



TABLE OF CONTENTS

	PAGE
GENERAL INFORMATION	1
OPERATION OF MACHINE	1
SPECIFICATIONS	2
ELECTRICAL	2
CAPACITY	2
COOLING SYSTEM PRECAUTIONS (WHEN COOLING SYSTEM INSTALLED) .....	.
CONTROLLER SPECIFICATIONS	3
STARTING AND TESTING	4-5
COIN BOX REMOVAL	6
PRODUCT LOADING	7-10
HELIX DISPENSER REMOVAL	8
HELIX TRAY LOADING .....	.
BOX TYPE OR FLAT BOTTOM CANDY LOADING	10
PRICE SETTING PROCEDURES	11
CLEANING INSTRUCTIONS .....	.12
INTERRUPTIONS IN OPERATIONS .....	.13
TROUBLE SHOOTING .....	.14-16
DRAWING AND PARTS LISTS .....	.17-25
COMPLETE DOOR DRAWING AND PARTS LIST .....	.18-19
COMPLETE CABINET DRAWING AND PARTS LIST .....	.20-22
TRAY ASSEMBLY DRAWING AND PARTS LIST .....	.23
COMPLETE ELECTRICAL WIRING DRAWING AND PARTS LIST .....	.24-25
SCHEMATIC (COMPLETE MACHINE) .....	.26-27

POLYVEND INT. MODEL 300-3315 AUTOMATIC MERCHANDISER

The Polyvend 300-3315 snack machine has been developed specifically for the display merchandising market. Each of the dispensing units may be activated by push button selection of letter A or B and a number (0 to 9) after sufficient credit has been established in the coin mechanism.

OPERATION OF THE MACHINE

The coins which can be used in the machine are shown beside the coin slot. When a customer decides to make a purchase, the amount required is next to the selection letter and number on the tray front of the item you wish to buy. Once the customer has deposited the amount corresponding to the price of the item, the letter and number of that selection is pushed. The corresponding motor of that selection is energized and the item is vended by the helix. The product will drop off the front of the tray and down into the product delivery compartment. The customer then pushes the delivery door open and retrieves the purchased item. The vending machine will then determine if change should be returned to the customer and if due, dispense the required amount into the coin return cup.

If the coin changer does not have enough change in the coin tubes to make a purchase and return change to the customer the "EXACT CHANGE ONLY" lamp will be illuminated. If there is insufficient credit for the selection made the "SELECTION PRICE" lamp will be illuminated. When a selection is made and there is a malfunction in that circuit resulting in no product being vended the "MAKE ALTERNATE SELECTION" lamp will be illuminated.



SPECIFICATIONS

Height940mm

Width 684mm

Depth 610mm

Shipping Weight85kg. Approx.

ELECTRICAL

Voltage 220VAC 50 Cycles 1 amp

Voltage to coin changer 24 VAC

CAPACITY

Small Helix

16mm thick product17 pieces (crackers & candy)

25mm thick product12 pieces (crackers & candy)

31 mm thick product10 pieces (crackers & candy)

Large Helix

25mm thick product11 pieces (chips & pastry)

38mm thick product8 pieces (chips & pastry)

48mm thick product6 pieces (chips & pastry)

COOLING SYSTEM PRECAUTION (When Installed)

If for any reason the vending machine should be laid on its side, front or back, do not apply power to the vending machine for a minimum of (10) hours, after the machine is set upright. If power is applied to the vending machine before (10) hours has passed, ~~severe~~ damage can occur to the compressor.

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

NOTE: Polyvend is not responsible for faulty or overloaded circuits within the facility where Polyvend machines are installed. The exact load imposed by the machines is stated above. The sum of all devices connected into a particular circuit will determine the total line load.



CONTROLLER SPECIFICATIONS

Input

24 VAC at 1 Amp Max.
10.8 VAC at 1 Amp Max.

Display

The four digit L.E.D. display board is mounted on the front panel. The lamps directly under the display are for, "SELECTION PRICE" and "ALTERNATE SELECTION". Above the display is for "EXACT CHANGE".

Helix Motors

24 Volts D.C.

Coin-Mech.

Mars ME-1900 or equivalent.

Note: This unit DOES NOT COME WITH A COIN CHANGER IN IT. Changer must be provided.

Software

This unit has multiprice setting capabilities which are used in conjunction with the ME-1900 Mars changer or equivalent.



STARTING AND TESTING THE MACHINE

01. Remove all external packing material.
02. Check for shipping damage.
03. Remove keys from product dispensing compartment (in small manila envelope) and unlock the service door. Raise the service door and remove the blue protective sheet, covering the inside and outside surface of the plexiglass product service door.
04. Remove shipping screws holding the top and center trays of the machine during shipment. (See figure 1).

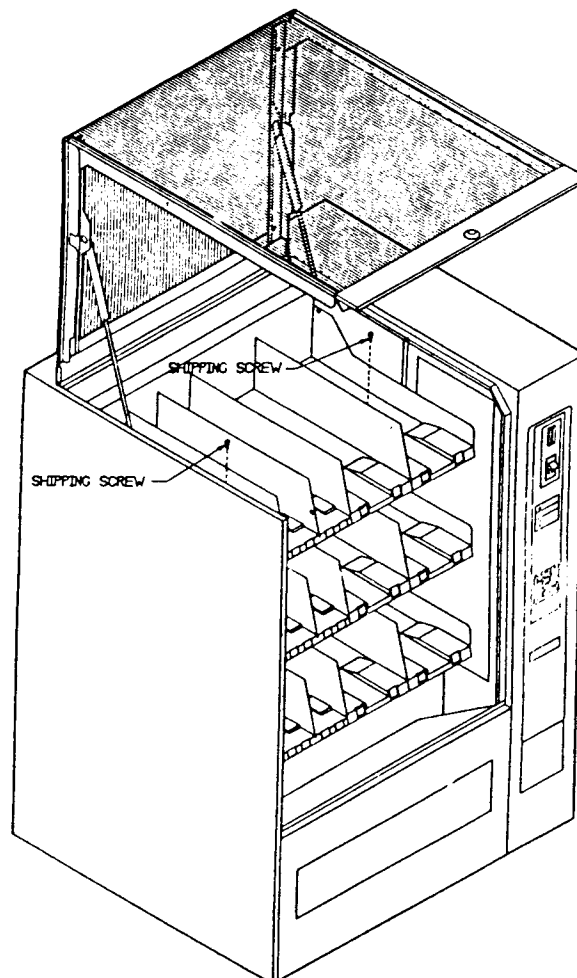


FIGURE 1



05. Install coin changer into the machine in the area located behind the sliding door (changer access door) on the right side of the compartment. See figure 2 pg. 6. There are three (3) screws with approximately 5 mm of thread showing. The changer is mounted on these screws. Open the acceptor and tighten the two (2) top screws. Plug the large electronic plug on the changer into the connector provided and the small nine (9) pin plug into the receptacle on the control board wiring harness.
06. Plug the service cord into an electrical source, (see note) maintaining proper polarity using the three prong grounded connector provided.

