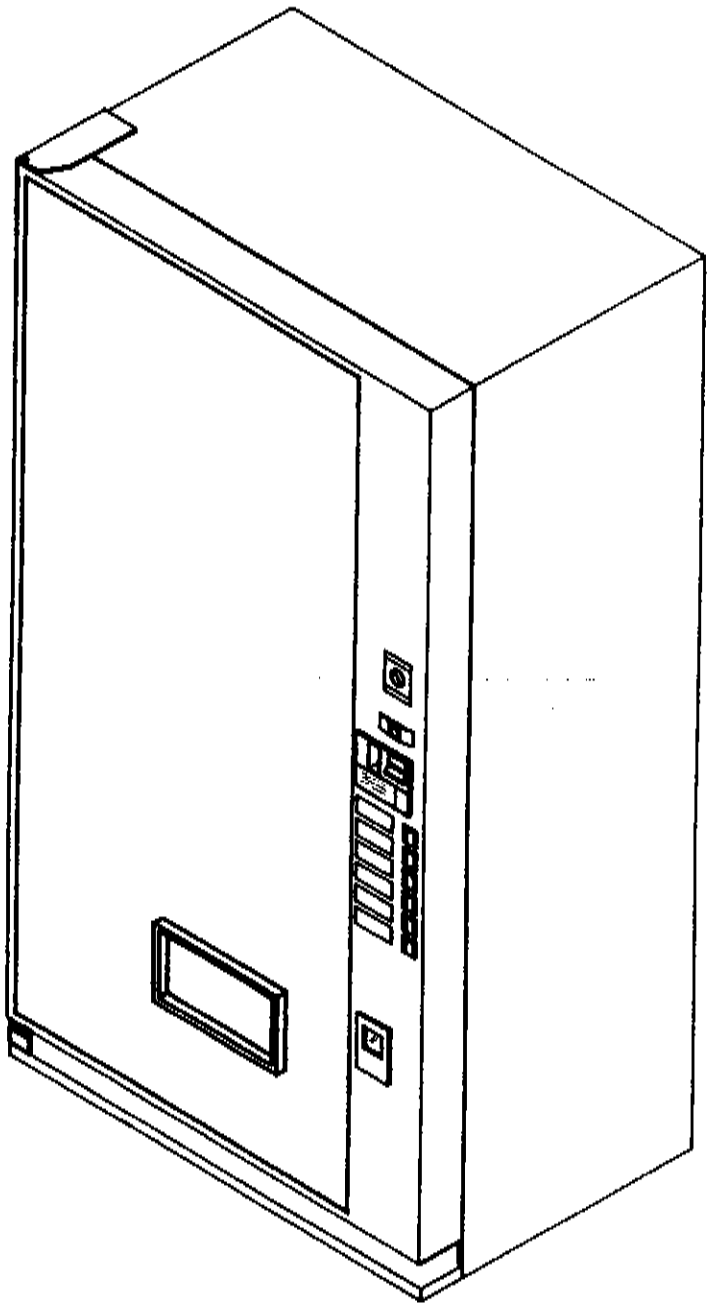
Vendo®



WORKPLACE VENDOR PARTS AND SERVICE MANUAL

THE VENDO COMPANY
LITERATURE NUMBER 390201
MAY 1990

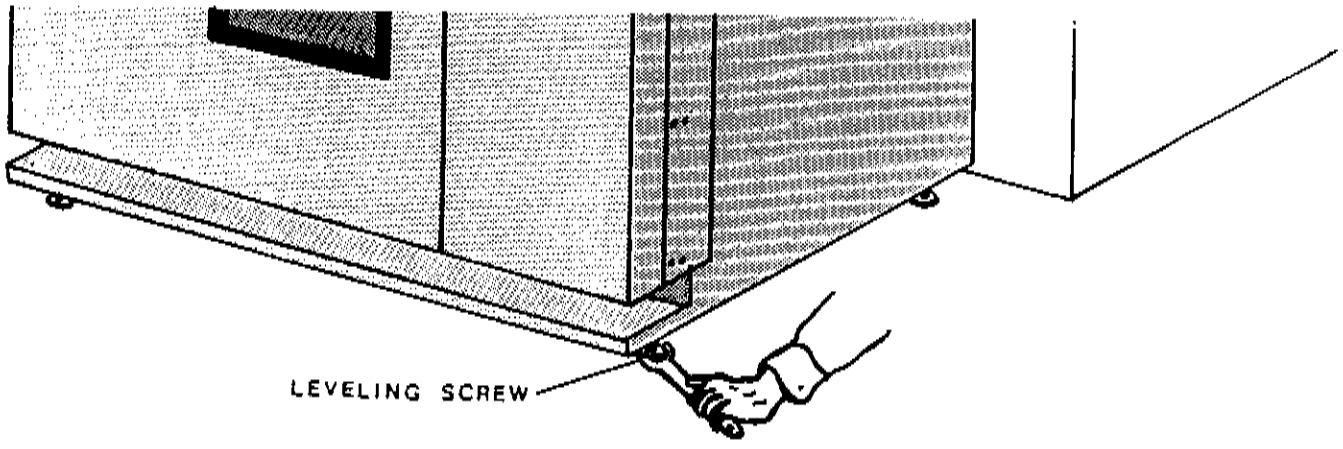
Vendo®

MAIN INDEX

INITIAL SET-UP

1. UNPACK. Remove all the packing, cardboard, shrink wrap and tape from the exterior of the vender. Check the interior for any tape or compound that may be used to hold some parts in place for shipping of the equipment. To remove the shipping boards, either use a heavy bladed screwdriver or a pinch bar inserted in the precut slots and pry the boards apart, or raise the vender off the floor on a sturdy hand truck or lift truck to raise the vender high enough to remove the leveling bolts, and return them to their original place in the base of the vender.

2. POSITION AND LEVEL THE VENDER. IMPORTANT!!! Place the vender on the desired location and be sure that it is at least 3" to 4" away from any rear obstruction, to ensure that the air circulation through the refrigeration area is not blocked. Good air circulation is important from front to rear in this vender. After you have set the vender on the location, adjust the levelers to maintain the vender in as near to level position as possible due to the irregularities in the surface conditions. A good test to see if you are level, is to open the door. It should stay in any position that you leave it.



3. CONNECT TO THE POWER IN THE WALL. (See Figure #1). This vender requires 115 VOLT, 15 AMPS, 60 HZ, AC Current. Check the power supply at the wall receptacle before plugging the vender into it to see if it is properly polarized. CAUTION!! DO NOT USE AN EXTENSION CORD!!! To ensure the safe operation of any electrical device, it must be properly grounded and the power source must match the needs of the device that is plugged into it. Using FIGURE #1 as a guide, with a test light, or a volt meter, locate the center screw that holds the cover of the receptacle in place, and attach one of the probes to this screw, and place the second probe into the larger lug hole (NEUTRAL); you should get no reaction. Insert the same probe into the smaller lug hole (POWER) and you should get a reaction. (NOTE!! If you get no reaction from either test, the outlet is not grounded properly. IF you get a reaction between the center screw and the large lug, the receptacle is not properly polarized.) If either of these conditions show up during these tests, a licensed electrician should be called to correct the problem.

