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POLYVEND  
CANDY MERCHANDISER

VAC. PULSE  
#3 OFF

GENERAL

The Polyvend <sup>CANDY</sup> ~~confectionary~~ merchandiser has dispensing units assigned to each selection. The dispensing units are installed on a plug-in, twist and lock basis from the front of the machine. This design provides easy access and loading of the helix dispenser. When money is inserted the control board determines the amount of credit and displays it on the scrolling display. When a selection is made the control board determines if there is adequate credit and energizes the correct motor to dispense the product. The product drops into the product delivery compartment and is retrieved by the customer.

SPECIFICATIONS

Height..... 72"  
Width.....36"  
Depth.....32"  
Weight (With chiller unit installed ).....(Approx)830 lbs

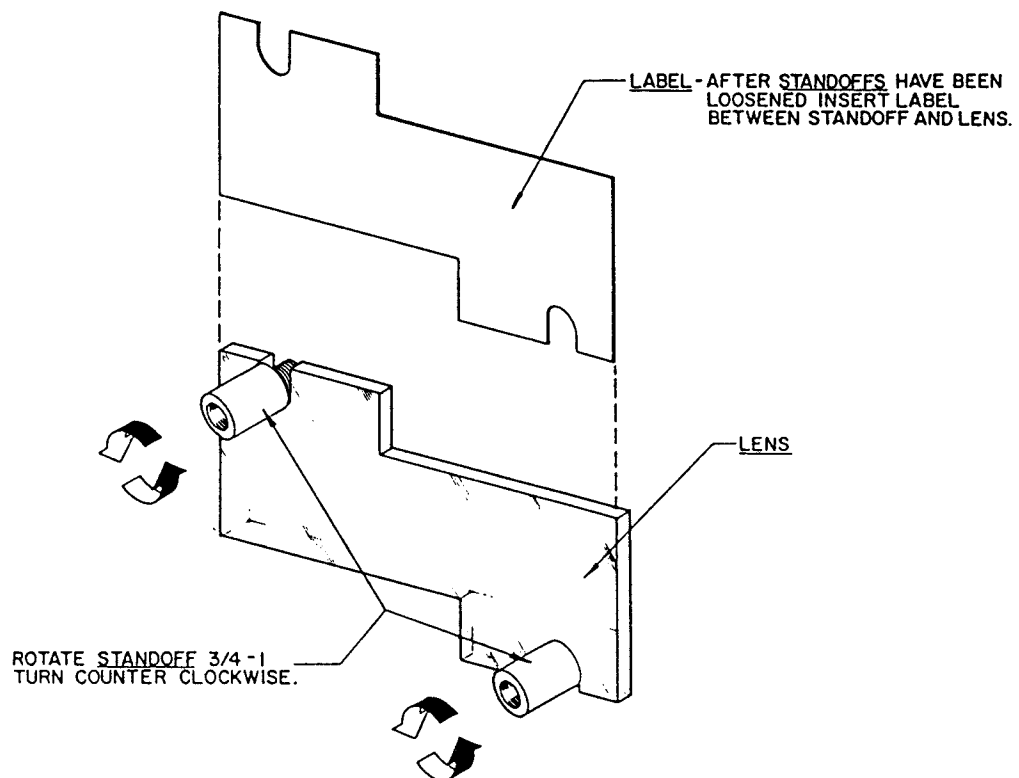
ELECTRICAL

Primary voltage.....110VAC/60 Cycles  
Secondary voltage.....10.8/24 VAC  
Maximum current.(with chiller installed)..... 12 amps.  
Voltage to changer.....24 VAC  
Voltage to validator.....24 VAC  
Voltage to chiller.....110VAC/60Cycles

## INSTALLATION

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

- \* Remove shipping material from around the machine by cutting the shrink wrap at the top; then cut downward, keeping the knife over a cardboard corner post.
- \* Inspect for damage resulting from improper handling and if evident, file claim immediately with the carrier.
- \* Place machine into position and adjust leveling legs so machine is level and all legs are firmly on the floor.
- \* Remove keys from product dispensing compartment (in small manila envelope) and unlock the service door to remove shipping cardboard.
- \* Check the operation of the service door and locking mechanism. They should operate smoothly and latch at all three locking plates.
- \* Place the product labels and prices on the front of the machine beside the selection buttons. On each clear window there are two white posts. Unscrew the posts 1/2 turn and slide the label in with the ears sliding under the posts. Screw the posts down until they are snug, but not tight on the label. See diagram below.



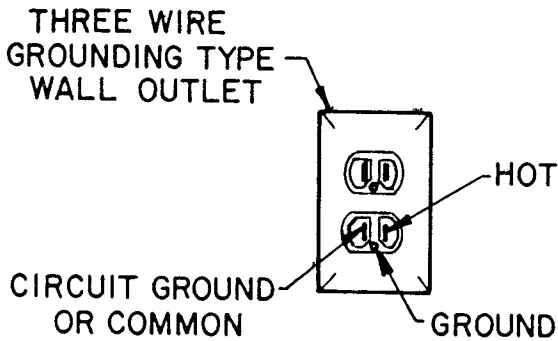
- \* Save the extra fuses, etc. found in the envelopes as spare parts.

\* 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.

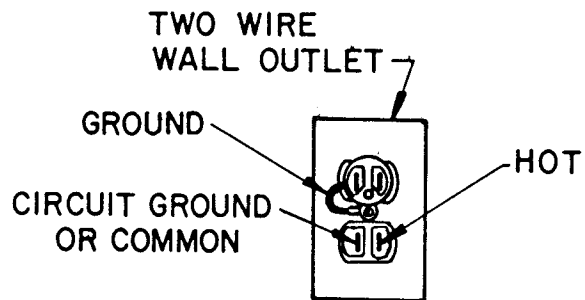
Note: In order to comply with electrical safety regulations and Underwriters Laboratories requirements, all electrical equipment must be properly polarized and grounded. The machine is wired so that it is properly polarized in accordance with the electrical code. If the wall outlet is wired properly, 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 appear any way other than that shown below, the outlet should be rewired by qualified personnel.



VIEW A

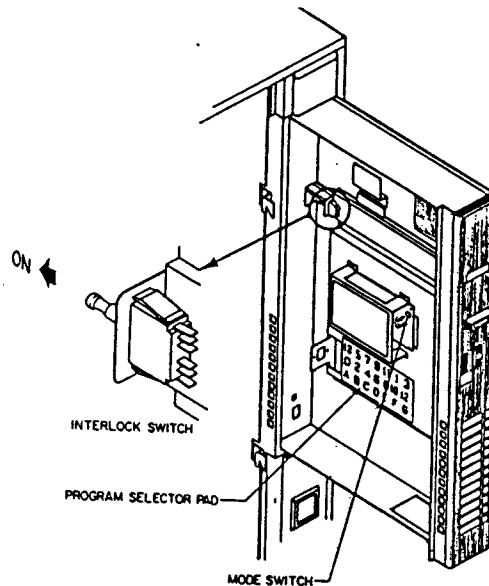


VIEW B

- \* Set the desired price for each item in accordance with the the instructions provided in the Operations Section of this manual.

Note: Instructions for setting the prices of the control board are also provided on an instruction sheet above the control board in the slide out drawer assembly.

Remember: The power to the slide out drawer is turned off when you pull out the drawer. To energize the drawer assembly, pull the plunge out, on the interlock switch as shown below in Figure A. Check to ensure that the power present 10.8 VAC and 24 VAC indicator lights are illuminated on the right hand side of the control board located in the sliding drawer assembly.



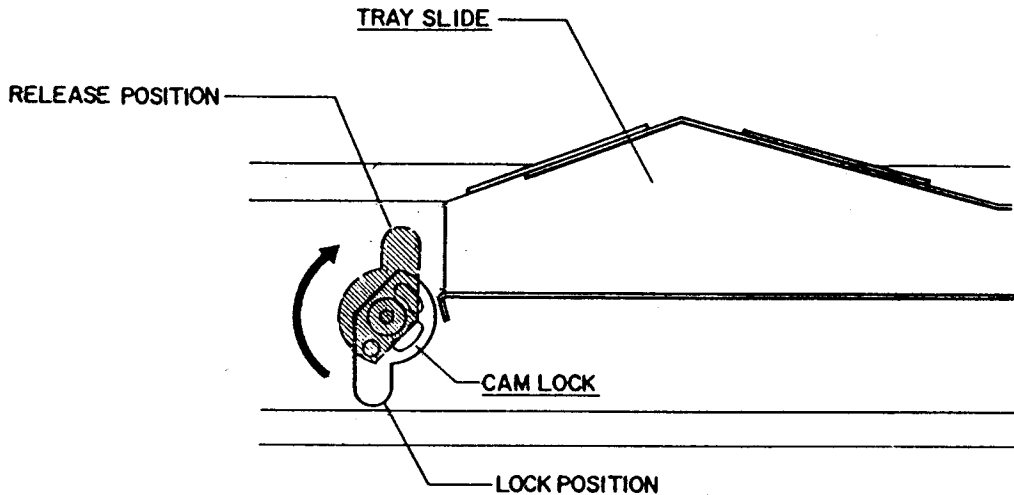
- \* Load the coin changer with the proper denomination of coins.
- \* Check the operation of the vending machine with coins to verify that the proper selection motors operate with the selection made on the selection pad.
- \* To check the product dispensing sensor, service vend a helix and pass your hand across the sensor eye located at the top of the product delivery shoot underneath the side product deflectors. The helix should stop immediately.
- \* Ensure that all helix dispensers run in their channels.
- \* Load the machine with product. (See Product Loading Section).
- \* Close and lock the service door.

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

## PRODUCT LOADING SECTION

### HELIX DISPENSER LOADING

To load a tray, release the white plastic stops on the bottom right and left of the tray as shown below.



Pull the tray out until it comes to the tray stop, then let it tilt down into the loading position.

Starting at the front of the tray, insert a product between each winding of the helix. Be sure to place the product all the way to the bottom of the tray (See figure A) 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 not ride on helix wire. After filling the tray, lift the front of the tray up until the tray is parallel with the floor and push it back in until the latch is engaged. After loading the machine, enter the service mode, causing the control board to recognize that all of the motors have been reset for service. For additional information see page 7.

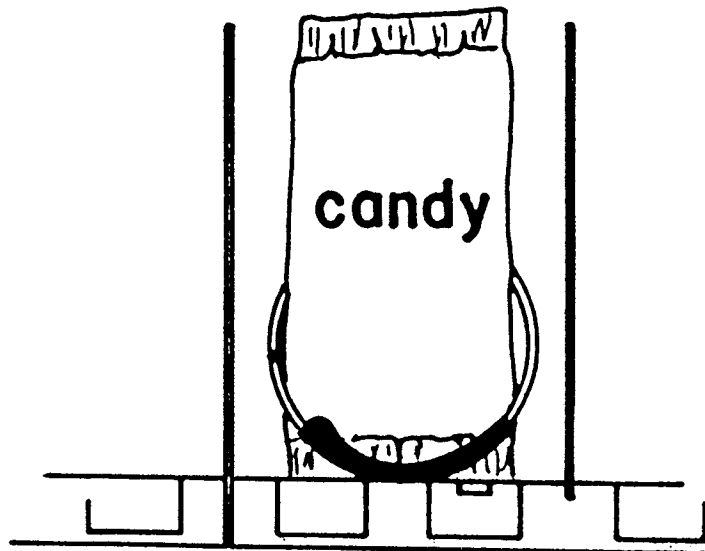


FIGURE A

## OPERATIONS 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 (for location of the mode switch see figure B below).

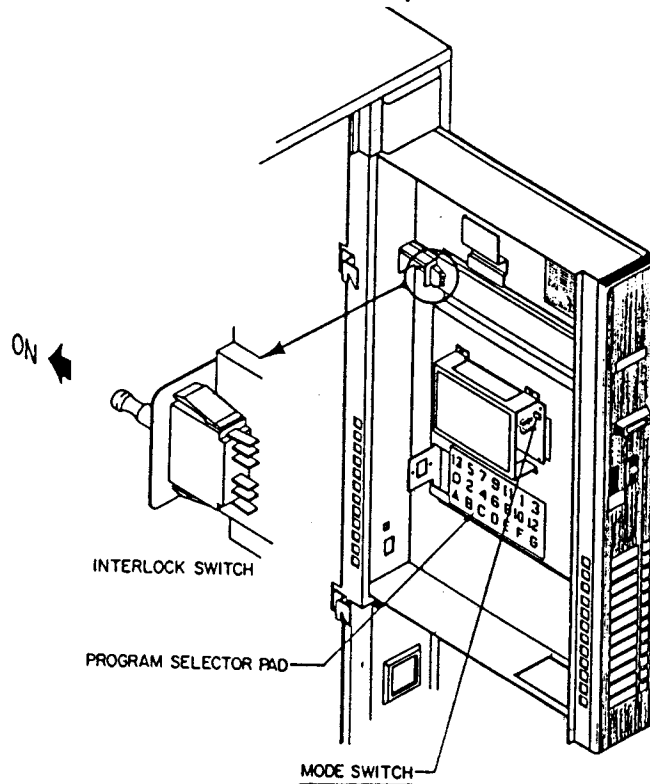


FIGURE B

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 so as credit is entered it will be shown on the scrolling display. If there is inadequate change available, the coin mechanism indicates that an exact change situation exists, the control board will show on the scrolling display "PLEASE INSERT EXACT MONEY".

When a customer makes a selection from the selection pad, the accumulated credit will be compared to the price set for this product 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 correct change returned.

The vend will be considered unsuccessful if the motor exhibits under current, the product sensing eye fails to detect a product dropping into the product delivery chute or the motor runs for more than six(6) seconds in which case the control board will then take that motor out of service. The vend will not be attempted on that motor if the particular motor has already been detected as failed. The control board will then go to the next motor assigned to that selection and attempt to vend that motor. If the vend is successful the control board will deduct the price of that item from the credit value and the change returned below. If all items in that selection have been vended and the product delivery sensing eye does not detect a product vended the control board will not deduct credit 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 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 enough credit is added and the selection made again or a lower priced item is chosen. During the vend, the selection number and price will be displayed.

If power should fail during a vend, the credit will be lost, the selected motor WILL NOT BE RE-ENERGIZED when power returns.

#### SERVICE MODE

This mode will be entered by pressing the "MODE BUTTON" located on the control board just above the two red power indicator lights(See figure B pg.7). By using the numbers and letters on the program selector pad the operator can program and review the features of the control board. Upon pressing the "MODE BUTTON", the scrolling display will sequence through (1.5 secs each), the alphanumeric motor identification (located on the front of the tray by the individual 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 in button #13 on the program selector pad will abort this sequence display.

#### ERROR CODES

1. Error 1 = To little motor current.
2. Error 2 = Normal operation when motor helix is sold out.
3. Error 3 = The control board has lost communications with the changer. (Changer has malfunctioned).
4. Error 4 = EEPROM sum check error.

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



## DETAILED OPERATION OF CONTROL BOARD PROGRAM MODES

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

1. All vend options will be off.
2. The maximum change limit is \$1.00.
3. The cash accountability will be set to \$00,000.00. Note: Due to factory testing the total will not be exactly \$00,0000.00
4. All of the prices will be set to \$99.95.
5. The language will be set to English.
6. The point of sales message will be preprogrammed to: "ENJOY ONE OF OUR FINE SNACK PRODUCTS".

There are two selector pads used to perform the functions listed under the program modes. The one is the program selection pad located inside of the pull out drawer and the other is the selection pad located on the front of the drawer assembly. See figure 1.

