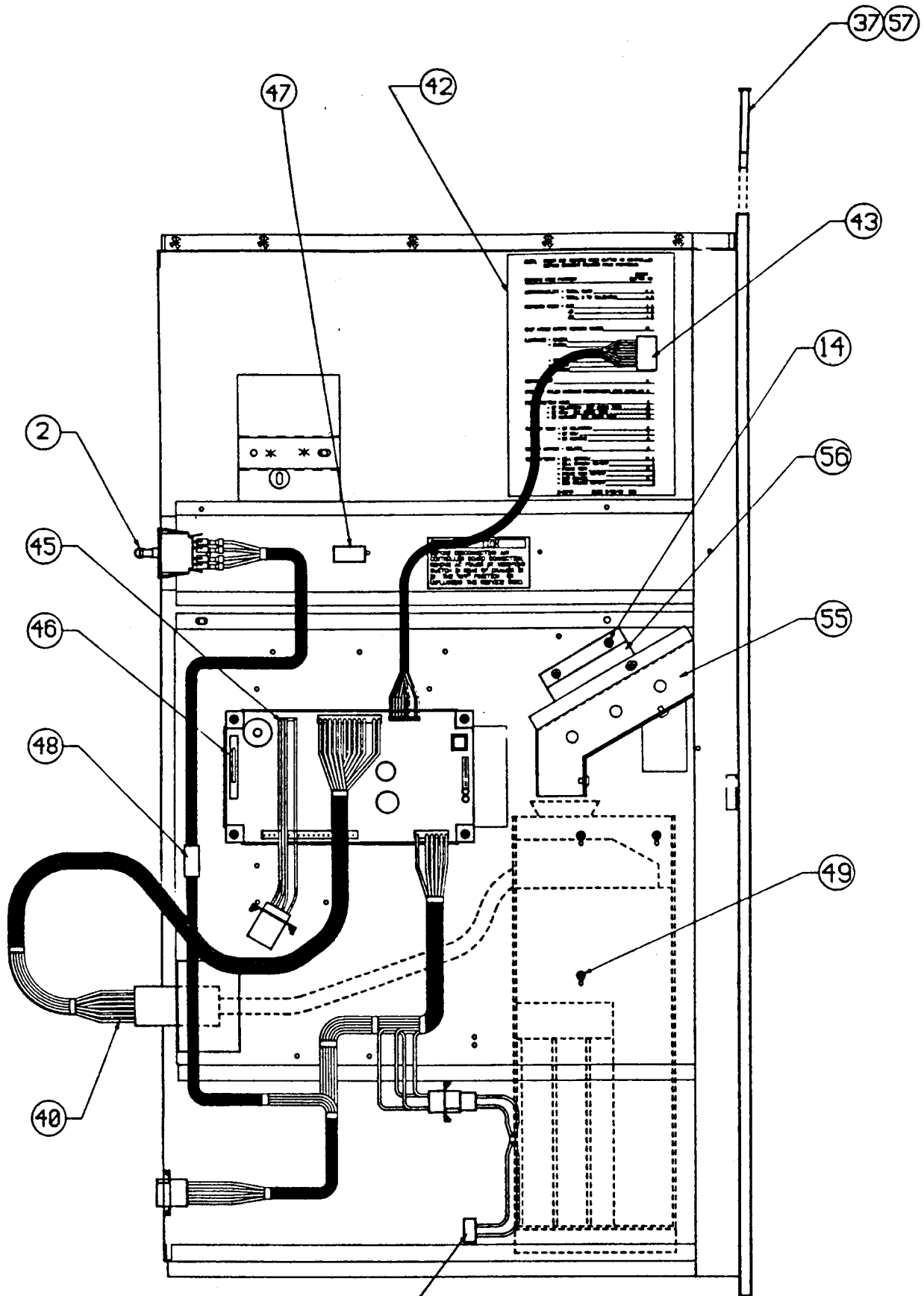
ITEM	DESCRIPTION	PART NO.	QTY.
1	CABINET W/A	21449	1
2	DRAWER ASSEMBLY	23530	1
3	POWER BOX ASSEMBLY	22929	1
4	POWER BOX MOUNT	21478	1
5	SCREW	01298BLK	4
6	CLAMP	0853802	1
7	STRAIN BUSHING	02438	1
8	POWER CORD COVER	22684	1
9	CLAMP	0853801	6
10	TRAY HARNESS 4SEL/5SEL	21464	
11	TRAY HARNESS 8SEL/10SEL	21462	
12	LAMP ASSEMBLY HARNESS	21498	1
13	MOTOR JUNCTION BOARD	21528	1
14	POWER EXTENSION HARNESS	21531	1
15	POWER CORD	17720	1



