

IMPORTANT INFORMATION

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**5 Selection
Electric Pastry Merchandiser**

PLEASE
READ THE SET-UP INSTRUCTIONS
THOROUGHLY AND CAREFULLY
BEFORE PLACING THE MERCHANDISER
ON LOCATION.

SAVE
THE INSTRUCTIONS FOR REFERENCE
WHEN:

- 1. PLACING THE MERCHANDISER IN SERVICE.*
- 2. SERVICING THE MERCHANDISER.*
- 3. CLEANING THE MERCHANDISER.*
- 4. MAKING ADJUSTMENTS IN THE MERCHANDISER.*

THE
INSTRUCTIONS CONTAIN ESSENTIAL
WIRING AND CIRCUIT DIAGRAMS.

PLEASE SAVE

IMPORTANT INFORMATION

SET-UP INSTRUCTIONS FOR NATIONAL VENDORS,[®] CROWN SEVENTY TWO,[®] EPM-72 ELECTRIC PASTRY MERCHANDISERS

WARRANTY

The National Vendors[®], Crown Line Two[®], EPM-72, Electric Pastry Merchandisers are warranted for one (1) year against defective parts and workmanship. Any part or parts which are proved to be defective within one (1) year of the date of shipment, will be replaced free of charge when the defective part is returned with the transportation charges prepaid to the destination designated by the National Vendors Parts Department.

This Warranty applies only to the original purchaser of the Merchandiser and is null and void if the Merchandiser is sold during the period of warranty.

This Warranty is also null and void for all electrical components, wiring, or circuits damaged and/or for all mechanical parts or assemblies damaged as the result of operating the merchandiser at other than 110-120 volt, 60 Hertz current.

No Warranty is given or implied on the incandescent lamps, neon lamps, fluorescent lamps, ballasts, or starters.

Further, National Vendors is not responsible for any costs of service rendered or repairs made at other than National Vendors; or, by anyone other than an authorized factory service representative of National Vendors; unless, authorization to incur such expense has been given in writing by National Vendors prior to the incurring of such expense.

This Warranty is in lieu of all other warranties expressed or implied, including, without limitation, warranties of Merchantability, and all other obligations or liabilities on National Vendors' part, and National Vendors neither assumes nor authorizes any person to assume for it, any other obligation or liability, in connection with the sale of said Equipment or any part thereof.

CRANE-National Vendors
12955 Enterprise Way
Bridgeton, MO 63044

ACI-AGB

This machine has been engineered to our own rigid safety and performance standards. It has earned a "Letter of Compliance" from NAMA indicating that it complies with Sanitation and Health Guidelines recommended by the Automatic Merchandising Health-Industry Council (AMHIC) and it conforms with all other NAMA Safety Recommendations. In addition, the UL label signifies that its constructions and design have been inspected and tested by Underwriters' Laboratories, Inc. and found to comply with their safety standards. UL inspectors also periodically examine production machines at the factory to assure continued compliance. Each electrical part has been

separately investigated by UL and found to be safe as used in this equipment.

To retain the safety and performance built into this machine it is important that installation and maintenance be conducted so as to not alter the construction, or wiring, and that replacement parts are as specified in the Parts Manual. Your investment in this equipment will be protected by using the Set-Up Manual, Service Manual, and Parts Manual in your operation and maintenance work. By following prescribed procedures, machine performance and safety will be preserved.

TABLE OF CONTENTS

Warranty	i
Table of Contents	ii
List of Illustrations	iii
General Information and Specifications	iv
Introduction	v
SECTION I - GENERAL INFORMATION AND INSTALLATION INSTRUCTIONS	1-1
I. General	1-1
II. Electrical	1-1
III. Unpacking and Inspecting the Merchandiser	1-1
IV. Installing the Cabinet Fan	1-2
V. Installing the Merchandiser	1-2
SECTION II - PREPARING THE MERCHANDISER FOR VENDING	2-1
I. General	2-1
II. Loading the Magazine Columns	2-1
III. Inserting Price Tags	2-2
IV. Setting the Vend Pricing	2-2
V. Loading the Coin Mechanism	2-4
VI. Positioning the Coin Block	2-5
VII. Test Vending the Merchandiser	2-5
SECTION III - ROUTINE SERVICE AND SANITATION INSTRUCTIONS	3-1
I. General	3-1
II. Cleaning the Exterior of the Merchandiser	3-1
III. Cleaning the Interior of the Merchandiser	3-1
SECTION IV - ADJUSTMENT, REMOVAL AND REPLACEMENT PROCEDURES	4-1
I. General	4-1
II. Adjustment of the Anti-Pilferage Guard	4-1
III. Removal and Replacement Procedures	4-2
IV. Installation of a New Lock Cylinder or Recoding a Flex-ACE [®] Lock	4-2
SECTION V - ELECTRICAL CIRCUITRY	5-1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Wall Receptacle Polarity	1-1
1-2	Installing the Cabinet Fan	1-2
1-3	Repositioning and Adjusting the Door Support	1-3
1-4	Bank Style Installation of Merchandisers	1-4
2-1	Loading the Magazine Columns	2-1
2-2	Inserting Price Tags	2-3
2-3	Coin Mechanism (ACER)	2-3
2-4	Price Setting Boards (ACER)	2-4
2-5	Positioning Coin Block	2-5
4-1	Adjustable Anti-Pilferage Guard	4-1
4-2	Upper Display Panel	4-2
4-3	Installation of a Lock Cylinder	4-3
4-4	Recoding a Recodeable Lock	4-4
5-1	Wiring Diagram of Series 5250 ACER Schematic Diagram of Merchandiser	5-2
5-2	Schematic Diagram of Merchandiser with Series 5250 ACER	5-3
5-3	Wiring Diagram of Series EPM-72 Merchandiser	5-4

GENERAL INFORMATION AND SPECIFICATIONS

STYLING:		The EPM-72 Electric Pastry Merchandiser styling permits compatible and attractive side-by-side use with similarly styled Merchandisers.
SIZE:		72 inches (182.9 cm) high, 38 inches (96.5 cm) wide, 23 inches (58.4 cm) deep. 6 inches (15.2 cm) legs comply with requirements of US Public Health Service and AMHIC of NAMA.
WEIGHT:		Approximately 412 lbs. (186.9 kg)
POWER REQUIREMENTS:		110-120 volts ac, 60 hertz, 3.5 amperes
COIN MECHANISM:	Optional:	The All Coin Electric Register (ACER) Series 2505 accepts nickels, dimes, and quarters. This coin mechanism does not make change. A Merchandiser with a Series 2505 ACER may be set to vend at any five different prices from five cents to \$1.50.
	Optional:	The All Coin Electric Register (ACER) Series 5250 accepts nickels, dimes, and quarters. The coin mechanism returns up to 20¢ in change upon making a purchase. A Merchandiser equipped with a Series 5250 ACER may be set to vend at any five different prices from five cents to \$1.50.
CAPACITY:	Total:	174 items, 5 Columns 2 Columns - 27 trays each Tray Size: 7 inches (17.78 cm) long, maximum x 1 7/8 inches (4.75 cm) high x 5 inches (12.7 cm) wide. 3 Columns -40 trays each Tray Size: 7 inches (17.78 cm) long, maximum x 1 1/4 inches (3.18 cm) high x 5 inches (12.7 cm) wide. (Identically price items may vend interchangeably in one column, since each is seen in Display before purchase).

These specifications are subject to change without notice.

INTRODUCTION

The National Vendors EPM-72 Electric Pastry Merchandiser is a quality engineered and thoroughly tested well built machine.

This Set-Up Instruction is provided to give the information required to properly install and operate the Merchandiser.

When ordering parts or requesting information for an EPM-72 Electric Pastry Merchandiser include the Serial Number found on the Electrical Rating Tag at the rear of the Merchandiser. Also, when ordering painted or colored parts, specify the color each individual part required.

Read the following instructions thoroughly before unpacking, inspecting or installing the Merchandiser. All references to right and left in these instructions are, unless otherwise noted, as seen by the operator as one looks at the front of the Merchandiser.

SECTION I

GENERAL INFORMATION AND INSTALLATION INSTRUCTIONS

I. GENERAL

This section is designed to aid in the unpacking, inspecting and installing of the EPM-72, Electric Pastry Merchandiser.

II. ELECTRICAL

A. The Merchandiser is equipped with a 3-pin connector on the service cord. The wall receptacle into which the service cord is plugged should be a properly polarized and grounded 15 ampere, 3-pin grounding type wall receptacle. The electrical supply line to the wall receptacle should be fused with a 15 ampere fuse or circuit breaker and supply a constant 110-120 Volts at 60 Hertz.

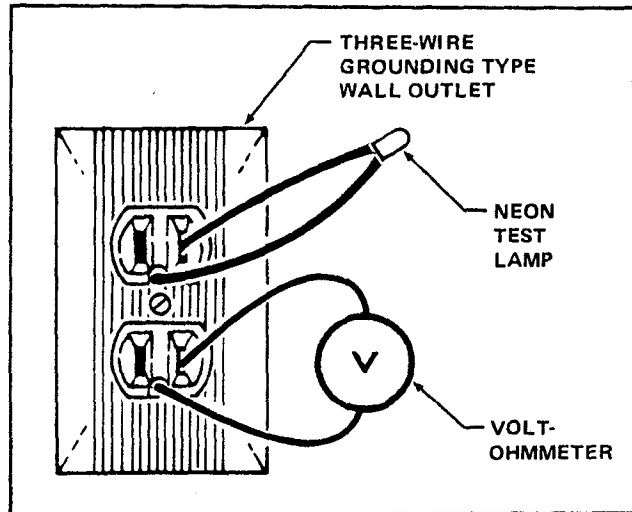


Figure 1-1. Wall Receptacle Polarity

WARNING

To avoid shock hazard, make all electrical tests with a neon indicator test lamp or a volt-ohmmeter. DO NOT Use an incandescent lamp or jumper wire when checking the circuitry of the Merchandiser or the polarity of the Wall Receptacle.