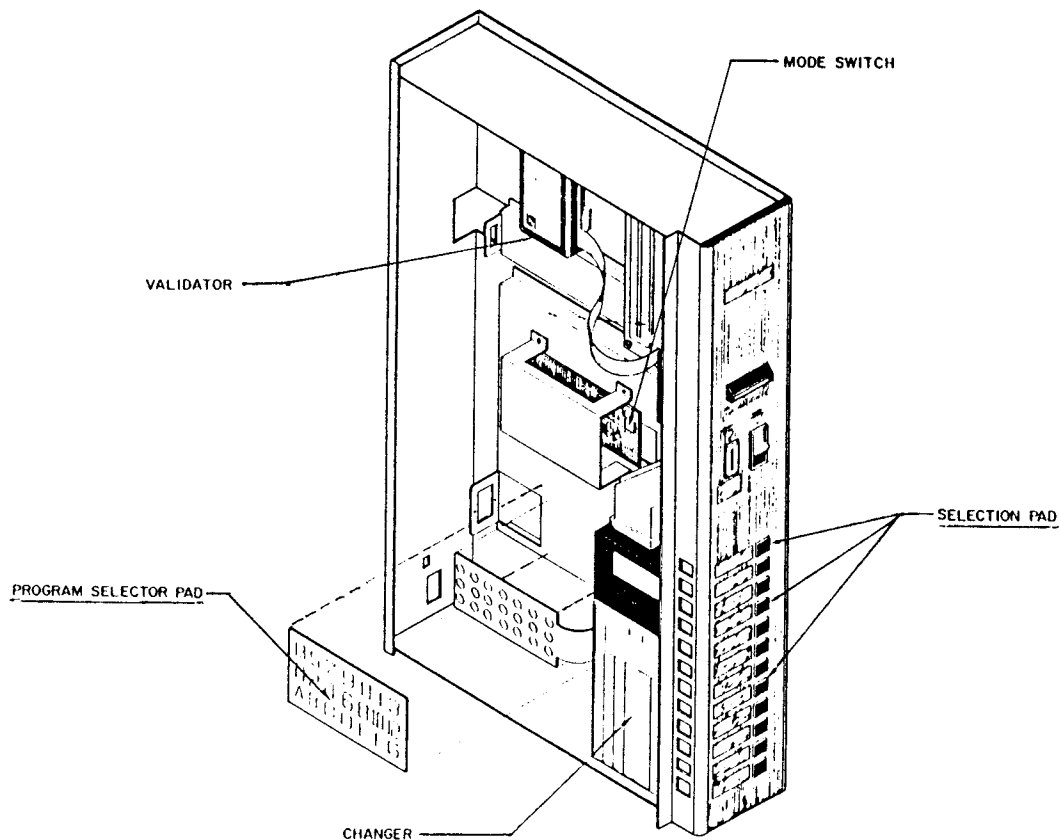


FIGURE 1

## PROGRAM MODES

### 1. VERIFYING MOTOR SELECTION

While in the service mode press button #2 on the program selection pad, then press the selection on the selection pad you wish to verify. The scrolling display will show the motors assigned to that selection two motors at a time.

### 2. ASSIGN A MOTOR TO A SELECTION

After going into the service mode, press button # 3 on the program selection pad. The control board will show "SELECTION" on the scrolling display. Press the selection on the selection pad you wish to add the motor to. On the program selection pad, press each letter and number of each motor you want assigned to that selection(The letter and number of each motor is located on the front of the tray). The letter and number of each selection will be shown on the scrolling display as they are entered. After entering all of the motors including the new motor to this selection, press button #10 on the program selection pad.

### 3. MOVING A MOTOR FROM ONE SELECTION TO ANOTHER

Go into the service mode and press button #3 on the program selection pad. The control board will show "SELECTION" on the scrolling display. Press the selection on the selection pad that you wish to move the motor to. On the program selection pad, press each letter and number of each motor that you want assigned to that selection including the motor you are adding. The letter and number of each selection will be show on the scrolling display as they are entered. After entering all of the motors, press button #10 on the program selection pad.

Now to remove the motor from the selection you are taking it from, press button #3 on the program selection pad. The control board will show "SELECTION" on the scrolling display. Press the selection on the selection pad that the motor is being removed from. On the program selection pad, press the letter and number of each motor that will be in this selection (Do not press the letter and number of the motor you have taken out of this selection). After entering all of the motors, press button # 10 on the program selection pad.

### 4. ACCOUNTING

To display the stored accountability, while in the service mode, press button #4 on the program selection pad. The control board will display "ACCOUNTING" and then press the respective button on the program selection pad.

A = Total cash accountability, which will rollover after \$99,999.95. Note: This function can not be reset.

B = Total bill validator accountability(if installed), which will rollover after \$99,999.00

C = Total number of vends for an individual selection.

After you press "C" the control board will display "SELECTION" then press a selection from the selection pad.

Note: This feature can not be reset.

D = Total number of vends of an individual selection. After pressing the letter "D" the control board will show "SELECTION" on the scrolling display, then press the selection you wish to review. When the selection number is shown on the scrolling display an "R" to the right of the selection is also present (indicating that the function is resettable). Note: When the function is reset all selections will be reset at the same time (You can not reset an individual selection). To reset the selections while in the service mode, press button #4 on the program selection pad. Then press button "E" on the program selection pad and the scrolling display will show "RESET". Then press button "F" on the program selection pad. The function will then return to 00000 on the scrolling display.

## 5. PRICE SETTING

### A. Price Setting by Selection

To set the price on an individual selection, while in the service mode, press button #5 on the program selection pad. The control board will display "SELECTION" on the scrolling display. Press the selection button on the selection pad you wish to change the price of. The current selection price will be displayed. Using the numbers on the program selection pad, enter the most significant digit first, then the less significant digits.

Example: \$00.85. Press button #8 on the program selection pad, then button #5. The scrolling display should read \$00.85. To save this price, press button #10 on the program selection pad. To set another single price, press button #5 on the program selection pad and repeat the above price setting sequence. To cancel an unwanted price before the fourth digit is entered press button #13 on the program selection pad.

### B. Price Setting of the Entire Machine

To set the price of the entire machine while in the service mode, press button #5 on the program selection pad. The control board will display "SELECTION". Press a selection button on the selection pad. The present price of that selection will be displayed on the scrolling display. Using the numbers on the program selection pad, enter the most significant digit first, then the less significant digits. Example: \$00.75. Press button #7 on the program selection pad, then press button #5. To save this price for the entire machine press button #12 on the program selection pad. To cancel an unwanted price before the fourth number is entered, press button #13 on the program selection pad.

## 6. SERVICE VEND

### A. Service Vend by Individual Motor

To service vend a motor while in the service mode, press button #6 on the program selection pad. The scrolling display will show "SELECTION". Then press the motor's letter and number on the program selection pad you wish to service vend. The control board will then attempt to service vend that motor. The letter and number of that selection will be displayed while the vend is attempted. If the vend is successful the control board will beep three times and the scrolling display will blank.

### B. Service Vend by Selection

To service vend a selection while in the service mode, press button #7 on the program selection pad. The scrolling display will show "SELECTION". Press the selection button on the selection pad. The control board will then display the motor's letter and number of that selection while the vends are attempted. Each motor in that selection will be vended. If the service vend is successful and all of the motors in that selection have vended the control board will beep three times and the scrolling display will blank.

To exit this mode press button #13 on the program selection pad and hold until the current vend is completed.

### C. Service Vend by Machine

To service vend the entire machine one time, while in the service mode, press button #8 on the program selection pad. The scrolling display will show the selection motor letter and number, 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 the next motor. This cycle will be repeated until vends on all motors in the machine have been attempted. The display will then blank after the last motor has been vended.

To exit this mode press button #13 on the program selection pad and hold until the current vend is completed.

## 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 button #9 on the program selection pad. The scrolling display will show "MESSAGE". Using the keypad overlay and following the keypad definitions, enter the new message. Menu 1 (Letters and symbols are blue in color) is the default menu. After each keypad entry, from either menu the keypad will return to menu 1. To use menu 2, (Letters and symbols are red in color) the "SHIFT" key must be pressed prior to pressing a menu 2 key. 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. To remove a wrong letter press back space.

Note: The maximum number of characters you can enter to form a message is 53 characters plus two(2) spaces at the end of the message. The two spaces are to prevent the end and the beginning of the next message from running together. A space between two words is considered one character.

MENU 1 (BLUE IN COLOR)			MENU 2 (RED IN COLOR)		
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 (NEXT MENU)	BACK SPACE	*	ENTER	\$

EXAMPLE: "ENJOY OUR SNACKS". Press the service mode button, then press button #9 on the program selection pad. "MESSAGE" will appear on display. Using the overlay on the program selector pad, press the letter E, letter N, letter J, letter O, press SHIFT, press Y, press SPACE, press O, 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 button #10 on the program selection pad. The scrolling display will show "LANGUAGE". Press the letter of the language you want to program in (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

Note: The language you select will be for "Exact Change Only", "Please Insert More Money", etc. It will not translate the Point of Sales Message on the scrolling display.

## **SERVICE SECTION**

## 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.

### FRONT DOOR SIGN

Can be cleaned with any common brand of window cleaner and a soft cloth. Do not use harsh abrasive cleaners on the sign.

DO NOT USE ANY KIND OF SOLVENT ON THE DOOR SIGN. Solvents will cause the sign to cloud up. Use a soft cloth to clean the door. Do not use paper products.



PRIMARY CABINET COMPONENT INFORMATION

SLIDEOUT CONTROL DRAWER

All electrical components in this compartment are low voltage. Located in this panel are the control board, changer, power interlock switch, program selection pad, validator and digital readout circuit board. Note: Power is shut off when the slide out drawer is pulled out. To apply power to the drawer, pull the interlock switch plunger out. See figure 2 below for location.

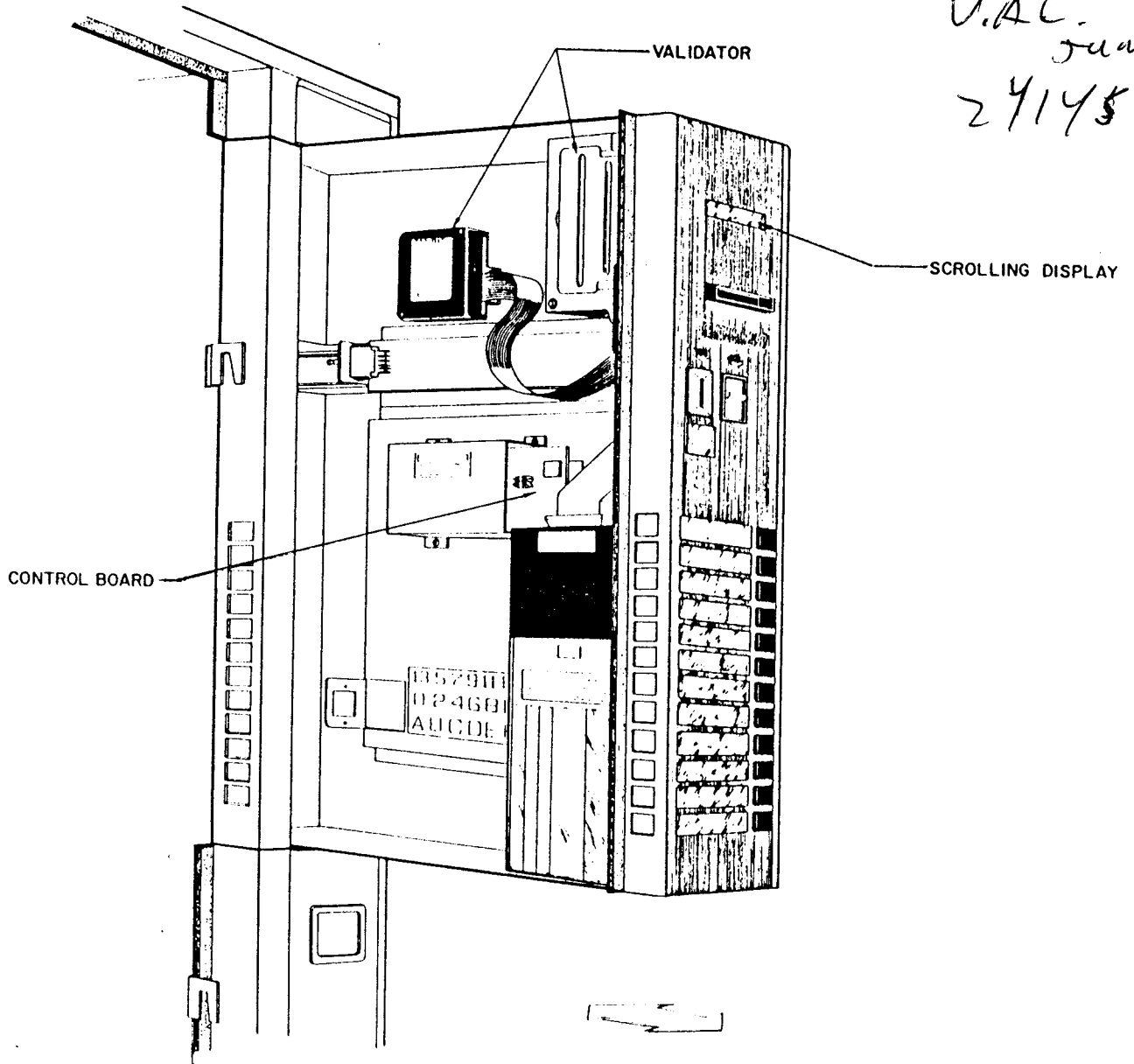


FIGURE 2

## REMOVAL OF SLIDEOUT 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. After disconnecting the harness, pull the drawer to the full open position. Remove the four(4) screws from the slide in the center back of the drawer. Two(2) 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.

## STORAGE COMPARTMENT

The storage compartment is below the product display area and is accessed by opening the front door(See figure 3 below). Because of the location of the chiller unit in this area the amount of storage space is limited.

## HIGH VOLTAGE POWER SUPPLY

The high voltage power supply is located in the bottom of the machine, to the rear of the storage compartment on the right-hand side(See figure 3 below). The fuses for the 10.8 volt and 24 volt and 110 volt circuits are located on the front of the power supply. Located on the left side of the power supply is the plug for the chiller unit. Also located inside the power supply are the step down transformer and the RFI filter.

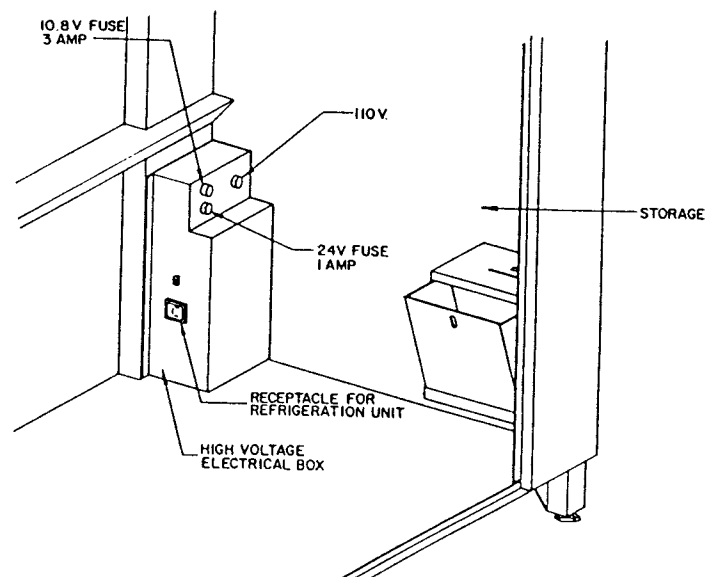


FIGURE 3

## REAR ACCESS PANEL

A large access panel is provided on the rear of the machine. Its only purpose is to permit access to the wiring in the rear of the machine. To remove the rear access panel, locate the two flat keys provided in the spare parts envelope (manila envelope located in the product delivery compartment), insert the two flat keys into the locks on the panel and unlock them. Pull the top away from the cabinet, then lift the bottom of the door away from the cabinet and remove. Handle carefully to prevent dropping and damage. Note: Rear access panel is for convenience only. All service can be handled from the front of the machine.

## COIN COLLECTION

The coin bank is located in the bottom right hand side of the machine in the storage compartment area and is accessible when the front door is opened (See figure 4). An optional lock and key is available to provide additional security. To open, tilt the top to the bank to the left until it can be removed. Lift and remove coin bank, empty coins and replace by reversing the procedure.