Note: 220 VAC/50 cycles

CAUTION: DISCONNECT POWER TO THE VENDING MACHINE BY UNPLUGGING THE MACHINE OR TURNING OFF THE CIRCUIT BREAKER BEFORE REMOVING THE CONTROL BOARD, COIN CHANGER OR WORKING ON ANY ELECTRICAL COMPONENTS IN THE MACHINE.

07. Push up on the coin return lever to check the operation of the coin changer. Operation should be smooth, if not, insure proper alignment of the changer with the coin return lever.
08. Set the desired price of each selection in accordance with the coin mechanism instruction sheet and the instructions provided in the Price Setting section.
09. Load the coin tubes on the coin changer with proper coinage. Operate each dispenser using coins. Test each dispenser to ensure smooth operation.
10. Ensure that all helix dispensers run in their channels and stop at the proper location for product dispensing.
11. Load the machine with product. (See Product Loading Section).
12. Close and lock the service door.

CAUTION: DISCONNECT POWER TO THE VENDING MACHINE BY UNPLUGGING THE MACHINE OR TURNING OFF THE CIRCUIT BREAKER BEFORE REMOVING THE CONTROL BOARD, COIN CHANGER OR WORKING ON ANY ELECTRICAL COMPONENTS IN THE MACHINE.

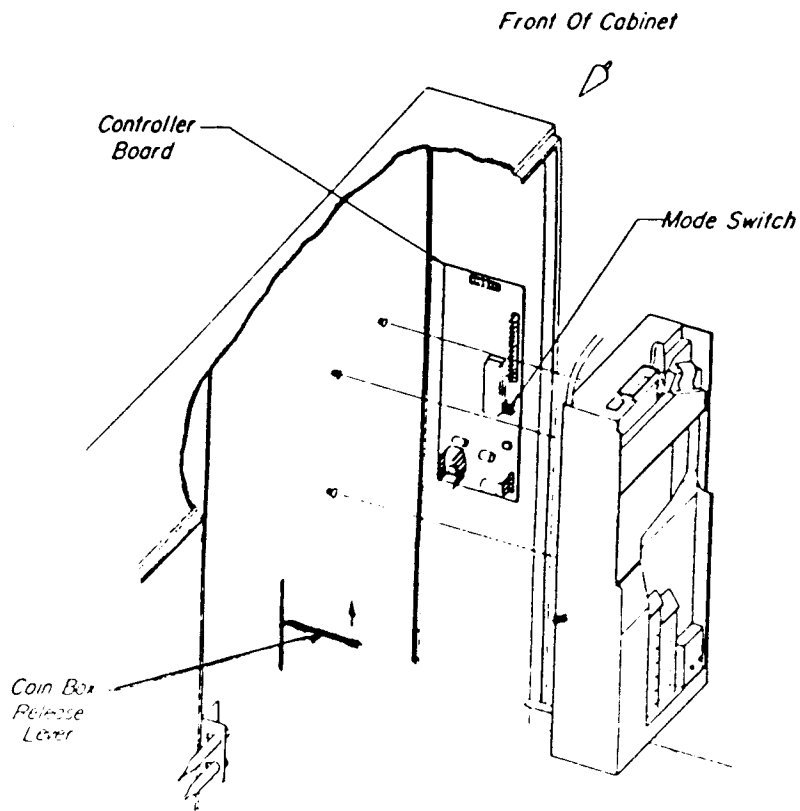


FIGURE 2

COIN BOX REMOVAL

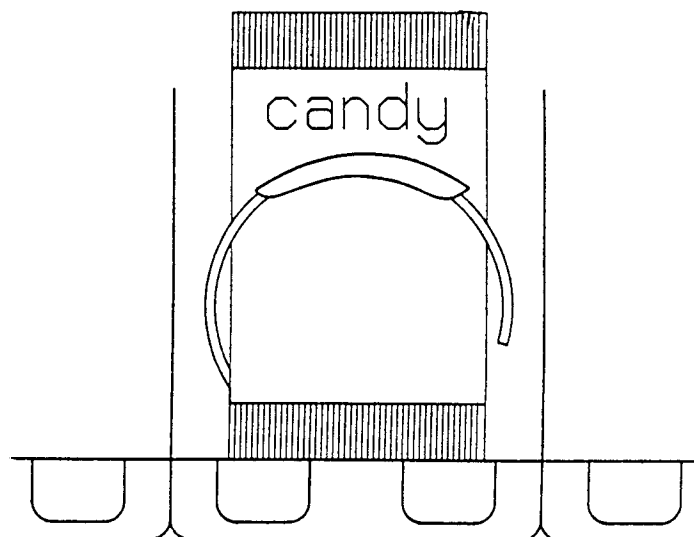
To the bottom left of the coin changer is the coin box release lever (see figure 2). Pull up on this lever and the coin box will slide forward out the front of the machine, allowing you to remove the coin box. To lock the coin box, push the coin box into the cabinet until the front of the box is flush with the cabinet.



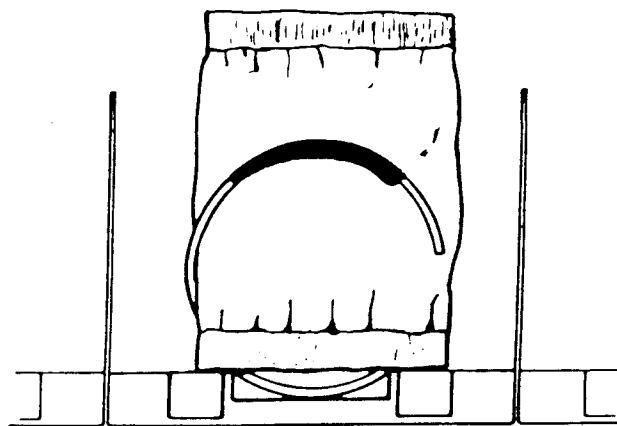
PRODUCT LOADING

HELIX TRAY DISPENSERS

The Polyvend 300-3315 has several helix pitches. To assure the proper operation and maximum capacity, the product size should closely match the opening between the winding 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. Be sure to place the product all the way to the bottom of the tray and tilt free end at the top backwards (see figure 3 below).