B. Check the polarity of the receptacle with a neon indicator test lamp or a volt-ohmmeter to measure 110-120 VAC, per Figure 1-1. If the test lamp does not glow when it is inserted into the receptacle in the position shown, or voltage is not measure on the meter, have the wall receptacle rewired to conform to the required polarity.

WARNING

To avoid shock hazard, DO NOT plug the Merchandiser Service Cord into a wall receptacle which is not properly polarized and grounded. If it is not polarized according to the tests above, the wall receptacle must be rewired for proper polarity.

III. UNPACKING AND INSPECTING THE MERCHANDISER

Read the following instructions thoroughly before unpacking and inspecting the Merchandiser. All references to right and left in these instructions are as seen by the operator as he looks into the front of the Merchandiser, or at the Assembly being described.

CAUTION

DO NOT attempt to operate the Merchandiser before the Merchandiser is completely unpacked.

- A. Carefully remove the Merchandiser from the shipping carton and shipping base. Place the Merchandiser on a level surface. When ordered, the optional Hinged Base Plate Assembly is shipped in the base Packing. The Base Plate installation instructions are packed with the Assembly. If the Base Plate is not used, see the instructions for repositioning the Door Support, procedure IV-E of this Section.
- B. Inspect the Cabinet for dents, scratches, or damage resulting from improper handling. If damage is evident, file a claim immediately with the delivering carrier.
- C. Open the Cabinet Door with the key in the envelope in the Delivery Pan or if applicable, grasp the Lock Spring and pull outward to unlatch the Door. Note the Door Support at the bottom of the Door.

WARNING

The Door Support provides stability against tipping the Merchandiser. DO NOT remove the Door Support and leave it off the Merchandiser.

NOTE

Projections in the floor area around the Merchandiser may interfere with this support and prohibit full Door opening. For instructions on repositioning or adjusting the Door Support, see procedure IV-E of this Section.

D. Inspect the interior of the Merchandiser carefully, remove all packing pads, blocks, and tape from inside the Cabinet. Avoid damaging the packing and observe piece positions to assure proper replacement of packing if re-use is necessary.

E. Disengage and store the Packing Clip located at the lower right front corner of the Delivery Mechanism.

CAUTION

The Packing Clip should be reinstalled when the Merchandiser is relocated.

F. A cloth bag is shipped in the Money Box, and contains the following parts.

1. One Cable Clamp for the optional Cabinet Fan.
2. One Tie Strap, one Machine Screw, one Nut, and two Sheet Metal Screws, all for Bank Style Installation of Merchandisers.

IV. INSTALLING THE CABINET FAN

- A. Unlock and open the Cabinet Door. Be sure the Door Support Leg is extended.
- B. Using the red handle, rotate the Delivery Mechanism out of the Cabinet.
- C. Remove four Wing Nuts which are attached to studs on the Cabinet Fan Assembly.
- D. From the rear of the Cabinet, locate the Fan Assembly over the opening provided. Insert the Fan harness through the opening. See Figure 1-2.
- E. From inside the Cabinet, hold the Fan to the Cabinet wall, then install the four Wing Nuts removed in Step C.
- F. Connect the Fan Harness Plug to the Cabinet Receptacle.

CAUTION

To prevent damage to the Ventilating Fan Assembly or to the wall behind the Merchandiser, care must be used when pushing the Merchandiser into position after the Fan Assembly is installed.

V. INSTALLING THE MERCHANDISER

- A. Position the Merchandiser in the desired location.

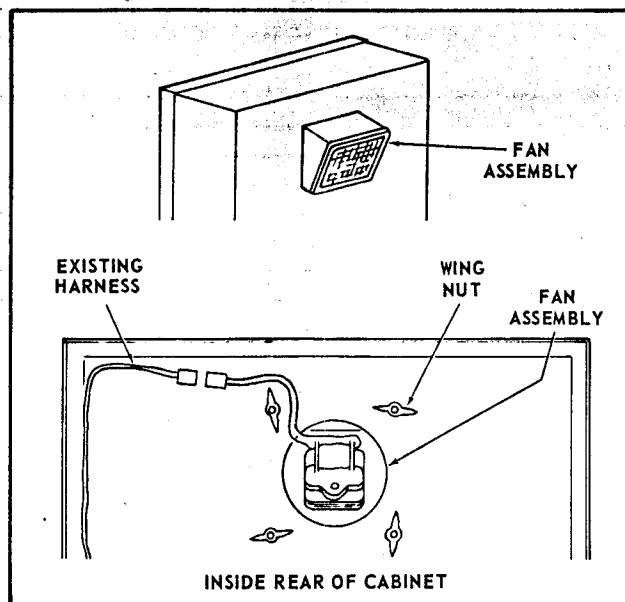


Figure 1-2. Installing Cabinet Fan

WARNING

1. To prevent the Merchandiser from tipping and to ensure proper Merchandiser operation, always be sure the Merchandiser is properly leveled on a flat, solid, and stable floor or base foundation.
2. The Merchandiser is equipped with a Door Support on the Door to prevent the Merchandiser from tipping, causing property damage and possible injury to personnel. For the Door Support to be effective the Merchandiser must be located on a flat surface, large enough to come within 3/8" (.952 cm) of the Door Support at any point in the Door's arc.
3. DO NOT install the Merchandiser on an elevated platform that prevents the Door Support from remaining within 3/8" (.952 cm) of the upper surface of the platform or floor through-out the entire arc of the Door.

- B. Level the Merchandiser in both the left-to-right and front-to-rear directions by adjusting the Leg Levelers.
- C. Plug the Service Cord in to the wall receptacle. If the Cabinet Door is opened the Display Lights will not light because the Merchandiser is equipped with an Interlock Switch designed to cut all power to electrical components when the Cabinet Door is open.

WARNING

The Interlock Switch is an important safety device against shock hazard. Unless other instructed, DO NOT manually depress, tape down, or pull out the Interlock Switch while the Cabinet Door is open.

D. If applicable, install the optional Hinged Base Plate Assembly per instructions packed with the Base Plate Assembly.

E. If the Base Plate is not used, the Door Support should be moved to align the support with the Cabinet Right Hand Base Leg. To reposition the Door Support, see Figure 1-3 and perform the following steps.

WARNING

To avoid tipping the Merchandiser:

1. DO NOT remove the Door Support and leave it off the Merchandiser.
2. DO NOT remove the Door Check.
3. DO NOT open the Door beyond 90 degrees.

1. Fully open the Cabinet Door.
2. Block the underside of the Cabinet Door.

NOTE

Be sure the Delivery Mechanism is secure in the in-Cabinet position.

3. Remove the Sanitation Strip.
4. Remove the Door Support.
 - a. Remove the Door Support Nut and washer.
 - b. Raise the Door Support.
 - c. Pull the Foot from the bottom of the Door Support.
 - d. Remove the Door Support.
5. Remove the Hole Plug from the door and install the Plug in the hole the Door Support was taken from.
6. Install the Door Support in the vacated hole, position on the stud, and install the nut. Do not tighten the nut.
7. Place the Door Support Foot back on the Door Support.
8. Set the Door Support so that the bottom of the Foot is within 3/8" (.95 cm) of the floor, and tighten the Door Support Nut. See Figure 1-3.