SLIDING DRAWER ASSEMBLY

**COMPLETE DRAWER ASSEMBLY
PARTS LIST**

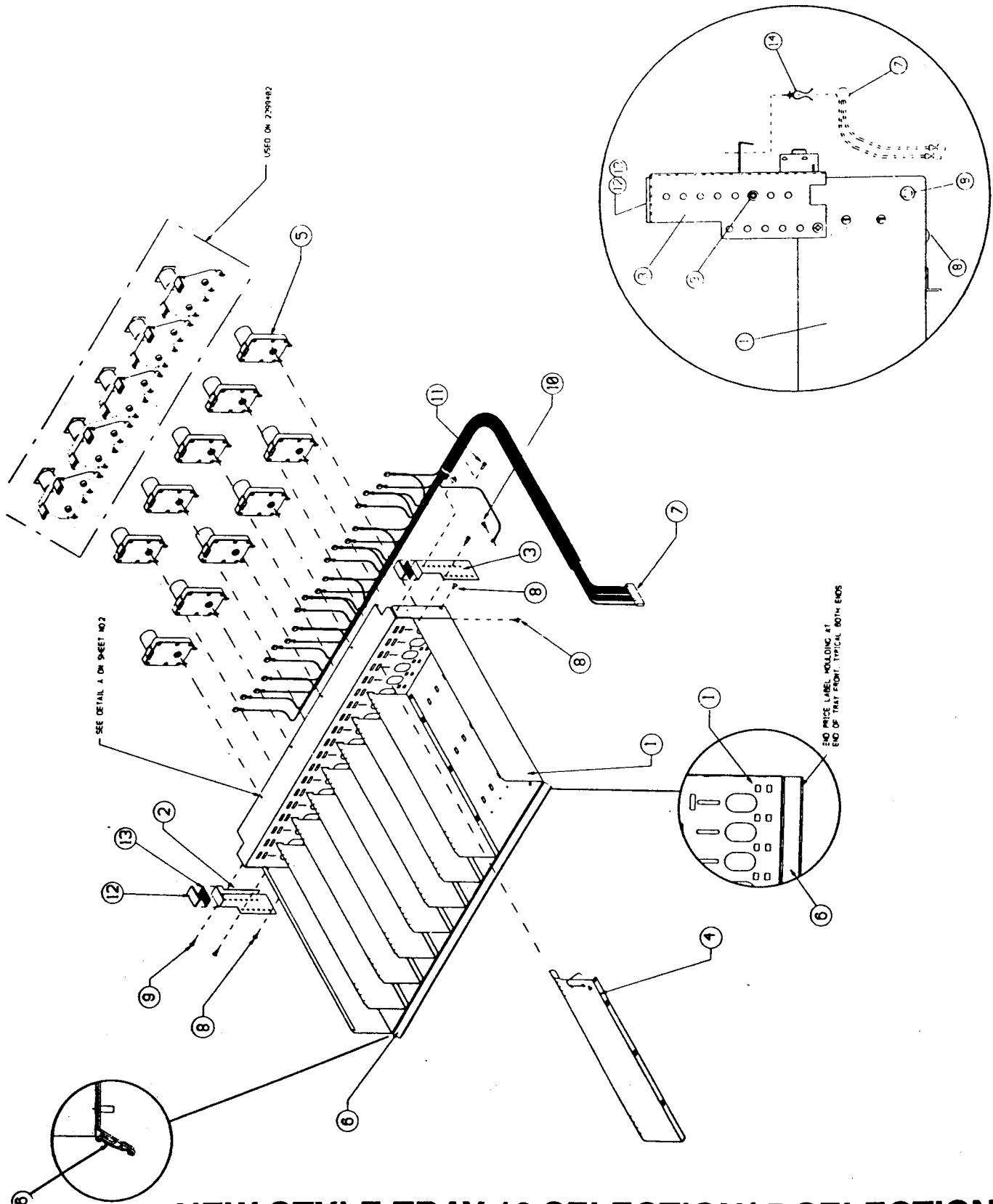
ITEM	DESCRIPTION	PART NO.	QTY
1	DRAWER W/A	2413801	1
2	SWITCH	19746	1
3	DISPLAY	21153	1
3A	DISPLAY (DDCMP)	24150	1
4	SCREW	2614BLK	4
5	SCREW	01715	3
6	GROUND HARNESS	20797	1
7	CAUTION DECAL	19819	1
8	INTERNATIONAL CONTROL BD. (DDCMP)	24149	1
10	CONTROL BOARD COVER	2330901	1
11	CONTROL BOARD COVER DECAL	23315	1
12	MOTOR HARNESS CLAMP	23321	1
13	WING NUT	19170	2
14	SCREW	01298BLK	25
15	SCREW	18370BLK	6
16	MOTOR INTERCONNECT HARNESS	21501	1
17	STEEL SPACER	00827	8
18	COIN REJECT	21476	1
19	WASHER	04280	5
20	COIN REJECT BASE W/A	21474	1
21	COIN REJECT CAM	21475	1
22	NEOPRENE GASKET	23129	1
23	KEYPAD MOUNTING PLATE	23230	1
24	KEYPAD MULTINATIONAL	19576	1
25	SCREW	21274	2
26	SELECTION BUTTON SET	29909ST	1
27	COIN INLET	17948	1
28	COIN REJECT BUTTON	21125	1
29	COIN REJECT BUSHING	21126	1
30	WASHER	03276	1
31	WASHER	23810	1
32	SPACER SLEEVE	22201	1
33	SCREW - BRASS	24167	1
34	LENS	21061	1
36	NUT	01958	4
37	MIDDLE ESCUTCHEON CAP	17916BLK	1
38	DRAWER ESCUTCHEON	2153604	1
39	ESCUTCHEON DECAL	21516BWH	1
59	SCREW	22482	4
60	MOTOR HARNESS JUNCTION BOARD	2142401	1