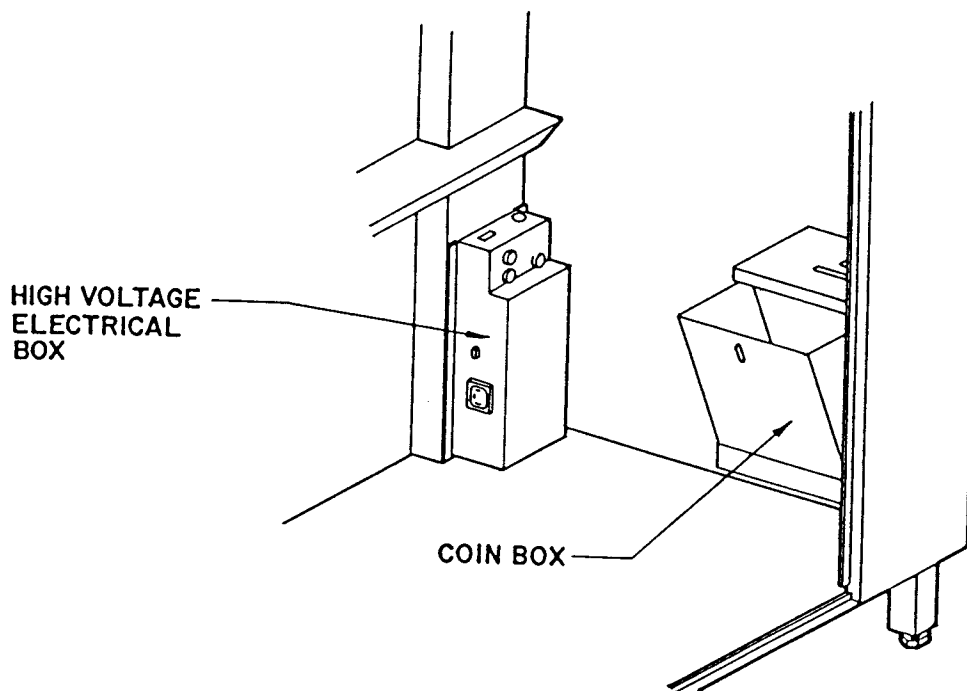


FIGURE 4

## HELIX TRAY REMOVAL(FROM MACHINE)

Lift the white cams one on the right and one on the left side until they are upside down(See figure 5) and pull the tray up and forward until reaching the stop that allows the tray to tilt down for loading. Lift the front of the tray and the same two white cams while pulling forward. The tray should then slide out. Unplug the wire harness on the right-hand side rail(Notice how plug is connected, with wires to the front of the plug). To clear the machine, grasp the tray at the front, back and lift it out and place it on a work surface.

To replace, reverse the operation. Grasp the tray, engage the rear slide in the track and plug in the wire harness provided on the right rail(Make sure plug is properly connected, wires to the front of the plug). Slide in the tray, raising up the front to clear the stop, and push into the loading position. Lift and push it into the machine until it is in the latched position.

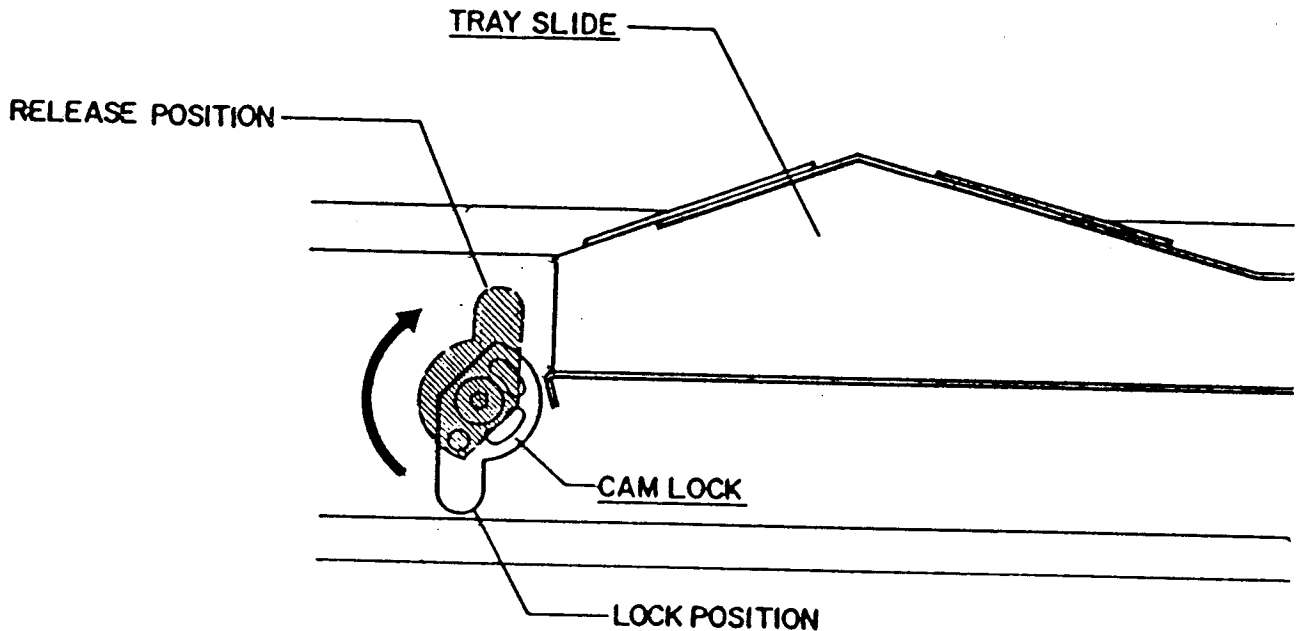


FIGURE 5

## HELIX DISPENSER 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. Grasp the helix and twist counter clockwise 10 to 15 degrees. Then pull forward and remove the helix from the tray.

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 as shown below. Verify that the helix end is in the proper position and pull to insure proper connection.

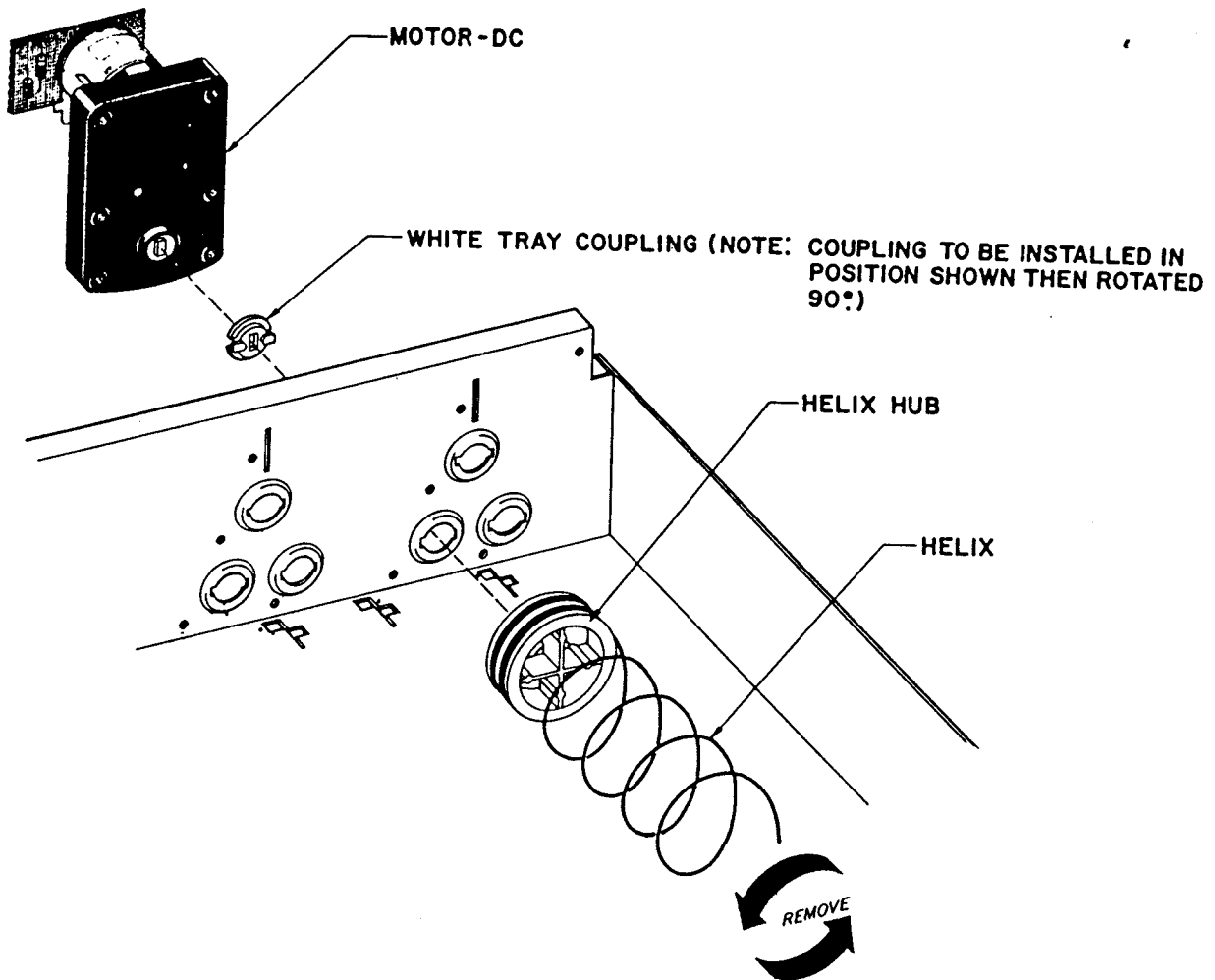


FIGURE 6

TROUBLE SHOOTING  
CAUTION

BEFORE CHANGING, DISCONNECTING OR CONNECTING ANY ELECTRICAL COMPONENTS, DISCONNECT POWER TO THE MACHINE BY TURNING OFF THE INTERLOCK SWITCH, REMOVING THE FUSES OR UNPLUG THE MACHINE FROM THE WALL OUTLET.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1. All coins deposited are rejected.	Machine not level	Level machine
In service mode error code 3	Defective coin mechanism	Replace mechanism
10.8 volt and 24 volt power indicator L.E.D.'s not on	No power at wall outlet fuse blow or defective transformer	Check power at wall outlet, 10.8 or 24 volt fuse and transformer.
1A. On power up, if changer is not communicating with control board, price setting mode can not be entered. In the service mode Error code 3 displayed. Changer will have to be repaired or replaced to correct problem before you can enter price setting mode.		
2. Selection motor fails to run.	Insufficient credit established	Check to see that selection price is same as deposited amount. Note message on display.
In service mode error code 1 displayed	Defective motor assembly	Test vend motor. Replace if defective. See note 1 below.
	Defective control board	Replace assembly. See note 2 pg. 24
	Wire connector disconnected from motor.	Reconnect wire on motor.
	Wire pinched or broken	Trace wire harness for broke or pinched wire. See note 3 pg. 24

Note 1: When you replace a motor, go into the service mode then come back out of the mode and the motor will be reset.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
3. All selection motors do not run (Test or service vend).	Defective control board	Replace assembly See note 2 pg. 24
	Connection broken at back of drawer assy.	Check back of drawer assembly. Reach up from storage area to check.
	Product dispensing sensor defective.	Replace assembly
4. Selection motor does not complete cycle in service mode shows error code 1.	Defective components on motor PC board assembly.	Replace motor assy. See note 1 pg. 22
	Defective control assembly.	Replace motor assy. See note 2 pg. 24
5. Selection motor continuously cycles	Defective control board assembly.	Replace motor. See note 2 pg. 24
6. Two motors run simultaneously	Defective control board assembly	Replace assembly See note 2 pg. 24
	Defective motor assembly	Locate defective motor assembly and replace.

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
7. Incorrect change dispensed, in service mode error code 3 displayed.	Defective coin mechanism	Replace mechanism
	Defective control board assembly	Replace control board assembly. See note 2 below.

Note 2: When you replace the control board always disconnect power to the equipment. After control board is installed and power reapplied, go into service mode and press button #13 on the program selection pad, then set up the motors in the configuration you desire using the Program Modes found on page 10 of the service manual.

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 "A" row have the white and black stripe in common. Likewise, all the motors in a column have a wire in common. Example: All motors in column 2 have a red wire in common. To trace the common wire see wiring chart below.

The following is the wire color guide for the motor matrix

	WIRE COLOR
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 a 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 Black/White 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"	Gray
Column "9"	White



## SERVICE MODE TROUBLE SHOOTING

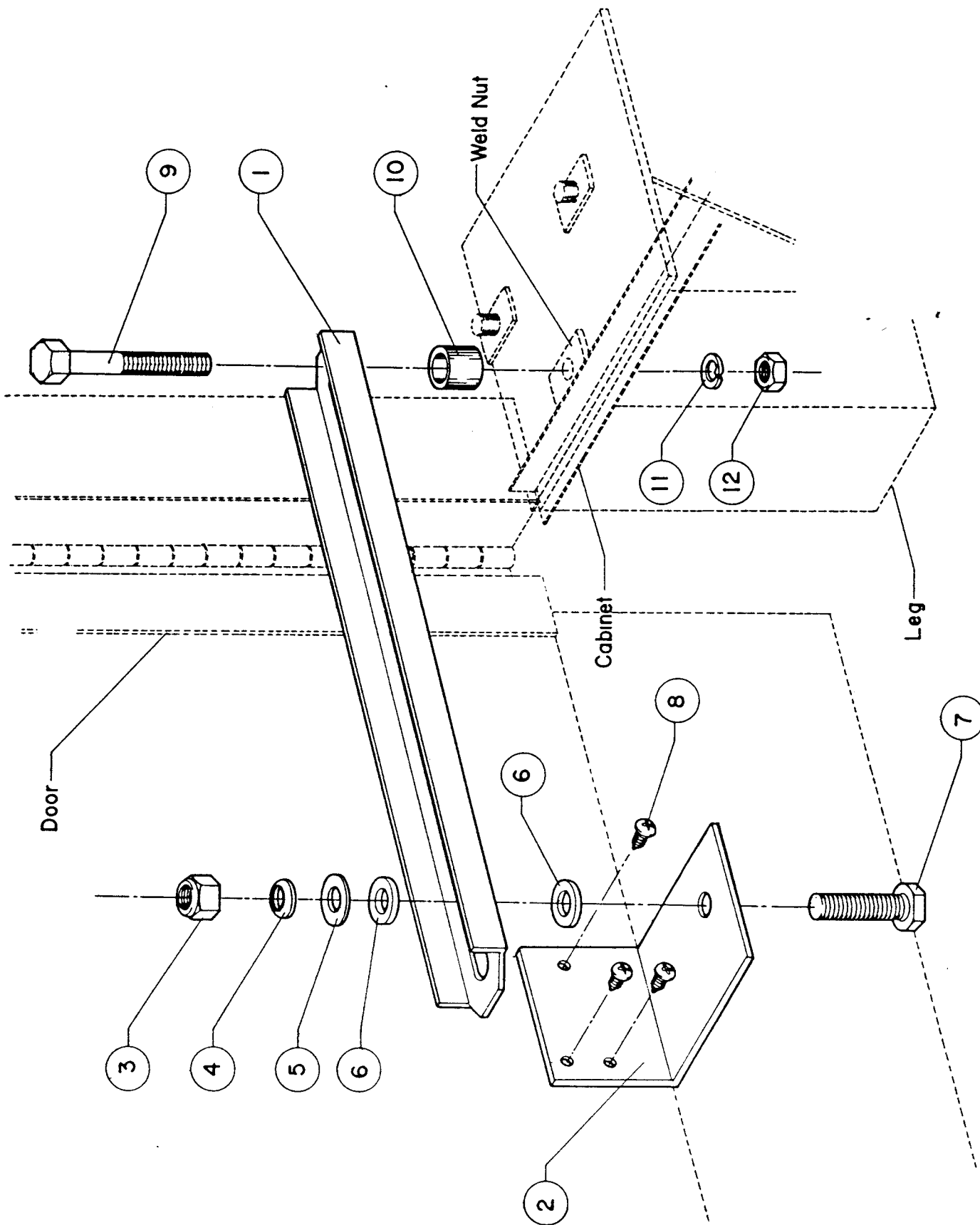
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
When you enter service mode selection number shown with error code 1 shown	Motor disconnected	Reconnect motor
	Defective motor	Replace motor
	Motor jammed	Free jammed motor or replace motor.

### Error Codes

1. Error 1 = Too little motor current
2. Error 2 = Normal operation when motor helix is sold out
3. Error 3 = The control board has lost communications with the changer(changer has malfunctioned).
4. Error 4 = EEPROM sum check error.

