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*No CASH ACCOUNTABILITY ON MARS CHANGER 5010
6010
CASH ACCOUNTABILITY ON C-300*

NOTE: Changes pertaining to this manual will be sent out as a supplement update.

ELECTRASNAX

MODEL E-22

Automatic Rack Merchandiser

Service Manual

GENERAL

The E-22 Polyvend Automatic Rack Merchandiser has twenty-two (22) independent dispensing units. Each conveyor or "spindle" is activated by a separate push button in conjunction with a signal from the coin equipment. **Only merchandise in bags and having a hole punched tab may be vended.**

The separate dispensing or motor driven assemblies are installed on a plug-in basis from the front of the machine. This design provides an invaluable aid to the serviceman, allowing easy removal and replacement of any dispensing unit on location. These dispensing units are supplied with conveyors having two pitches to accommodate a wide range of products. The smaller diameter conveyor has a capacity for 15 units of the products in thinner bags, such as peanuts, candies, pastries, etc. The larger diameter conveyor will accommodate 10 thicker bags such as potato chips, pork skins, etc. All may be pulled out of the machine for easy loading and proper stock rotation. With either pitch, a single conveyor rotation dispenses one product.

The standard E-22 is supplied with (10) of the 15 position and (12) of the 10 position conveyors.

SPECIFICATIONS

- Height 68"
- Width 33 3/4"
- Depth 25"
- Clearance for door opening 30" (front)
- Shipping Weight 380#

INSTALLATION

- Remove all external packing materials.
- Check for shipping damage. (Save Carton) See shipping procedures, p. 15 & 16.
- Remove keys from small envelope in the delivery compartment.
- Adjust leveling screws on the bottom of machine to eliminate any binding of product door in cabinet opening.
- Plug service cord into a 115 VAC source using the three prong grounded connector provided. If a grounded outlet is not available, use a proper external ground on **all** locations. (see page 11 for electrical information.)
- Load the coin tubes on the coin changer located behind sliding door on the right inner side of the product compartment.
- Operate each dispenser using coins. Test each dispenser with packing in place to simulate the presence of products.

PRODUCT LOADING

All product loading of the E-22 is accomplished from the front. Using one of the two keys provided, open the service door in the top of the machine. This provides access to all dispensers.

To load any dispenser, pull and lift the cover bar assembly and gently pull the helical conveyor out of its socket, (see FIG.1). Hold it by the front tip and load all new products face forward over the rear hub to maintain a "first out" product flow. After loading, there should be one product on each position of the conveyor (see FIG. 2).

To insert loaded conveyor, lift up the cover bar assembly and push firmly into the motor socket until a "snap" is felt. This "snap" is the detent spring engaging, which assures the conveyor is fully seated and cannot fall out. Pull and lower the cover bar so the pin is reinserted into the large end of the spindle.

The procedure is repeated for each dispenser until the machine is fully loaded.



FIG. 1



FIG. 2

ELECTRASNAX
PRICE SETTING INSTRUCTIONS
FOR MODELS
E-22 AND E-30

1. Open the coin equipment sliding door and locate the controller board directly above the coin changer.
2. Push mode switch "A" and release. (See controller on opposite page.) *For MARS Changer see below.
3. Depress #1 selector switch button.
It will display the current price setting, press again and the price will increase in nickle increments, release button for two seconds and redepess the button and the price will decline in nickle increments. When the desired price setting is reached, release the button and repeat the procedure for each of the other selections. Vendor will automatically return to sales mode 25 seconds after last selection has been set. DO NOT forget to label the end of the cover bar with appropriate price sticker.
4. To free vend or test vend a selection.
You must push the mode switch "A" then push the free vend switch "B", then push the selector button number on the selector switch.

NOTE: The mode switch and free vend switch must be pushed each time you free vend the machine.

* For machines with the Mars 5010 changer, you must hold the mode switch on for 3 to 5 seconds before the machine will enter the mode function. This will be necessary for price setting, interogation, or for free vend operation.

See photo of controller on opposite page.