**SLIDING DRAWER ASSEMBLY
WIRING DIAGRAM**

**ELECTRICAL WIRING
SLIDING DRAWER ASSEMBLY
PARTS LIST**

ITEM	DESCRIPTION	PART NO.	QTY.
14	SCREW	01298BLK	18
42	PROGRAM CHART DECAL	19766	1
43	DISPLAY HARNESS	1973501	1
48	CLAMP	0853801	2
49	SCREW	11894	3
55	COIN CHUTE ASSEMBLY	23000	1
56	COIN CHUTE MOUNTING ASSEMBLY	21523BLK	1
57	ADHESIVE	18880	1
61	DEX HARNESS (NOT SHOWN)	098-5258	1



NEW STYLE TRAY 10 SELECTION/ 5 SELECTION



**NEW STYLE TRAY WITH REMOVABLE DIVIDERS
PARTS LIST
5 SELECTION TRAY ASSEMBLY
LARGE HELIX**

Note: New style trays installed in all machines starting with serial number 19767 and higher.

ITEM	DESCRIPTION	PART NO.	QTY.
	TRAY ASSEMBLY COMPLETE	2399401	1
1	TRAY W/A	2399503	1
2	TRAY TILT BRACKET LH	24128LH	1
3	TRAY TILT BRACKET RH	24128RH	1
4	TRAY ASSEMBLY DIVIDER	24000	4
5	MOTOR	23894	5
6	PRICE LABEL MOLDING	24042	1
7	TRAY MOTOR HARNESS 8-SELECT	2146201	1
8	CANOE CLIP	210-8021	4
9	SCREW #8-32 X 3/8	01298BLK	3
10	SCREW #8-32 X 3/8 SEMS	01715	1
11	SCREW #8-32 X 1/2	02614BLK	1
12	TRAY TILT BRACKET PAD	21438	2
13	ADHESIVE TAPE	18880	1.312"
14	PURSE LOCK STANDOFF	24002	4