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 LIST**

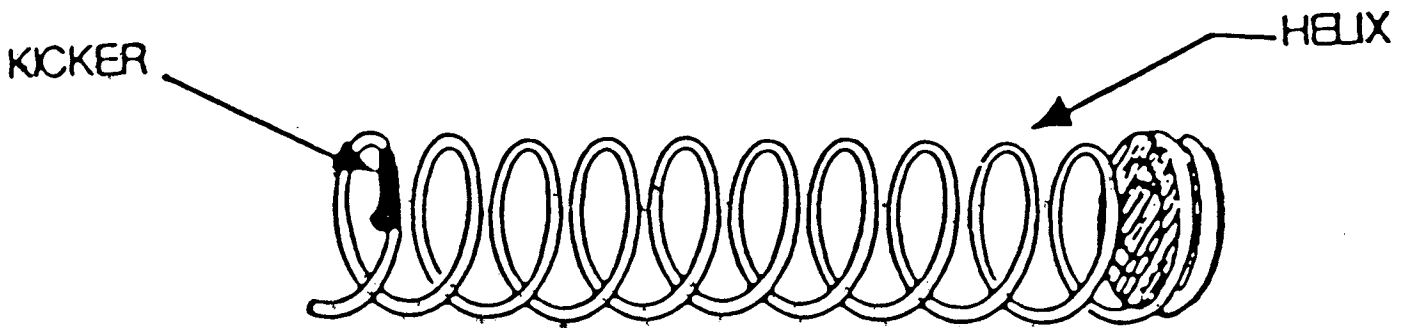


**DOOR STOP ASSEMBLY**

PARTS LIST  
DOOR STOP ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
1	DOOR STOP CHANNEL	20430	1
2	BRACKET DOOR STOP	20429	1
3	LOCK NUT	14937	1
4	BELLEVILLE WASHER	20179	1
5	PRECISION WASHER	20178	1
6	NYLON WASHER	20180	2
7	HEX HEAD BOLT 3/8-24 X 1 1/4	20176	1
8	SCREW # 10-24 X 5/16	13140	3
9	HEX HEAD BOLT 5/16-18 X 2 1/4	20177	1
10	DOOR STOP SPACER	20681	1
11	SPLIT WASHER 5/16	285	1
12	HEX NUT 5/16-18 PLTD	14937	1

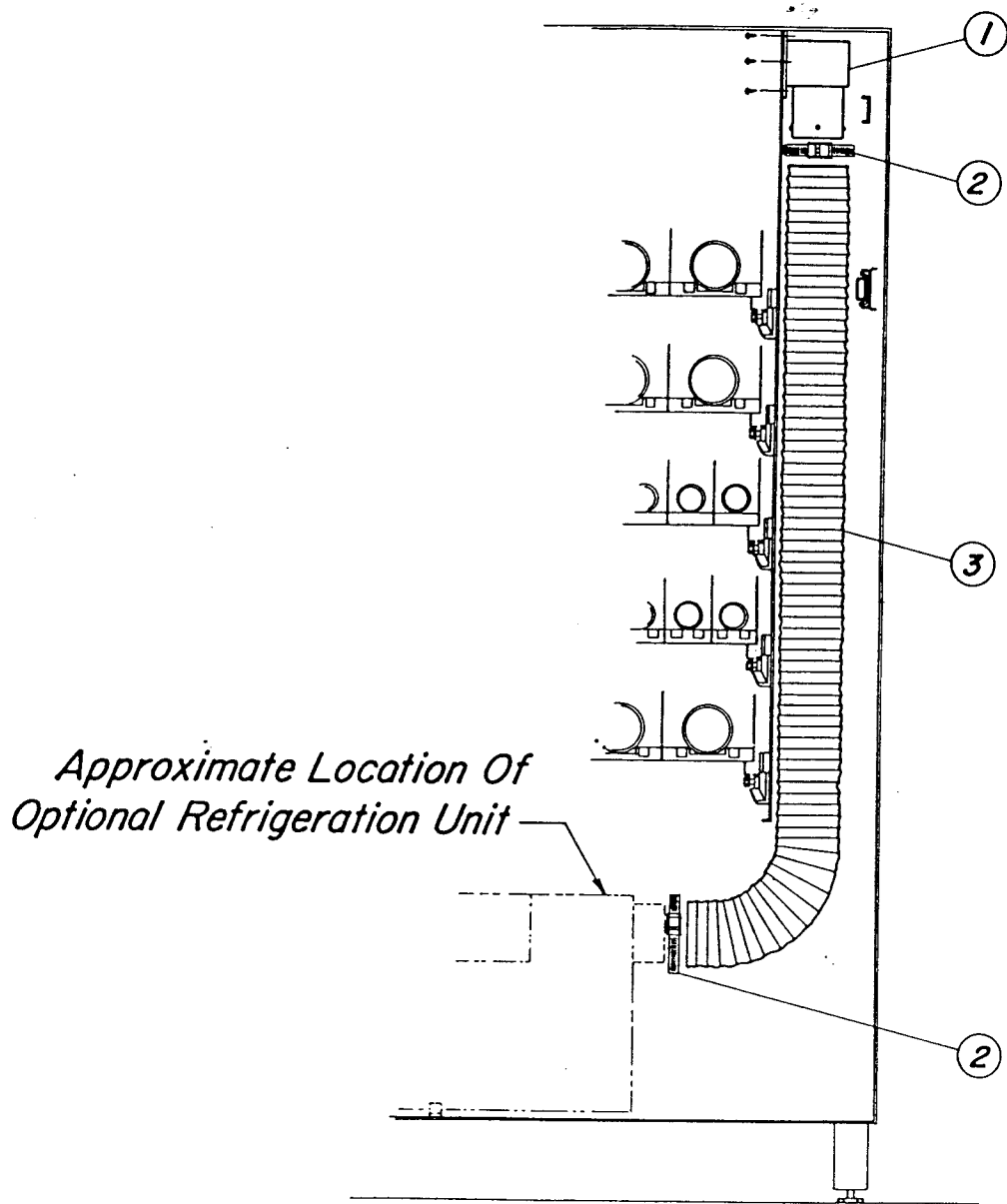
# HELIX ASSEMBLY



## PARTS LIST HELIX ASSEMBLY

HELIX	PART NO.	PRODUCT THICKNESS
12ct	18372-03	1 1/4"
14ct	18372-01	1"
18ct	18372-10	3/4"
22ct	18372-09	5/8"
SEPARATE KICKER	18302	

PARTS LIST  
CHILLER ASSEMBLY

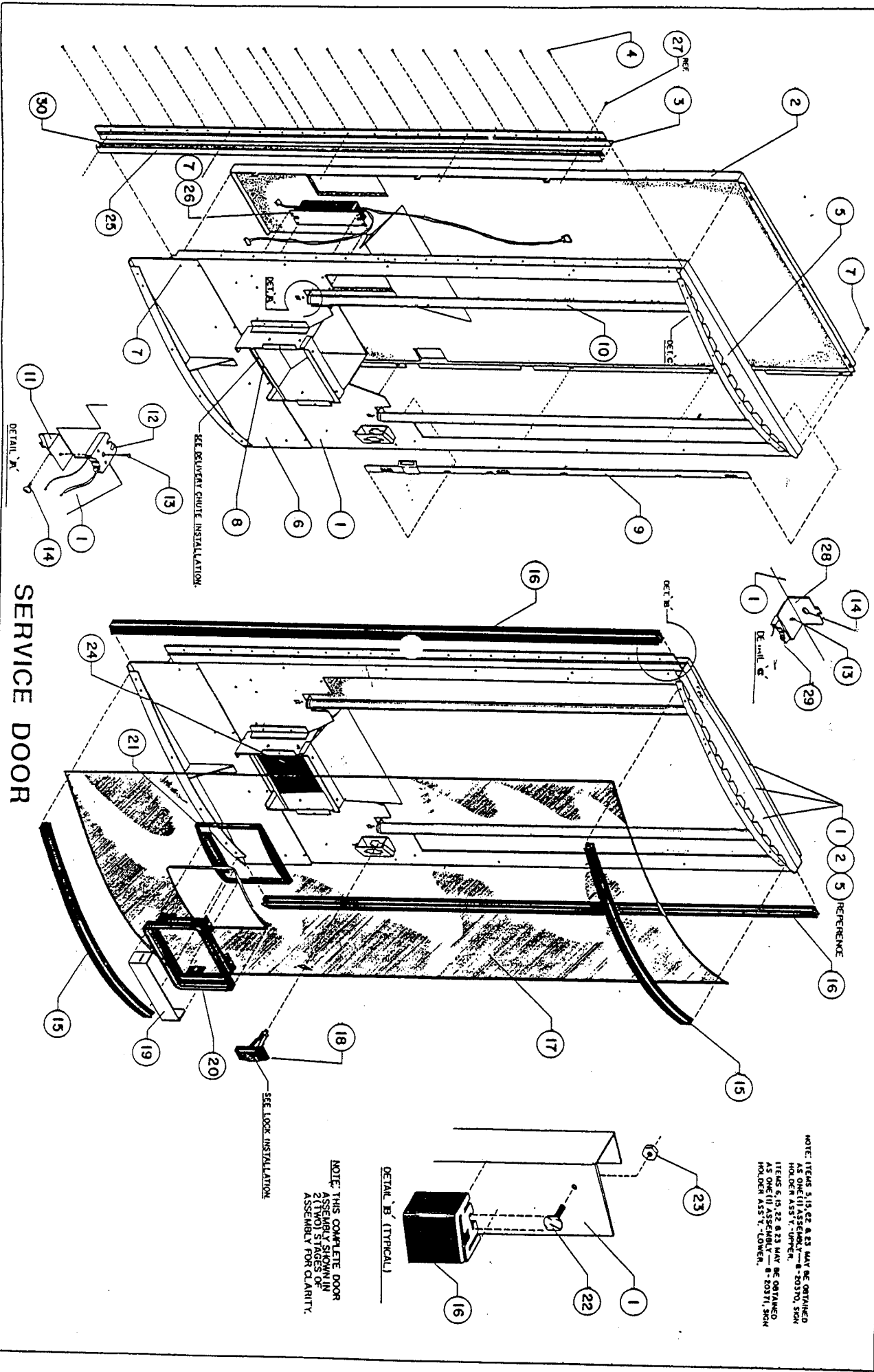


ITEM	DESCRIPTION	PART NO.	QTY
1	19566-BLK	REFRIGERATION TRANSISTION	1
2	19693	HOSE CLAMP	2
3	19691	4" FLEXIBLE TUBING	1
-	1298-BLK	SCREWS, 8- 1/8 X 3/8 TAP	6

PARTS LIST  
SERVICE DOOR ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
1 *	SERVICE DOOR W.A.	20362	1
2 *	REAR DOOR ASSEMBLY	20397	1
3 *	HINGE	18774-SGB	1
4	SCREW #8-18 X 1/4	1868-BLK	17
5	UPPER WELD ASSEMBLY	20304-BLK	1
6	LOWER WELD ASSEMBLY	20300-BLK	1
7	SCREW #8-18 X 3/8	1298-BLK	32
8	DELIVERY COMPT. W.A.	20346-BLK	1
9	LOCKING BAR W.A.	20425-BLK	1
10	FLORESCENT TUBE	20388	2
11	LAMP SOCKET HOLDER	20289	2
12	LOWER WIRING HARNESS	20366	1
13	SCREW PH. PN HD. #4-40X 3/8	18610	4
14	SCREW #6-32 X 3/8	302	4
15	FLAT SIGN TRIM	20265	2
16	ANGLED SIGN TRIM	20264	2
17	CANDY SIGN US VERSION	20334	1
18	LARGE LOCK ASSEMBLY	19397-BLK	1
19	DELIVERY GUARD	20266-BLK	1
20	PORT TRIM	20267-BLK	1
21	PORT SPACER	20372	1
22	TEE BOLT #8-32 X 1/2	20155	22
23	NUT #8-32	1958	22
24	DELIVERY COMPARTMENT DOOR	20283	1
25 *	HINGE COVER	19359-SGB	1
26	BALLAST/ 2-40W/ 120V	20364-120	1
27	SCREW #8-32 X 3/8 TAP	638	17
28	LAMP HOLDER BRACKET	20446	2
29	UPPER WIRING HARNESS	20365	1
30	TWO SIDED TAPE	18880	6FT

\* When ordering part, state whether machine color is Snickers brown or M&M yellow.



**SERVICE DOOR**

NOTE: ITEMS 5, 19, 22 & 23 MAY BE OBTAINED AS ONE (1) ASSEMBLY - B-20370, SHG HOLDOR ASS'Y - (UPPER).  
 ITEMS 5, 19, 22 & 23 MAY BE OBTAINED AS ONE (1) ASSEMBLY - B-20371, SHG HOLDOR ASS'Y - (LOWER).

NOTE: THIS COMPLETE DOOR ASSEMBLY SHOWN IN 21 (NO) STAGES OF ASSEMBLY FOR CLARITY.

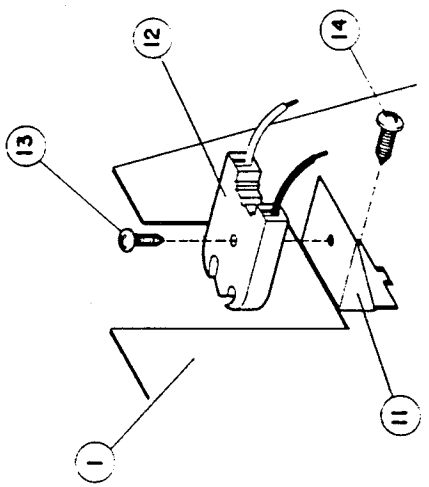
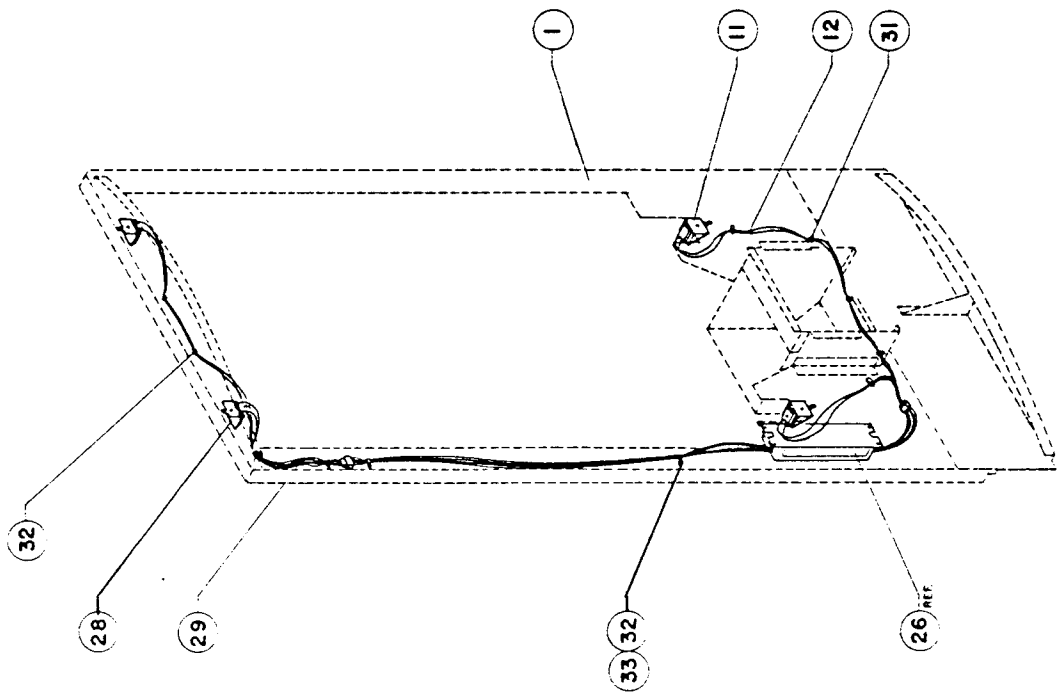
SEE LOCK INSTALLATION

SEE EXHAUST CHUTE INSTALLATION

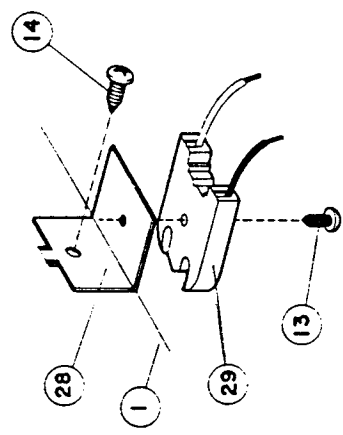
DETAIL 'A'

DETAIL 'B' (TYPICAL)

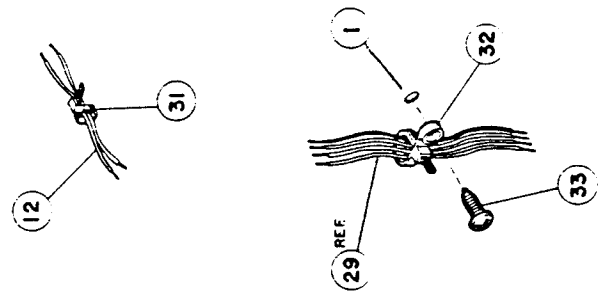




R.H. SHOWN-L.H. TYPICAL  
LAMP HOLDER-LOWER



LAMP HOLDER-UPPER



WIRING DIAGRAM  
SERVICE DOOR

PARTS LIST  
WIRING DIAGRAM  
SERVICE DOOR ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
1 *	SERVICE DOOR W.A.	20384	1
11	LAMP SOCKET HOLDER	20289	2
12	LOWER WIRING HARNESS	20366	1
13	SCREW #4-40 X 3/8	18610	4
14	SCREW #6-32 X 3/8	302	2
26	BALLAST ASSY. CANDY	20364-120	1
28	LAMP HOLDER BRACKET	20446	2
29	UPPER WIRING HARNESS	20365	1
31	TIE HARNESS	2120-1	7
32	TIE HARNESS	80569	2
33	SCREW #8-18 X 1/2 TP	2614	2

\* When ordering part, state whether machine color is Snicker brown or M&M yellow.