CONTROLLER BOARD ASSEMBLY

P/N 17314

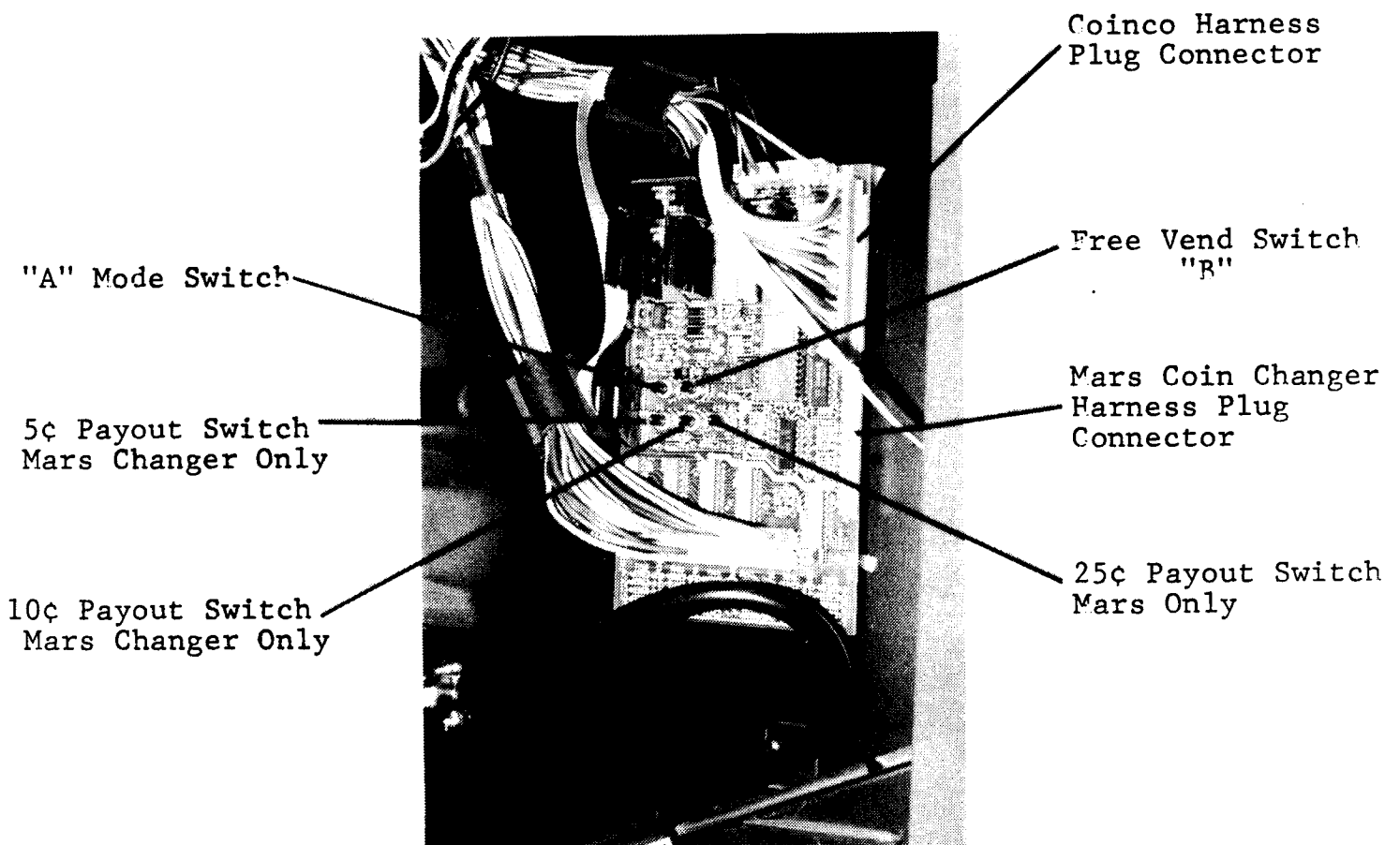


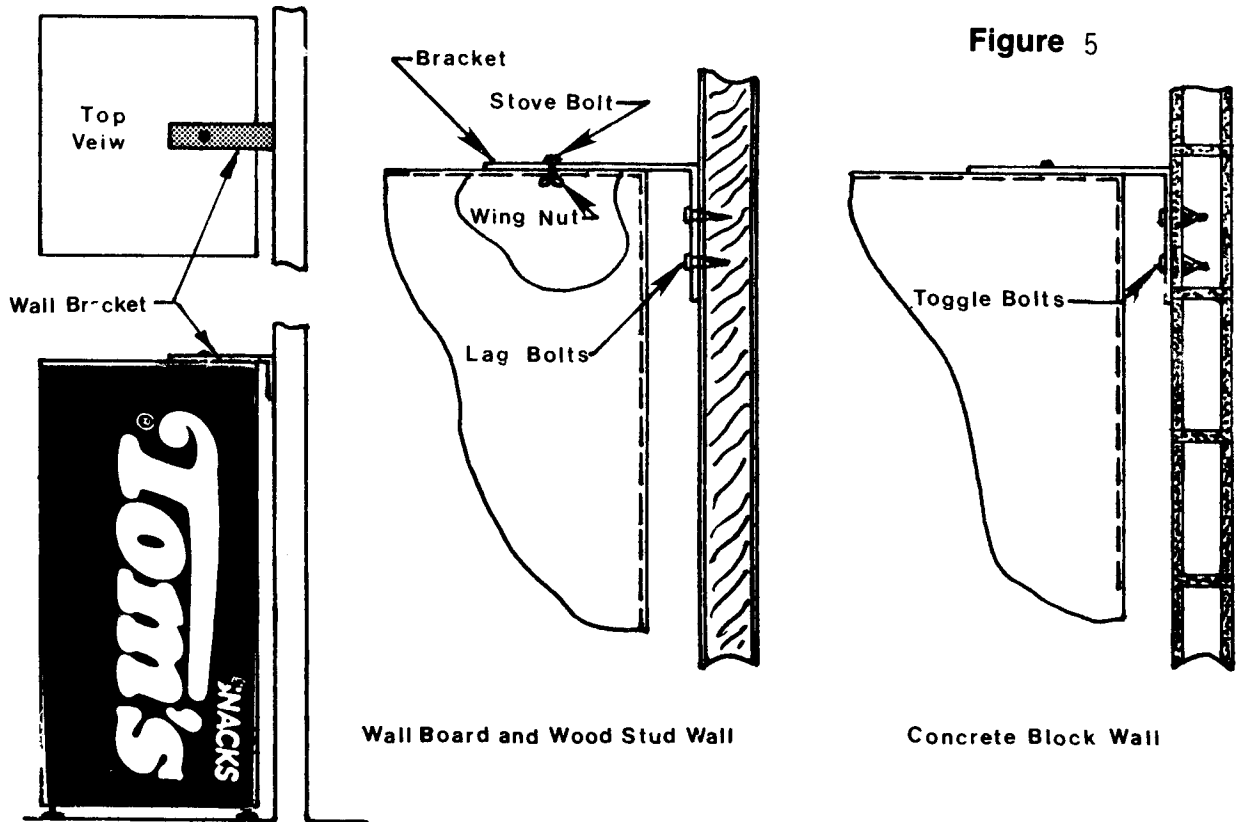
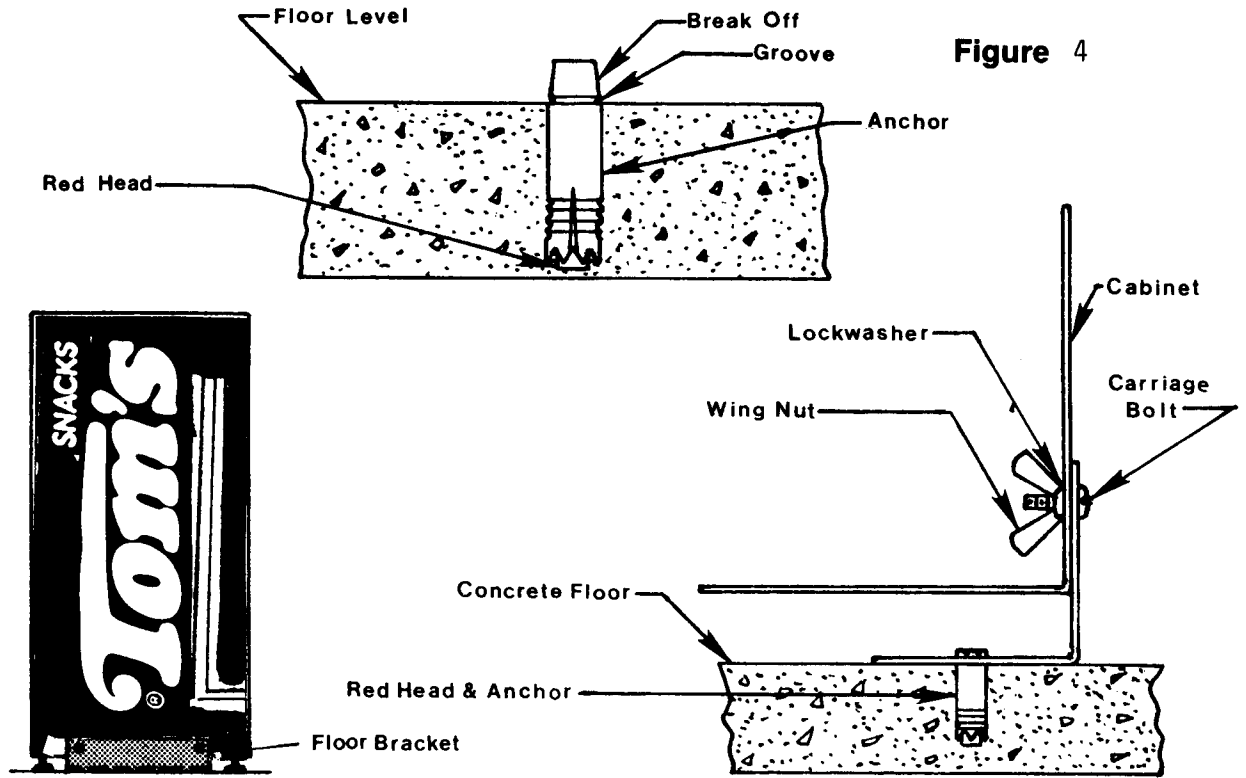
FIG. 3

OPTION

- Floor mounting of machine (concrete).
 - Place machine in desired position.
 - Place angle brackets under each side of machine as shown in FIG. 4. (Make sure the angle rests on floor and points underneath machine. The leg with square holes should rest against side of machine). Scribe pencil lines on the floor around brackets.
 - Move machine away from brackets.
 - Make certain brackets are positioned at pencil lines. Secure brackets to floor using two red heads and anchor bolts, or using a "ramset" gun and four nails.
 - Move machine back into position between brackets.
 - Using square holes in brackets as guides, drill (4) 11/32" diameter holes into sides of machine.
 - Insert 5/16" carriage bolts thru bracket and into machine from the outside. Secure with (4) lock washers and wing nuts on inside of storage compartment as shown in FIG. 4.

OPTION

- Wall mounting of machine (FIG. 5).
 - Make sure machine is as close to wall as possible.
- Place bracket on top of machine and against wall to locate on stud or hollow portion of wall depending on construction. Mark all holes or mark around bracket if holes cannot be marked.
- Drill (1) 5/16" hole in top of machine as marked.
- If wall is frame construction.
 - Drill (2) 3/16" into wood wall stud.
 - Secure bracket to wall using lag bolts.
- If wall is concrete block:
 - Drill (2) 11/16" or 3/4" holes into blockwall (hollow part of block).
 - Insert toggle bolts in bracket.
 - Attach toggles.
 - Insert toggles and bolts through holes in block.
 - Tighten bolts and clamp bracket to wall.
- Return machine to wall position so that bracket hole is aligned with hole drilled in machine. (Protect top with cloth to prevent scratching.)
- Remove cloth and insert stove bolt thru bracket and top of machine.
- Open product door and spin wing nut onto the stove bolt and tighten.



STORAGE COMPARTMENT

The storage compartment has 6 cubic feet of space to be used for storing extra products, spare parts or dispensers. It is a versatile compartment to be used as each operator chooses. This compartment is located in the bottom of the E-22 and may be opened with the same key that opens the product loading door.

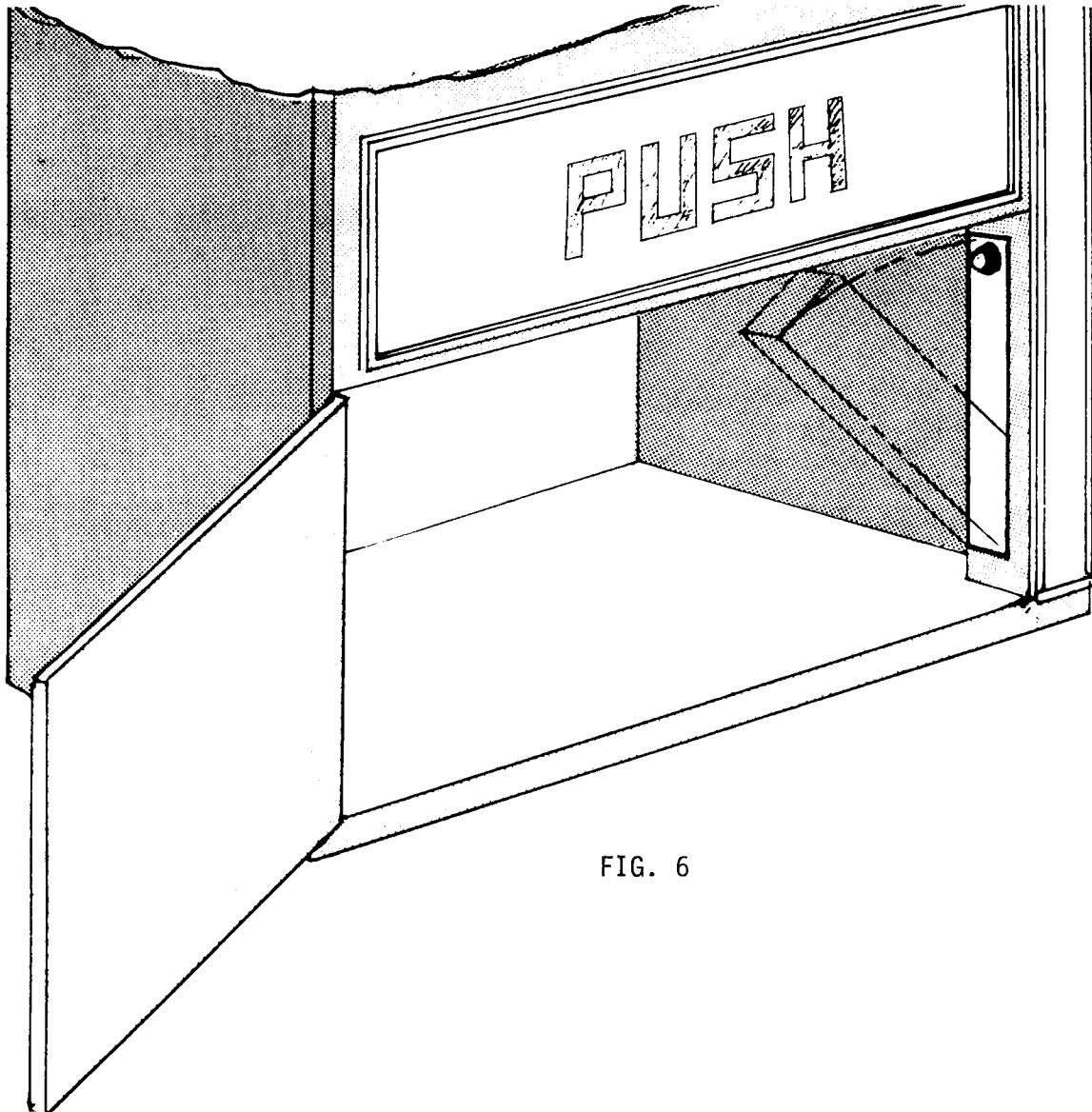


FIG. 6

COIN COLLECTION

The coin bank is located in the storage compartment in the right hand corner as shown above. The second key supplied will open the coin bank. Insert the key, press in and rotate 1/4 turn counterclockwise to unlock the bank. Allow the bank to tilt to the left until it can be lifted out. Remove the coins and replace by reversing the procedure.