*Candy Helix In
Detent Position*



*Chip (Large) Helix
In Detent Position*

FIGURE 3

PRODUCT LOADING

Helix Tray Product Loading

There are several helix pitches. To ensure proper operation and maximum capacity, the product should fill most of the opening without being tight.

The helix sizes are listed below.

Candy Helix	Product Thickness
17ct	16mm - thin candy bar
12ct	25mm - medium candy bar
10ct	31mm - large candy bar
Snack/Pastry Helix	Product Thickness
11ct	25mm - large cookies
8ct	38mm - medium chip bag
6ct	48mm - large chip or pastry

Helix Dispenser Removal

An individual helix can be removed for cleaning, repair or replacement with a different pitch. Grasp the helix and twist it 10 to 15 degrees counter clockwise. Then pull forward and remove the helix from the tray (see figure 4 below).

To replace the helix, align the tabs on the helix hub with the slots in the white colored tray coupling. Push the helix into position and twist 10 to 15 degrees clockwise. Check to verify that the helix end is in the proper position and pull to insure proper connection.

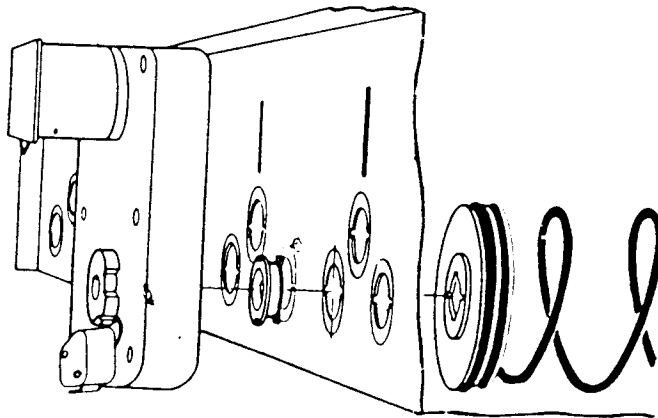


FIGURE 4

HELIX TRAY LOADING

All product loading is accomplished from the front. Using one of the two keys provided, unlock and raise the service door to the full open position. This provides access to all dispensers.

To load the bottom shelf, lift the top tray assembly and slide the locking bars outward to lock it into position, raise and lock the second tray into position. Load the bottom shelf 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: ALL PRODUCTS SHOULD RIDE ON SHELF AND NOT ON HELIX WIRE.

After filling the tray, lift the front of the second tray, release the locking bars and lower it into position. Repeat the loading procedure for the second tray, then lower the top tray into position and load the tray as instructed above.

NOTE: All products should ride on the shelf and not on helix wire. This applies to all products, but it is most important with tall products which must vend bottom first. Certain candies and cigarettes have flat or semi-flat bottoms which are thick and wide (see page 10). Polyvend has designed into our helix the flexibility to be 100% sure of the vending of this type of product. If needed for narrow products use the two spacers provided with the machine. Install the spacers as shown below in figure 5. For additional spacers, order part no. 18244-01.

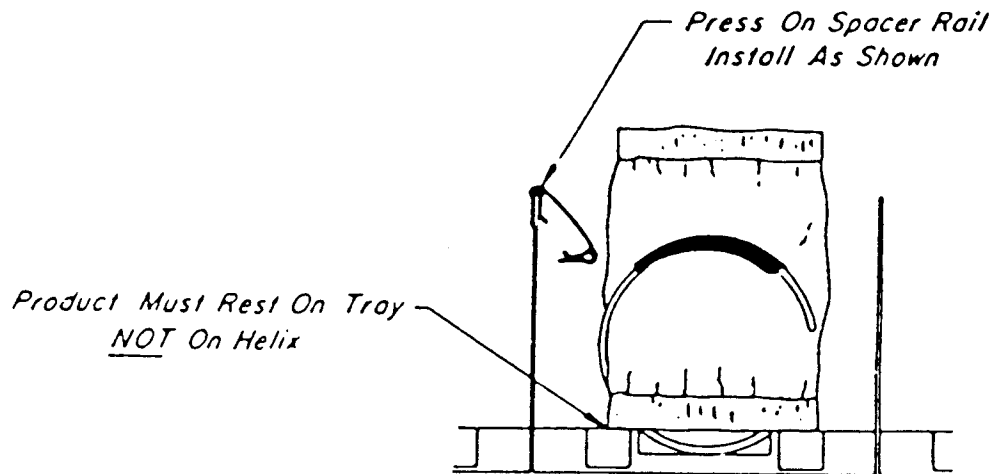


FIGURE 5

NOTICE

LOADING INSTRUCTIONS FOR BOX TYPE PRODUCT OR THICK FLAT BOTTOM CANDY.

CANDY HELIX ONLY

Certain candies and cigarettes have flat or semi-flat bottoms which are thick and wide. We have 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 kicker, it ensures the best dispensing for boxed products. You simply unlock the helix by twisting counter clockwise 10 to 15 degrees. Then turn the helix approximately 100 to 110 degrees clockwise, engage, twist clockwise and lock. The helix should be 90 degrees from the original position as shown below in figure 6.