SERVICE DOOR WELD ASSEMBLY

2

5

6

1

2

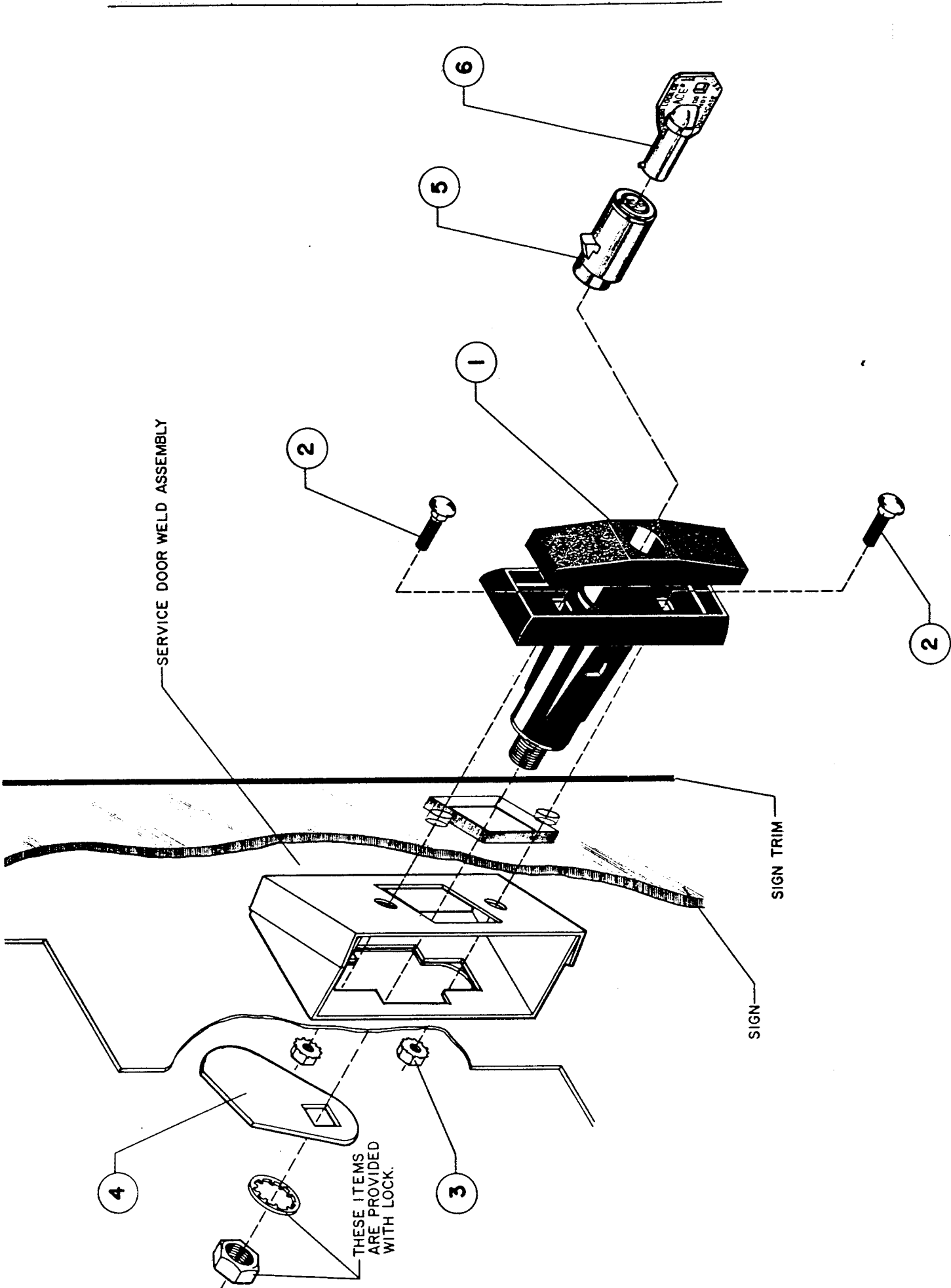
SIGN TRIM

SIGN

4

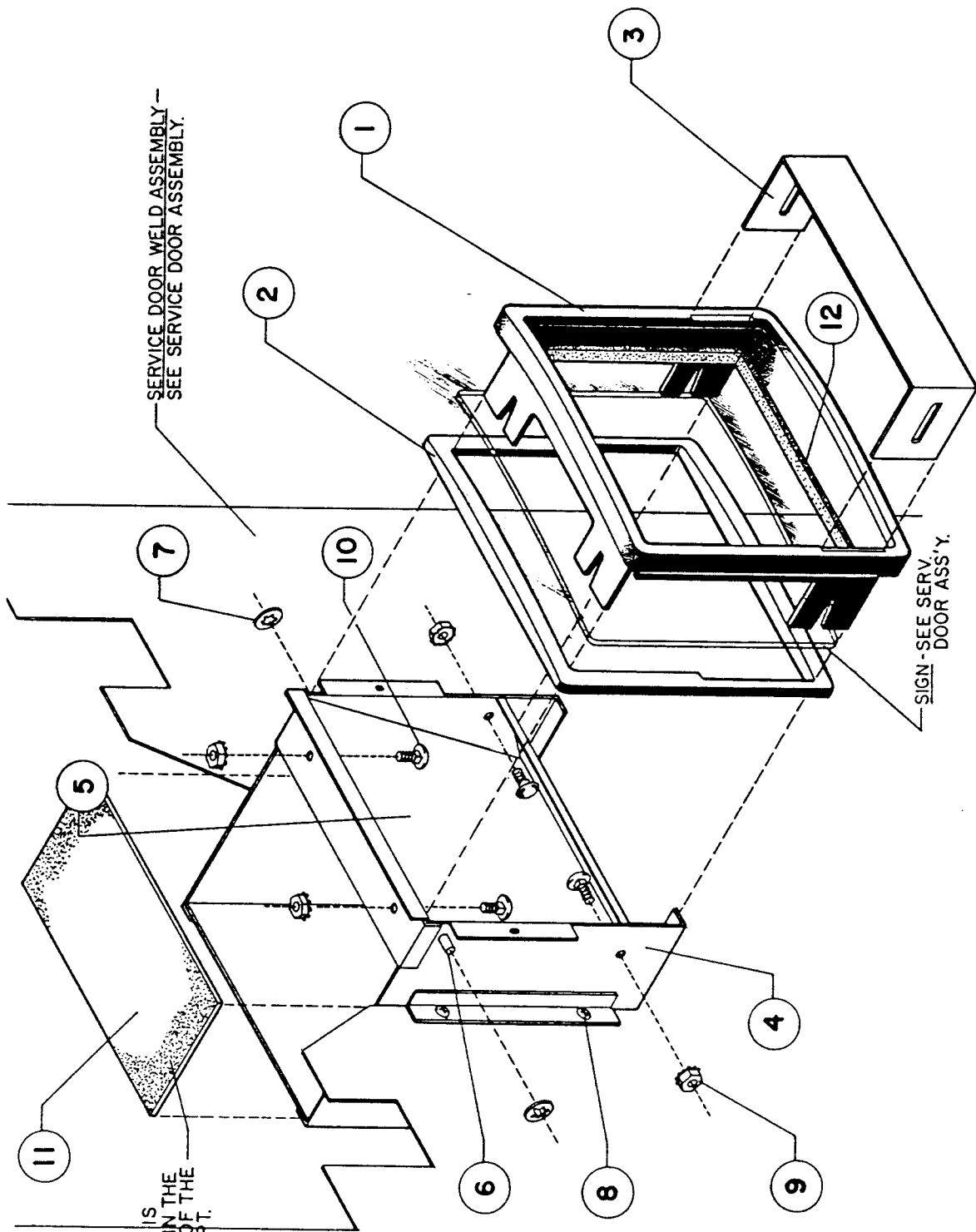
3

THESE ITEMS  
ARE PROVIDED  
WITH LOCK.



PARTS LIST  
LARGE LOCK ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
1	LARGE LOCK ASSEMBLY	19397-BLK	1
2	CARRIAGE BOLT #10-24 UNC X 3/4	15249	2
3	STAR LOCK NUT #10-24	19566	2
4	LOCK CAM	17457-BLK	1
5	LOCK CYLINDER INSERT	19380-02	1
6	LOCK KEY	11527-02	1



SERVICE DOOR WELD ASSEMBLY--  
SEE SERVICE DOOR ASSEMBLY.

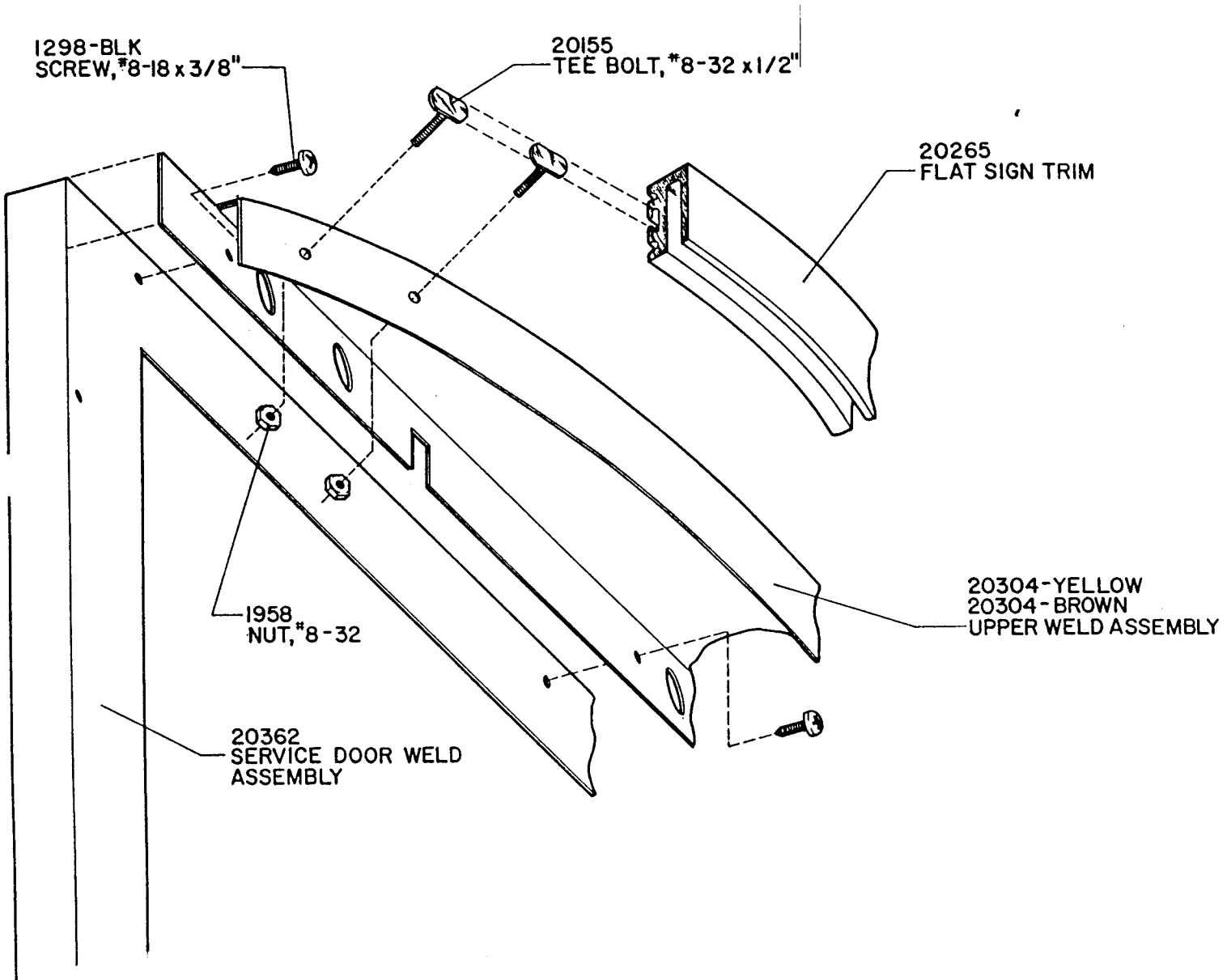
SIGN - SEE SERV.  
DOOR ASS'Y.

NOTE:  
THIS ITEM IS  
LOCATED IN THE  
BOTTOM OF THE  
DELL. COMP T.

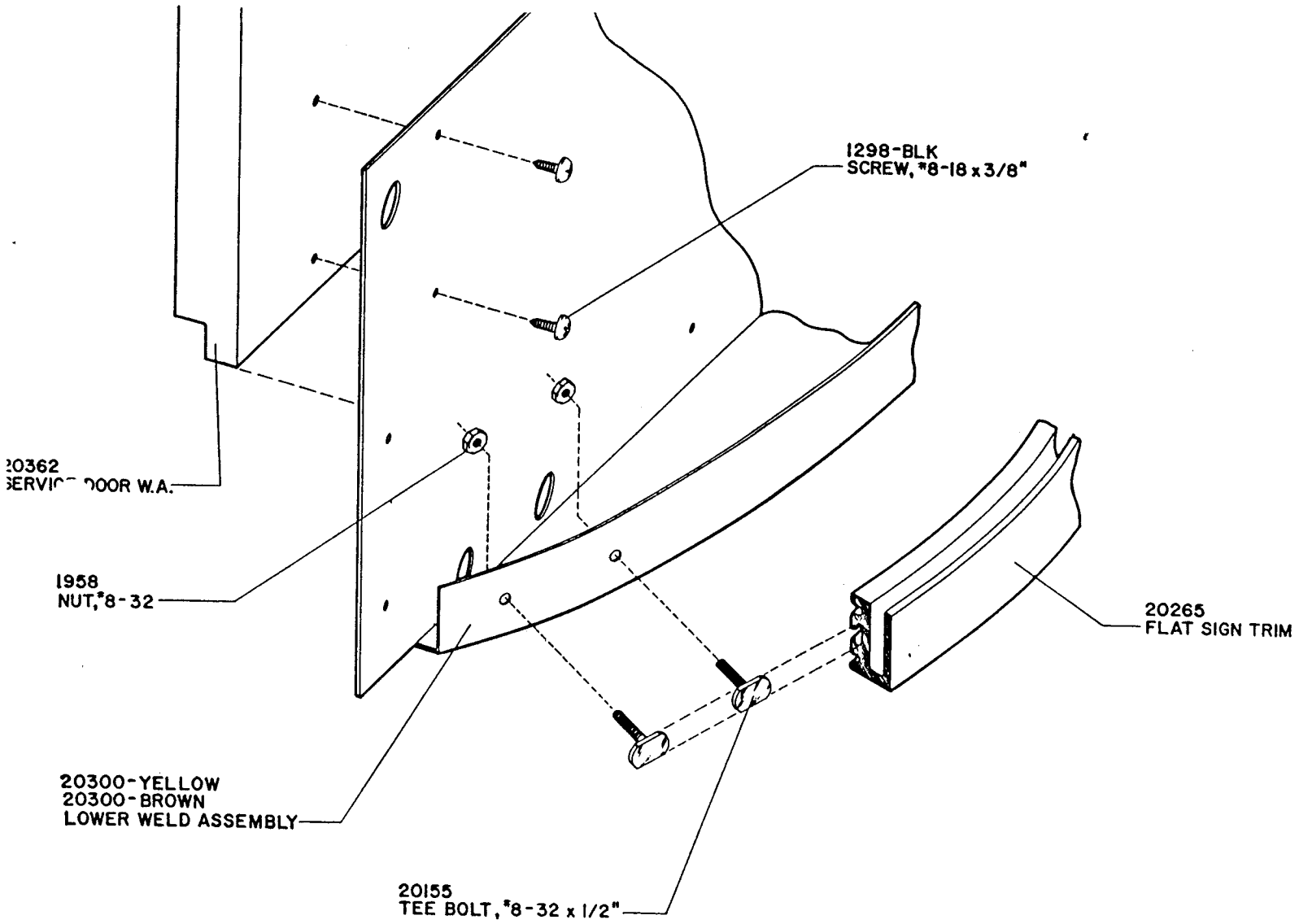
PARTS LIST  
DELIVERY CHUTE ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
1	PORT TRIM	20267	1
2	PORT SPACER	20372	1
3	DELIVERY GUARD	20266-BLK	1
4	DELIVERY COMPARTMENT W.A.	20346	1
5	DELIVERY COMPARTMENT DOOR	20283	1
6	PIVOT	20363	1
7	PUSH ON RING	18333	2
8	SCREW #8-18 X 3/8	1298-BLK	4
9	STAR LOCK NUT 1/4-20	20491	4
10	CARRIAGE BOLT 1/4-20 X 1/2	20483	4
11	PAD	19402-04	1
12	SEALER TAPE	1154	30"