SELECTOR SWITCH

The #22 button selector switch is mounted inside the right front of the product compartment behind the sliding electrical compartment door. It may be removed by backing out four phillips head screws and disconnecting it from the machine harness connectors.

PRODUCT DELIVERY COMPARTMENT

This sub-assembly, including the "push" plastic door, may be removed from the front of the machine thru the storage compartment. This may be accomplished as follows:

- . Remove display compartment bottom.
- . Remove the left side panel.
- . Remove the right side panel and sliding door.
- . Remove 3 screws on the front inside edge of the delivery compartment. NOTE: Support the compartment while removing the last screw to prevent dropping.
- . Lift up compartment to release it and lower it into the storage compartment.
- . Open storage compartment and remove.
- . Reverse procedure to replace.

REAR ACCESS PANEL

A large access panel is provided on the rear of the E-22. Its only purpose is to permit access to the wiring in the rear of the machine. To remove it, dispenser motor assemblies #1 and #18 must be removed to gain access to the two screws holding the panel. In removing these screws, be sure that the panel is supported externally from the rear. If unsupported it can fall.

NOTE: All motors can be removed from the front for servicing.

DISPENSERS

FIG. 7 illustrates the dispenser unit used in the E-22. The basic components as labeled in FIG. 7 are:

- (1) Cover Bar
- (2) Spindle Conveyor
- (3) Motor Assembly

When a product selection is made (see section E of operation), an electric signal starts the motor, turning the helical conveyor one complete rotation. This operation advances all products forward dispensing the front selection into the delivery compartment.

The cover bar has three functions. It discourages theft through shaking the machine, provides a number on the front tab for product selection with the matching number on the selector switch assembly, and presents a more attractive appearance to the machine by concealing the conveyor.

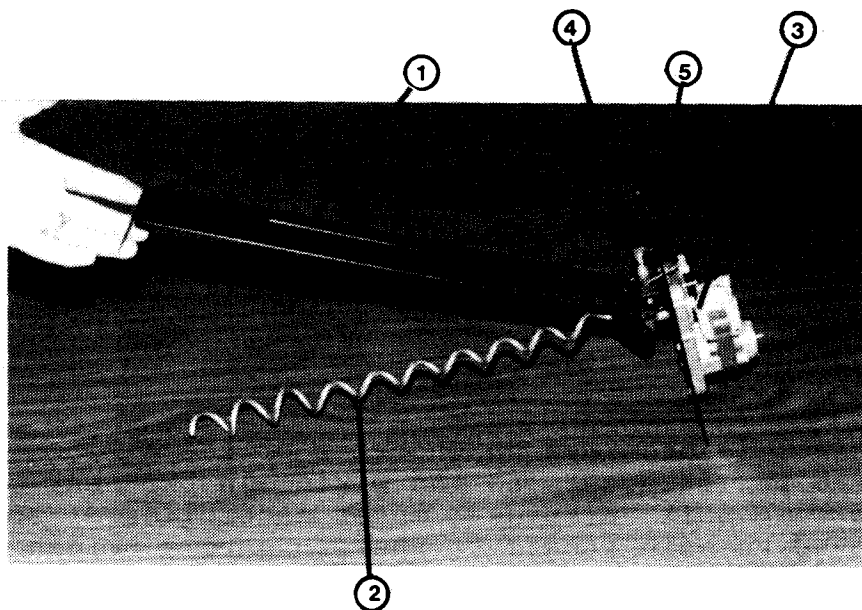


FIG. 7

| | INDEX | PART NO. | DESCRIPTION |
|--|-------|-------------------|--|
| P H S I 1 35¢ | 1 | 17321 | Cover Bar - Black |
| | 2 | 17343 | Conveyor, 15 Positions |
| | 2 | 17342 | Conveyor, 10 Positions |
| | 3 | 16283 | Motor Assy. - Single Price and Controller MP Black |
| | 4 | 14383 | Pivot Pin |
| | 5 | 14318 | Cover Bar Spring |
| | 6 | 17317 | Selection Decal |
| | 7 | 17311-03 thru -08 | Price Decal |

ELECTRICAL

The E-22 Automatic Rack Merchandiser operates from a primary power source of 115 volts, 60 cycle A.C. This power source is reduced through a transformer to a secondary source of 24 volts, 60 cycle A.C. which supplies power to the entire machine with the exception of the fluorescent lighting. The low voltage system offers greater protection in the servicing and maintenance of the machine. The electrical schematic (Page 28) shows the entire electrical system.

The Polyvend E-22 with "tilt out" power panel is illustrated in this service manual. A list of the components is given in this service manual. The components that are mounted to the power panel are accessible by following the steps on page 12.

Some components on the power panel have 115 volts supplied to them (ballasts, transformer etc.) therefore care should be taken when servicing these components. The selector switches, coin changer and motors are all supplied with 24 volts from the 24 volt side of the transformer.

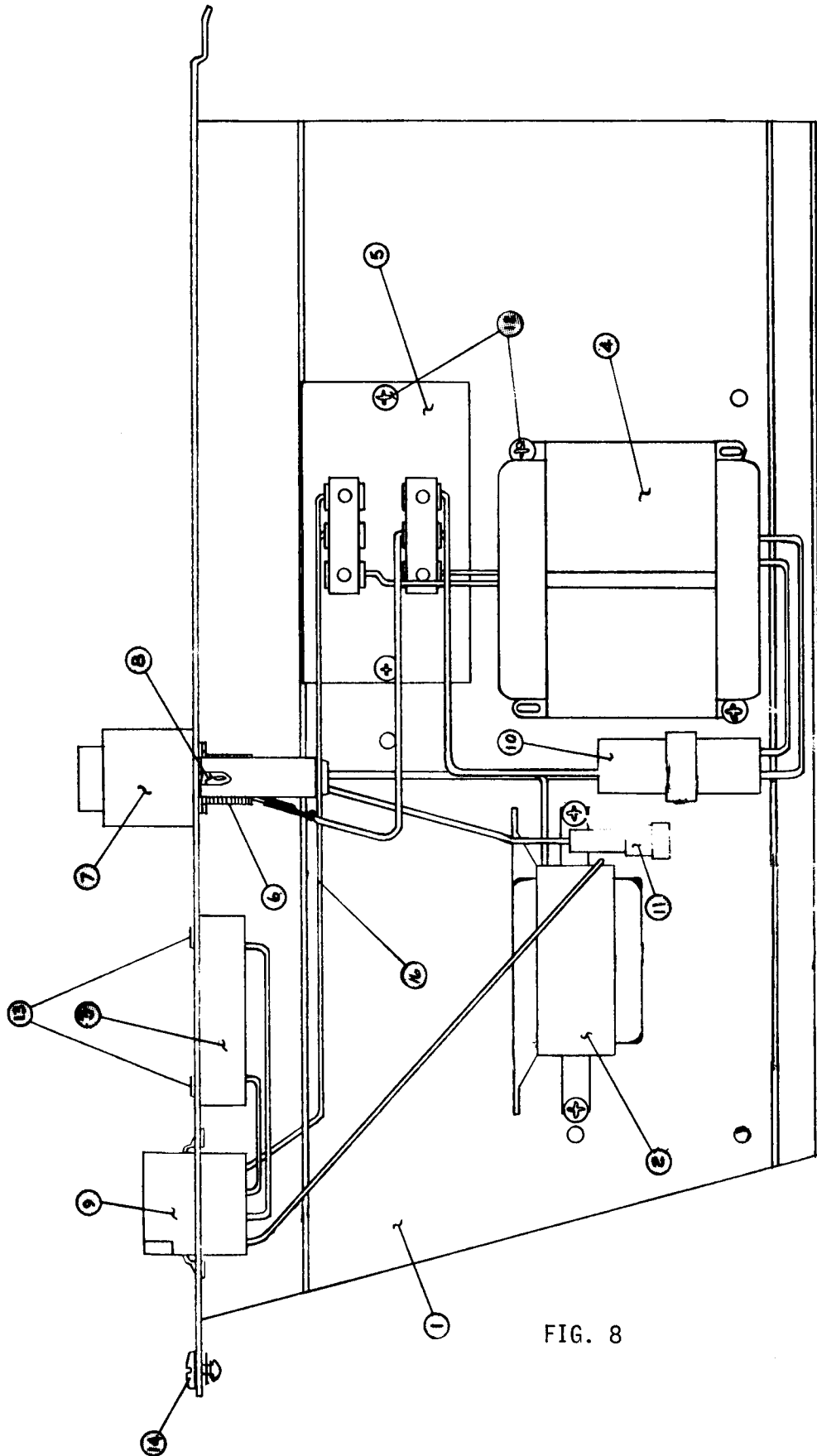
The fuse can be replaced as required by turning the red cap on the bottom of the fuse holder toward the rear of the machine until it falls free. The fuse can then be replaced with a new one. The black cap fuse is replaced in the same manner.

Lighting for the E-22 is supplied by one 15 watt fluorescent lamp located at the top of the product compartment.

INSTRUCTIONS FOR REMOVING POWER PANEL

- . To gain access to the components mounted on the tilt out power panel:
 - . Turn power to machine off (unplug service cord from wall outlet).
 - . Open product loading door.
 - . Push sliding door back to expose power panel.
 - . Locate retaining screw at top of power panel and remove.
 - . Tilt top of panel out.
- . To remove power panel:
 - . Follow steps above.
 - . Lift panel up and out.
 - . Unplug quick-disconnects.
 - . Replace by reversing the steps above.

*NOTE: It will be necessary to remove the controller board assembly from it's mounting standoffs to remove or tilt out the power panel.