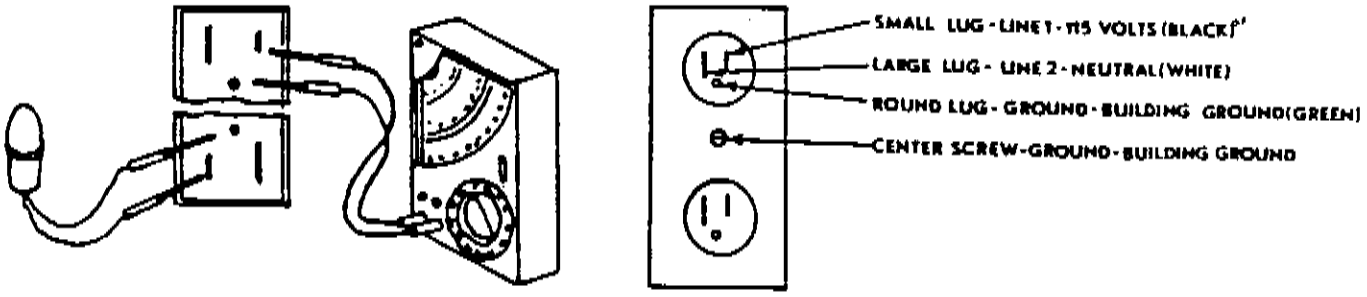
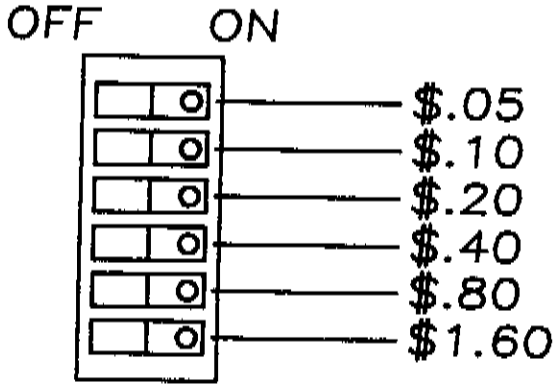


FIGURE #1

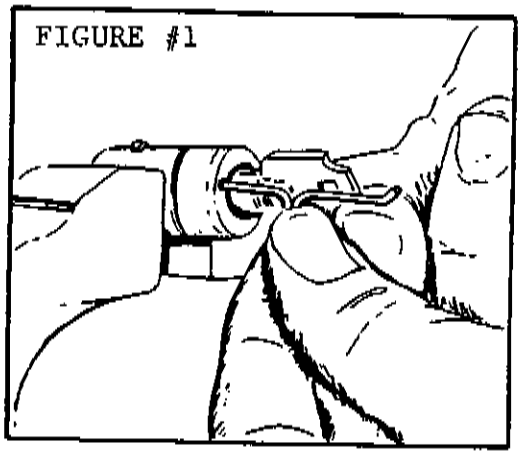
4. COIN MECHANISM. The coinage unit is located on the back of the outer door and has been installed at the factory. It is a 24 VOLT DC. Maka changer, P/N 389662-28, and is considered part of the vender that the customer will receive. Using the instructions provided, setthe desired price in the changer.



5. CODE THE LOCK (SEE FIGURES 1 THROUGH 9). Remove the lock clip from its position in the handle, and either insert the precoded lock of your choice into place, or if you have FLEX-ACE LOCKS, YOU MAY CODE THEM AS FOLLOWS:

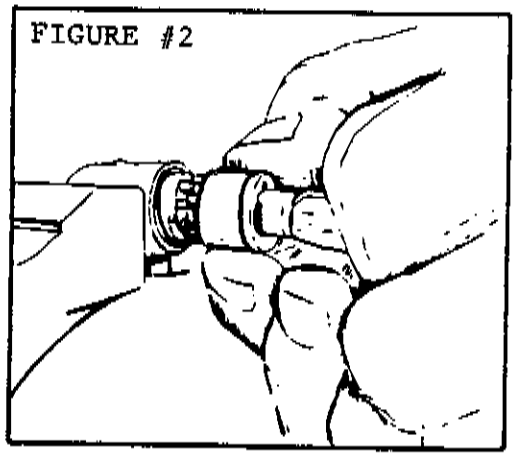
FLEX-ACE Locks may be coded in the "T" handle or precoded prior to installing it in the handle. If you code the locks on the bench, you should put the lock into a vise in order to keep it in a stable position to make the code change easier.