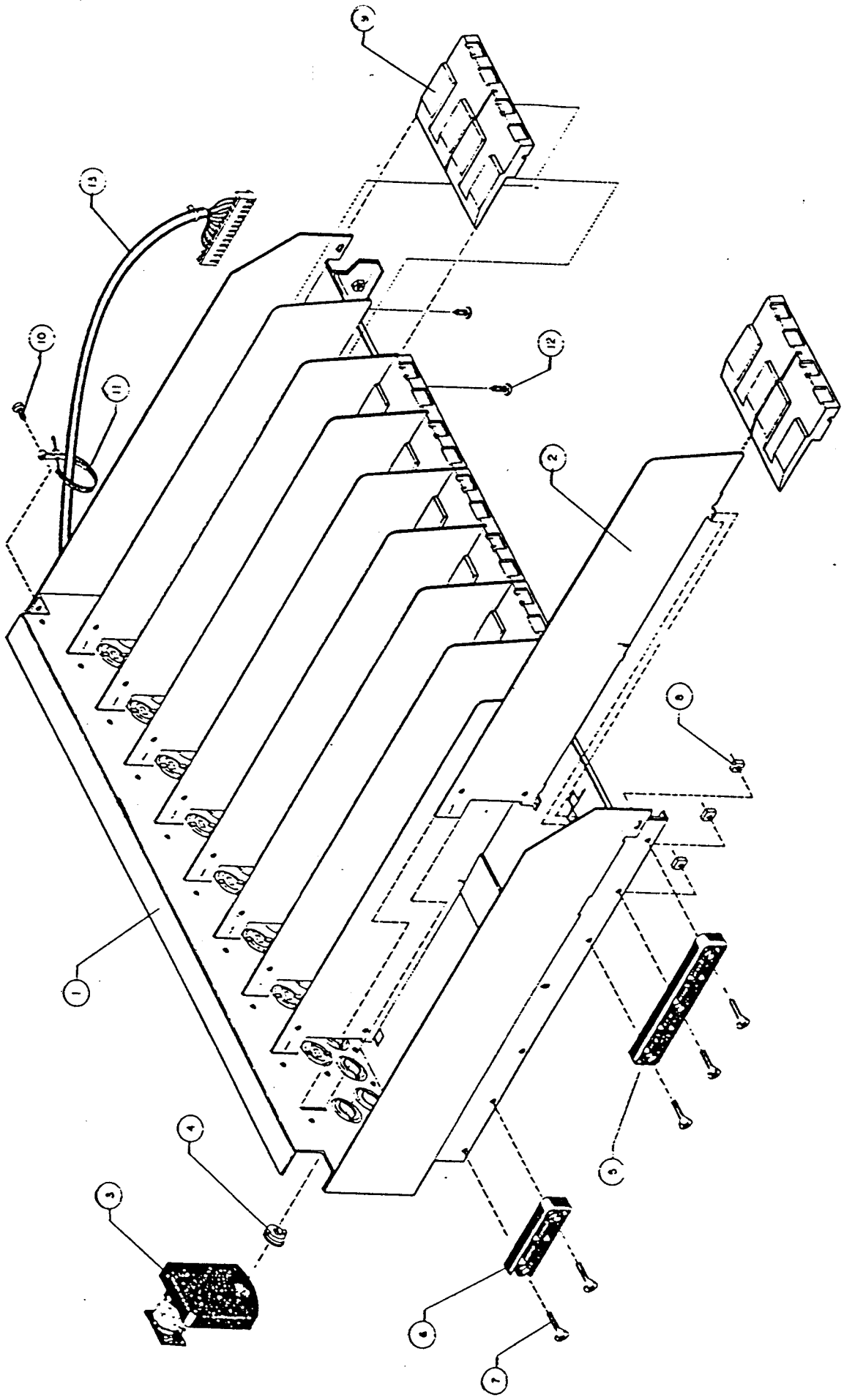
DOOR SIGN MOUNTING HARDWARE  
TOP



DOOR SIGN MOUNTING HARDWARE  
BOTTOM



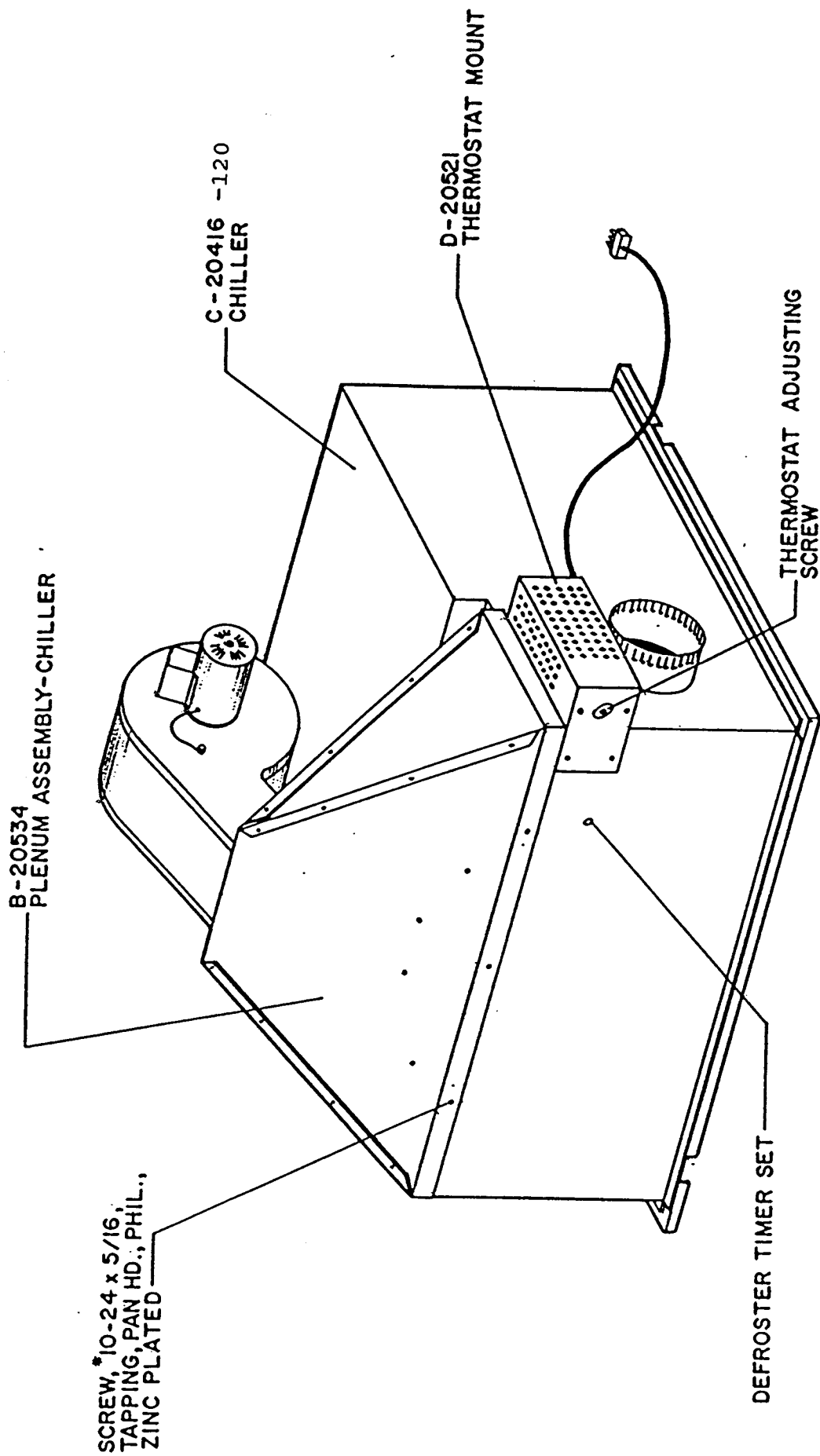




**TRAY ASSEMBLY**

PARTS LIST  
TRAY ASSEMBLY

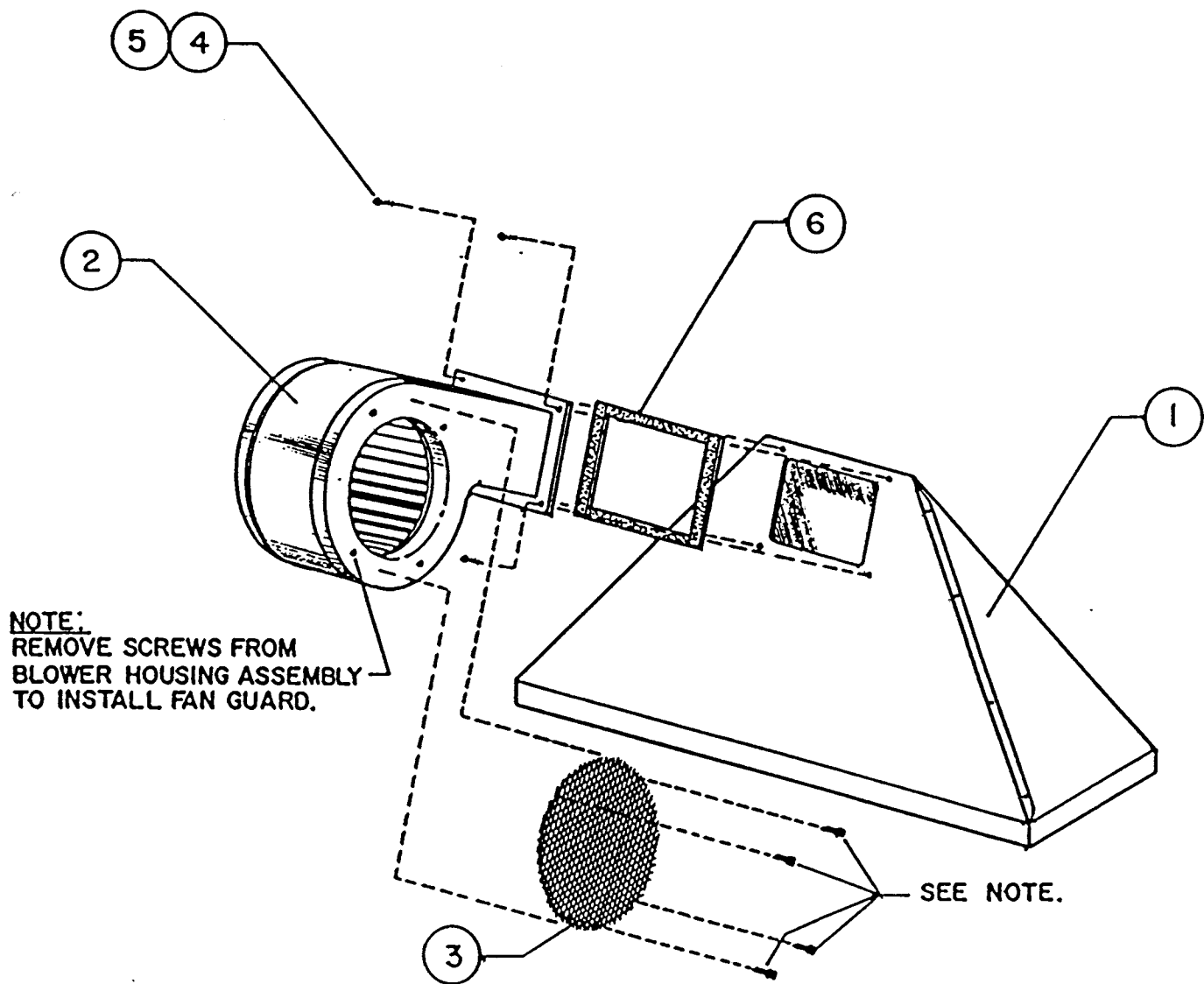
ITEM	DESCRIPTION	PART NO.	QTY
-	COMPLETE ASSEMBLY	20360-10	-
1	SLIDING TRAY W.A.	20361-10	1
2	TRAY DIVIDER	17843-BLK	9
3	COINCO 360 MOTOR DC	20434	10
4	PLASTIC HUB COUPLING	17537	10
5	LONG SLIDING BLOCK	20431	2
6	REAR SLIDING BLOCK	20379	2
7	1/4-20 SCREW	19069	10
8	1/4-20 NUT	20435	6
9	CANDY TRAY FRONT	18925	5
10	SCREW #8-18 X 1/2 T.A.	2614-BLK	21
11	HARNESS TIE	80569	1
12	#8 PLASTILOCK SCREW	19321	12
13	MULTI HARNESS-TRAY	19647	1

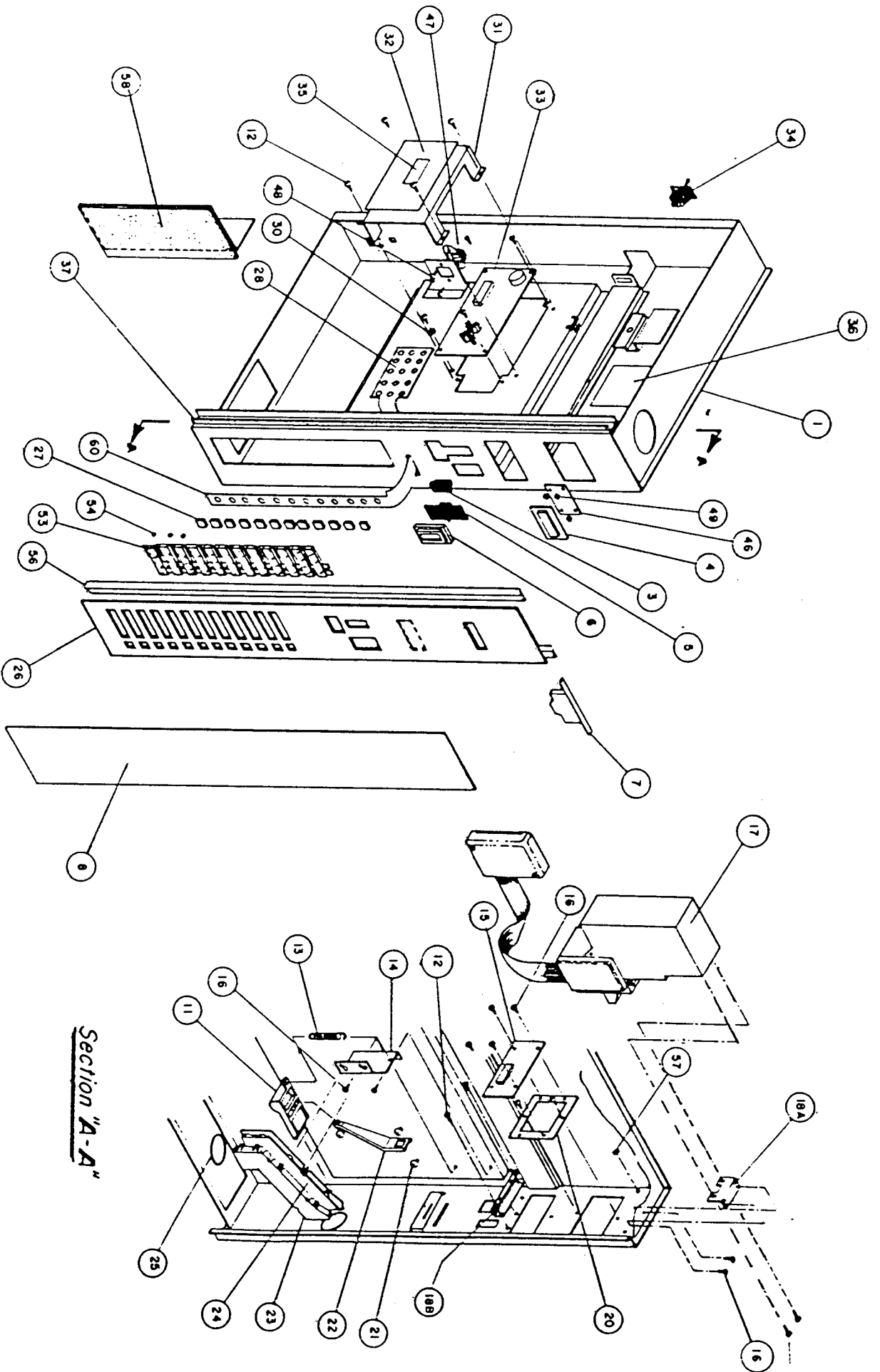


# CHILLER ASSEMBLY

**PARTS LIST**  
**CHILLER ASSEMBLY PLENUM**

ITEM	DESCRIPTION	PART NO.	QTY
1	CHILLER PLENUM ASSEMBLY	20520	1
2	BLOWER FOR CHILLER	20511	1
3	FAN-CHILLER PLENUM GUARD	20522	1
4	MACH. SCREW #10-24 X 1/2"	4226	4
5	HEX NUT #10-24 SS.	4208	4
6	NEOPRENE STRIPPING	18245-00	16 3/4"