POWER PANEL COMPLETE - Black
Part No. 16585

FIG. 8

| Item | Qty. | Part No. | Description |
|------|------|-----------------------|--|
| 1 | 1 | 12706 | Panel-Power - (Black) |
| 2 | 1 | 104 | Ballast-115 Volt |
| 3 | 1 | 1466 | Socket-Starter |
| 4 | 1 | 1505 1787s | Transformer with receptacle |
| 5 | 1 | 1652 | Board-Terminal |
| 6 | 1 | 996 | Fuseholder-115 Volt |
| 7 | 1 | 1487 | Fuseholder-24 Volt |
| 8 | 1 | 1489 | Clip-Mounting |
| 9 | 2 | 4839 | Receptacle-4 pin |
| 10 | 1 | 4844 | Plug-2 pin |
| 11 | 1 | 4842 | Plug-1 pin |
| 12 | 8 | 1298 | Screw |
| 13 | 4 | 302 | Screw |
| 14 | 1 | | |
| * | 8 | | Female Term. |
| * | 2 | | Male Term. |
| * | 8 | | .250 Quick Dis-connect |
| * | 1 | 12671 | Decal-Starter |
| * | 1 | 12672 | Decal-Fuse |
| 16 | Typ. | | (Red) 20 AWG 7/28 B.C. .023 SAE-GBT |
| * | 1 | 222 | Fuse 2 Amp (115V Holder) |
| * | 1 | 1488 | Fuse 3.2 Amp (24 Volt Holder) |

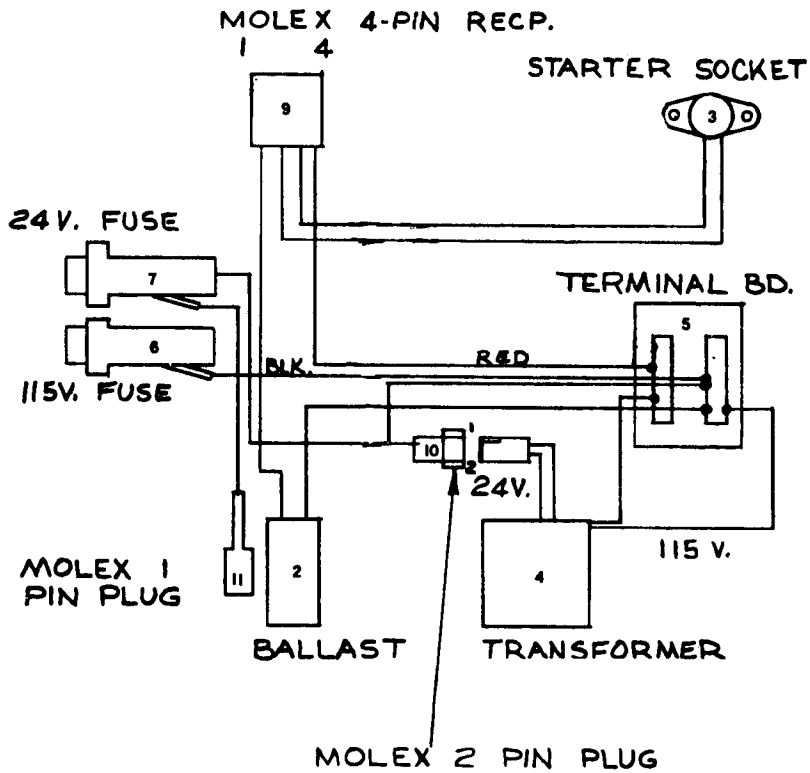


FIG. 9

POLYVEND SHIPPING POLICY

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

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

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

PROCEDURE FOR VISIBLE DAMAGE

1. IT IS VERY IMPORTANT TO INSPECT ALL FREIGHT DELIVERIES, WHETHER MACHINES OR PARTS, IMMEDIATELY. If there is any visible damage you have the right to refuse the merchandise or to accept the damaged shipment. If you accept it, make certain that you have the deliveryman note on the freight bill the nature and extent of damage.
2. After you determine extent and cost of damage, notify the delivering carrier's office by phone, and confirm with a written notice within 15 days requesting an inspection of the damaged merchandise. Keep a copy of the inspection request for claim purposes. Do not destroy packing material until shipment is inspected and claim is settled.
3. When inspector arrives, ask for claim form. In filing a claim, you may make a cash settlement with the carrier for the full invoice price of the merchandise or contact Polyvend, Inc., telephone 501/327-1301, and make arrangements to have merchandise returned for repair, and file claim for repair charges. Do not return merchandise without authorization from Polyvend, Inc., Traffic Manager. Ask carrier to return "DEADHEAD". Do not claim more than cash price of machine plus freight.

PROCEDURE FOR CONCEALED DAMAGE

1. If there is no visible damage, YOU MUST OPEN THE SHIPMENT WITHIN 15 DAYS AND INSPECT FOR CONCEALED DAMAGE. If there is concealed damage, notify the delivering carrier by phone immediately asking for an inspection, confirm in writing and keep a copy of the request for claim purposes. If you fail to notify the carrier within 15 days of delivery, by telephone and in writing, the freight company is no longer liable for the damage and will probably refuse your claim. Do not destroy packing material until shipment is inspected and claim is settled.
2. After inspection by carrier, file claim for damages at once. (See Item 4) On concealed damage, unless it can be proven that the carrier is responsible for the damage, they will probably want to settle on a compromise basis. Therefore, the faster you inspect your delivery and notify the carrier, the better the chances are for full settlement. If the claim is disallowed, check on the possibility of a compromise.

PROCEDURE FOR SHORTAGES

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

Claims for loss or damage will not be deducted from your invoice while awaiting adjustment of such claims.

For further information or any other problems regarding deliveries of Polyvend merchandise, contact our Traffic Manager, Gene Huss, at 501/327-1301.

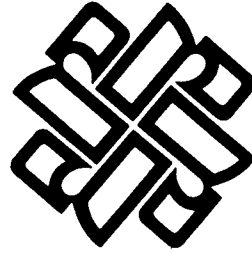
WARRANTY LIMITED

Polyvend, Inc. warrants this equipment, to the Original Purchaser only, for a period of twelve months from date of shipment, to be free from significant defects in material or workmanship. Purchased components which are part of this equipment are warranted to the extent such parts are warranted to Polyvend, except for filter cartridges, starters, light bulbs and fuses, which will be warranted for two months from date of shipment.

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

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

Polyvend service or repair to items not in warranty will be subject to service charge. For warranty or service information call or write Polyvend Service Department.



Polyvend^{INC.}

SOUTH GERMAN LANE, CONWAY, ARKANSAS 72032 (501) 327-1301

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CLEANING INSTRUCTIONS

Painted Surfaces:

All painted surfaces can be cleaned with a clean cloth and any common brand of household detergent. Do not use harsh abrasive materials on the painted surfaces that would mar the paint.

Glass Items:

The glass product loading door and the push plexiglass delivery door may be cleaned with any commercial window cleaner. Do not use any kind of solvents on the plexiglass delivery door. Solvents will cause the plexiglass delivery door to cloud up and would remove the lettering that is silkscreened on the plexiglass door.

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**45-13
(7-76)**

COIN ACCEPTORS, INC.

LIMITED WARRANTY

Coin Acceptors, Inc., hereby warrants all products of its manufacture to be free from defects in material and factory workmanship for a period of twelve months from date of sale or eighteen months from date of manufacture, whichever date shall first occur, as determined by Coin Acceptors Inc. manufacturing date code, subject to the following conditions:

1. Coin Acceptors, Inc. will repair or replace, at its option, any part of its equipment which proves to be defective during normal use and service during said period of time.
2. All products or parts covered under this warranty are to be shipped, prepaid, or delivered, by Purchaser, to any Coin Acceptors, Inc. Sales and Service office.
3. If a complete unit or assembly containing defective parts is returned to Coin Acceptors, Inc., a charge will be made for labor to remove and replace said parts.
4. Complete written information must be supplied Coin Acceptors, Inc. in each warranty case, providing the model and serial numbers, date of purchase of unit, and a brief description of the defective action.
5. This warranty does not apply to any equipment which has been subjected to an electrical overload of its circuitry, or to any other kind of abuse, or accident, alteration, misuse, or neglect.
6. Subject to all of the above and foregoing conditions, Coin Acceptors, Inc. further warrants the Electronic Logic Board in its electronic units to be free from defects in material and factory workmanship for a period of two years, from the date of its manufacture, as determined by Coin Acceptors, Inc. manufacturing date code and agrees to repair or replace, at its option, any such defective board, free of charge, if its seal is intact and said board has not been tampered with or altered in any way after leaving Coin Acceptors, Inc. factory.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, ORAL OR WRITTEN, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. Coin Acceptors, Inc. liability is limited to repair or replacement, at its option, of defective items and does not include installation costs or incidental and consequential damages. No other obligation or liability is assumed, nor is any person authorized to make any other warranty on behalf of Coin Acceptors, Inc., or to obligate the Company to any liability not strictly in accordance with this warranty.

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For service and/or repair, contact your nearest Coinco service branch or service center.

COINCO BRANCHES and SERVICE CENTERS

Coinco's world-wide sales and service organization. Strategically located experts offering a complete line of the finest coin equipment in the vending industry.

ARIZONA

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Phoenix, Arizona 85006
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Houston, Texas 77092
Phone No. (713)-683-6558

WASHINGTON

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881 Industry Dr.
Seattle, WA 98188
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2851 Simpson Rd. Unit F
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Nalo Coin GMBH & Co. KG
Coinco Europe
Alter Teichweg 11-13
2000 Hamburg 76
West Germany



TWO YEAR WARRANTY

MARS MONEY SYSTEMS guarantees that your MARS ELECTRONIC™ Coin Changer will operate satisfactorily for two years under normal conditions of use and service.

If your MARS ELECTRONIC Coin Changer fails to perform satisfactorily during the warranty period MARS MONEY SYSTEMS will repair it. Simply ship or mail your MARS ELECTRONIC Coin Changer postage paid to the location most convenient for you. Your unit will be shipped or mailed, postage paid, by MARS MONEY SYSTEMS immediately upon repair of the returned unit.

We request wherever possible that you use the original shipping container and include a letter or note indicating the specific cause for returning the unit.

No other person is authorized to make any other warranty or to assume any other obligation on MARS MONEY SYSTEMS' behalf. Our Free Repair Policy described above is the exclusive remedy for breach of any warranty.