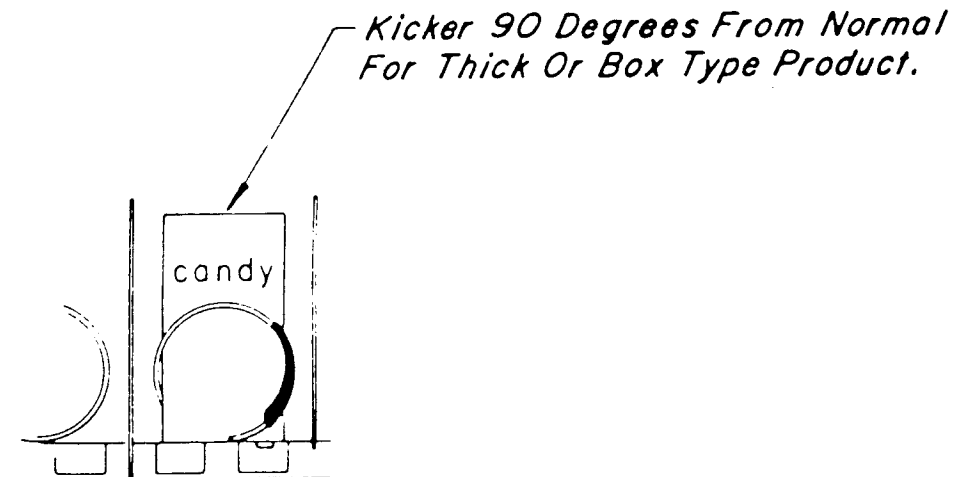


FIGURE 6

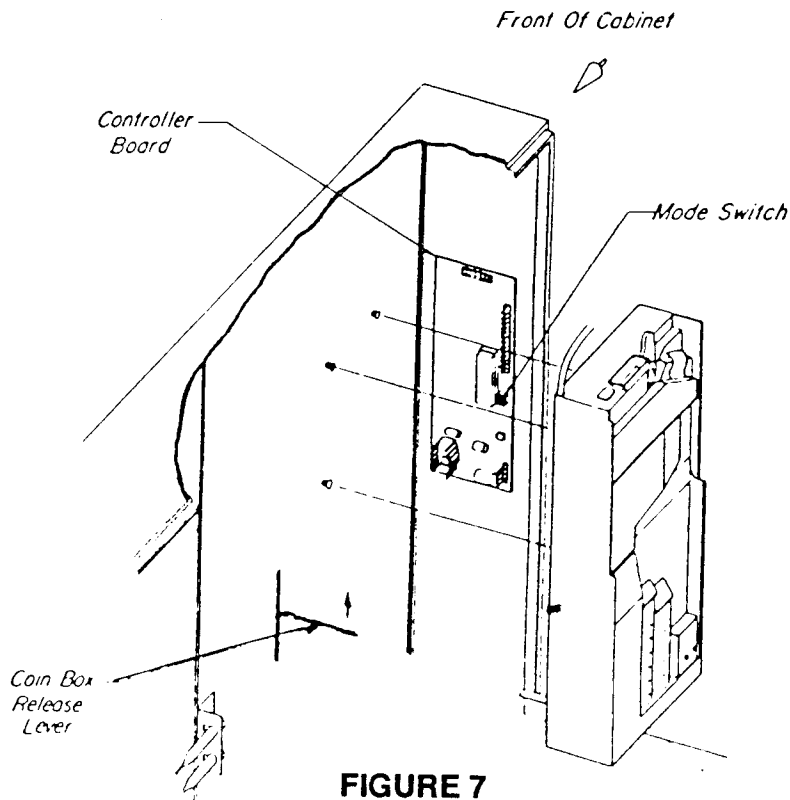


PRICE SETTING PROCEDURES

01. Inside of the changer access door to the right side of the changer, mounted on the backside of the front cabinet panel is the control board. On the nearest edge of the control board is the mode button (see figure 7 below). When this button is pushed, the machine will go into the price setting mode (the display will go blank noting the service mode). After entering the price setting mode, press the letter and number of the selection you would like to change the price of. The existing price will be displayed. Release the number button for one second and push the number again. The price will increase in increments of the base currency of the changer installed in the machine. Once you have the desired price on the chosen item you may set another selection price by pressing the letter and number. Then repeat the price setting procedure as mentioned above.

After you set all of your prices they will be locked in when you exit the mode by pushing the mode button or by waiting 25 seconds and the control board will automatically return to the sales mode.

02. To Free Vend a selection just set the price of the selection to 0000.





CLEANING INSTRUCTIONS

01. 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.

02. PRODUCT LOADING DOOR

The product loading door may be cleaned with any commercial window cleaner. **DO NOT USE ANY KIND OF SOLVENTS ON THE PLEXIGLASS LOADING DOOR.** Solvents will cause the plexiglass loading door to cloud up. Use a soft cloth to clean the door. **DO NOT USE PAPER PRODUCTS.**



INTERRUPTIONS IN OPERATION

If the machine does not operate, one or more of the points mentioned below can be the cause. Please check these points before calling a technician, as the points are NOT covered by the guarantee of the machine.

CAUTION: DISCONNECT POWER TO THE VENDING MACHINE BY UNPLUGGING THE MACHINE OR TURNING THE CIRCUIT BREAKER OFF BEFORE WORKING ON ANY ELECTRICAL COMPONENTS IN THE MACHINE. Failure to remove power to the machine could result in electrical damage to the vending machine.

01. 24 VOLT POWER SUPPLY

Check the coin payout on the changer. If payout does not work, 24 volt power supply fuse is blown. Fuse is located to the left of the control board and towards the rear of the machine. There are two fuses one over the other. The bottom fuse is for 24 volts. If the fuse blows repeatedly, a technician must be called.

02. 10 VOLT POWER SUPPLY

Check the 10 volt power supply fuse located to the left of the control board and towards the rear of the machine. There are two fuses one over the other. The top fuse is for 10 volt. If the fuse blows repeatedly, a technician must be called.

03. 220 VOLT POWER SUPPLY

Check to see if the machine is disconnected at power outlet or power to outlet is lost. Check the fuse or circuit breaker of the power supply .

- 04. THE COIN MECHANISM dirty. Jammed coins or foreign matter in the selector or the coin mechanism have to be removed. If the selector is dirty, clean out mechanism. DO NOT LUBRICATE MECHANISM. Test changer by inserting the right coins into the machine and make a vend. If the changer continues to malfunction a technician should be called.**



TROUBLE SHOOTING



TROUBLE SHOOTING

CAUTION: DISCONNECT POWER TO THE VENDING MACHINE BY UNPLUGGING THE MACHINE OR TURNING THE CIRCUIT BREAKER OFF TO THE MACHINE BEFORE REMOVING THE CONTROL BOARD OR COIN CHANGER OR WORKING ON ANY ELECTRICAL COMPONENTS IN THE MACHINE.