FIGURE #1



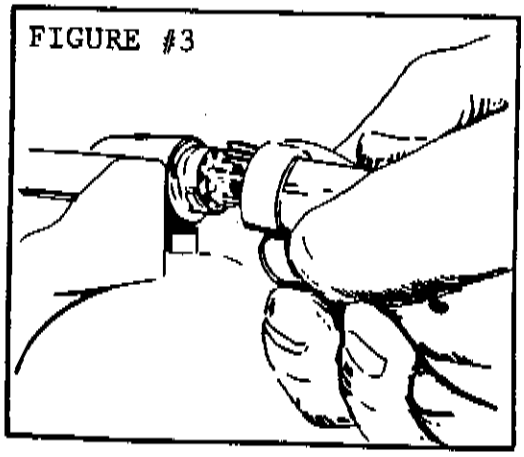
1. Insert the release pin into the hole provided in the cap; put the old key into the lock, and as you push in on the pin, turn the key in a clockwise direction, and the cap will be released.

FIGURE #2



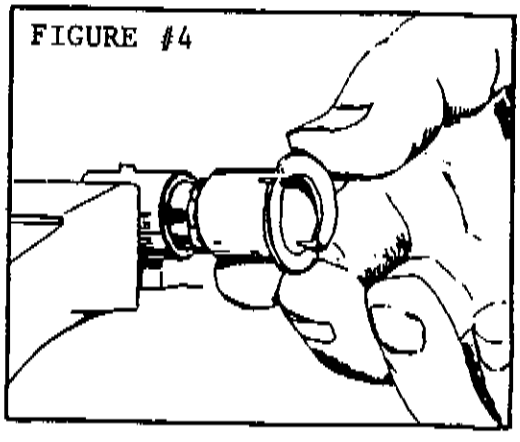
2. Remove the cap and the key, plus the pin.

FIGURE #3

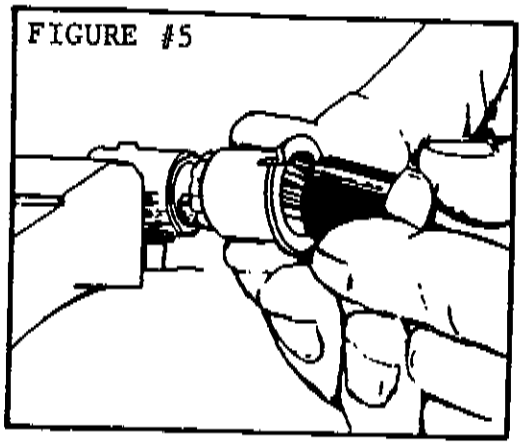


3. Using the magnet side of the loading tool, remove all (7) pins from the lock barrel.

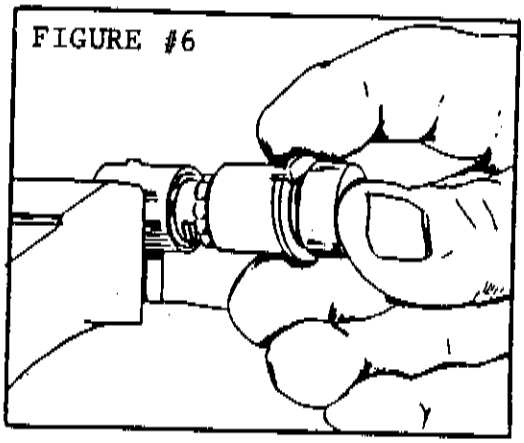
FIGURE #4



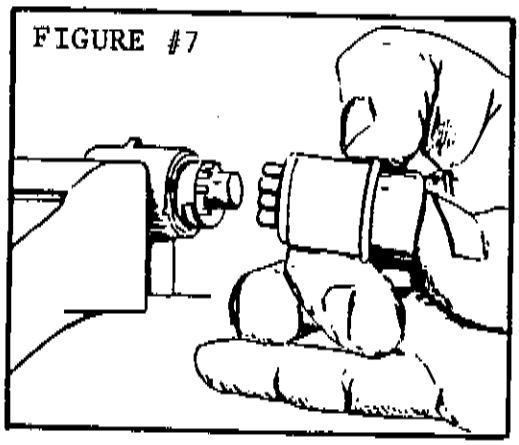
4. Place the coder into the lock barrel; it is slotted so that it can be only applied one way.