For detailed specifications,
for specific applications and any
additional information, contact:
MARS MONEY SYSTEMS
801 Carpenters Crossing, Folcroft, Pa. 19032
Phone: (215) 534-4200/Telex: 83-1517

E-22 TROUBLE SHOOTING

- . MACHINE WILL NOT ACCEPT COINS
- . Make sure it is plugged into the wall outlet. (Look to see if fluorescent lamp is on.)
- . Check for credit on the machine by attempting a selection.
- . Check machine for leveling. (Such a condition can cause rejected coin to drop through rejector mechanism.)
- . Check type of coin changer in machine. It must be a 24 volt Coinco C-300 or MARS 5010. If not replace.
- . Check to make sure that coin return lever is fully released. If it is not releasing, clear and repair or replace acceptor mechanism.
- . Manually rotate dispensing conveyor #22 counter clockwise. If it electrically picks up power and completes one cycle, repeat for dispensing conveyor #1. If #1 fails to operate, the ladder circuit between #22 and #1 is broken. Locate break by testing each dispenser in order, beginning with #21, #20, #19, etc., until the first dead position is found. This dead dispenser motor assembly, the next higher number assembly, or wiring between the two is faulty.
- . If dispenser #22 did not complete its cycle above, check 24 VAC power supply by activating the manual payout on the coin changer. If it does not operate, the fuse is blown, wiring is defective or the transformer has failed on the 24 volt side or the controller is defective.
- . Check for a loose connector plug on the controller board.
- . CAUTION! CAUTION! Before attempting to remove the controller board, display board or coin changer, remove the red cap fuse or unplug the machine from the wall outlet. This is to prevent damage to the boards and coin changer.
- . Coin changer should now accept coins.
- . MACHINE WILL ACCEPT ALL COINS BUT.....
- . No selection can be made.
 - . Does display show amount of coins inserted?
 - . If customer display is blank, check the manual payout switch on the changer. If the payout motor will not operate, the changer or controller is defective. Also check all connector plugs on controller board for proper connection.

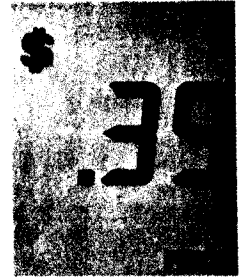
- . If display is blank and the manual payout switch will operate the payout motor - check the display cable, defective display or controller.
- . If display shows garbage - replace display.
- . If display shows proper amount of coins inserted and you get no beep or beeps when pushing a selector button - check for a defective selector switch or a bad connection at the selector switch by using free mode for that selection.
- . Check the continuity of the selector switch at #1 when switch is depressed.
- . Only one selection cannot be made.
 - . Determine fault by substituting an operational motor assembly in this position and pressing mode switch on controller. If motor assembly now functions properly, the replaced one needs repair. If not, the wiring is faulty.

CUSTOMER DISPLAY MODE keeps customer informed. Reduces vandalism.

The customer display ends confusion over deposits and status of sale during each transaction. Don't forget...trouble free transactions means increased sales volume, less vandalism and more customer satisfaction for you.

With each transaction, total change deposited is indicated on the customer display (available in LCD version only). Each valid customer action is acknowledged with a single, audible tone, or "beep". Invalid actions are called to customers attention with three successive "beeps". If change is owed to customer after selection is made, the credit display indicated the amount overpaid.

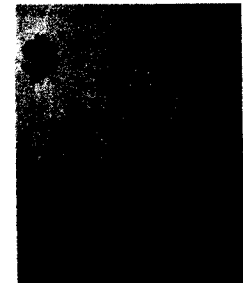
If a selection is made before enough credit is established, the credit display reads "PRICE", and shows the price of the selection, while customer is alerted with three "beeps". The customer has the option of inserting more coins or actuating the coin return lever and getting money inserted back.



If exact change is required for a transaction the credit display reads "EXACT CHANGE ONLY". Low inventory in the coin tubes does not prevent the customer from making a selection.



If a column selected malfunctions, the customer is alerted with three "beeps" and the printed message "MAKE ALTERNATE SELECTION". The customer then has the option of making another choice or having his money returned by actuating the coin return lever.



*NOTE: When the highest vend price setting is reached the crem coils in the coin changer will fall out to prevent further acceptance of coins until a selection has been made. (Example) Machine is set to vend at 30¢, 35¢, and 40¢ and two (2) quarters are inserted into the machine. Cremes fall out at that time until selection has been made.

**NOTE: The Coinco changer price range is 5¢ to \$3.15. The MARS changer price range is 5¢ to \$6.35.

E-22 AND E-30
TROUBLE SHOOTING
OF THE
CONTROLLER BOARD AND CUSTOMER DISPLAY BOARD

- . If customer display is blank and the manual payout will not operate the payout motor - defective controller board or there is no power to the machine.
- . If customer display is blank and the payout motor will operate - controller board, display, or cable.
- . If display shows all 8's but machine will vend - replace display.
- . Display shows garbage - display or controller board is defective.
- . If motor jams in cycle - display will show price of jammed selection.
- . If a vend motor takes more than $\frac{1}{2}$ second to leave home or more than 8 seconds to return home - display will show selection when mode switch is depressed. Display will alternate selections if more than one selection is defective.
- . When mode switch is depressed and display shows:
 - Blank - no problems.
 - Letter C - means machine has not vended in last 24 hour period.
 - Make and number of failed selection if failure has occurred. This number will alternate if more than one failure has occurred.
- . If the selection made has a defective motor it will show "MAKE ALTERNATE SELECTION" on display when the selector button is pushed.

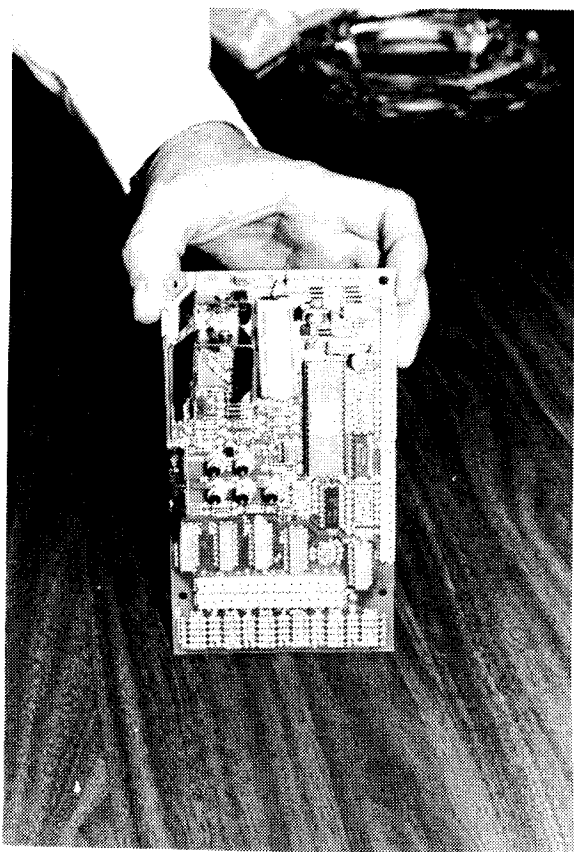
(*NOTE: When mode switch is pressed, messages will be displayed for only 25 seconds.)

Service messages or electrical failures recorded by the controller will also be displayed in the read-out when the machine or controller is first placed in the service mode. Again, these messages will only be displayed for 25 seconds, so it is important that they be recorded immediately if they appear when the controller is first placed in the service mode. If they are not recorded, it will be necessary for the controller to detect the failures again before they can be displayed by pressing the mode switch.

During the normal vending operation or mode, without any credit, the read-out will display ".00". When first placed in the service mode (if no failures have been detected by the controller) the zero's will disappear.

E-22 AND E-30
CONTROLLER AND DISPLAY

A
CONTROLLER



B
DISPLAY



FIG. 10
CAUTION

CAUTION

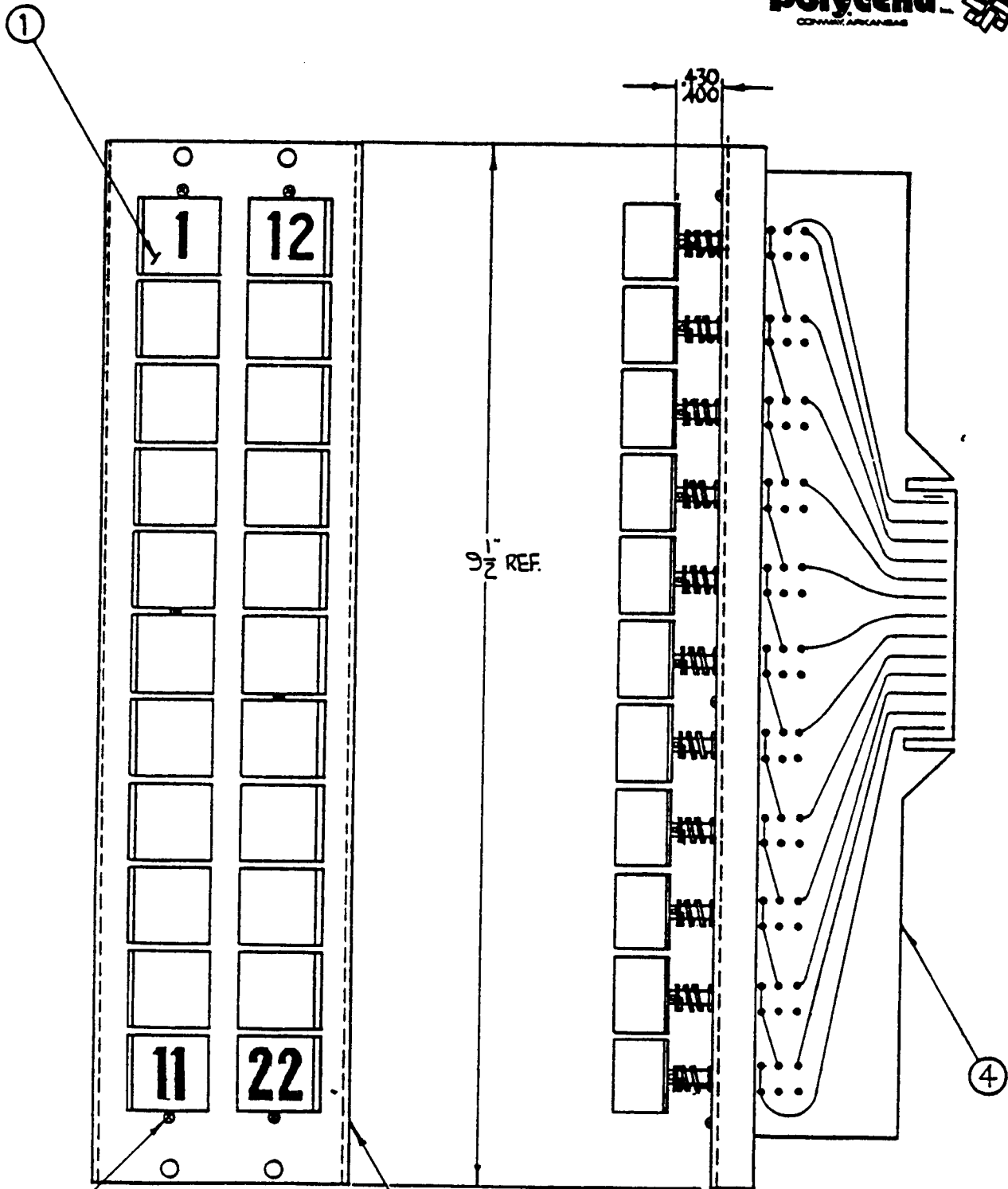
FIG. 11
CAUTION

Before attempting to remove the controller board, display board or the coin changer for repair, remove the red cap fuse or unplug the machine from the wall outlet. This is to prevent damage to the boards and coin changer.