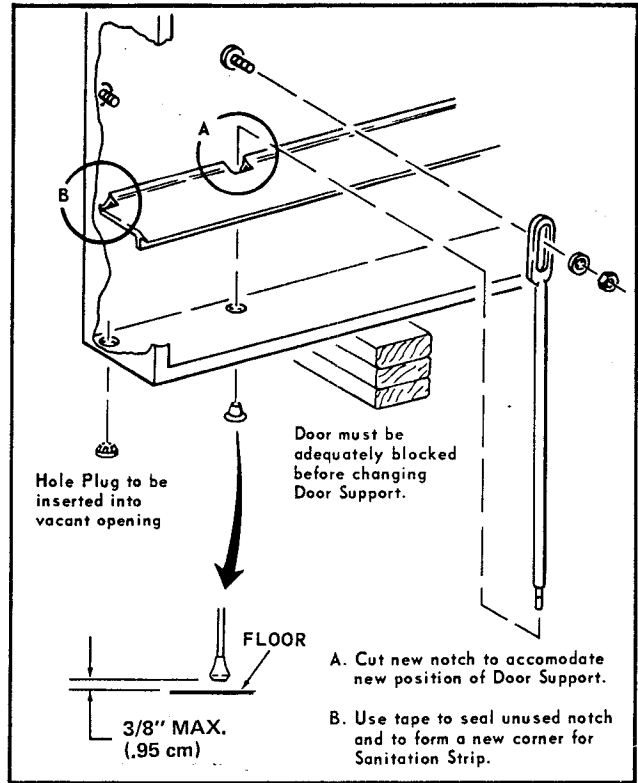


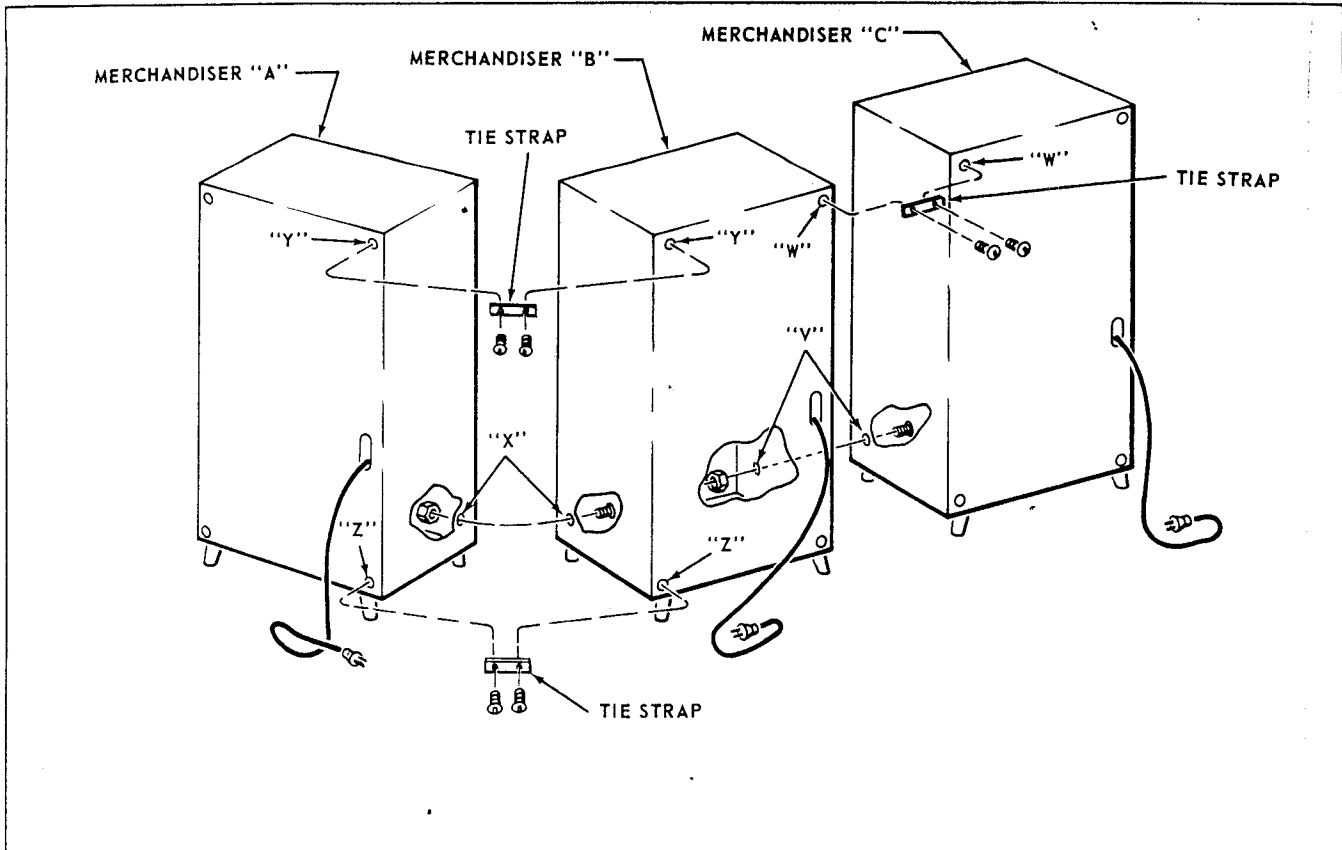
Figure 1-3. Repositioning and Adjusting the Door Support

WARNING

To avoid tipping the Merchandiser:

1. The Door Support should stay within 3/8" (.95 cm) proximity to the floor through the entire radius between the open and the closed position. If this is not possible through adjustment, move the Merchandiser.
2. The Door Support must be readjusted after any significant change in Leg Leveler position.

9. Cut a notch in the Sanitation Strip to accommodate the Door Support.
 10. Use tape to seal the vacated notch at the corner of the Sanitation Strip.
 11. Install the Sanitation Strip on the Door.
 12. Remove the blocking from under the Door.
- F. For Bank Style Installation of the Merchandiser, see Figure 1-4.



Each Merchandiser, when shipped, has in the Money Box, a 1/4" Machine Screw and Nut, a Tie Strap, and 2 Sheet Metal Screws.

- I. If only 2 Merchandisers are to be installed next to each other, they may be joined in the following way:
 - A. Remove the knock-outs indicated by "X".
 - B. Remove the knock-outs indicated by "Y".
 - C. Remove the knock-outs indicated by "Z".
 - D. Butt the Merchandisers together.
 - E. Level the Merchandisers in the front-to-rear and the side-to-side directions. Make sure the holes opened in Step "A" are in line.
 - F. At "X" bolt the Cabinets together with the 1/4" Machine Screw and Nut.
 - G. Connect the Cabinets at point "Y" with one of the Tie Straps and 2-Sheet Metal Screws.
 - H. Connect the Cabinets at point "Z" with the other Tie Strap and 2-Sheet Metal Screws.

- II. If 3 or more Merchandisers are to be installed next to each other, they may be joined in the following way:
 - A. Follow steps "A" through "G" of procedure I.

Determine how level the entire floor area is where the bank of Merchandisers is to be placed, before placing the first Merchandiser in place. If the floor has a slope to one end of the proposed line of Merchandisers, or if the high spot in the floor is in the center of the proposed line, or if the ends of the proposed line will be at high spots; place the Merchandiser that is to be at the highest spot in position first. Level the first Merchandiser in the front-to-rear and side-to-side direction. Do not extend the levelers on this first Merchandiser unless absolutely necessary to level it. Position and level all the rest of the Merchandisers in the bank using the first Merchandiser as the point of reference.

- B. Punch out the knock-outs indicated by "V".
- C. Punch out the knock-outs indicated by "W".
- D. Align and attach the other Merchandisers as in Steps "D" through "G" of procedure I.

Figure 1-4. Bank Style Installation of Merchandisers

SECTION II

PREPARING THE MERCHANDISER FOR VENDING

I. GENERAL

The Five Selection Electric Pastry Merchandiser has three columns of 40 useable trays each and two columns of 27 useable trays each.

NOTE

When the Cabinet Door is opened, the Interlock Switch is released and the Merchandiser is electrically inoperable.

WARNING

The Interlock Switch is an important safety device against shock hazard. Unless otherwise instructed, **DO NOT** manually depress, tape down, or pull out the Interlock Switch while the Cabinet Door is open.

II. LOADING THE MAGAZINE COLUMNS

NOTE

To insure trouble free operation, avoid using products wrapped in self-adhering plastic or products with sticky wrappers and keep the Trays clean.

A. Full Column Loading.

1. Unlock and open the Cabinet Door.
2. Open the Delivery Mechanism Magazine Assembly Door.

CAUTION

There is a Delivery Assist Block (See Figure 2-1) attached by two screws to the lower right front of each of the 40 capacity Columns. This Block is essential for Pastry vending. However, this Block should be removed if found to cause difficulty when vending extremely large items other than Pastry. Always reinstall Block to vend Pastry. Use upper mounting holes for the 40 capacity Columns.

3. Load the Delivery Trays and all accessible Trays of Columns 1 through 5 with the product. See Figure 2-1. Select the Column having the Tray spacing most compatible with the product(s) to be vended in that Column.

CAUTION

DO NOT vend any products in a Column having inadequate Tray spacing. Products must fit freely.

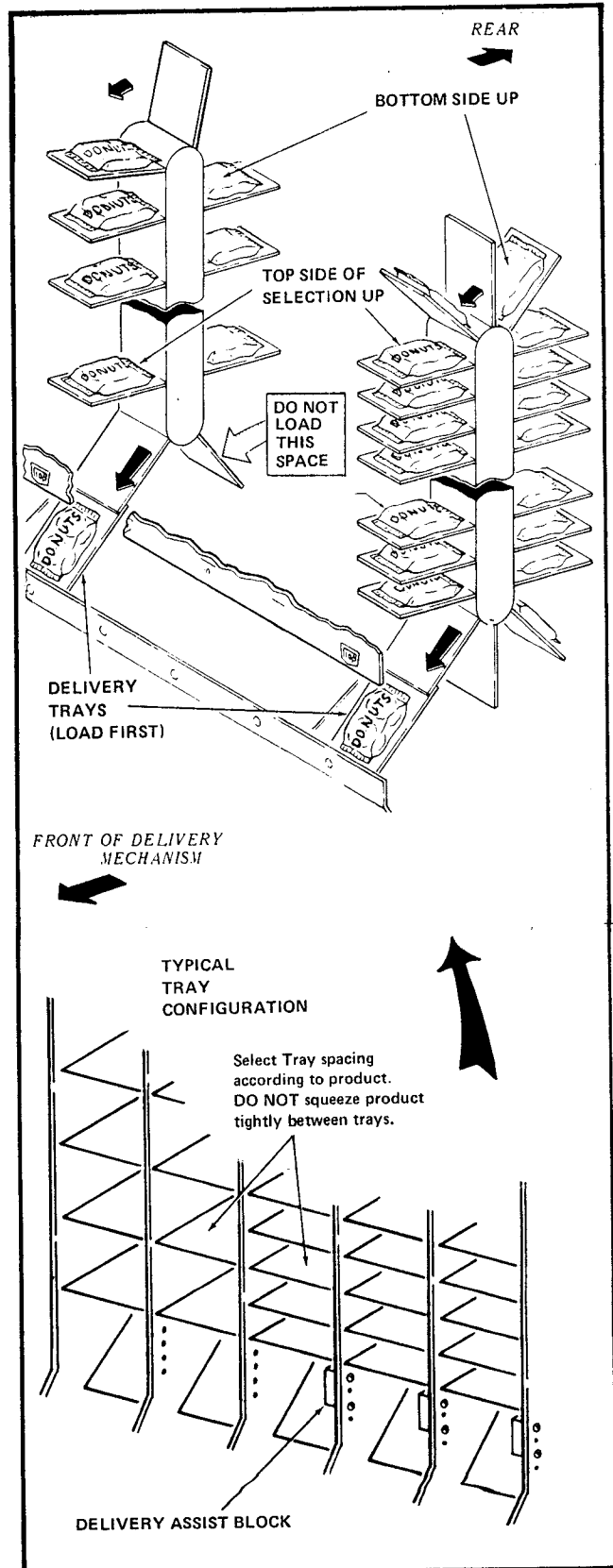


Figure 2-1. Loading the Magazine Columns

NOTE

Since all items will appear on the Delivery Trays, several varieties of product may be loaded in a single Column providing they will all be vended at the same single price for which the Column is set.

4. Rotate the Delivery Mechanism Magazine Assembly out to expose the rear side for loading.

WARNING

To avoid tipping the Merchandiser over when opening or closing the Delivery Mechanism Magazine Assembly, use the red handle provided and operate with one hand only.