**PARTS LIST
5 SELECTION TRAY ASSEMBLY
DUAL HELIX**

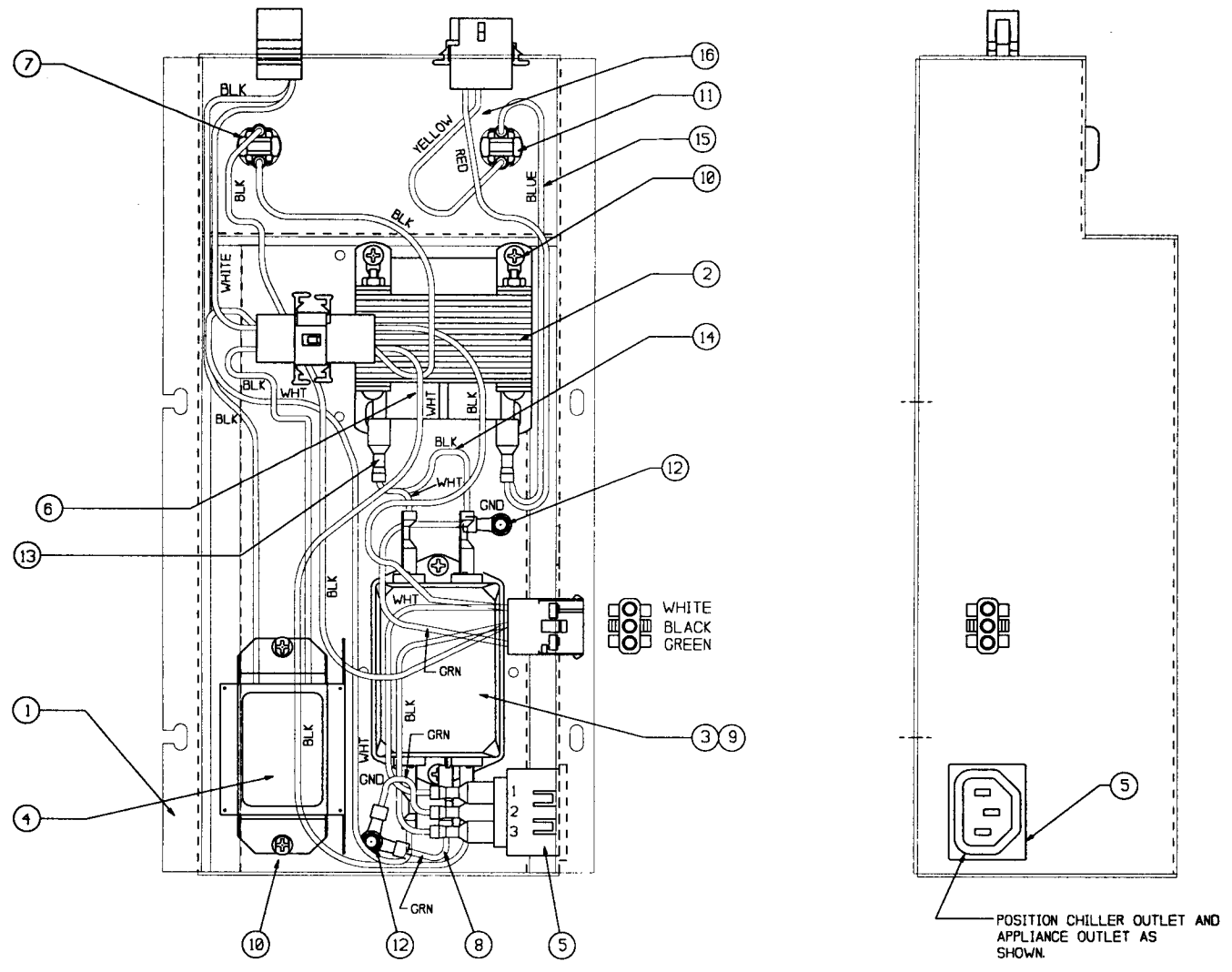
ITEM	DESCRIPTION	PART NO.	qty.
	TRAY ASSEMBLY COMPLETE	2399402	1
1	TRAY W/A	2399503	1
2	TRAY TILT BRACKET LH	24 128LH	1
3	TRAY TILT BRACKET RH	24128RH	1
4	TRAY ASSEMBLY DIVIDER	24000	4
5	MOTOR	23216	5
6	PRICE LABEL MOLDING	24042	1
7	TRAY MOTOR HARNESS 8-SELECT	2146201	1
8	CANOE CLIP	21 0-8021	4
9	SCREW #8-32 X 3/8	01298BLK	3
10	SCREW #8-32 X 3/8 SEMS	01715	1
11	SCREW #8-32 X 1/2	02614BLK	1
12	TRAY TILT BRACKET PAD	21438	2
13	ADHESIVE TAPE	18880	1.312"
14	PURSE LOCK STANDOFF	24002	4



**NEW STYLE TRAY WITH REMOVABLE DIVIDERS
PARTS LIST
10 SELECTION
TRAY ASSEMBLY**

Note: New style trays installed in all machines starting with serial number 19767 and higher.