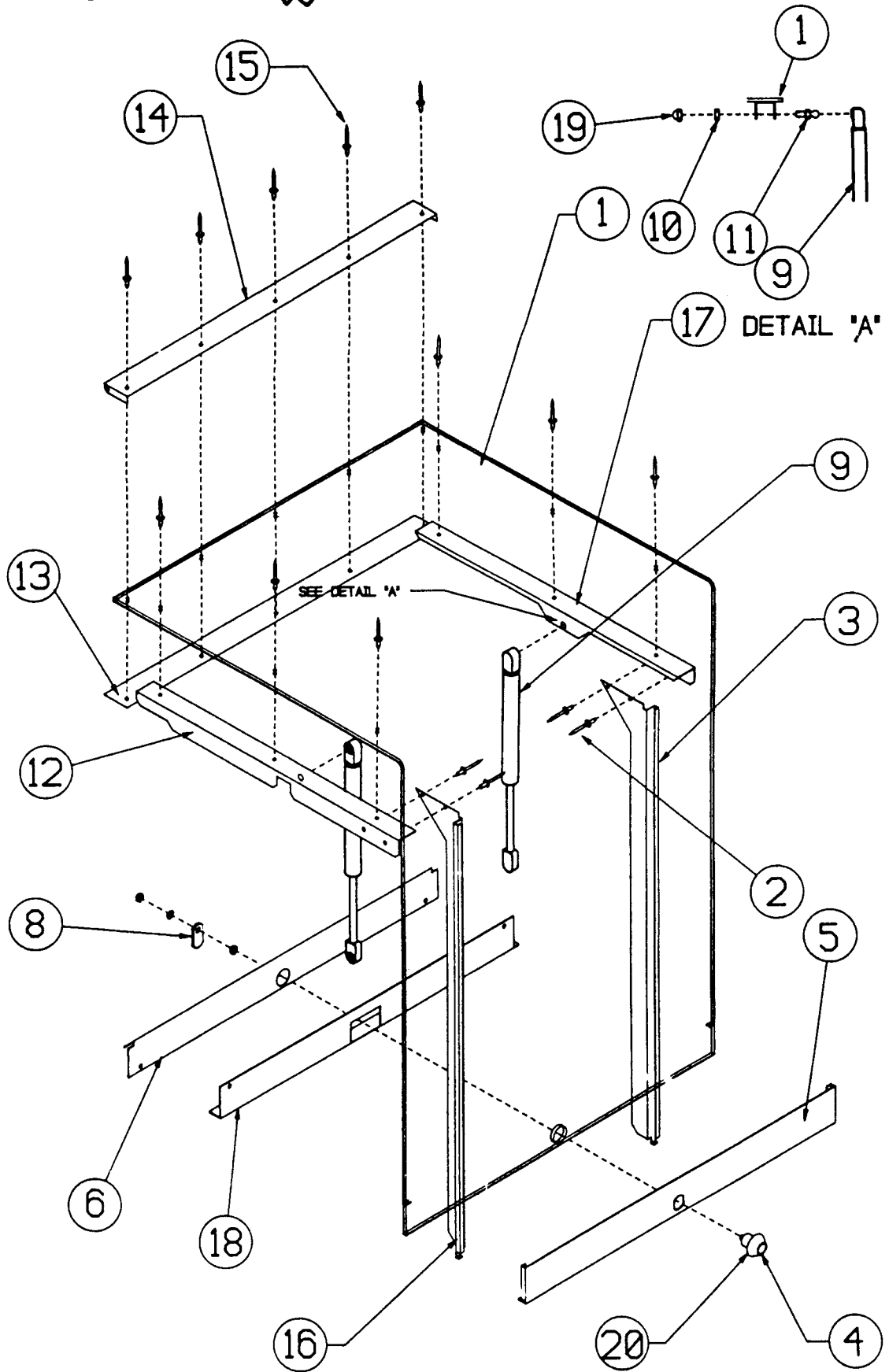
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
<p>1. All coins deposited are rejected</p>	<p>Machine unplugged at wall outlet</p> <p>Wrong changer in machine</p> <p>Check for credit on machine</p> <p>Machine not level</p>	<p>Make sure machine plugged in</p> <p>Make sure changer is Mars ME-1900 or equivalent</p> <p>Attempt to make a selection</p> <p>Level machine</p>
<p>2. Display also blank</p>	<p>No power</p>	<p>Check fuses, and transformer</p>
<p>3. Coin mechanism does not accept all coins</p>	<p>Wrong coin acceptance program</p> <p>Coin chute bent</p>	<p>Check program</p> <p>Straighten coin chute</p>
<p>4. Coins accepted No selection can be made</p>	<p>If display blank 24 volt fuse blown</p> <p>Connector at control board unplugged</p> <p>If display is blank and L.E.D. on changer has a red dot in each window check for defective control board</p> <p>If display has garbage on it. Defective control board</p>	<p>Check 24 volt fuse</p> <p>Check all connections on control board</p> <p>Replace control board</p> <p>Replace control board</p>

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
4. Coins accepted. No selection can be made	Defective selector button panel. Try to change the price of a selection. If you cannot, selector panel defective.	Replace selector button panel.
5. Can not make one selection	<p>Set price to 0000. If unable to set, selector button panel defective</p> <p>Connector on motor has come off</p> <p>Control board defective</p> <p>Defective motor assembly</p>	<p>Replace selector button panel</p> <p>Reconnect wire to motor</p> <p>Replace control board</p> <p>Replace motor</p>
6. No change returned after purchase	Coin mechanism program set for multi-vend or maximum change	Check mechanism program. See coin mechanism instructions.
7. Digital readout shows a different value than the coins deposited	Coin mechanism on wrong scale for the currency you are using	Check mechanism program. See coin mechanism instructions

Polyvend INT.