5. Load the rear of Columns 1 through 5. Be sure to position the selection items properly as shown in Figure 3-1. If a given Column is to vend one type product only, be sure to match the front and rear of the Column with the same product.
6. Check to see that the Delivery Trays and all Column Trays are loaded. Check particularly the angled Trays at the top of each Column, and the bottom angled Tray on the rear side of each 40 capacity Column.

CAUTION

DO NOT load the bottom angled Tray of either of the two 27 capacity Columns.

7. Rotate the Delivery Mechanism Magazine Assembly back to the in-Cabinet position.

WARNING

To avoid tipping the Merchandiser over when opening or closing the Delivery Mechanism Magazine Assembly, use the red handle provided and operate with one hand only.

B. Partial Column Loading.

To partially load a column, the same procedure should be followed as for full Column loading, with the exception that proper sequence must be strictly observed. After loading the Delivery Trays, Column loading should begin at the bottom of the front side of the Column and proceed toward the bottom of the rear side of the Column. A partial load of less than half of the total Column capacity will have the vacant trays appearing at the top of the front side, and a partial load of more than half of the total capacity will have the vacant trays appearing at the bottom rear of the Column. Regardless of load size, continuity must be maintained. Check to be sure that a vacant tray does not appear among the loaded trays.

NOTE

Since all items will appear on the Delivery Trays, several varieties of product may be loaded in a single Column providing they will all be vended at the same single price for which the Column is set.

WARNING

To avoid tipping the Merchandiser over when opening or closing the Delivery Mechanism Magazine Assembly, use the red handle provided and operate with one hand only.

C. Reloading a Column

1. Unlock and open the Cabinet Door.
2. Open the Delivery Mechanism Magazine Assembly Door.
3. Find the termination point of the product supply already in the Merchandiser Column. If the Column contains more than half of its total capacity, this point will be found on the rear side of the Column.
4. Beginning with the first vacant tray, load (See Figure 3-1) in the proper sequence described in step III-I-B "Partial Column Loading".

NOTE

Since all items will appear on the Delivery Trays, several varieties of product may be loaded in a single Column providing they will all be vended at the same single price for which the Column is set.

III. INSERTING PRICE TAGS

The Merchandiser Display Price Tags can be found in the envelope in the base of the Cabinet.

Install the appropriate Price Tags by reaching in under the Display Price Panel and sliding the Price Tag into its holder, see Figure 2-2. Save the unused tags for future use.

IV. SETTING THE VEND PRICING

Setting the prices of an EPM-72 Merchandiser involves the coordination of the Coin Mechanism Price Setting Board, and the Merchandiser Price Setting Board.

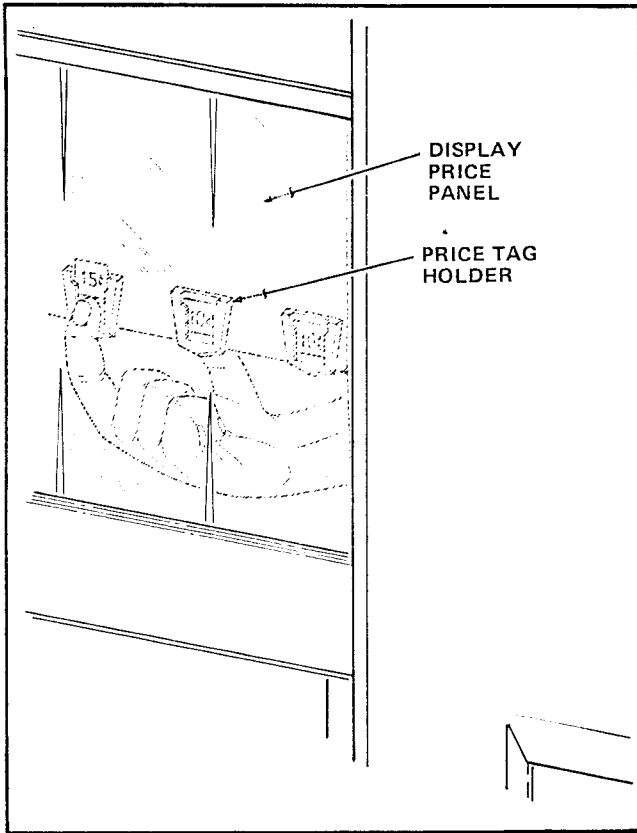


Figure 2-2. Installing Price Tags

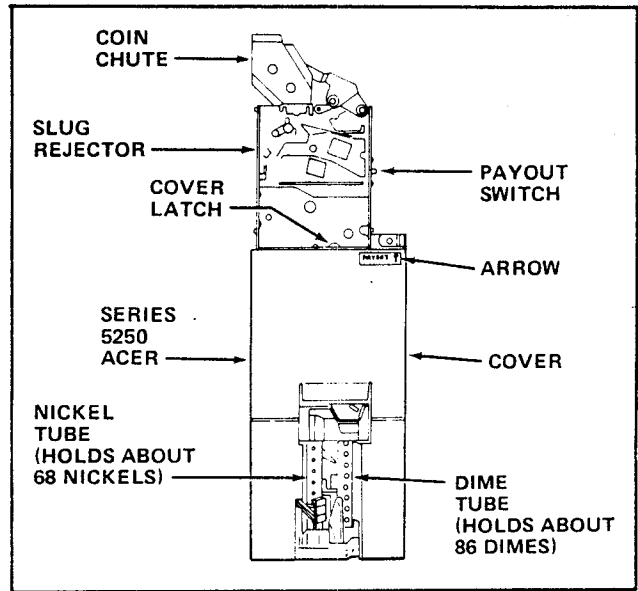


Figure 2-3. Coin Mechanism (ACER)

NOTE

Do not use the circuit path marked "O" or unmarked, as this would allow jack potting of the Merchandise in one column.

A. The Coin Mechanism Price Setting Board.

1. The Series 5250 ACER Price Setting Board.

The Series 5250 ACER can be set to vend five different priced selections between five cents and \$1.50. The ACER is capable of accepting nickels, dimes and quarters; and of returning a maximum of twenty cents above the purchase price of any one selection.

Five coded plugs are available for use in setting the maximum number of five prices at which the Merchandiser can be set to vend. These plugs are letter-coded to correspond with the letter-coded terminal strips on the Merchandiser Price Setting Board. There is one plug for each strip. Plug "A", red wire energizes Price Terminal Strip "A"; plug B, white wire, Strip "B"; plug "C", blue wire, Strip "C"; plug "D", orange wire, Strip "D"; and plug "E", black wire, Strip "E". To adjust the pricing of the Coin Mechanism perform the following steps:

- a. Open the Upper Cover Plate by depressing the latch. See Figure 2-3.

- b. Insert the five plugs into the five receptacles which correspond to prices at which the Merchandiser is to vend. The plugs must be firmly seated. If the Merchandiser is to vend at less than five prices, insert the unused plugs into any unused high price receptacles. See Figure 2-4.

WARNING

Pinching a wire may cut the insulation and cause a short circuit, presenting a shock hazard.

- c. Close the Coin Mechanism Upper Cover Plate. All wires must be inside the case before the Upper Cover Plate is closed.

B. The Merchandiser Price Setting Board.

The Merchandiser Price Setting Board, which is located on the lower left of the Cabinet Door (See Figures 2-4 and 2-6), consists of a Cover, a Terminal Board, Price Terminal Strips, and five wires numbered 1 through 5. The numbers on the wires represent the column numbers of the Merchandiser. The number 1 wire is for the

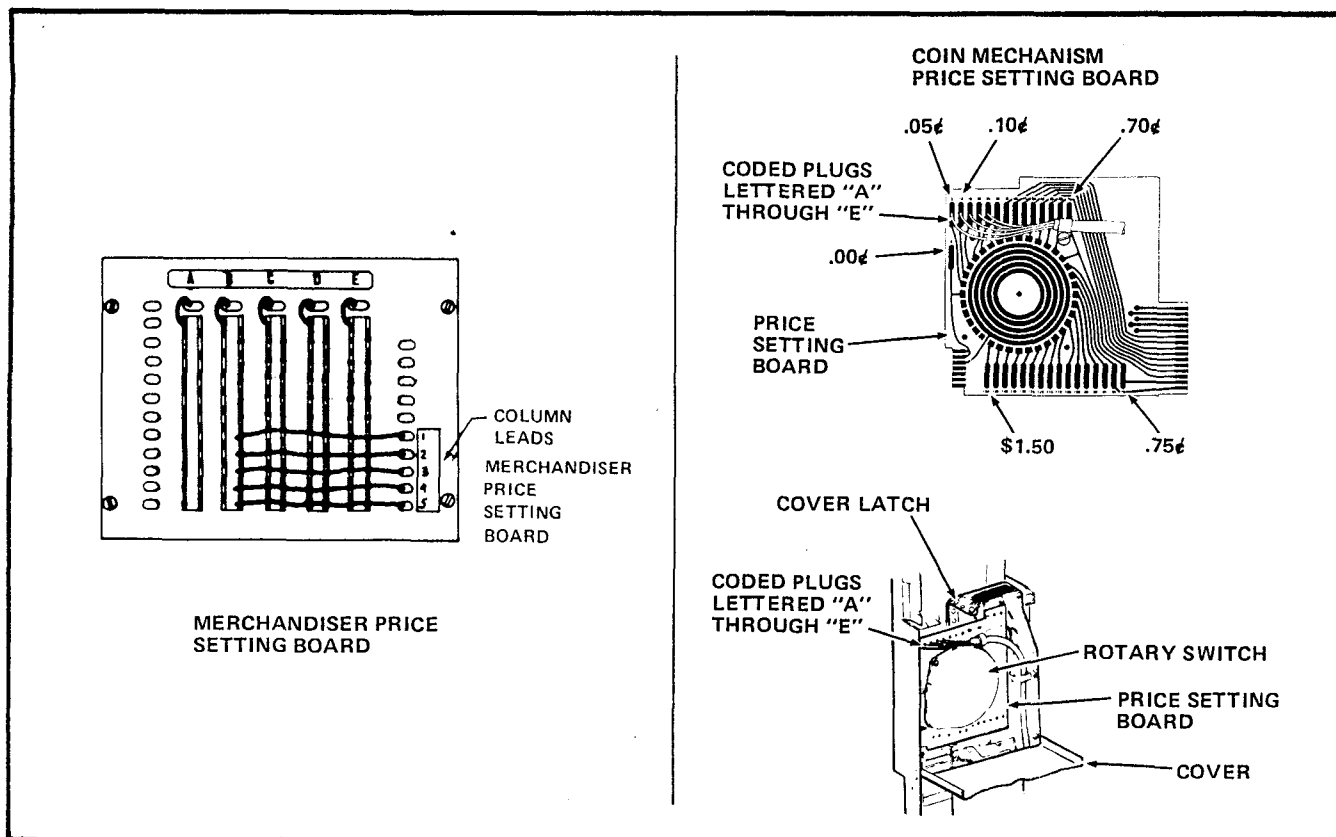


Figure 2-4. Price Setting Boards (ACER)