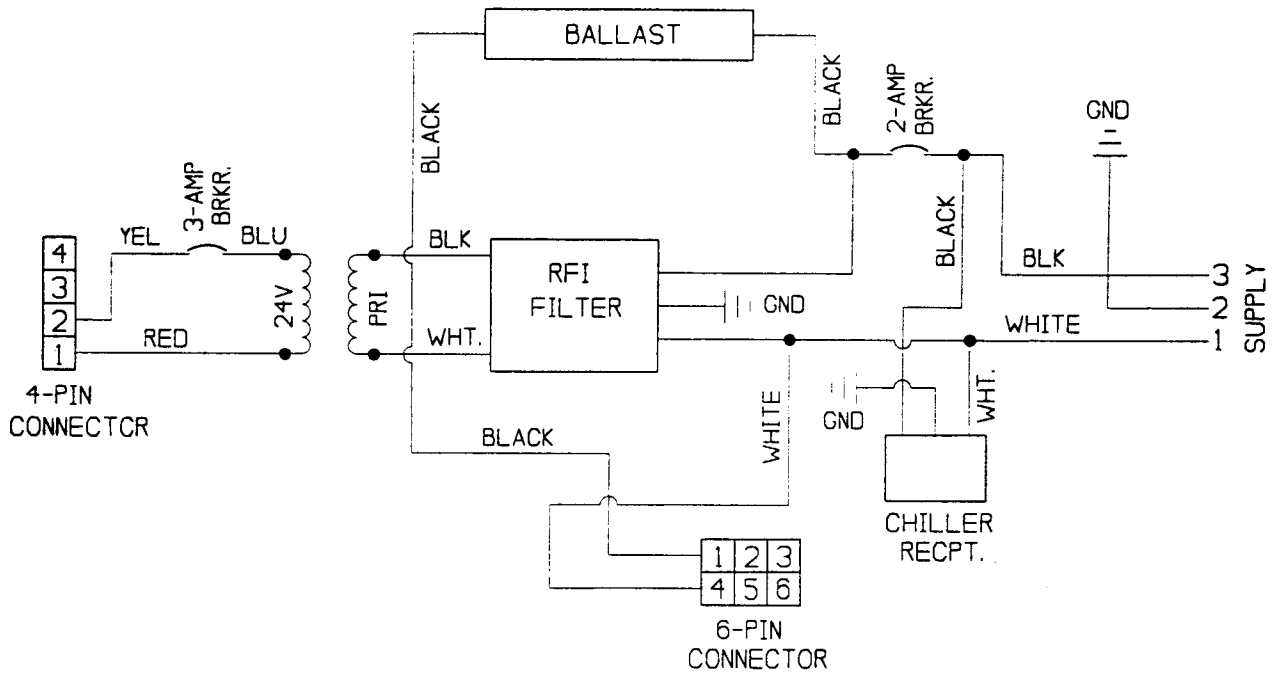
ITEM	DESCRIPTION	PART NO.	QTY.
1	TRAY ASSEMBLY COMPLETE	23994	1
1	TRAY W/A	2399503	1
2	TRAY TILT BRACKET LH	24128LH	1
3	TRAY TILT BRACKET RH	24128RH	1
4	TRAY ASSEMBLY DIVIDER	24000	9
5	MOTOR	23894	10
6	PRICE LABEL MOLDING	24042	1
7	TRAY MOTOR HARNESS 8-SELECT	2146201	1
8	CANOE CLIP	21 O-8021	4
9	SCREW #8-32 X 3/8	01298BLK	3
10	SCREW #8-32 X 3/8 SEMS	01715	1
11	SCREW #8-32 X 1/2	02614BLK	1
12	TRAY TILT BRACKET PAD	21438	2
13	ADHESIVE TAPE	18880	1.312"
14	PURSE LOCK STANDOFF	24002	4



**POWER BOX ASSEMBLY
TO BE USED IN CONJUNCTION WITH PAGES 49, 50, 51**

**PARTS LIST
POWER BOX ASSEMBLY**

ITEM	DESCRIPTION	PART NO.	QTY.
-	POWER BOX ASSEMBLY	24346	1
1	BOX, W.A. - POWER	23660	1
2	TRANS. 115/230 TO 24V AC	097-8029	1
3	FILTER, RFI, SCHAFFNER	20758	1
4	BALLAST ASSY. 15 W 120V	24601	1
5	OUTLET, APPLIANCE	19663	1
6	HARNESS, POWER SUPPLY	23661	1
7	CIRCUIT BREAKER 2.0 A	2233001	1
8	HRNS. - GND., EXPORT PWR	19703	2
9	SCREW, 8-18 X 3/8, TAR	01298BLK	2
10	SCREW, SEMS	01715	4
11	CIRCUIT BREAKER, 3.0A	2233002	1
12	NUT, HEX W/LOCKWASH. 832	20208	2
13	JUMPER WIRE -WHITE	2363101	1
14	JUMPER WIRE - BLACK	23631	1
15	JUMP. WIRE - TRANS./BRKR.	23636	1
16	HARNESS ASSY. 24V POWER	23642	1