DRAWINGS AND PARTS LIST





**COMPLETE DOOR ASSEMBLY
PARTS LIST**

ITEM	DESCRIPTION	PART NO.	QTY.
1	ACRYLIC DOOR	20023	1
2	POP-RIVET	20205	4
3	RT. DOOR SUPPORT	20029-BRT	1
4	LOCK ASSEMBLY	1423908	1
5	LOCK PLATE	20028-BLK	1
6	PRODUCT DEFLECTOR	20026-BLK	1
8	LOCK CAM	22502	1
9	GAS SPRING	20236	2
10	HEX NUT	14937	2
11	BALL STUD	19927	2
12	RT. GAS SPRING SUPPORT	20027-BRT	1
13	BACK HINGE PLATE	18059-BLK	1
14	PIVOT BRACKET	20056-BLK	1
15	POP-RIVET	1642	11
16	LT. DOOR SUPPORT	20029-BLT	1
17	LT GAS SPRING SUPPORT	20027-BLT	1
18	SLIDE LOCK W/A	20859-BLK	1
19	ACORN NUT	22098	2
20	LOCK COLLAR SPACER	22420	1

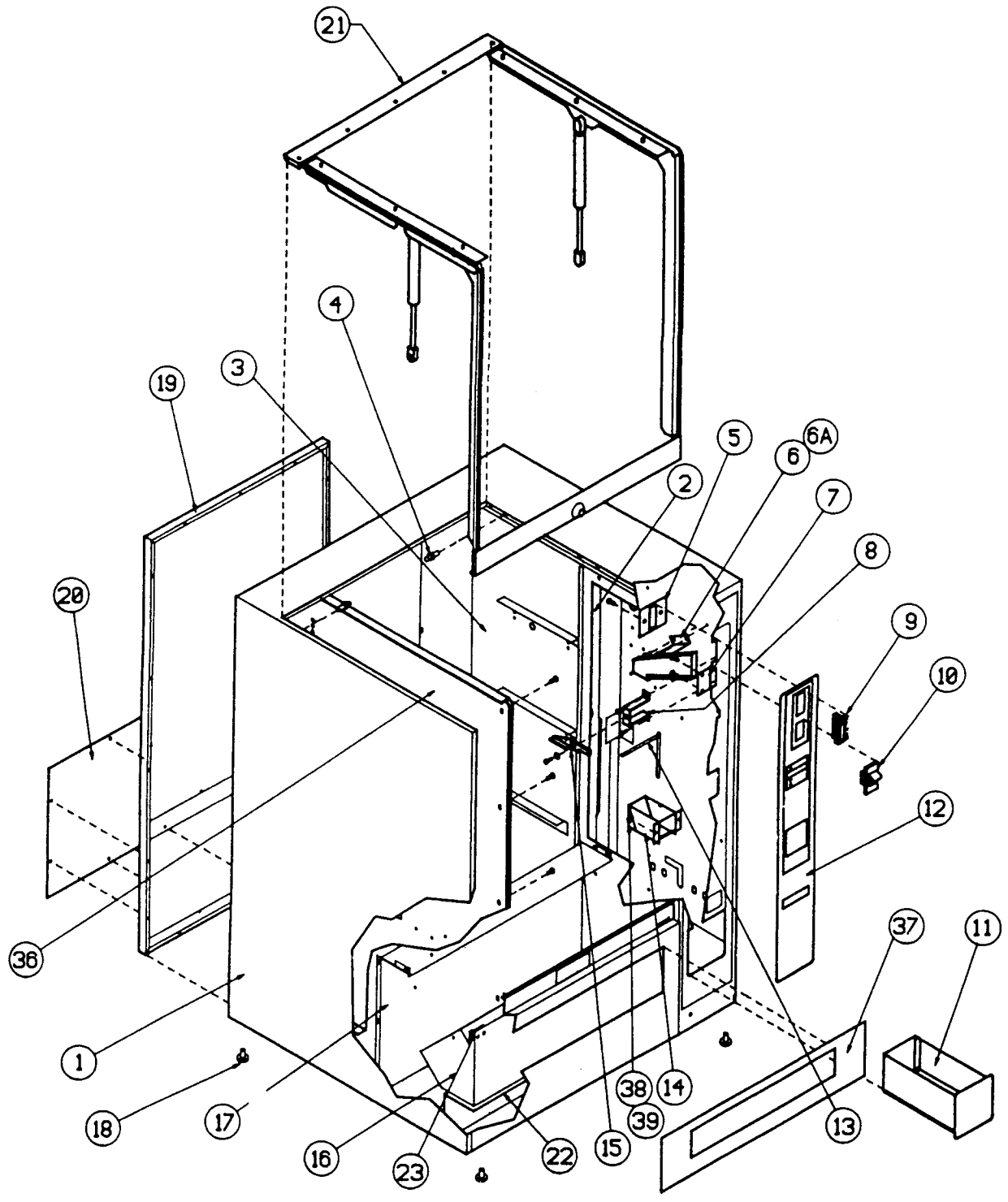
NY 02657 —

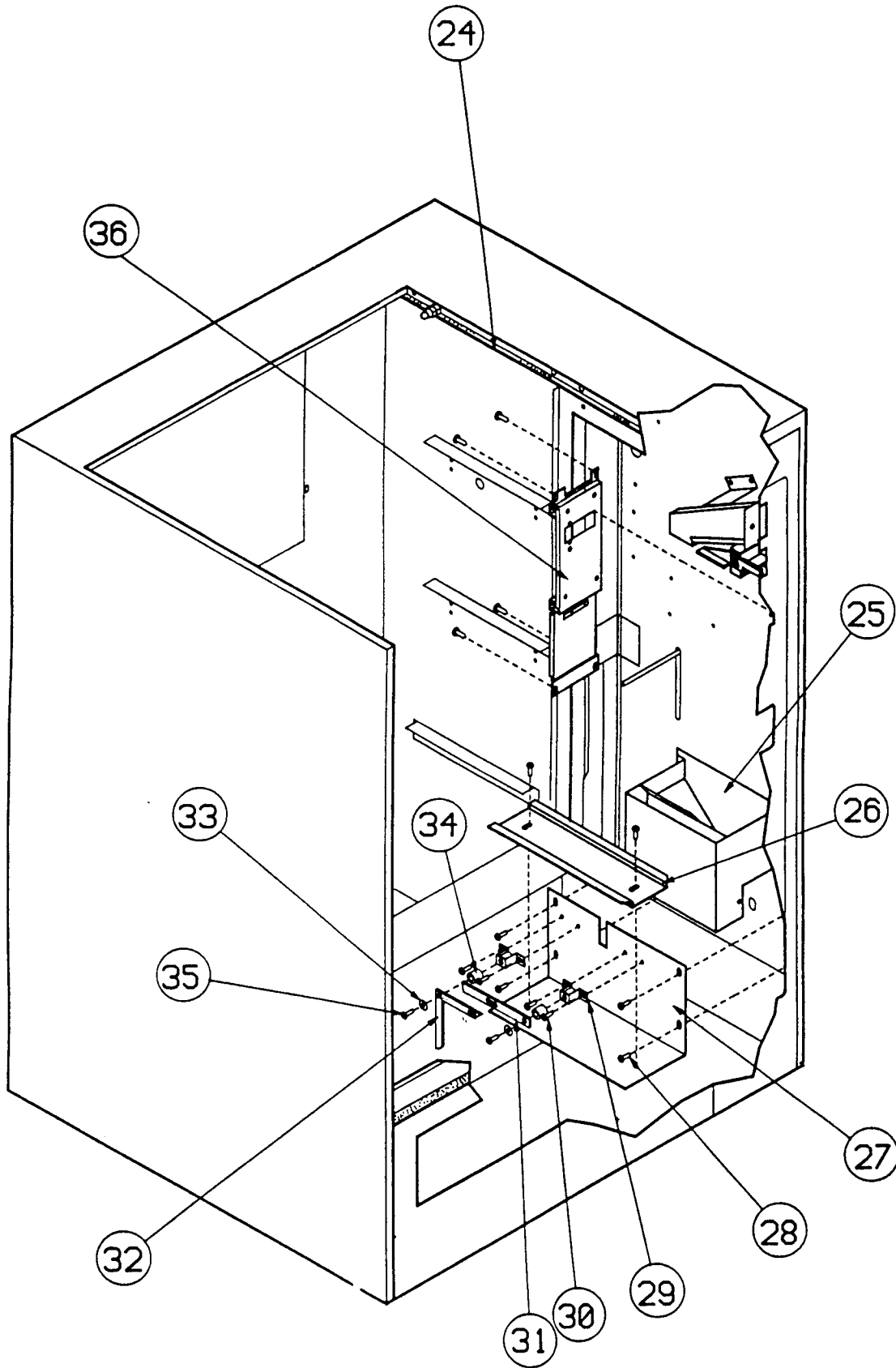


**COMPLETE CABINET ASSEMBLY
PARTS LIST**

USED IN CONJUNCTION WITH PAGES 21 & 22

ITEM	DESCRIPTION	PART NO.	QTY.
1	W/A 3 TRAY BLK SHELL	19999-BLK	1
2	ACCESS PANEL DOOR	20042	1
3	R.H. INNER PANEL	20016-BLK	1
4	BALL STUD	19927	2
5	BRACKET COIN INLET MOUNTING	19954-BLK	1
6	MV COIN CHUTE	19952-BLK	1
6A	MV COIN CHUTE COVER	19953-BLK	1