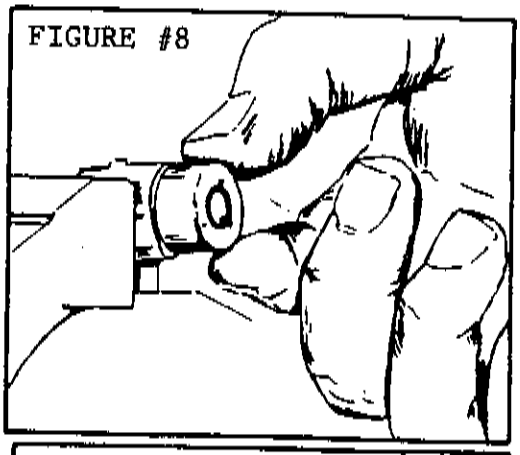
5. Place the loading tool with the pin side into the coder; these pins are spring loaded, and the loading is slotted also.



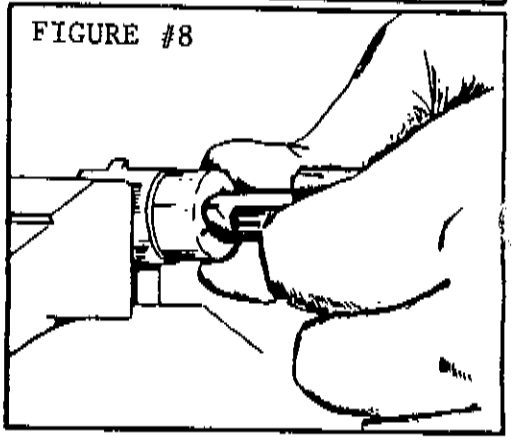
6. With the coder into position, push the loading tool into the coder and at the same time hold the coder firmly until the loading tool bottoms out; this will force the pins out of the coder and into the lock barrel.



7. While you are still holding the coder and the loading tool in position, slowly pull the two units away from the barrel to be sure all (7) pins have been inserted in the lock barrel.



8. Apply the new key into the cap, and place these two parts onto the barrel, and slowly turn the key counter-clockwise, and the key should release as soon as this happens; if the key comes out, try opening and closing the lock to ensure that it is coded correctly.



6. INSTALL PRICE INSTRUCTIONS, AND FLAVOR LABELS:

(A) Coin Insert Instruction Label

(1) Be sure that the front surface of the coin insert plate is clean and dry. Peel off the backing paper and apply the label with firm pressure in the position shown in (Figure #1).

(B) Price Label

(1) Be sure that the front surface of this area is clean and dry. Select the proper price label, and peel off the backing plate and apply as indicated (A-1).

(C) Flavor Labels

(1) Remove any previous labels and be sure that the face of the surface is free of any old adhesive. Peel off the backing of the label, and be sure to align it evenly in the embossed area before applying the label with firm pressure. (Figure #2).

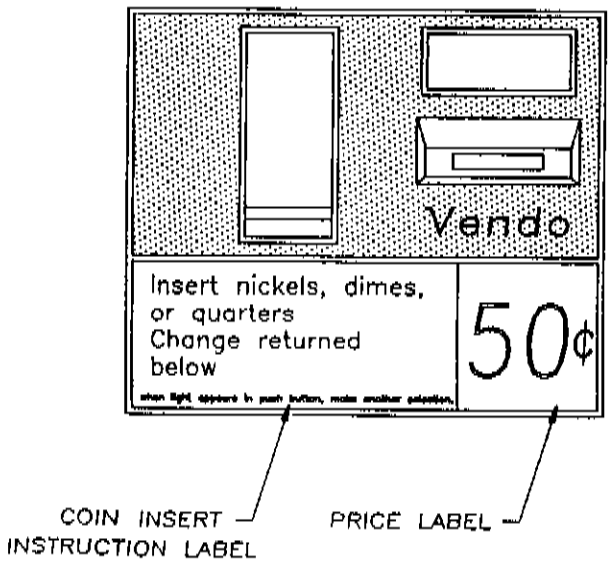


FIGURE #1

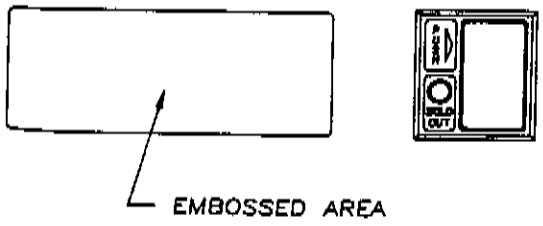


FIGURE #2

NOTE!!!