E-22

PARTS LIST

| | |
|------------------------------|---------------------------------|
| 17312 | Changer C-300 |
| 16327 | Harness Main Motor |
| 17331 | Harness Selector Switch |
| 16283 | Motor Assembly (new style) Blk |
| 12693 | Power Panel |
| C- 14771 19830 | Selector Switch (new style) Blk |
| 17314 | Controller Board Assembly |
| 17313 | L. C. D. Board Assembly Display |
| 17339 | Changer MARS 5010 |
| 17379 | Harness Assembly For MARS 5010 |



ASSEMBLY 14771

FIG. 14

| ITEM | PART NO. | DESCRIPTION | QTY. |
|------|--------------------------|--------------------------------|------|
| 1 | C-15981-01 C-15981-22 | Selector Switch Buttons (Blk.) | 22 |
| 2 | A-14772 | #4-40 Screw, 1/8" Long | 6 |
| 3 | B-14254 | Selector Switch Guard | 1 |
| 4 | C-16040 | Selector Switch Sub-Assy. | 2 |

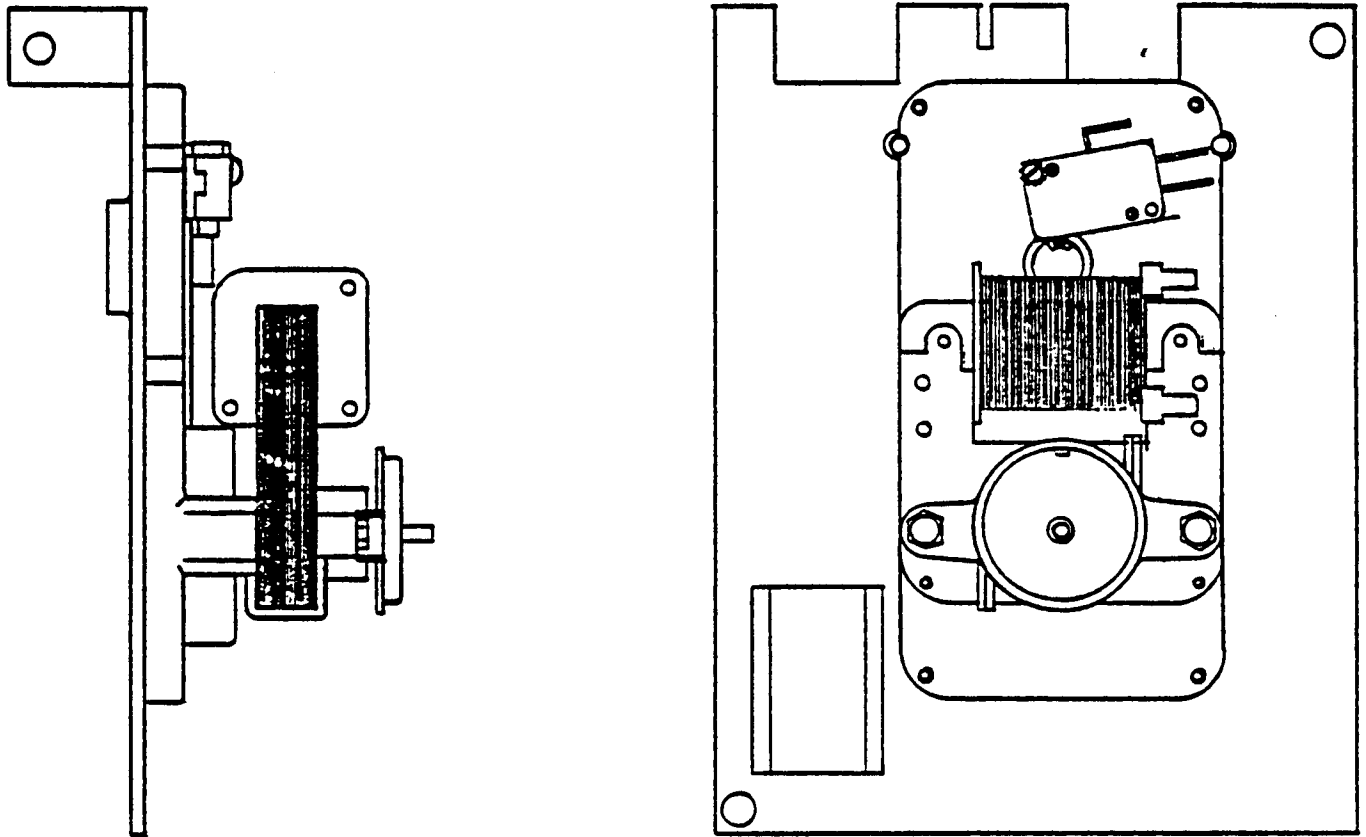


FIG. 15

NEW STYLE E-12, E-22 & E-30 MOTOR BLACK

Part Number ~~1628~~ 17712-B1k

17712

| INDEX | PART NO. | DESCRIPTION |
|-------|---------------------------|--|
| 1 | 11010 | Rear Door Assembly w/Screens - New Style (Red) |
| 2 | 11009 | Outer Shell (Red) |
| 3 | 17321 | Conveyor Cover Bar |
| 4 | 17313 | Credit Display |
| 5 | 14771 (Blk) 1627 (Blk) | Selector Switch Complete (w/Harness & Buttons) Selector Button (Specify Number) |
| 6 | 10431 | Anti-Theft Door - New Style with roll pins (Blk) |
| 7 | 1851 | Plexiglass Product Delivery Door |
| 8 | 12766 | Leg Equalizer |
| 9 | 1240 | Door Extrusion Left Side without hinge (Blk) |
| 10 | 1241 | Door Extrusion - Top or Bottom (Blk) |
| 11 | 1235 | Door Extrusion - Lock Side (Blk) |
| 12 | 1638 (Blk) | Reject Lever Assembly |
| 13 | 13804 | Storage Compartment Door Lock Assembly |
| 14 | 10960 (Red) | Storage Compartment Door Assembly (Red) |
| 15 | 14323 (Blk) | Product Service Door Complete |
| 16 | 17334 | Decal, Logo Side Cabinet |
| 17 | 17335 | Decal, Stripe Front & Side |
| 18 | 17337 | Decal, Stripe Right Side Cabinet |
| 19 | 17338 | Decal, Stripe Left Side Cabinet (Not Shown) |
| 20 | 17333 | Decal, Logo Front Side |