7	REJECT BUTTON RETAINER	19950	1
8	REJECT LEVER BRACKET	19959-BLK	1
9	COIN INLET	17930	1
10	REJECT BUTTON	19958	1
11	MV W/A COIN BOX	19931-BLK	1
12	R.S. ENGLISH DECAL MV	19902	1
13	COIN BOX RELEASE ROD	19951	1
14	COIN RETURN CUP ASSEMBLY	10342	1
15	W/A REJECT LEVER	19973	1
16	DELIVERY DOOR ASSEMBLY	20007	1
17	DELIVERY COMPARTMENT BACK	20004-BLK	1
18	LEG LEVELER	22557	4
19	MINI-VENDOR BACK PANEL	20115-BLK	1
20	COVER REAR 3 TRAY PAINTED MV	20119-BLK	1
21	SERVICE DOOR ASSEMBLY 3 TRAY	23099	1
22	DELIVERY COMPARTMENT SHELF	18113-BLK	1
23	FLAT WASHER	04280	2
24	NEOPRENE GASKET	00810	13 FT.
25	W/A HOPPER MV	19977-BLK	1
28	SLIDE COIN BOX MOUNTING	19932	1
27	COIN BOX MOUNTING BRACKET	19933-BLK	1
28	TAPPING SCREW	01298	25
29	LATCH MOUNTING BRACKET MV	19947	2
30	TAPPING SCREW	01868-BLK	76
31	CAM LOCK MV	19935	1
32	CAM PUSH MV	19936	1
33	FLAT WASHER	13419	2
34	STEEL SPACER	00827	11
35	SCREW	01299	3
36	CONTROL BOARD MOUNTING BRACKET	19897-BLK	1
37	TRIM DECAL	20013	1
38	HEX NUT	11694	2
39	INT. TOOTH WASHER	02497	2