Be sure that the flavor label is properly located at the push button that has the same flavor as the column it represents, (see Figure #3) for the selection button to column relationship.

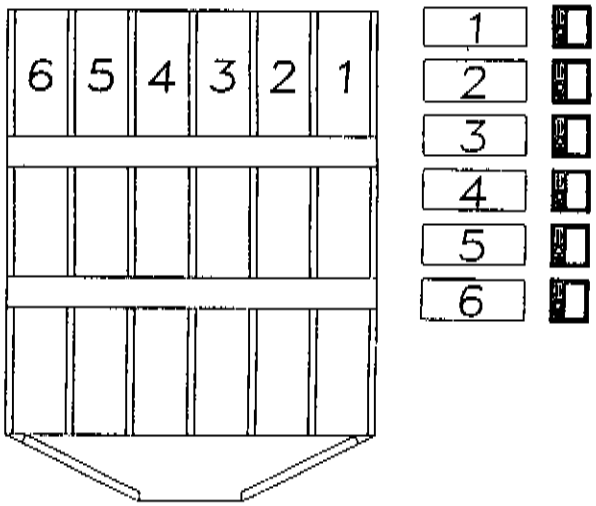


FIGURE #3

7. CHECK DOOR ROLLER (SEE FIGURE #1)

The door roller assembly may be raised or lowered by adding or removing shims. Raising or lowering this roller will help to ensure the proper alignment of the door lockstud to the cabinet latch.

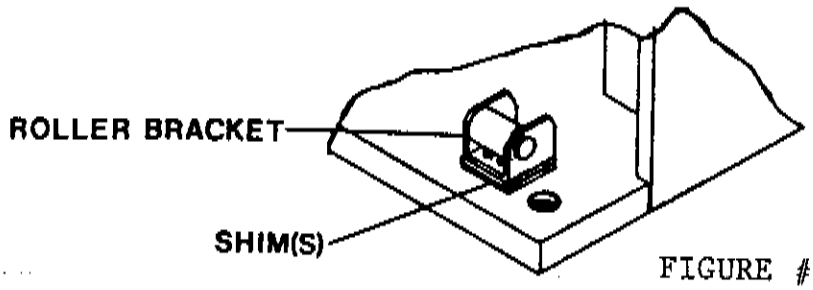


FIGURE #1

8. CHECK THE DOOR ALIGNMENT (SEE FIGURE #2).

After the door adjustment is made, be sure to check for proper alignment and engagement to the latch bracket on the cabinet. The latch bracket is only adjustable up or down by loosening the bolts that hold it in place. Be sure that the floating nut in the cage is able to engage the bolt of the "T" handle.

9. CHECK THE REFRIGERATION AREA. (SEE FIGURE #3)

(A). Check the position of the condensate pan to be sure it is seated between the compressor and the condenser fan bracket, as this is the best position to dissipate any excess moisture that may drain into the pan. Be sure that the hose is in the clip provided in the pan, and the hose has a loop in it to prevent any warm air from the base area from getting into the evaporator area. This extra warm air will cause the evaporator to freeze up.