# SLIDING DRAWER ASSEMBLY

TO BE USED IN CONJUNCTION WITH PAGES 47 & 48

PARTS LIST  
SLIDING DRAWER ASSEMBLY U.S. VERSION

ITEM	DESCRIPTION	PART NO	QTY
-	COMPLETE DRAWER ASSEMBLY	20259-US	-
1	DRAWER W.A.	20378-BLK	1
2	SCREW #10-24 X 5/16	13140	6
3	COIN INLET	17948	1
4	LENS	19588	1
5	SCAVENGE SLIDE	17904	1
6	SCAVENGE SLIDE HOLDER	17901	1
7	MID-CAP	20545-BLK	1
8	ESCUTCHEON DECAL	20324-USB	1
9	NOT USED	-	-
10	NOT USED	-	-
11	SCAVENGE PLATE	17798-BLK	1
12	SCREW #8-18 X 3/8	1298-BLK	11
13	3" EXTENSION SPRING	611	1
14	CHUTE RETAINER BRACKET	18063-BLK	1
15	DISPLAY	19574-DIS	1
16	SCREW #8-18 X 1/4	1868-BLK	10
17	VALIDATOR	20423	1
18A	UPPER VALIDATOR BRACKET	20445	1
18B	LOWER VALIDATOR BRACKET	20447	1
19	NOT USED	-	-
20	MTG. DISPLAY BRACKET	19644-BLK	1
21	SCREW #8-32 X 3/8	11894	3
22	SCAVENGE LINK	17800	1
23	COIN CHUTE COVER	17803	1
24	REAR COIN CHUTE	17804	1
25	"O" RING	19610	2
26	ESCUTCHEON PLATE	20393-USY	1
27	BUTTON	19352	12
28	KEYPAD 3 X 7	19576	1
29	NOT USED	-	-
30	#8 INTERNAL WASHER	266	1
31	CONTROLLER COVER	19773-BLK	1
32	CONTROLLER COVER DECAL	19793	1
33	CONTROL BOARD	22001 <del>20545</del> -USA	1
34	SWITCH	19746	1
35	CAUTION DECAL	19819	1
36	PROGRAM CHART DECAL	20614	1
37	NEOPRENE 3/8" STRIP	810-00	2.83FT
38	DISPLAY HARNESS	19735	1
39	3/8" CLAMP	8538-01	1
40	POWER HARNESS	20336	1
41	U.S. CHANGER HARNESS	19737	1
42	5/8" CLAMP	8538-02	1
44	VALIDATOR HARNESS	<del>20377</del> 24116	1
46	MN / DISPLAY FILTER	19860	1
48	SCREW #6-20 X 3/16	18370-BLK	2
49	NUT #8-32	1958	4
50	NOT USED	-	-
53	LENS BUTTON	20268	12
54	STANDOFF 8-32 X 3/8 1/4 KEY	20352	24
55	BUTTON OVERLAY 3 X 7	20377	1
56	ESCUTCHEON TRIM	20349-BLK	2
57	NUT WITH LOCKWASHER #8-32	20208	6
58	LIGHT REFLECTOR	20466	1

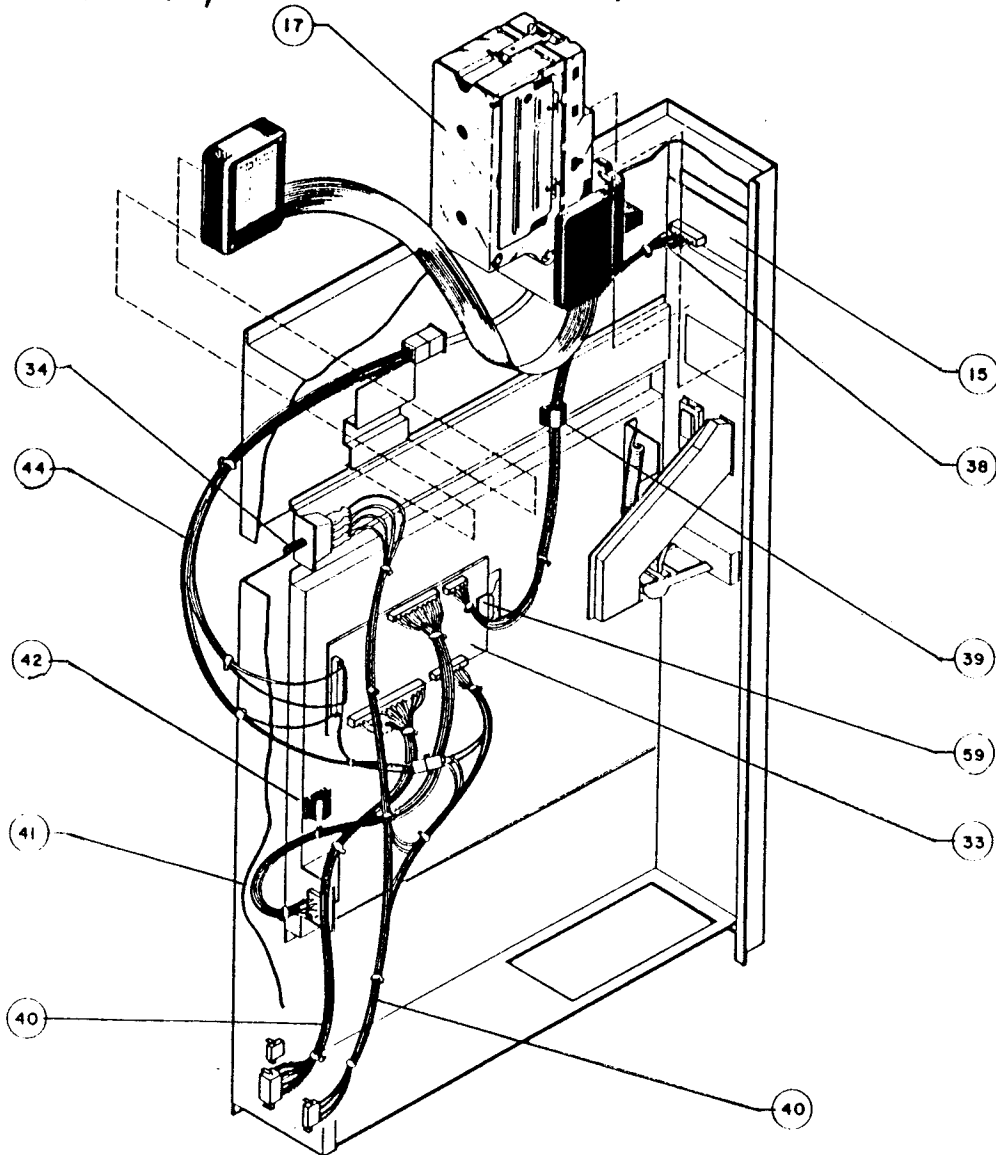
PARTS LIST  
SLIDING DRAWER ASSEMBLY (CONTINUED)

ITEM	DESCRIPTION	PART NO.	QTY
59	KEYPAD HARNESS	20391	1
60	KEYPAD 2 X 6	20291	1
61	REMOTE VALIDATOR KIT	20424	1
62	SCREW #8-18 X 1/2	2614	4
63	EXT. WASHER	4206	2

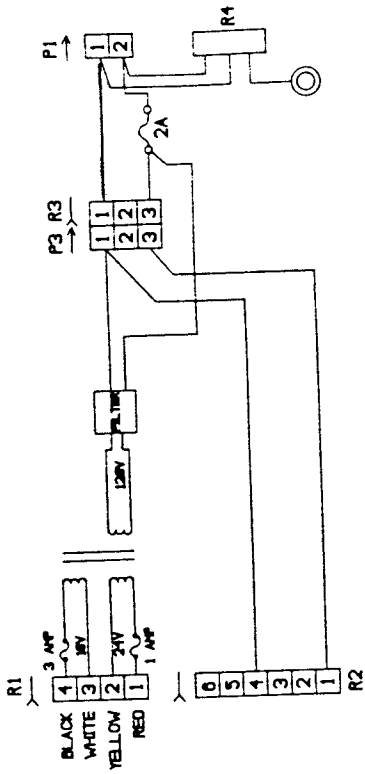
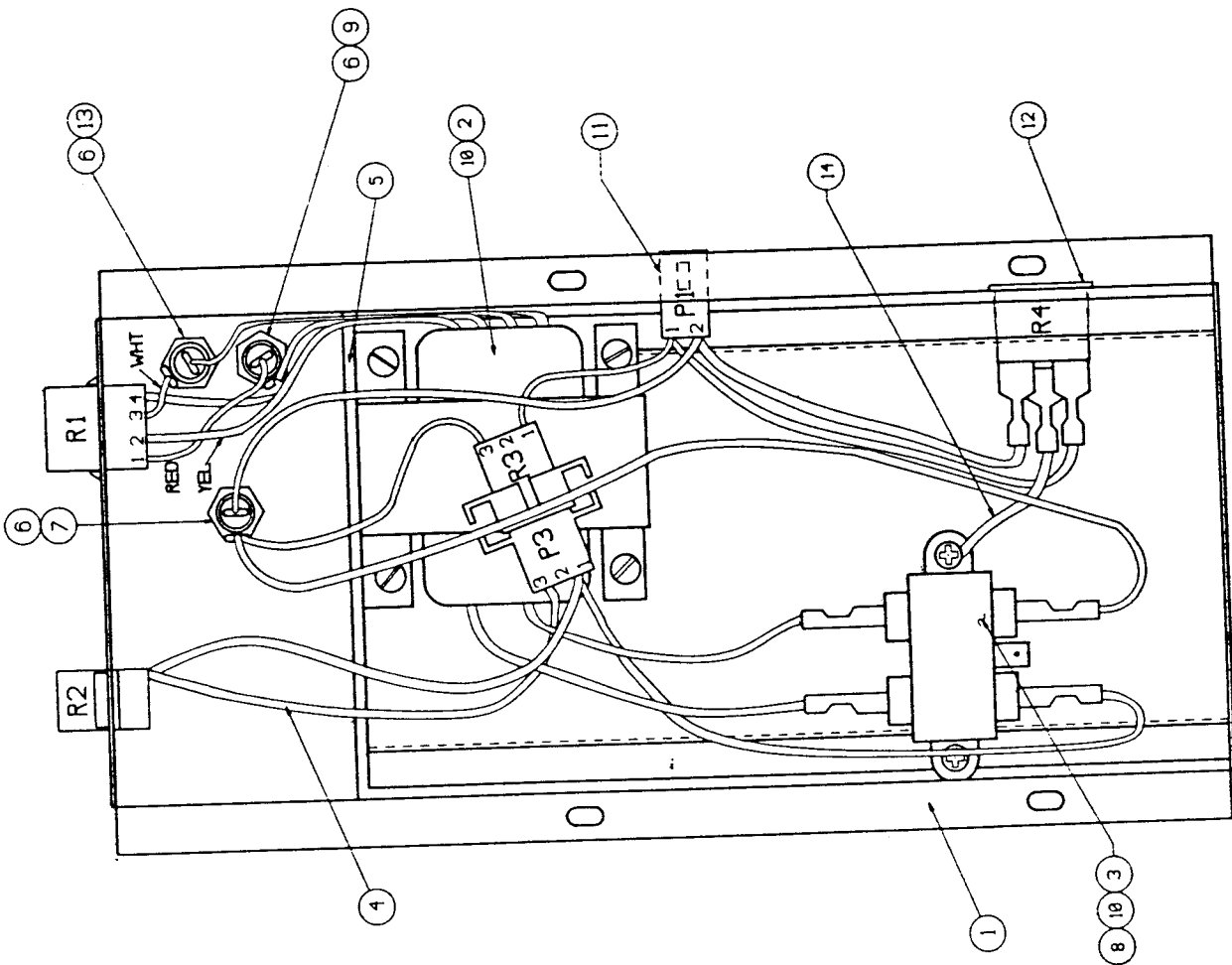
\* When ordering part, state whether machine color is Snicker brown or M&M yellow.

PARTS LIST  
SLIDING DRAWER ASSEMBLY WIRING

ITEM	DESCRIPTION	PART NO.	QTY
15	DISPLAY	19574-DIS	1
17	VALIDATOR	20423	1
33	CONTROL BOARD	<del>20275</del> CDY 22 000 USA	1
34	INTERLOCK SWITCH	19746	1
38	DISPLAY HARNESS	19735	1
39	CLAMP 3/8"	8538-01	1
40	POWER HARNESS	20336	1
41	NOT USED	-	-
42	CLAMP 5/8"	8538-02	1
44	VALIDATOR HARNESS	20261	1
59	KEYPAD HARNESS	20391	1
	<i>UAC. 540pm</i>	<i>24145</i>	<i>1</i>