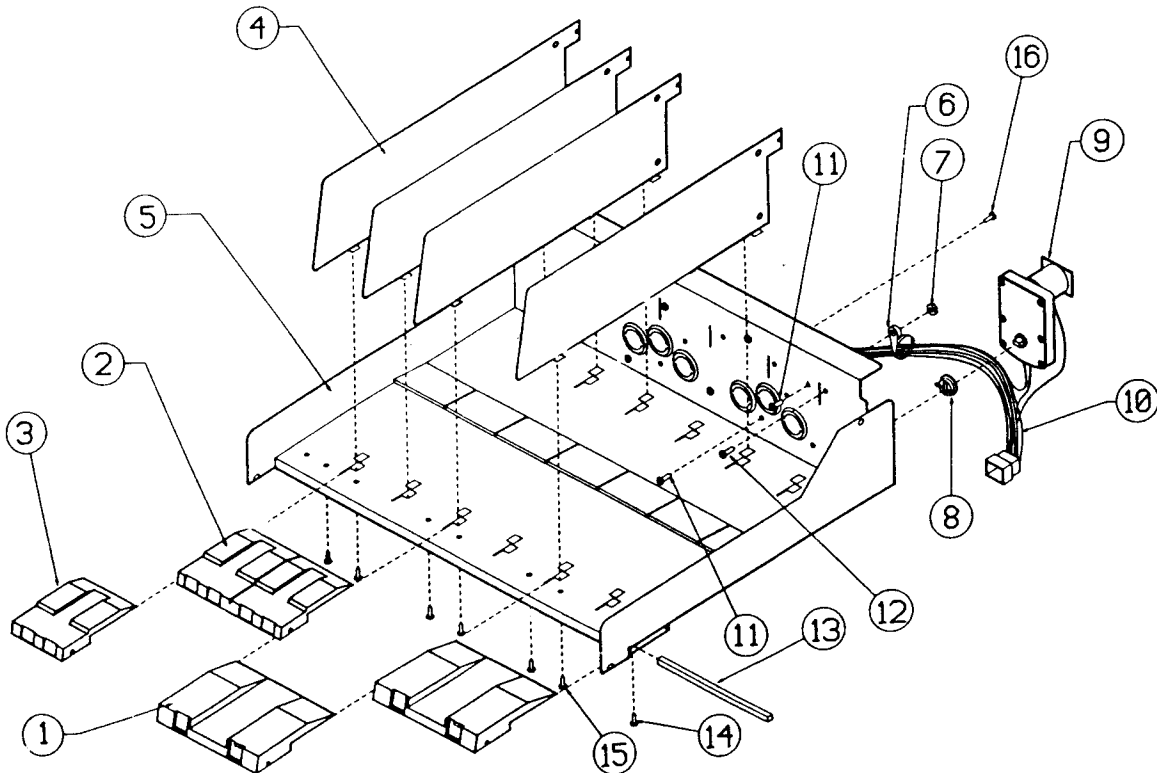


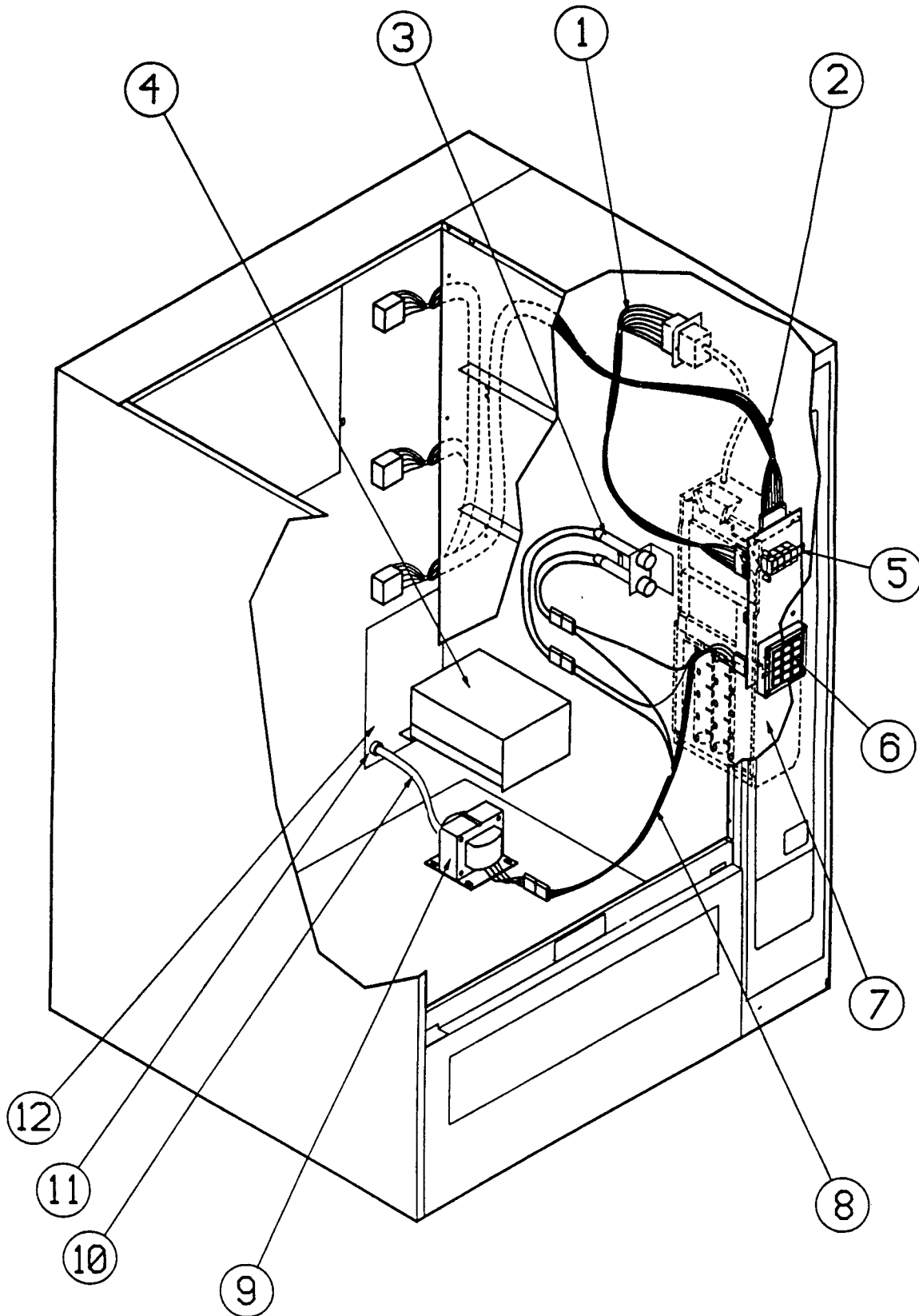




**TRAY ASSEMBLY DRAWING
PARTS LIST**

ITEM	DESCRIPTION	PART NO.	QTY.
1	TRAY FRONT PASTRY	18926	2
2	TRAY FRONT CANDY	18925	1
3	TRAY FRONT CANDY MINI	18925-MIN	1
4	TRAY DIVIDER MINI-VENDOR	18149	4
5	TRAY WELD ASSEMBLY	19923-BLK	1
6	HARNESS TIE	80569	1
7	HEX NUT	1958	1
8	PLASTIC HUB COUPLING	17537	5
9	DC MOTOR	18365-3CC	5
10	TRAY HARNESS	20052	1
11	SCREW #8-32	1465-BLK	10
12	MACHINE SCREW #8-32	2614-BLK	1
13	TRAY LATCH	19945	2
14	SCREW #8 X 1/4	1868-BLK	2
15	PLASTILOC	19321	8
16	SCREW #8-18	01715	1





**COMPLETE WIRING DIAGRAM
PARTS LIST**

ITEM	DESCRIPTION	PART NO.	QTY.
1	COIN MECH. HARNESS	19737	1
2	MOTOR HARNESS	22544	1
3	FUSE ASSEMBLY	17920	2
4	TRANSFORMER COVER	18456	1
5	CLEAR PLASTIC WINDOW LENS	19994	1
6	SELECTOR SWITCH	19859-BLK	1
7	COIN CHANGER	21240	1
8	POWER HARNESS	18134	1
9	TRANSFORMER ASSEMBLY	22511	1
10	SERVICE CORD AUSTRALIA	18937	1
11	STRAIN RELIEF BUSHING	02438	1
12	TRANSFORMER ACCESS PANEL PLATE	20641	1

SERIES 300
MINI VENDOR