number one (left hand) column; the number 2 wire is for the number two (second from left) column; etc. The Price Terminal Strips correspond to: the Five color-letter-coded wires and plugs on the ACER Price Setting Board. Any given Merchandiser Price Setting Board Wire connected to any given Price Terminal Strip will permit a vend at the price set by the Coin Mechanism Price Setting Board. For adjusting Merchandiser Price Setting Board proceed as follows:

1. Remove the cover from the Merchandiser Price Setting Board.
2. Connect each of the numbered wires to the desired Price Terminal Strip for the price at which that column is to vend. Each of the numbered wires corresponds to one of the columns in the Merchandiser. See Figure 2-4.

NOTE

Ensure terminal end of wire is firmly seated on the Price Terminal Strip.

3. Replace the cover on the Merchandiser Price Setting Board.

V. LOADING THE COIN MECHANISM

Before placing the Merchandiser into service, load the Coin Tubes with Coins.

- A. Connect the Merchandiser Service Cord to the wall receptacle.
- B. Open the Cabinet Door.

WARNING

When the Cabinet Door is open and the By-Pass Interlock Switch Plunger is pulled out or pushed in, the Merchandiser is in the full operating condition. All circuits in the Merchandiser are energized. To avoid electrical shock and injury keep clear of electrical contacts and moving parts.

- C. Pull out the Plunger on the By-Pass Interlock Switch.
- D. Extend the Coin Mechanism Frame Assembly out of the Merchandiser.

- E. Load the Nickel Tube, inserting the nickels one at a time, visually checking for coins that may be shingled or standing on end. All coins must lie flat in the tube. See Figure 2-3.
- F. Load the Dime Tube, inserting the dimes one at a time, visually checking for coins that may be shingled or standing on end. All coins must lie flat in the tube.
- G. ACER Payout Switch.
 1. Move the Payout Switch on the ACER to the Payout Position (arrow) and payout 2 or 3 coins from each Coin Tube to check the Changer operation. See Figure 2-3.
 2. Return the Payout Switch to the Non-Payout Position.
- H. Release the Interlock Switch.
- I. Reload the dispensed coins.
- J. Visually check the Tubes for shingling of the coins.
- K. Push the Coin Mechanism Frame Assembly into the Cabinet.
- L. Close the Cabinet Door.

- B. After having inserted less-than-correct amount of money for each selection, repeat step A. No vend should take place.
- C. Insert the exact amount of coins at which each selection is priced, and press a Selection Button. Repeat step A for each Column.

A successful vend will be determined by first: the delivery of the item selected into the Delivery Pan; and second: the appearance of another selection item in its place on the Delivery Tray.

- D. Insert an amount of coins at least 5¢ but not more than 20¢ in excess of the selection price and press a Selection Button. Repeat step A for each Column.
 1. For a Merchandiser equipped with an ACER Series 2505 Coin Mechanism, no vend will be possible but the coins may be retrieved by depressing the Coin Return Knob.
 2. For a Merchandiser equipped with an ACER Series 5250 Coin Mechanism, all selections should vend successfully as described in step C with the proper amount of change returned into the Coin Return Receptacle.

- E. Reload all items vended during testing and, if necessary, reload the Coin Mechanism Coin Tubes.
- F. Close and lock the Cabinet Door. The Merchandiser is ready to be placed in operation.

VI. POSITIONING THE COIN BLOCK

When a Merchandiser is shipped from the factory, it is set for 10¢ vending. All Merchandisers equipped with a Series 2505 ACER will have the Coin Block set to prevent the insertion of quarters. The Coin Block must be adjusted if the Merchandiser is to accept quarters for pricing of 25¢ or more. All Merchandisers equipped with a Series 5250 ACER will have the Coin Block set to accept nickels, dimes, and quarters. If quarters are not desired, the Coin Block must be adjusted. See Figure 2-5.

VII. TEST VENDING THE MERCHANDISER

Before placing the Merchandiser in operation it must be tested with product. Close the Cabinet Door and perform the following steps:

NOTE

If the Merchandiser is equipped with an ACER Series 5250 Coin Mechanism containing an adequate supply of coins, the "Use Exact Change" light should NOT be lit.

- A. One at a time, press the Selector Button for all five Selections in the Merchandiser without inserting coins. No vend should take place.

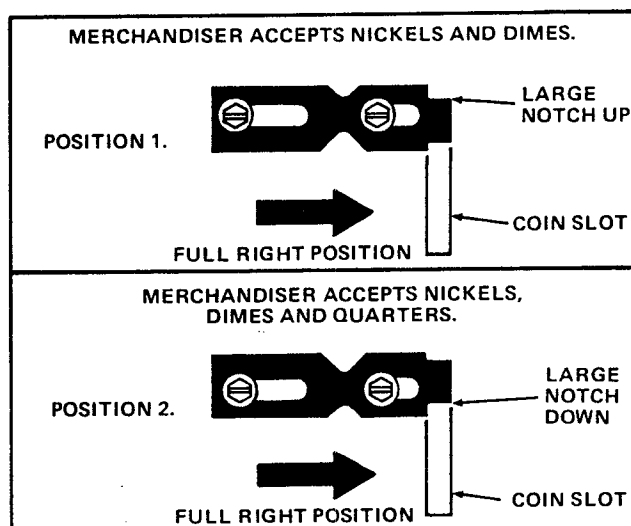


Figure 2-5. Positioning Coin Block

K | L

SECTION III

ROUTINE SERVICE AND SANITATION INSTRUCTIONS

I. GENERAL

The Merchandiser covered by this Set-Up Instruction is designed for ease of maintenance. This section gives procedures for cleaning the Merchandiser, and some service and electrical safety tips. The lack of proper service and sanitation can cause Merchandiser malfunction and loss of sales. National Vendors however stresses - A CLEAN MERCHANDISER IS THE MOST PROFITABLE MERCHANDISER.

WARNING

To avoid shock hazard:

1. Unplug the Unit Service Cord before using water on the Unit.
2. DO NOT get electrical connections or electrical components damp or wet.

CAUTION

Do not use cleaners, waxes, or lubricants that contain Silicone. Silicone sprays can coat electrical contacts and cause Merchandiser malfunction.

WARNING

Ensure area is well ventilated and no open flames are present before using any Aerosol Spray Cans. If an aerosol can uses freon as a propellant, this can combine with smoke to form toxic gas.

II. CLEANING THE EXTERIOR OF THE MERCHANDISER

The exterior parts of the Merchandiser can be cleaned with warm water and a mild detergent, rinsed thoroughly with clear water, and wiped dry with a soft cloth. The glass may be cleaned with a glass cleaner. There are a number of commercial spray-on type cleaners that can be used on the exterior of the Merchandiser to maintain the appearance of the Merchandiser and make it easier to keep clean.

III. CLEANING THE INTERIOR OF THE MERCHANDISER

NOTE

Install new fluorescent bulbs whenever one burns out, flickers, or becomes discolored.

The interior painted metal parts of the Merchandiser may be cleaned in the same way as the exterior. Clean the Display glass with a commercial glass cleaner.

A. CABINET FAN SCREENS

The Cabinet Fan Screens should be inspected at least once a week and cleaned as required.

Screens can be removed for cleaning by removing the screws securing the Screen Retainer to the Fan Housing and lifting the Retainer away from the Housing.

NOTE

Both a four Mesh and a 16 Mesh Screen are provided as part of the Cabinet Fan Assembly. Either Screen may be used independently provided the Screen used complies with local Health Authority Codes.

B. THE DISPLAY GLASS

The Lower Display Glass is accessible for cleaning without removing any Merchandiser parts. To expose the inside of the Upper Display Glass the Upper Display Panel must be removed. Refer to Section IV for removal of the Upper Display Panel.

The Display Glass may be cleaned with any commercial glass cleaner.

C. THE SLUG REJECTOR AND COIN CHUTE

The Slug Rejector and Coin Chute should be inspected at regular intervals and cleaned approximately every month.

WARNING

To avoid eye injury from flying particles, use protective glasses or protective shield if air hose is used for drying.

CAUTION

DO NOT use solvents of any kind on the Slug Rejector or Coin Chute.

Remove the Slug Rejector from the Merchandiser and clean the Coin Chute with soft bristle brush to remove any accumulated foreign matter. The Slug Rejector may be cleaned with detergent and hot water, but must be thoroughly dried before being restored to service. An air hose may be used to accelerate the drying of the Slug Rejector.

E. DELIVERY TRAYS

1. Move the Delivery Tray to the vend position.

a. Pull up on the Solenoid Latch Rod at the lower right front of the Delivery Mechanism.

b. Push down on the Delivery Tray.

2. The Delivery Tray and Column walls may then be cleaned with warm soapy water.

3. Move the Delivery Tray back to the display position.

SECTION IV

ADJUSTMENT AND REMOVAL AND REPLACEMENT PROCEDURES

I. GENERAL

The procedures provided in this section are arranged in alphabetical order to make specific adjustment and removal and replacement information easy to locate.