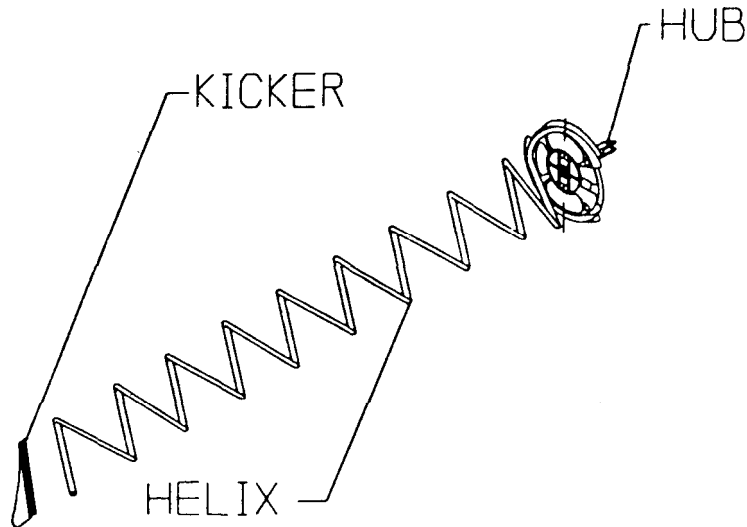


SCHEMATIC DIAGRAM



HELIX ASSEMBLY

USED WITH NEW STYLE TRAY WITH REMOVABLE DIVIDERS



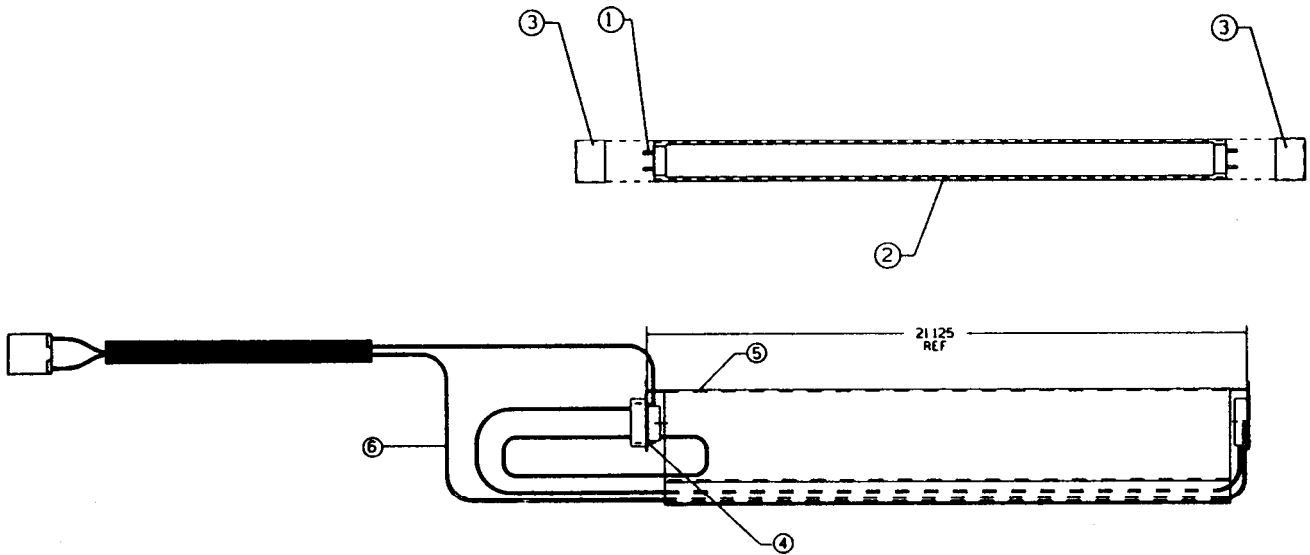
PASTRY			CANDY		
HELIX	PART NO.	PROD. THICKNESS	HELIX	PART NO.	PROD. THICKNESS
14CT	23978L3	1"	22 CT.	23977L6	5/8"
10 CT.	23978L2	1 1/2"	14 CT.	23977L4	1"
8 CT.	23978L1	1 7/8"	12 CT.	23977L3	1 1/4"
6 CT.	23978L4	2 1/2"	10 CT.	23977L2	1 1/2"
SEPARATE KICKER 18303 HUB ASSEMBLY 23886			SEPARATE KICKER 210-30206 HUB ASSEMBLY 23886		