FIGURE #2

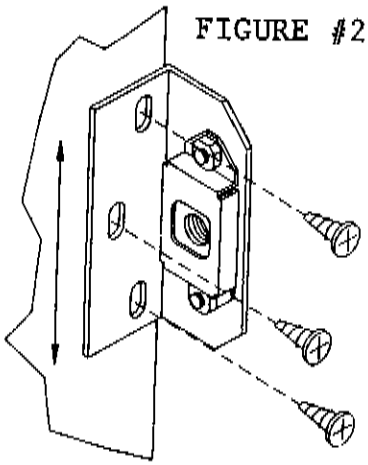
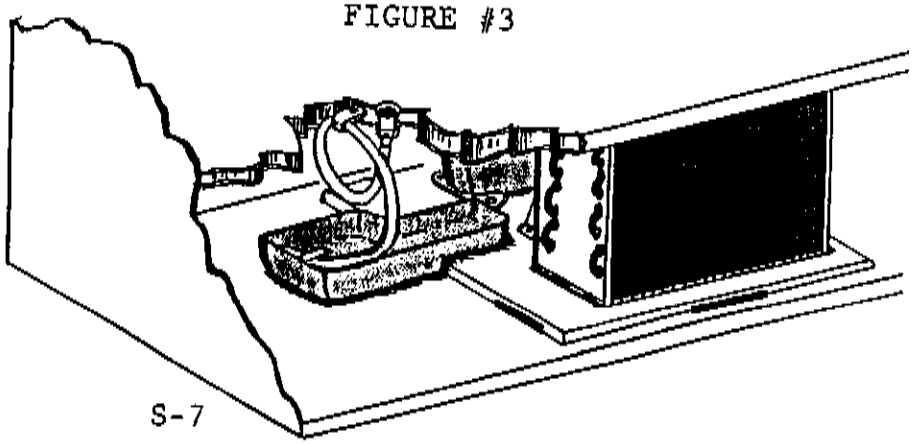


FIGURE #3



10. THERMOSTAT FEELER BULB. (SEE FIGURE #4)

The feeler bulb is set in the air stream of the evaporator fan, and if the temperature control is replaced, the location of the bulb is important. The bulb should be placed in the air stream and should not touch any metal.

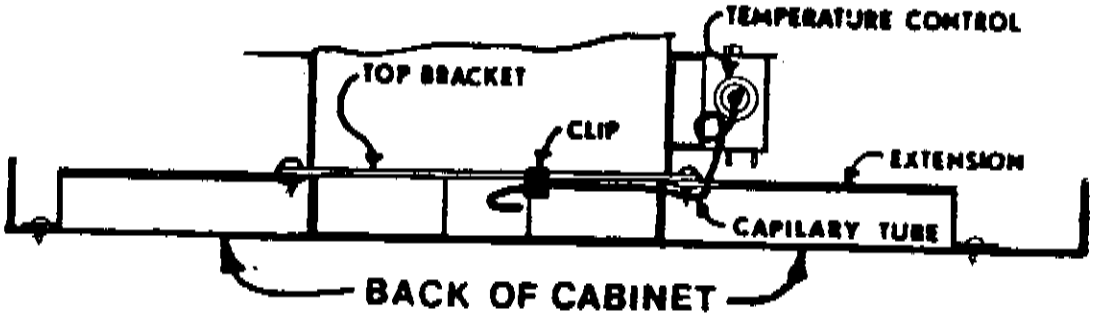


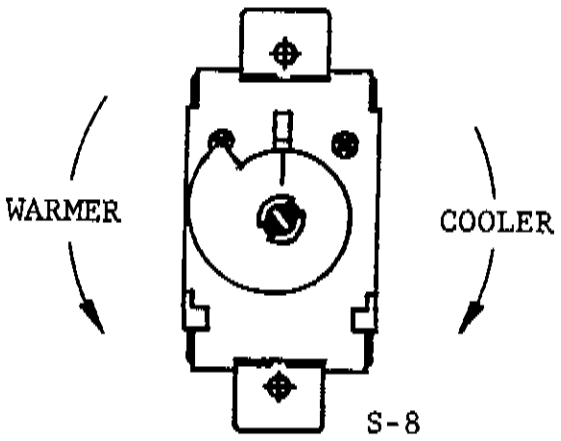
FIGURE #4

11. TEMPERATURE CONTROL SETTING: (SEE FIGURE #5)

The temperature inside of the cabinet is regulated by the temperature control setting. The control is mounted on the left side of the evaporator. Before making any adjustments to the control, all of the components of the refrigeration unit should be checked to ensure that they are not the cause of the problem. The normal setting from the factory is with the control at the center for the control range. The air temperature at the feeler bulb should cut the compressor in at 39°(F). If the temperature has to be increased, the control has to be turned in a counter-clockwise direction. If the temperature has to be lowered, turn the control clockwise.