Read the Instructions thoroughly before performing any adjustment or removal and replacement procedures.

II. ADJUSTMENT OF THE ANTI-PILFERAGE GUARD

Because of the wide variation in product height the Merchandiser has an adjustable Anti-Pilferage Guard.

Adjusting the Anti-Pilferage Guard too low restricts the opening so that the item cannot be removed without damage or possibly cannot be removed at all. Adjusting the Anti-Pilferage Guard too high may result in a loss of merchandise by someone reaching through the Delivery opening.

A. Place the product having the maximum height of all the items to be vended in the Delivery Pan in the position it would be in if it had been delivered.

B. Slide the product up and under the Anti-Pilferage Guard. If the product slides up without interference, note the amount by which it clears the Guard. If the amount of clearance is about 1/8 inch, proceed to step M. If the product will not slide up due to interference, or if the clearance is more than 1/8-inch, note the amount of interference or clearance.

C. Disconnect the Merchandiser Service Cord from the Wall Receptacle.

D. Unlock and open the Cabinet Door.

E. Rotate the Delivery Mechanism out of the Cabinet.

F. Remove the Reset Motor Cover by removing three No.8-32 Screws.

G. Remove the Anti-Pilferage Guard from the Merchandiser by removing the four No.8-32 Self-Tapping Screws; two on the Right Sidewall adjacent to the Reset Motor and two on the Left Sidewall. Carefully remove the Guard by sliding it forward out of the Delivery Pan.

NOTE

There are numerous screws through each Sidewall adjacent to those holding the Anti-Pilferage Guard; observe carefully to determine the proper screws to be removed.

H. Loosen the five No.8-32 Nuts with lockwashers across the rear bottom of the Anti-Pilferage Guard. Adjust the lower portion of the Anti-Pilferage Guard to allow about 1/8-inch of clearance between the bottom surface of the Anti-Pilferage Guard Assembly and the top of the thickest product to be vended. Be sure to adjust the Guard so that its bottom will be parallel to the surface of the Delivery Tray and tighten the five Nuts. See Figure 4-1.

I. Install the Anti-Pilferage Guard, using the four No.8-32 Screws removed in step G.

J. Install the Reset Motor Cover using three No.8-32 Screws removed in step G.

K. Rotate the Delivery Mechanism back into the Cabinet.

L. Close and lock the Door.

M. Plug the Merchandiser Service Cord into a wall receptacle.

N. Check to determine if the Anti-Pilferage Guard has been set to provide adequate clearance by test vending at least five of the items from the Column having the thickest product.

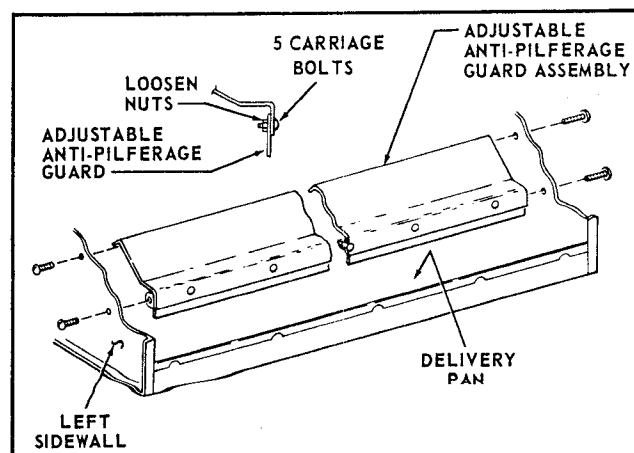


Figure 4-1. The Adjustable Anti-Pilferage Guard

- O. If the Anti-Pilferage Guard is not set correctly, repeat steps A through N. If the Anti-Pilferage Guard is set correctly, place the Merchandiser in service.

III. REMOVAL AND REPLACEMENT PROCEDURES

A. REMOVAL AND REPLACEMENT OF THE COIN MECHANISM

1. To remove the Coin Mechanism from the Merchandiser.
 - a. Remove the Slug Rejector from the Coin Mechanism by pulling forward at the bottom and lifting clear of locating slots.
 - b. Unplug the Wire Harness Plug(s) from the Coin Mechanism. The ACER Series 2505 Coin Mechanism has only one Receptacle and the ACER Series 5250 Coin Mechanism has two Receptacles.
 - c. Lift the Coin Mechanism upward until clear of Hinges.
2. To replace the Coin Mechanism.
 - a. While holding the Coin Mechanism Scavenger Bar depressed, locate the Coin Mechanism on the Door by inserting the Coin Mechanism Pins into the Hinges.
 - b. Align the Coin Mechanism on the Coin Return Chute.

NOTE

Check to see that the Coin Mechanism Scavenger Bar is located below the Merchandiser Scavenger Bar.

- c. Connect the Wire Harness Plug(s) to the Coin Mechanism Receptacle(s).
- d. Replace the Slug Rejector. Be sure that the roller on the Coin Mechanism Scavenger Bar is properly located in the Channel of the Slug Rejector Scavenger Bracket.

B. REMOVAL AND REPLACEMENT OF THE UPPER DISPLAY PANEL

1. To remove the Upper Display Panel from the Merchandiser. See Figure 4-2.
 - a. Remove four Wing Nuts which attach the Upper Display Panel to the Door.
 - b. Lift the Upper Display Panel from the Mounting Studs on the Door.
2. To replace the Upper Display Panel. See Figure 4-2.

To replace the Upper Display Panel, reverse the removal procedure.

IV. INSTALLATION OF A NEW LOCK CYLINDER OR RECODING A FLEX-ACE® LOCK

- A. For installation of a new lock cylinder see Figure 4-3.
- B. For instructions to recode a Flex-ACE® Lock see Figure 4-4.

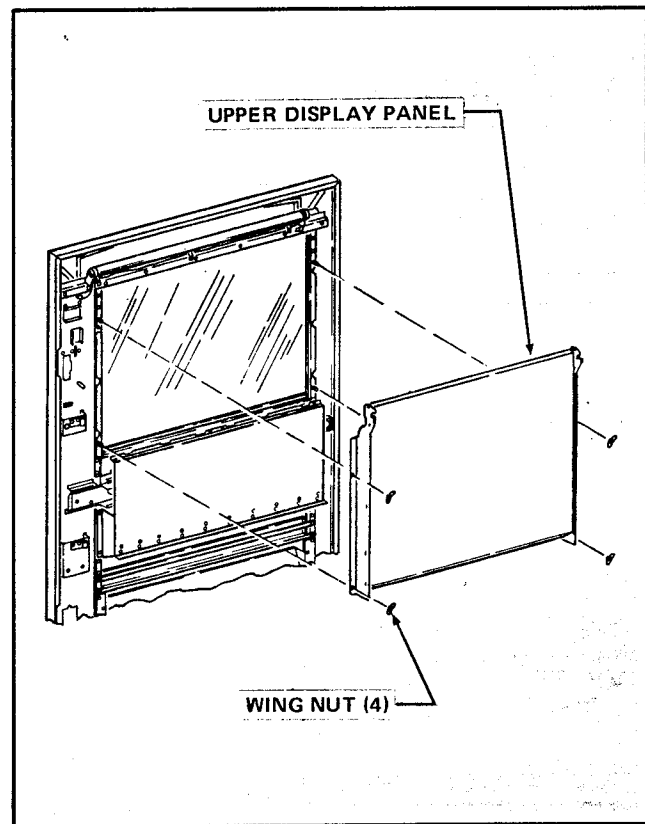


Figure 4-2. Upper Display Panel

These instructions apply to Merchandisers equipped with the Lift Handle Lock Lever and received without a Lock Cylinder installed. The *Flex-ACE* Lock Cylinder, Part Number 9992-000, the National Lock Cylinder and the New Style Van Lock Cylinder may be used in the Lift Handle Lock Lever.

Before starting the actual installation of a Lock Cylinder, read these instructions through carefully. Follow instructions carefully when performing the installation.

A. To Install the Flex-ACE Lock.

1. Move the Lift Handle Lock Lever to the position shown in Figure A, open the Door and remove the Lock Spring.
2. Raise the Lift Handle Lock Lever and turn the Lock Cylinder so the Spring Loaded Lock Pin is on top. See Figure B. Press in on the Spring Loaded Lock Pin and insert the Lock Cylinder into the Lock Cylinder Hole of the Lift Handle Lock Lever.
3. Push the Lock Cylinder in and turn slightly with the key if necessary until the Spring Loaded Lock Pin snaps up through the square hole in the top of the Lift Handle Lock Lever. See Figure C.

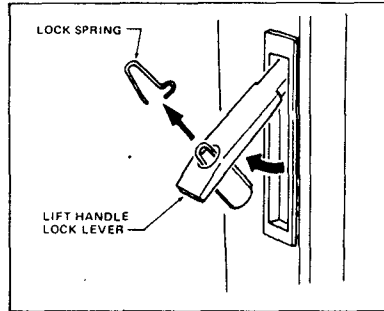


FIGURE A

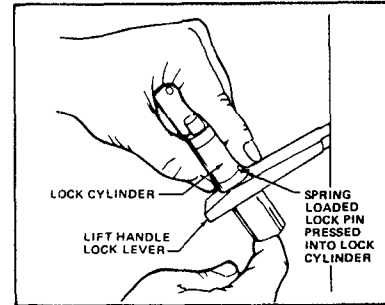


FIGURE B

CAUTION
Test the Lock release and latching operation thoroughly BEFORE closing the Door.

4. Close and lock the Cabinet Door.

B. To Install a National Lock or the new style Van Lock.

CAUTION
The Van Lock Kit, Part Number 311-2165, which contains a Van Lock Key, Part Number 311-2164 and a Van Lock Cylinder, Part Number 311-2163, are for use in the Lift Handle Lock Lever. Earlier styles of Van Lock Keys will not operate the Van Lock Cylinders for which they were designed if the Cylinders are installed in the Lift Handle Lock Lever.