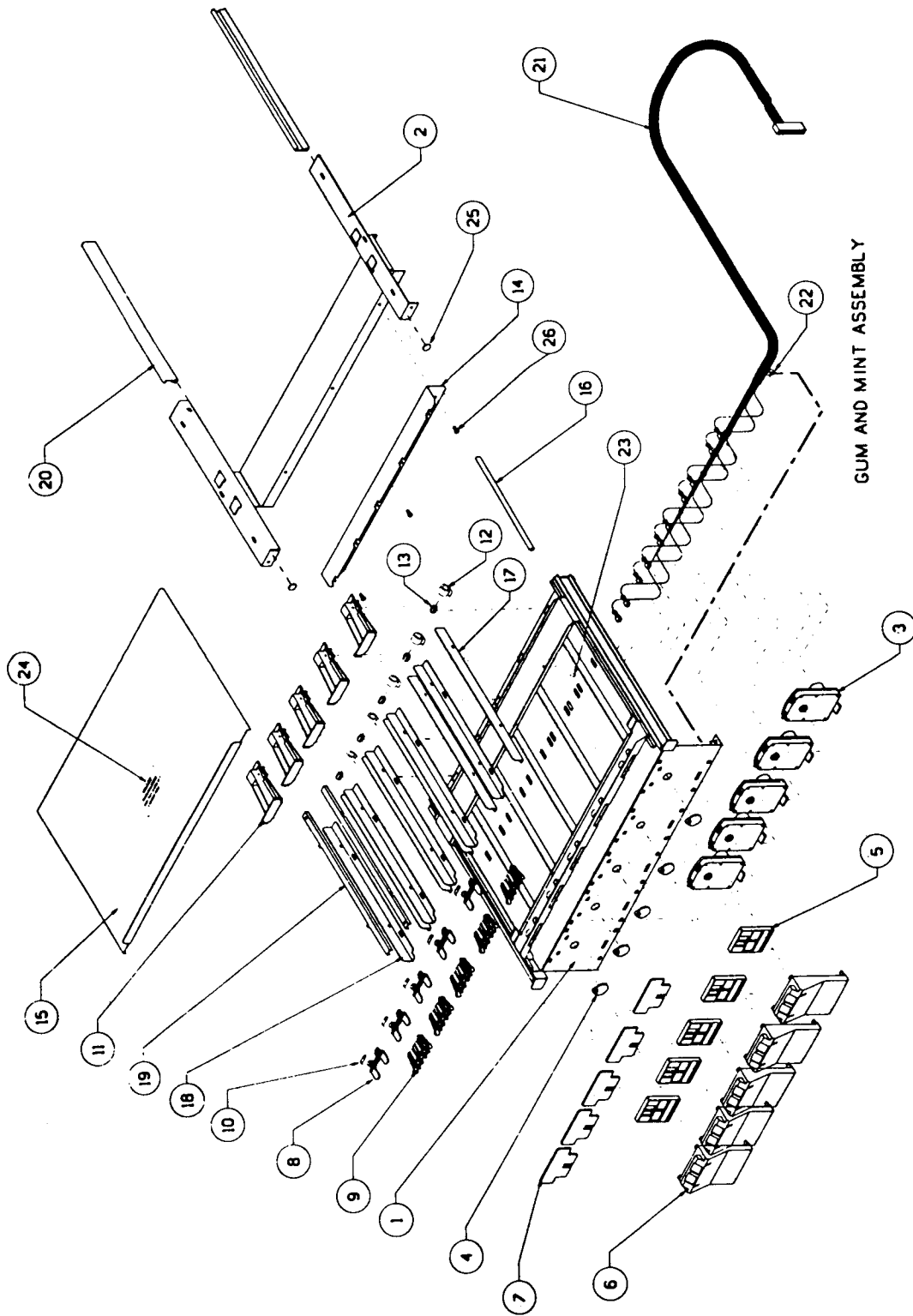
DUAL HELIX

HELIX	PART NO. RIGHT	PART NO. LEFT	PRODUCT THICKNESS
18 CT.	23977R5	23997L5	1/2"
14 CT.	23977R4	23977L4	7/8"
12 CT.	23977R3	23977L3	1"
10 CT.	23977R2	23977L2	1 1/4"
a CT.	23977R1	23977L1	1 1/2"
SEPARATE KICKER 210-3020B HUB ASSEMBLY 23886			

**PARTS LIST
LAMP ASSEMBLY**

ITEM	DESCRIPTION	PART NO.	QTY.
	LAMP ASSEMBLY	24353	1
1	LAMP BULB - 15 WATT	00101	1
2	TUBE POLYCARBONATE	21562	1
3	END CAP	19706	2
4	SCREW	13261	2
5	LAMP BRACKET	24402	2
6	HARNESS STD. LAMP ASSY.	24352	1
-	STARTER FS-2	24396	1