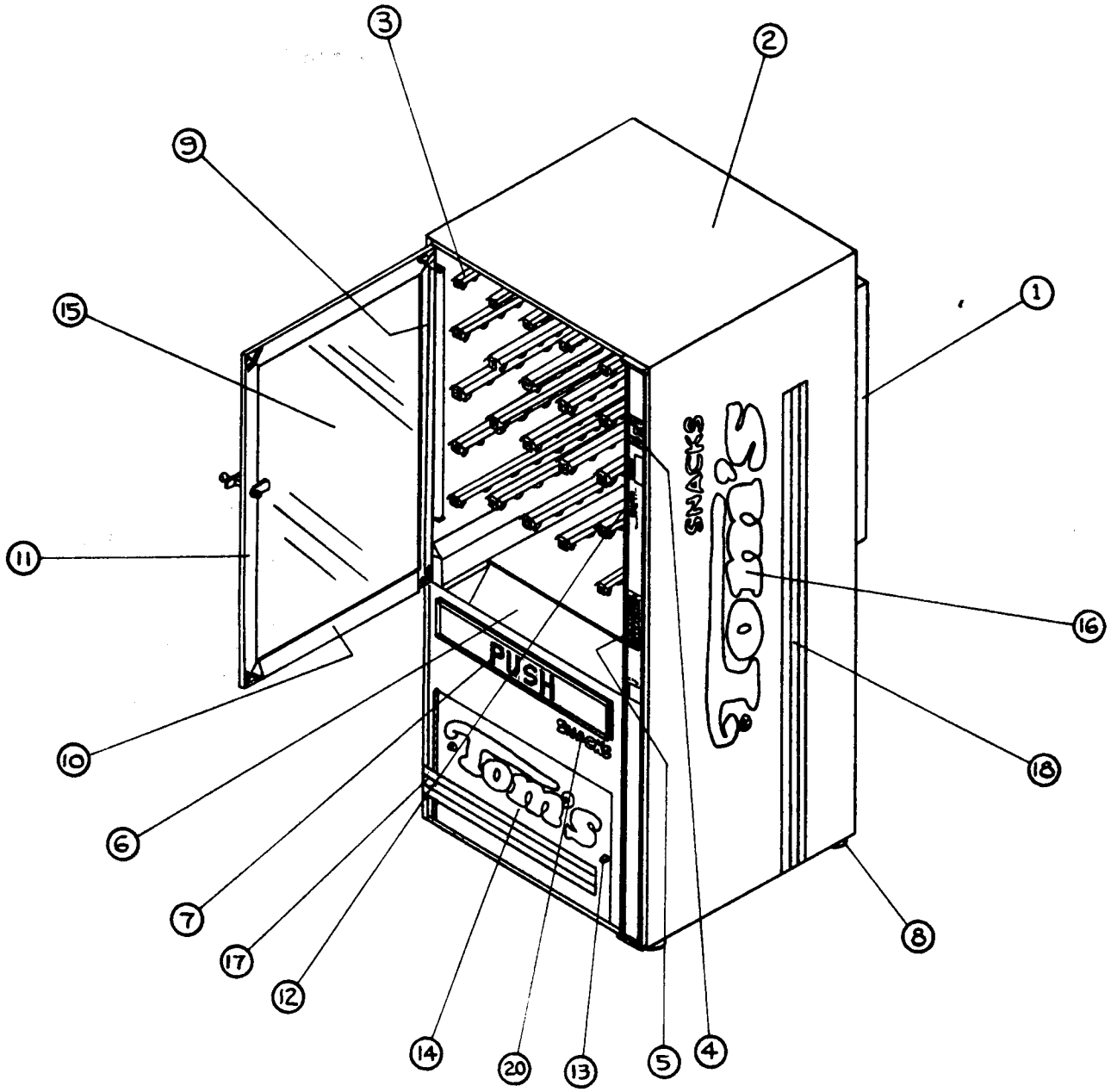
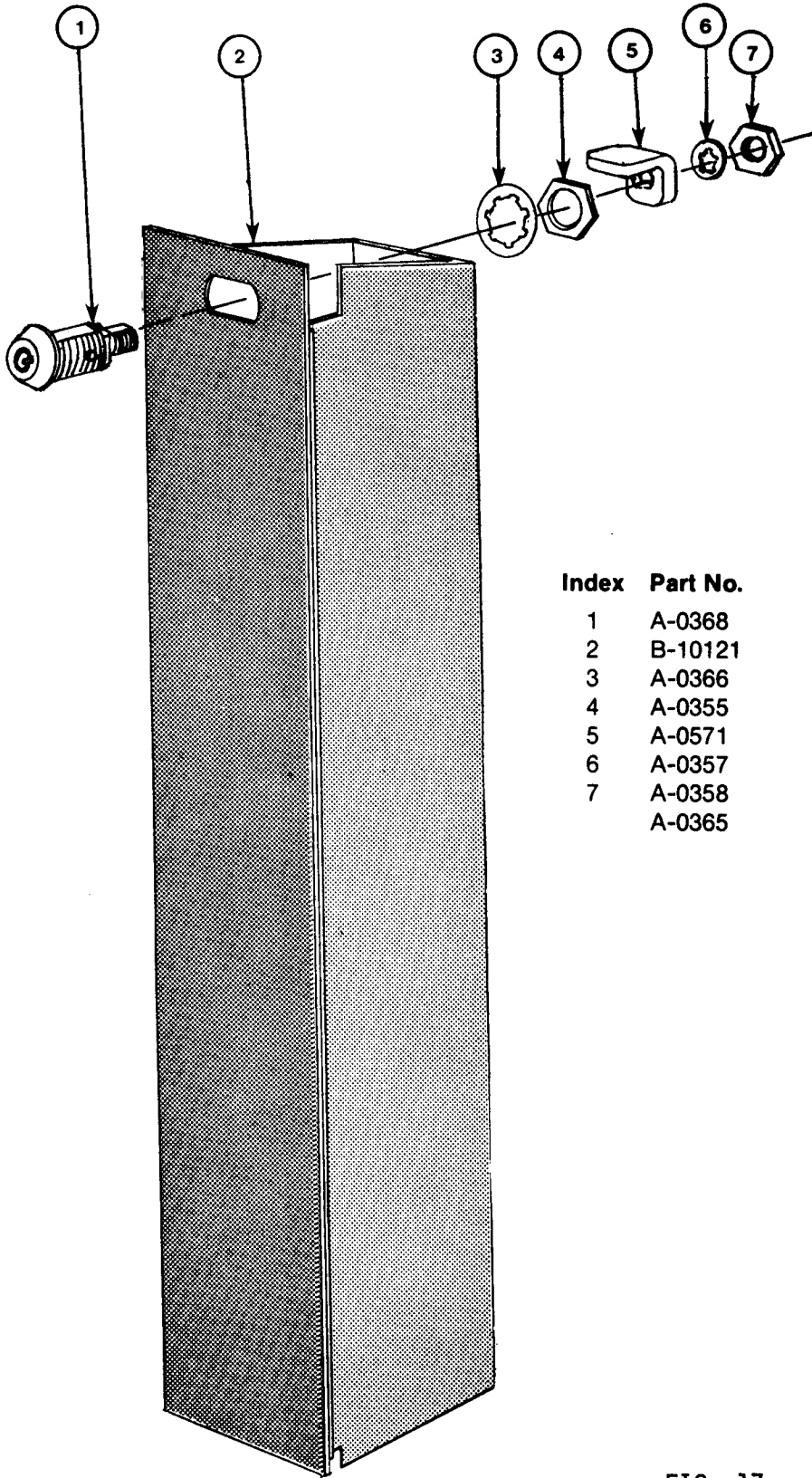


FIG. 16



| Index | Part No. | Description |
|-------|----------|-----------------------------|
| 1 | A-0368 | Chicago Lock, CCW Keyed MST |
| 2 | B-10121 | Coin Bank - (Black) |
| 3 | A-0366 | Lock Washer |
| 4 | A-0355 | Hex Nut |
| 5 | A-0571 | Cam |
| 6 | A-0357 | Shakeproof Lockwasher |
| 7 | A-0358 | Hex Nut |
| | A-0365 | MST Key, For No. A-0368 |

FIG. 17

T HANDLE LOCK ASSEMBLY COMPLETE
PART # 14324
Specify Key Number

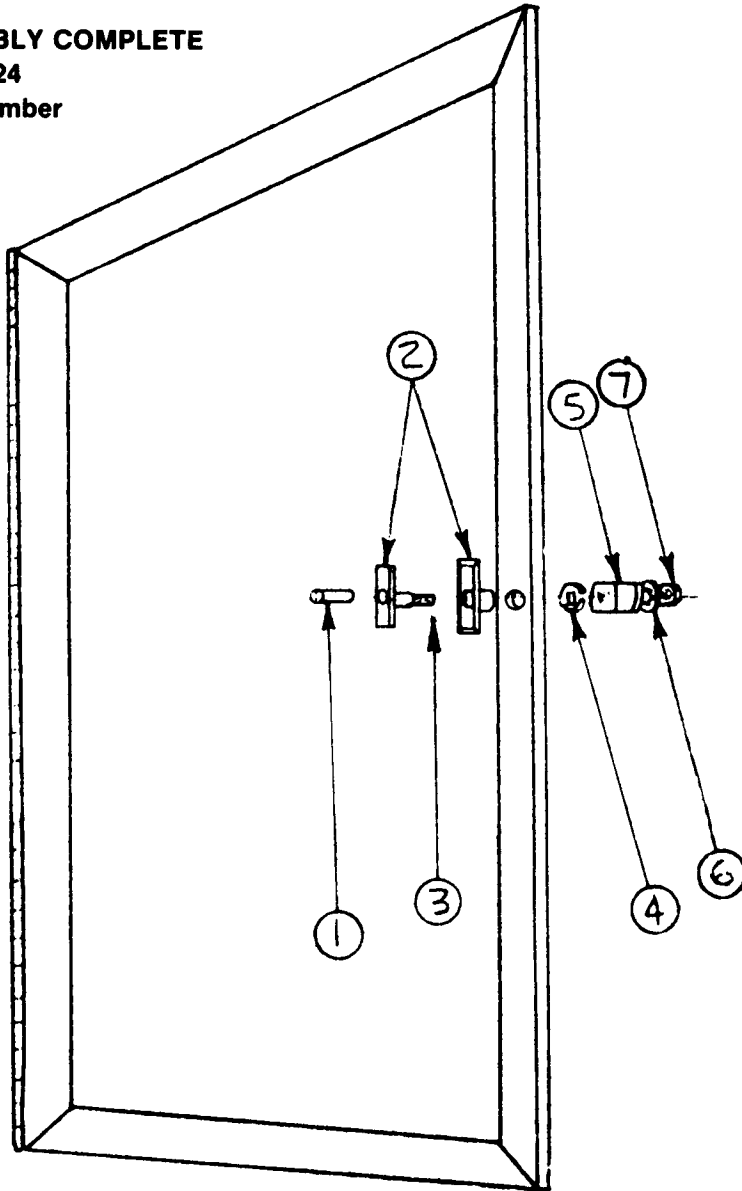


FIG. 18

| Item | Part No. | Description |
|------|----------|-------------------|
| 1 | 14326* | Cylinder |
| 2 | 11537 | T Handle Assembly |
| 3 | 746 | Screw |
| 4 | 11539 | Stop Cam |
| 5 | 14317 | Lock Cam |
| 6 | 1680 | Lock Washer |
| 7 | 11538 | Hex Nut |