1. Move the Lift Handle Lock Lever to the position shown in Figure A, open the Door, and remove the Lock Spring.
2. Raise the Lift Handle Lock Lever and turn the Lock Cylinder so the Spring Loaded Lock Pin is on the bottom. See Figure D. Press in on the Spring Loaded Lock Pin and insert the Lock Cylinder into the Lock Cylinder Hole of the Lift Handle Lock Lever.
3. Push the Lock Cylinder in and turn slightly with the Key if necessary until the Spring Loaded Lock Pin snaps through the groove in the bottom rear side of the Lock Cylinder Hole. See Figure E.

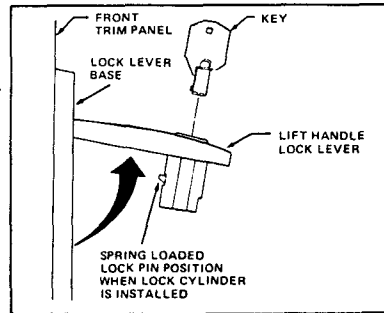


FIGURE C

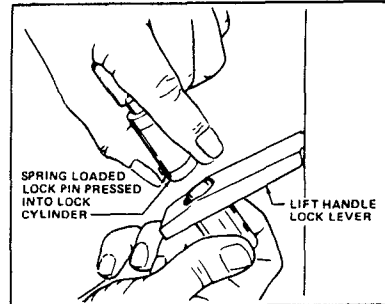


FIGURE D

CAUTION
Test the Lock release and latching operation thoroughly BEFORE closing the Door.

4. Close and Lock the Cabinet Door.

*Flex-ACE is the Registered Trade Mark of the Chicago Lock Co.

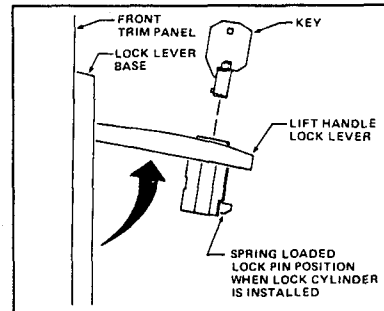


FIGURE E

Figure 4-3. Installation of a Lock Cylinder in the Lift Handle Lock Lever

These instructions apply only to Merchandisers equipped with a Flex-ACE® Lock. When the tumbler combination is to be changed on a Flex-ACE® Lock, order a new tumbler combination from National Vendors. Include in the order the proper line name, model, and serial number of the Merchandiser in which the new tumbler combination is to be installed. You will be shipped a Pre-loaded Coder which contains a new tumbler combination and the proper key for the new combination. If you do not have a Release Pin or a loading Tool, also order Release Pin, part number 222-2511 and Loading Tool, part number 222-2512.

Read these instructions carefully and thoroughly before proceeding with actual removal and replacement procedures. Retain the instructions for part number and replacement information.

1. Check to be sure the new key number matches the number on the Pre-loaded Coder.
2. Unlock the Cabinet Door with the original Key.
3. Open the Cabinet Door.
4. Insert Release Pin, part number 222-2511, into the hole in the Cap. Press the Pin firmly into the Cap and while holding the Pin into the Cap, rotate the key past the unlock position to the cap release position, see Figure A and B.
5. Remove the Release Pin and the key.
6. Use the hooked end of the Release Pin to remove the Cap, see Figure C.
7. Insert the Magnetic end of the Loading Tool, part number 222-2512, all the way into the Lock.
8. Remove the Tool from the Lock. The tumblers will come out with the Tool, see Figure D.
9. Check the Lock. Be sure all seven (7) tumblers came out of the Lock.
10. Insert the new Pre-loaded Coder into the Lock. The Coder contains seven (7) tumblers and is keyed to fit into the Lock in only one position, see Figure E.
11. Insert the prong end of the Loading Tool into the Coder and press in firmly, see Figure F.
12. Remove the empty Coder and Loading Tool, as one piece. Be sure all seven (7) tumblers are in place in the Lock after the Coder and Tool are removed, see Figure G.
13. Replace the Cap removed in step 6. At the lock end of the Cap are two different size aligning projections. These projections allow the Cap to fit in only one position in the Lock.
14. Insert the new Key into the Lock. Press the Cap firmly into the Lock, and rotate the Key to the locked position (counterclockwise) while holding the Cap depressed, see Figure H.
15. Unlock the Lock.
16. Close and lock the Cabinet Door.

Flex-ACE® is the registered Trade Mark of the Chicago Lock Company.

FIGURE A

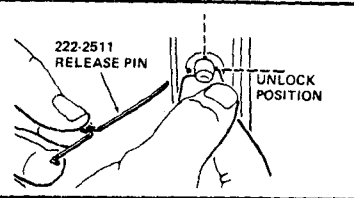


FIGURE B

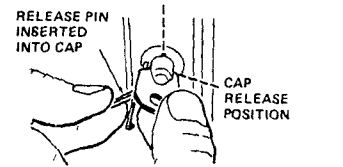


FIGURE C

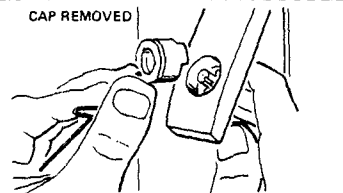


FIGURE D

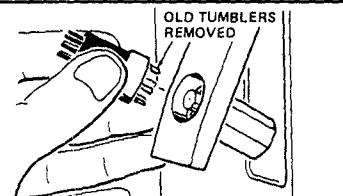


FIGURE E

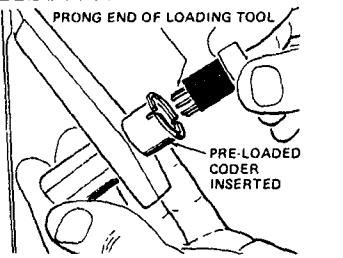


FIGURE F

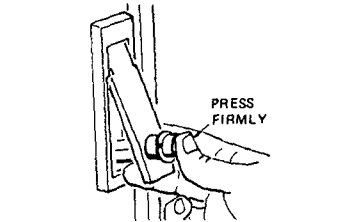


FIGURE G

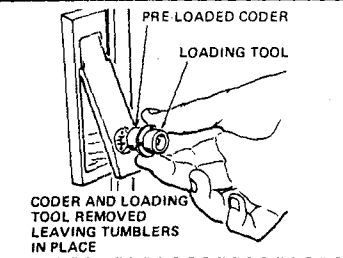


FIGURE H

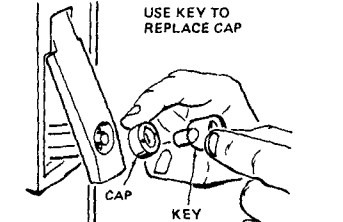


Figure 4-4. Recoding a Recodeable Lock

SECTION V ELECTRICAL CIRCUITRY

This Section is supplied as an aid in understanding the electrical circuitry of the Merchandiser.

WARNING

To avoid shock hazard when making a continuity check of the Merchandiser:

- a. Unplug the Merchandiser service cord.
- b. DO NOT use an incandescent lamp or jumper wire; make all tests with a volt-ohmmeter.

The Electrical Diagrams in this Section are the All Coin Electric Register (ACER) Series 5250. Also included are Wiring Diagram of the Electric Pastry Merchandiser for the 5250 ACER, the Schematic Diagram, and the Operational Schematics of the same. All Diagrams are up-to-date for the Merchandiser in which the Set-Up Instructions are shipped therefore, we advise you to keep these Set-Up Instructions with the said Merchandiser.

The abbreviated color code used in the diagrams is shown in the following list. When two colors are shown, the first color is the solid color of the wire and the second color is the color of the stripe (e.g., Blk-Wht is black wire with white stripes). A color with a number indicates that a number is printed on the wire (e.g., Blk 15 is black wire with the number 15 printed on the wire).

Abbreviation	—	Color
BLK	—	Black
BLU	—	Blue
BRN	—	Brown
GY	—	Gray
ORN	—	Orange
PINK	—	Pink
PR	—	Purple
RED	—	Red
TAN	—	Tan
WHT	—	White
YEL	—	Yellow