GUM AND MINT ASSEMBLY

NEW STYLE GUM & MINT ASSEMBLY

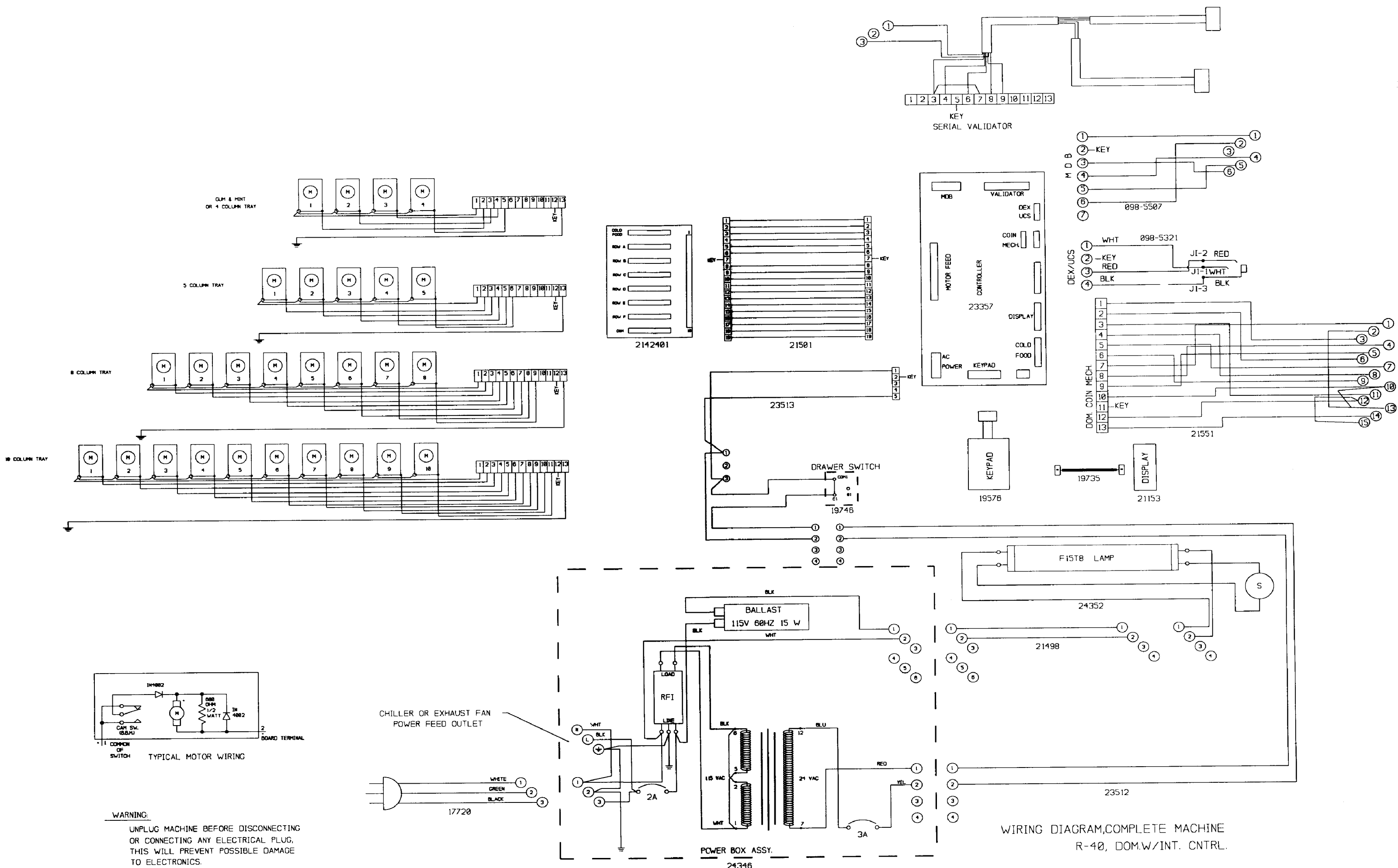
Used in conjunction with page 55

NEW STYLE GUM AND MINT ASSEMBLY

PARTS LIST

New style assemblies installed in machines with SN 20928 & higher.

ITEM	DESCRIPTION	PART NO.	QTY.
	TRAY ASSEMBLY COMPLETE	23950	1
1	TRAY W/A	2389801	1
2	SLIDE SUPPORT W/A MID-SIZE	2390601	1
3	MOTOR	23894	5
4	CAM	23888	5
5	ACTUATOR	23889	5
6	GUIDE BLOCK	23890	5
7	WINDOW	23891	5
a	GATE	23892	5
9	PIVOT	23893	5
10	SPRING	23908	5
11	PRODUCT PUSHER	19075	5
12	SPRING - CONSTANT FORCE	19165	5
13	ROLLER	23953	5
14	BRACKET - SPRING RETURN	2390901	1
15	FULL SIZE COVER	2391001	1
16	EDGE TRIM	23911	2
17	PRODUCT GUIDE R.H.	2391202	5
1a	PRODUCT GUIDE L.H.	2391203	5
19	HEIGHT ADJUSTMENT BRACKET	19166	2
20	SLIDE - UHMW EXTRUSION	23914	2
21	HARNESS	21500	1
22	STRAIN RELIEF	23945	1
23	CANOE CLIP	19176	2
24	DECAL "CAUTION"	19174	1
25	BUMPER ADHESIVE	24021	2
26	#8-18 X 3/a SCREW	01298BLK	3



WARNING:
 UNPLUG MACHINE BEFORE DISCONNECTING OR CONNECTING ANY ELECTRICAL PLUG. THIS WILL PREVENT POSSIBLE DAMAGE TO ELECTRONICS.

WIRING DIAGRAM, COMPLETE MACHINE
 R-40, DOM. W/INT. CNTRL.



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