* Specify Key Number

DRAWING #1
E-22 STORAGE DOOR COMPLETE
PART #10960* RED

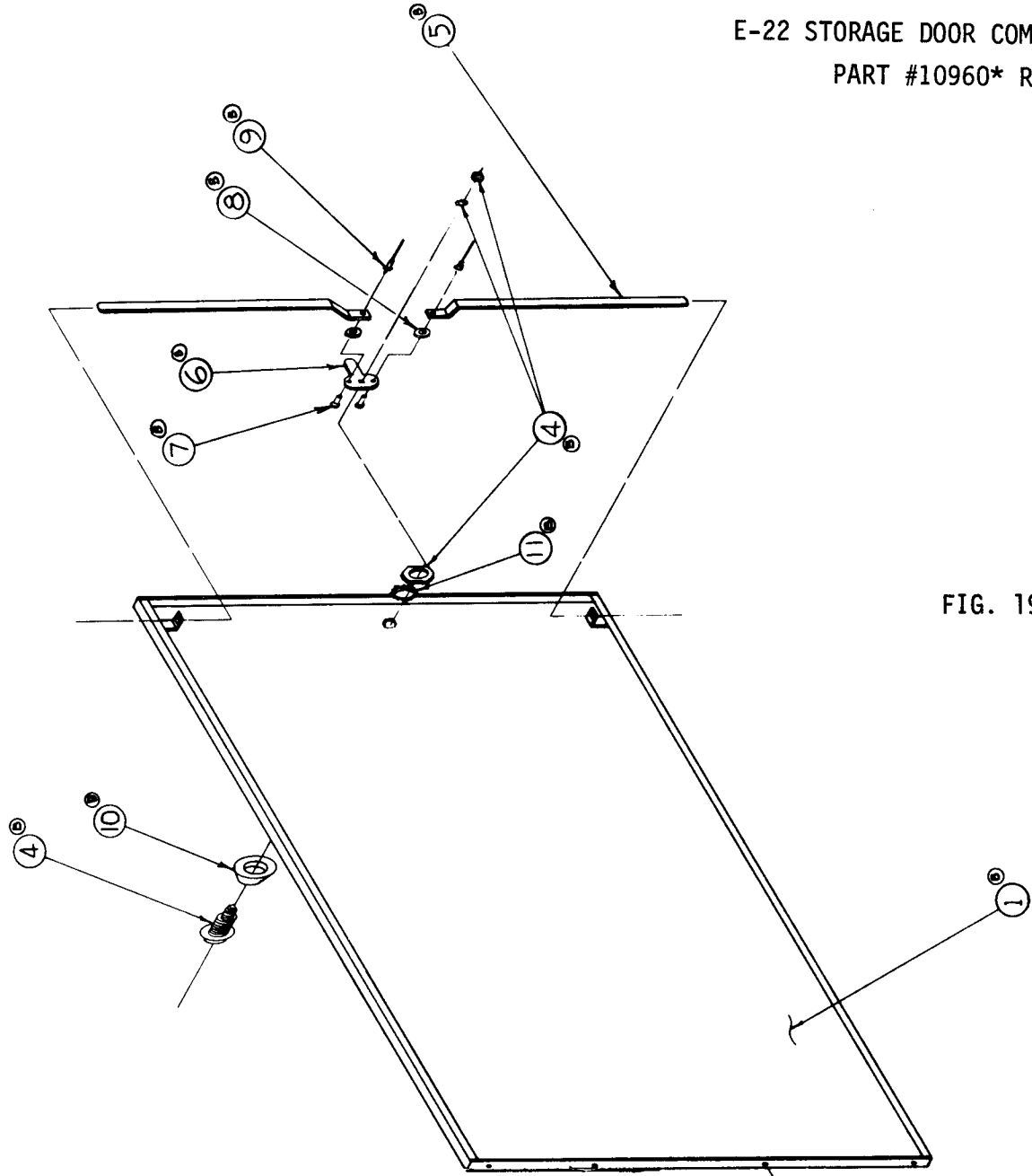
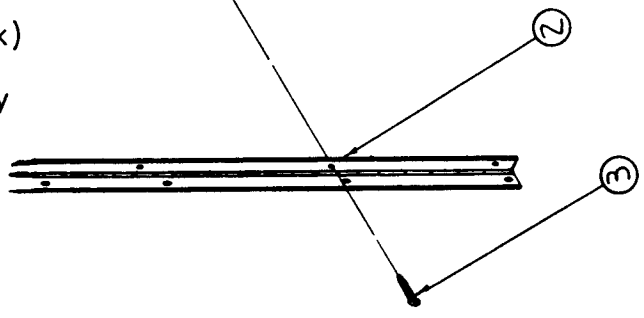


FIG. 19

| Item No. | Part No. | Description |
|----------|----------|----------------------------|
| 1 | 14220-01 | Door W. A. - Storage |
| 2 | 2305-00 | Hinge - Storage Door (Blk) |
| 3 | 638 | Screw Countersunk |
| 4 | 14239 | Barrel & Tumbler Assembly |
| 5 | 14210-01 | Bar - Locking (Blk) |
| 6 | 14209 | Cam - 3 Pt. Lock |
| 7 | 1745 | Spacer |
| 8 | 5374 | Washer - Plastic |
| 9 | 1642 | River - "Pop" |
| 10 | 12250 | Collar - Protecting |
| 11 | 366 | Washer |
| | 10960 | Complete Assembly E-22 |



*Specify Key Number

E-22 ELECTRA SNAX
PARTS LIST
PRICING AVAILABLE ON REQUEST
TWENTY-TWO SELECTION SNACK MACHINE

| <u>PART NUMBER</u> | <u>DESCRIPTION</u> |
|--------------------|-----------------------------------|
| 84 | Extn Spring 1 3/4 |
| 222 | Fuse - MDL 2 |
| 318 | Screw - TP 23 Hex 1/4 |
| 546 | Lamp - F18T8/CW/K28 |
| 601 | Screw - TP F RND #10 |
| 638 | Screw - TP 23 FLT #8 |
| 642 | Rivet - Drive 125 DX187 |
| 810-00 | Stripping - Neoprene |
| 827 | Spacer - Reject Lever |
| 1298 | Screw - TP AB Pan #8 (Blk) |
| 1414 | Plate - Reject Lever Cover |
| 1473 | Cord - Service 13 Ft. |
| 1488 | Fuse - GMQ 3 |
| 1868 - Blk | Screw - TP Pan #8 Blk |
| 1948-00 | Trim Delivery Compartment - Short |
| 1948-01 | Trim Delivery Compartment - Long |
| 1961 | Bushing - SB-1500-21 |
| 2438 | Bushing - SR-6N3-4 |
| 2607 | Starter - FS-25 |
| 2614 | Screw - TP A Pan #8 |
| 3566 | Stripping - Delivery Compartment |
| 3641 | Pad - Corner E-22 Carton |
| 4852 - Blk | Bottom Display Blk |
| 4862 - Blk | Deflector, LS Blk |
| 4959 | Casting - Coin Insert |
| 5157 - Blk | Door Sliding Blk E-22 |
| 5163 | Pkg - Flange Tube E-22 |
| 5164 | Pkg - Carton Cap D/C |
| 5165 | Pad - S/S |
| 5230 - Blk | Cover, LS Inner, Blk |
| 8656 - Blk | Hopper Assembly Coin E-22 |

| <u>PART NUMBER</u> | <u>DESCRIPTION</u> |
|--------------------|-------------------------------|
| 10121 - Blk | Bank WA Coin Blk |
| 10342 | Cup Assembly - Coin Return |
| 10494 - Blk | Compartment Delivery Assembly |
| 10960 - Red | Door, Storage Assembly, Red |
| 11009 - Red | Shell Assembly, E-22 Red |
| 11029 - Blk | Chute WA Coin Blk |
| 11032 - Blk | Track WA Upper Blk |
| 11245 - Blk | Track WA Lower Blk |
| 11246 - Blk | Panel WA Motor Blk |
| 11894 | Screw - TP23 Pan #8 |
| 12023 | Kit - Floor Seal |
| 12708 - Blk | Panel WA RH Inner Blk |
| 13140 | Screw -TP 1 Pan #10 |
| 352-01 | Key - MSU-1 |
| 746 | Screw - TP 23 FLT #10 |
| 14317-01 | Cam-Lock E-22 |
| 14325 | Lock Assembly-4260 |
| 14326-01 | Cylinder - Inner |
| 366 | Washer - Int TH 3/4 |
| 12250 | Collar - Lock |
| 14239-01 | Barrel & Tumbler Assembly |
| 365-07 | Key - MST 7 |
| 571 | Cam - Lock, 7-586 |
| 14240-07 | Barrel & Tumbler Assembly |
| 14270 - Blk | Cap Escutcheon End-B Blk |
| 14318 | Spring - Cover Bar |
| 14323 - Blk | Door, Service E-22 Blk |
| 14375 | Screw - Pan Head |
| 14383 | Pin - Pivot |
| 14385 | Plate Escutcheon E-22 |
| 14407 - Blk | Bar Assembly Locking Blk |
| 14572 | Skid - Assembly E-22 |
| 14603 - Blk | BRKT SA Reject Lever |
| 14771 | Switch Select E-22 |
| 16283 - Blk | Motor, E-22 Blk |
| 16327 | Main Motor Harness |
| 16382 - Blk | Lever Reject, Blk |
| 16560 - Blk | BRKT Assembly Top Lamp |
| 16585 - Blk | Panel Assembly Power E-22 |

| <u>PART NUMBER</u> | <u>DESCRIPTION</u> |
|--------------------|------------------------------------|
| 17310 | Lens, LCD |
| 17311-03 | Insert - Price 35¢ |
| 17311-04 | Insert - Price 40¢ |
| 17311-05 | Insert - Price 45¢ |
| 17311-06 | Insert - Price 50¢ |
| 17311-07 | Insert - Price 55¢ |
| 17311-08 | Insert - Price 60¢ |
| 17312 | Changer -COI/CO C-300 |
| 17313 | L.C.D. Display Board Assembly |
| 17314 | Board, Assembly - Controller |
| 17316 | Harness, LCD Board |
| 17317 | Decal Sheet |
| 17321 - Blk | Cover Bar W/A Black |
| 17322 - Blk | Pivot, Cover Bar Blk |
| 17324 | Jones Plug Assembly |
| 17330 | Harness, Power |
| 17331 | Harness, Switch |
| 17333 | Decal, Delivery Compartment |
| 17334 | Decal, Logo Side Cabinet |
| 17335 | Decal, Front & Side |
| 17337 | Decal, RT Side Cabinet |
| 17338 | Decal, LF Side Cabinet |
| 17343 | Conveyor Spindle Candy |
| 17342 | Conveyor Spindle Chip |
| 17347 - Blk | Retainer - LCD Lens Blk |
| 577 - Blk | Door - Coin Return Cup |
| 534 | Wheel - Roller Skate |
| 1272 | Pin-Roll 3/32 x 5/8 |
| 1298 - Blk | Screw-TP AB Pan #8 |
| 1841 | Bottom - False |
| 9041-01 | Alum - Bottom Delivery Compartment |
| 1851 | Door - Plexiglass |
| 10431 - Blk | Door - Anti-Theft |
| 17307 | Paint Red E-22 |
| 17367 | Paint, Prime, Lt Gray |
| 17332 | Decal, Storage Door E-22 |
| 17336 | Decal, Storage Door Strip E-22 |