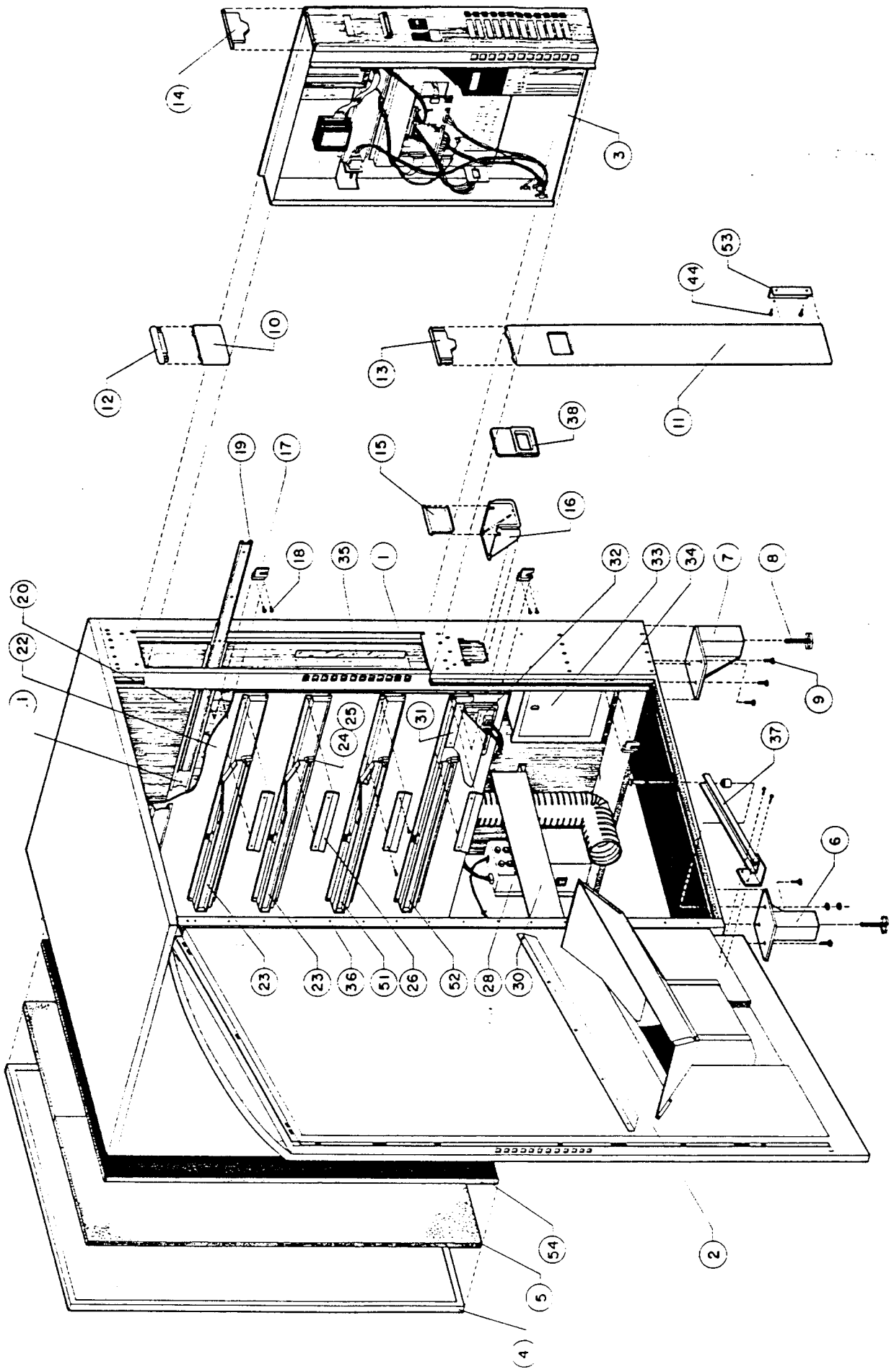




# POWER BOX ASSEMBLY

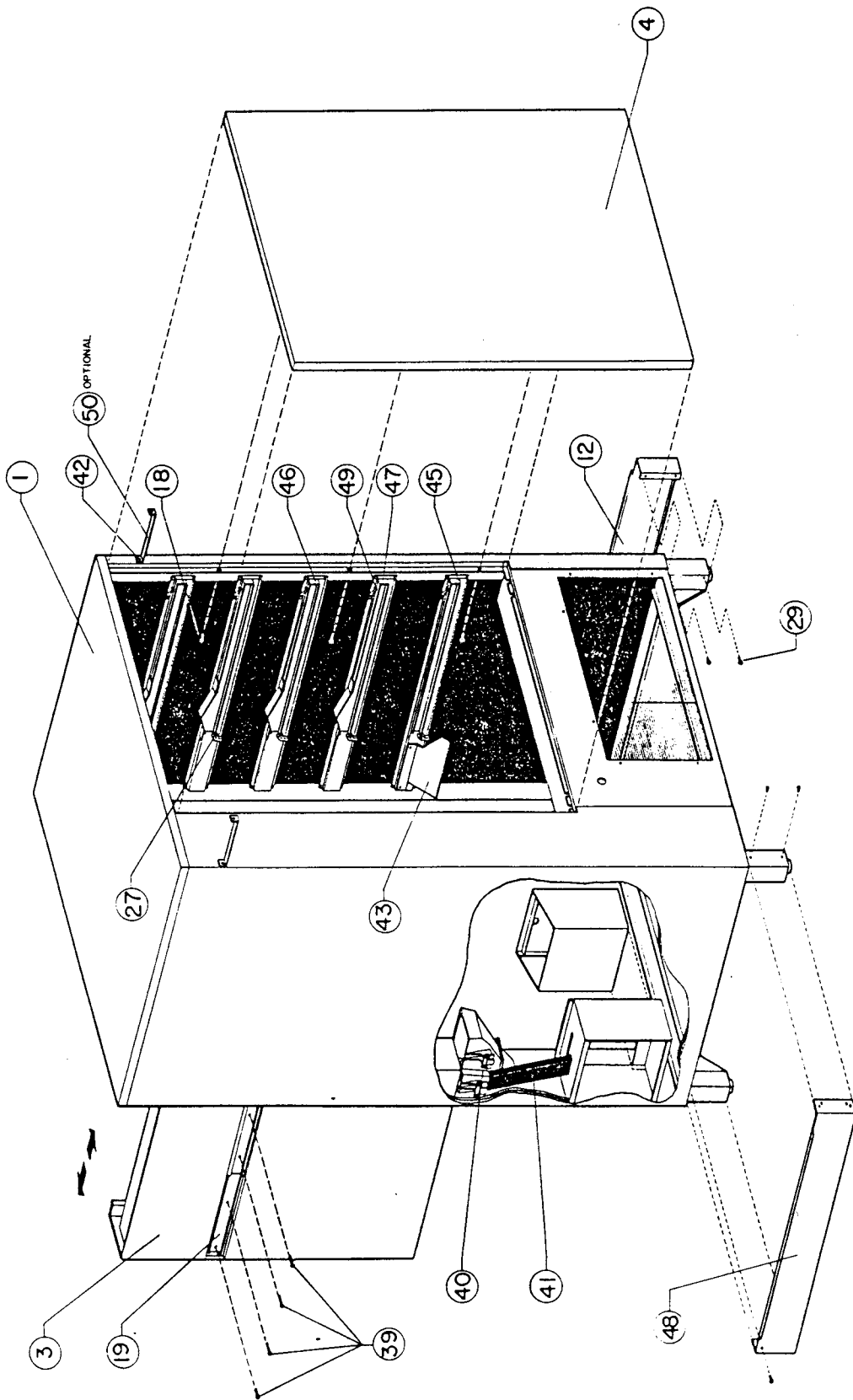
PARTS LIST  
HIGH VOLTAGE POWER BOX ASSEMBLY

ITEM	DESCRIPTION	PART NO.	QTY
-	COMPLETE ASSEMBLY	20494-120	-
1	POWER BOX W.A.	20689-BLK	1
2	TRANSFORMER	18359	1
3	RFI FILTER	17913	1
4	POWER LAMP HARNESS	20692	1
5	FUSE WARNING DECAL	18445	1
6	FUSE HOLDER	18434	3
7	2 AMP FUSE	222	1
8	#8 INTERNAL WASHER	266	1
9	1 AMP FUSE	18360	1
10	SCREW #8-18 X 3/8	1298-BLK	6
11	POWER HARNESS	20691	1
12	POWER BOX OUTLET	19663	1
13	3 AMP FUSE	20235	1
14	GROUND HARNESS	19703	1



# COMPLETE ASSEMBLY

TO BE USED IN CONJUNCTION WITH PAGES 54 & 55



REAR VIEW

# COMPLETE ASSEMBLY

TO BE USED IN CONJUNCTION WITH PAGES 54 & 55

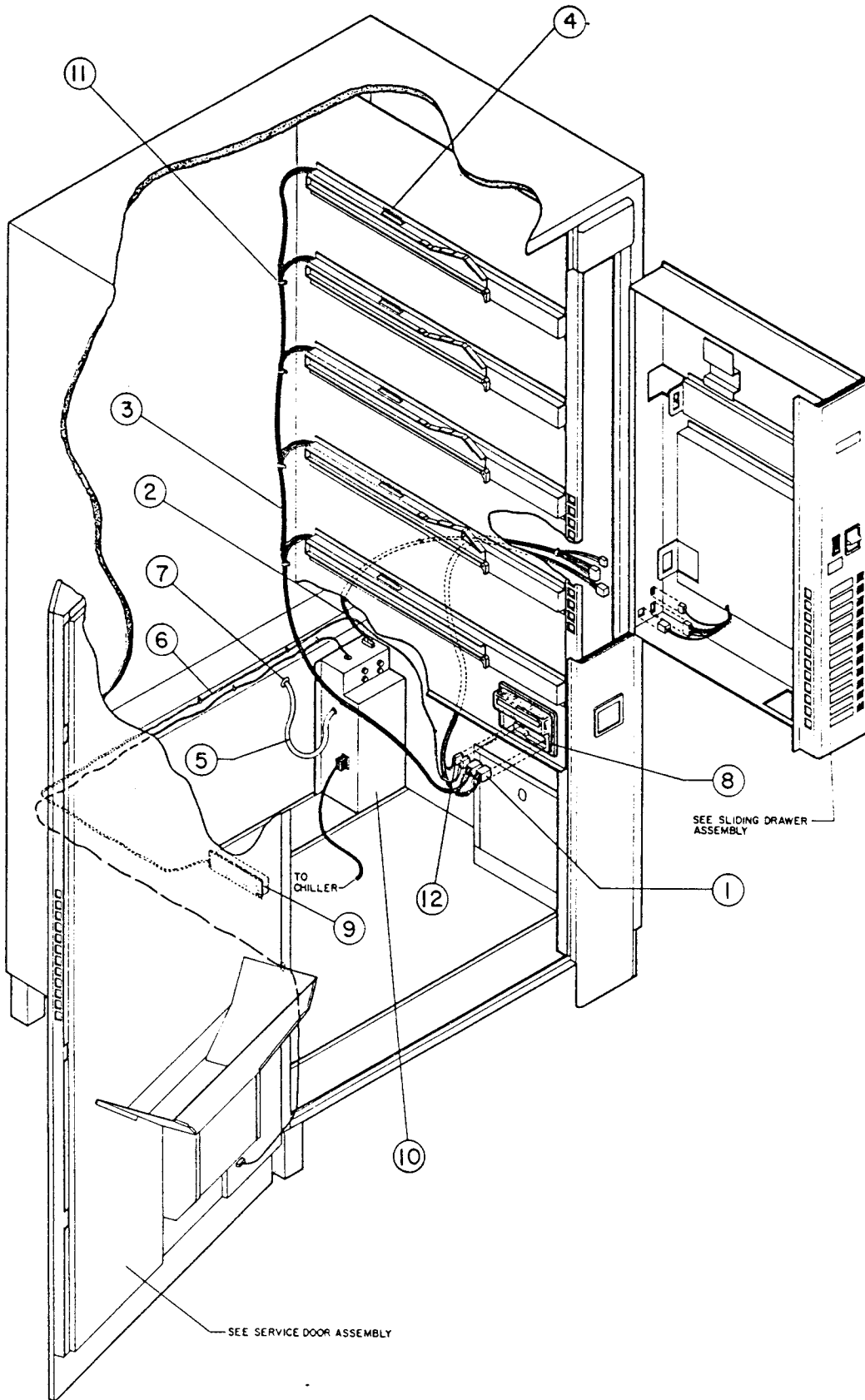
PARTS LIST  
COMPLETE ASSEMBLY DRAWING

ITEM	DESCRIPTION	PART NO.	QTY
1	CABINET	19827	1
2	* SERVICE DOOR ASSEMBLY	20384-YEL	1
3	* DRAWER ASSEMBLY	20259	1
4	* REAR DOOR	20286-SGB	1
5	INSULATION	20272	1
6	* PLATE & LEG LEFT SIDE	18747-LH	2
7	* PLATE & LEG RIGHT SIDE	18747-RH	2
8	LEG LEVELER 1/2-13	19765	4
9	WASHER HEAD BOLT 5/16-18X5/8	19302	11
10	* UPPER ESCUTCHEON PLATE	17939-BLK	1
11	* LOWER ESCUTCHEON PLATE	20500-BLK	1
12	* OUTSIDE LEG ASSEMBLY SKIRT	17879-LSG	1
13	CAP-MID, ESCUTCHEON	17916-BLK	1
14	DRAWER ESCUTCHEON CAP	20545	1
15	COIN CUP DOOR	17865	1
16	COIN CUP RETURN	20683	1
17	SERVICE DOOR LOCK PLATE	17996-BLK	3
18	SCREW # 8X3/8	1298-BLK	54
19	DRAWER SLIDE	17964	1
20	INSULATION RT.	20272-04	1
21	SCREW # 10-24 X 3/8	601	4
22	INNER PANEL R.S.	20347	1
23	TRAY SLIDE WLDT. R.H.	20340	3
24	SHOULDER SCREW	18827	10
25	CAM LATCH FOR TRAY	18697	5
26	PRODUCT DEFLECTOR	20405-BLK	4
27	CAM TRAY LATCH	20407	5
28	POWER BOX ASSEMBLY	20494-US	1
29	SCREW #8-32 X 3/8	11894	8
30	PRODUCT DEFLECTOR	20405	1
31	PRODUCT DEFLECTOR R.H.	20418-BRH	1
32	SOLDOUT RECEIVER	20410-REC	1
32A	L.E.D. SOLDOUT	20410-LED	1
33	COIN BANK	17960-BLK	1
34	NEOPRENE STRIP 3/8	810-00	1
35	LIGHT CANDY WINDOW	20504	58 1/2"
36	SCREW # 8-32 X 3/8	638-BLK	1
37	DOOR STOP ASSEMBLY	20546	17
38	COIN RETURN TRIM	17868-BLK	1
39	SCREW # 8-18 X 1/4	1868-BLK	1
40	COIN HOPPER	17823	4
41	CHUTE EXTRUSION	17889	1
42	BOLT 1/4 X 1/2-20	83271	1
43	DEFLECTOR L.H.	20418-BLH	2
44	SCREW # 10-24 X 5/16	13140	1
45	WLD'T-TRAY SLIDE, ELH	20477-BLK	10
46	WLD'T-TRAY SLIDE, L.H.	20339-BLK	1
47	WLD'T-TRAY SLIDE, DLH	20472-BLK	3
48	* RIGHT SIDE SKIRT	20508-BLK	1

PARTS LIST  
COMPLETE ASSEMBLY  
(CONTINUED)

ITEM	DESCRIPTION	PART NO.	QTY
49	GROUNDING SPRING	19475-BLK	5
50	WALL MOUNTING BRACKET	20116-BLK	2
51	WLD'T-TRAY SLIDE DRH	20473-BLK	1
52	WLD'T-TRAY SLIDE ERH	20478-BLK	1
53	ESCUTCHEON BRACE	20499-BLK	1

\* When ordering part, state whether machine color is Snicker brown or M&M yellow.



**COMPLETE ASSEMBLY**

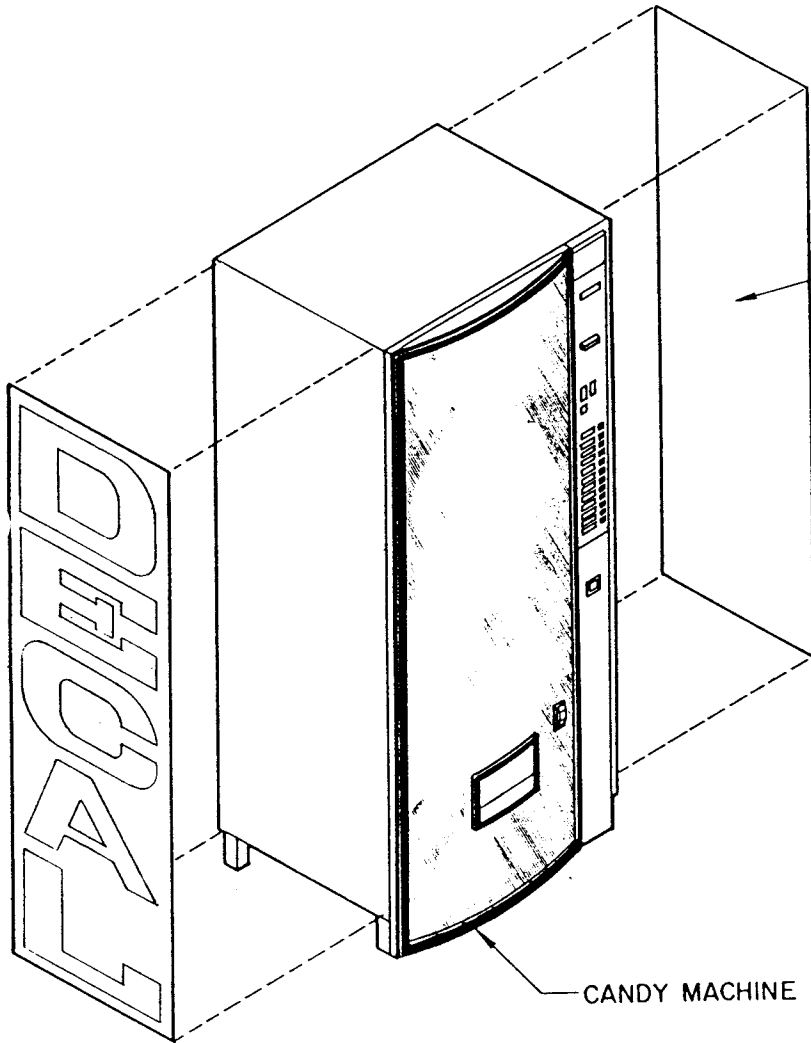
**WIRING DIAGRAM**

COMPLETE CABINET  
WIRING DIAGRAM

ITEM	DESCRIPTION	PART NO.	QTY
1	SOLD-OUT MOTOR HARNESS	20402	1
2	POWER JUMPER HARNESS	18391	1
3	MAIN MOTOR HARNESS	19643	1
4	CHASSIS MOUNT HEADER	19652	5
5	SERVICE CORD	17720	1
6	SOLD-OUT L.E.D. HARNESS	20403	1
7	STRAIN RELIEF BUSHING	2438	1
8	SOLD-OUT RECEIVER	20410-REC	1
9	SOLD-OUT L.E.D.	20410-LED	1
10	POWER BOX ASSEMBLY	20494-120	1
11	HARNESS TIE	80569	12
12	SOLD-OUT POWER HARNESS	20401	1



PARTS LIST  
CABINET DECAL



- 20574  
DECAL, SIDE, CANDY MACHINE, U.S.,  
YELLOW (M & M) QUANTITY - 2
- 20678  
DECAL, SIDE, CANDY MACHINE, U.S.,  
BROWN (SNICKERS) QUANTITY - 2

CANDY MACHINE