5250 Acer Coin Mechanism Wiring Diagram

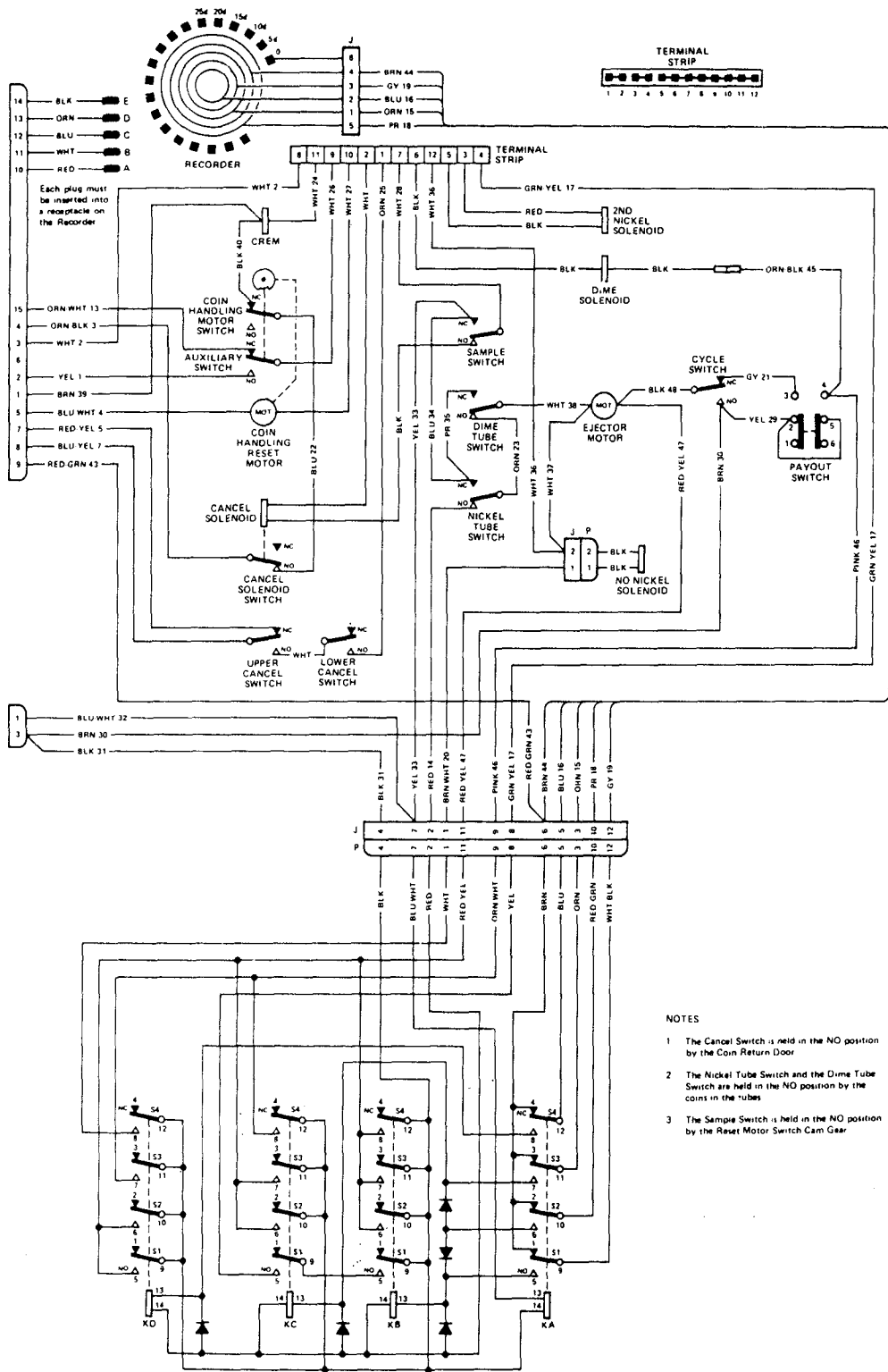


Figure 5-1. Wiring Diagram of Series 5250 ACER

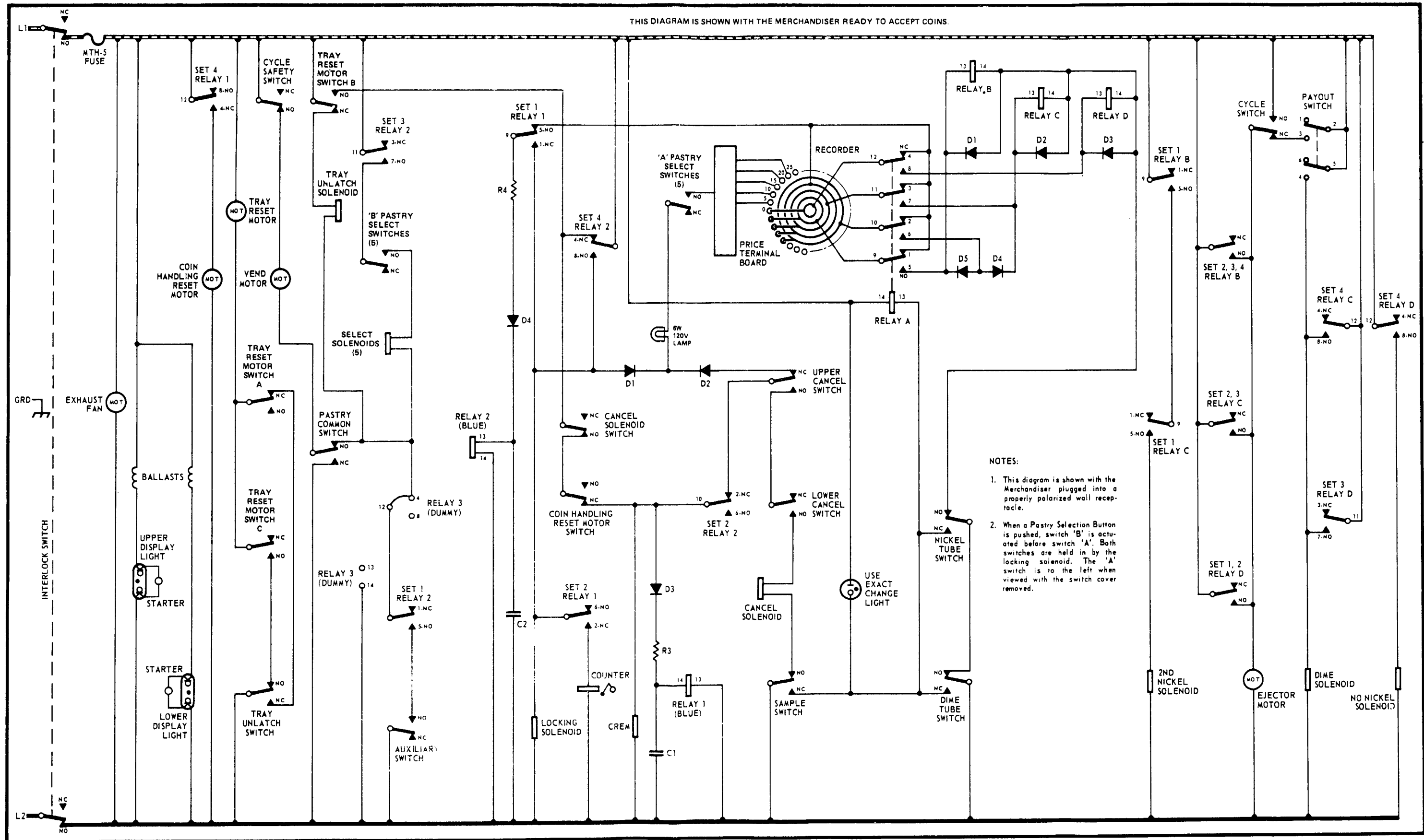


Figure 5-2. Schematic Diagram of Merchandiser With Series 5250 ACER

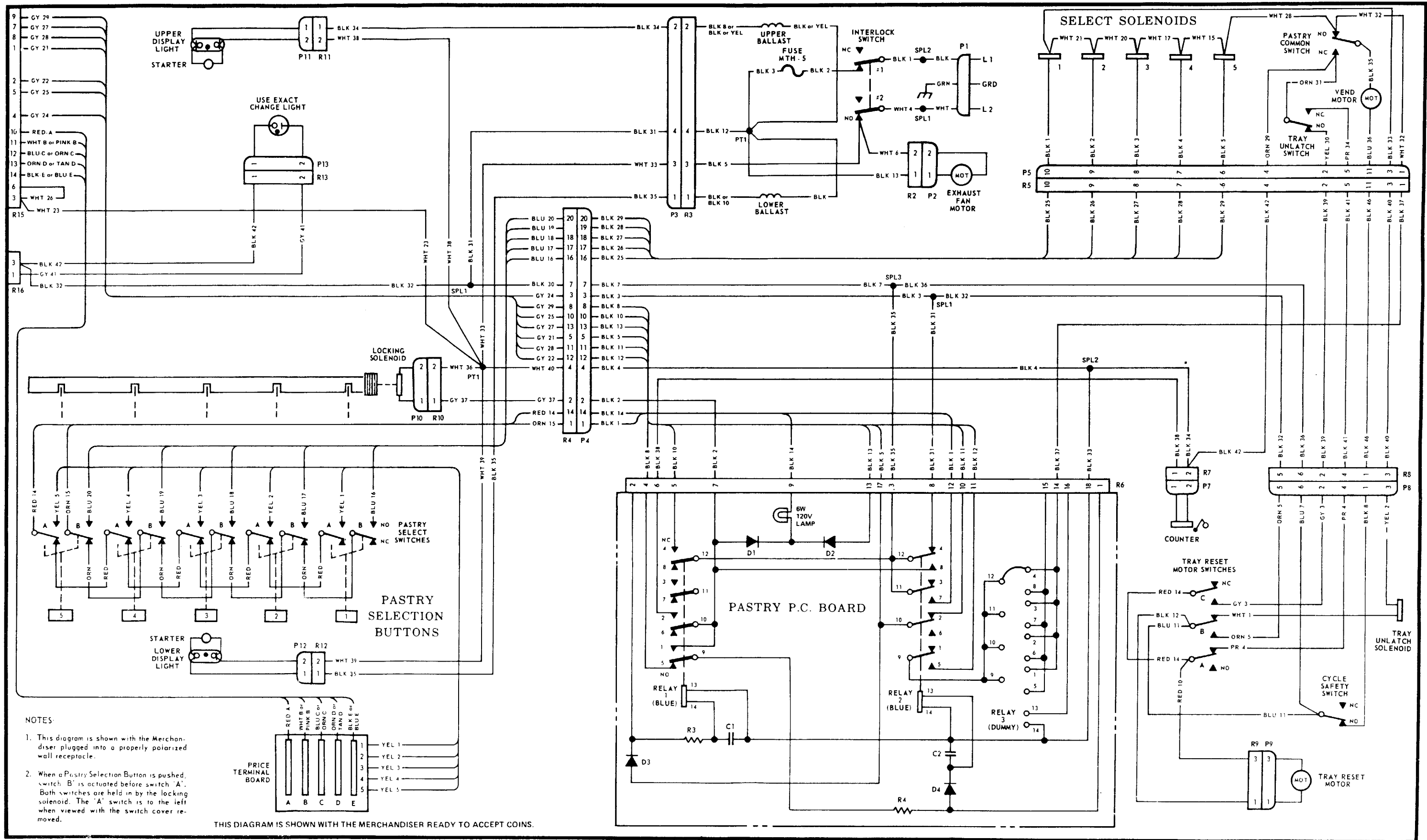


Figure 5-3. Wiring Diagram of Series EPM-72 Merchandiser