NOTE!! For every 1/12 of a turn of the control, the temperature will be changed by about 2 degrees. Be sure to keep all evaporator and condenser vanes clear of obstructions.

FIGURE #5



I. MECHANICAL OPERATION:

(A) PARTS DESCRIPTION:

The WORKPLACE vender, being a serpentine vender which has proven to be very reliable, requires only a few parts to maintain and operate, due to the simple design of the vend mechanism.

(1) VEND MOTOR, 389545. This motor is made up of a 24 Volt DC motor with its own carrier switch attached, and a cam built onto the shaft of the motor. The motor is a 20 RPM unit, and the cam allows the motor to operate once for every revolution of the cam. The motor is made of a very durable plastic throughout.

(2) AUGER : 389862. This auger is made of Glass Filled Polypropylene and is used to dispense the product from the serpentine stack and to keep the next product in position to refill the auger, ready for the next vend.

(3) MOTOR MOUNT: 389895. The motor mount is made of a polypropylene plastic and is also very sturdy. It is used to house the vend motor and auger in position and will be part of a complete vend motor assembly that is easily removed or replaced from the stack. It also features snap-in mounting for the sold-out switch.

(4) SOLD-OUT SWITCH: 390246. The sold out switch is mounted to the rear of the motor mount, and has a long leaf on it that extends into the track to sense a product in the track.

(5) MOTOR AND AUGER ASSEMBLY: 134819. This assembly consists of the motor w/cam, motor mount, auger, motor switch, and sold-out switch.

(6) SELECTION SWITCH: 368299. This is a standard switch that has been used on many of our previous model venders; it is mounted in the selection button assembly.

continuation...

(7) SELECTION BUTTON ASSEMBLY: 134827. This assembly consists of a housing, button spring, sold-out light, and selection switch.

ALL OF THESE PARTS ARE INTER-CHANGEABLE WITH THEMSELVES IN ALL COLUMNS OF THE SERPENTINE STACK. SPECIAL NOTE!!! ALL OF THE ELECTRICAL PARTS IN THE VENDING CIRCUIT ARE RATED AT 24 VOLTS DC.

(B). MECHANICAL VEND CYCLE:
The vend cycle of all (6) columns are the same in a SERPENTINE type vender, and it would be repeated on all of the electrical and mechanical cycles.

(1) After the vender has been loaded with at least (2) cans per column, this will relieve the sold-out condition. The changer must have the proper inventory of coins to be able to accept any combination of coins to meet the vend price of the product. The vender is now ready to be used by the customer to make the selection of the product of their choice.

(2) The customer inserts coins in the coin insert assembly. This will set up the vender so that a purchase of a product can be made as soon as the selling price is reached. The credit relay (24 Volt) will energize and set up a circuit to the selection buttons in preparation for the customer to select their product.

(3) At the same time the credit relay is energized, the C.R.E.M. coils in the changer are de-energized to block the coinage path and prevent any more coins from passing over the sensors or switches.

continuation...

(4) The customer at this time is able to make the selection of their choice. The selection button chosen actuates its switch and an electrical circuit is directed to the selected column motor/auger assembly to start it. As the motor rotates the auger, the built-in motor cam on the motor shaft actuates its carrier switch, which is also part of the motor, to keep the motor running.

(5) As the motor continues to operate, the auger turns and augers out one product, and moves another product into position, ready for the next vend.

(6) The motor carrier switch keeps the motor in operation until the actuator of the switch falls into the valley of its cam. The vender is returned to standby, ready to accept money for the next vend operation. This cycle is the same on all columns. On a sold-out condition after the last vend, the auger shifts the next product and the sold-out light is lit by the action of the sold-out switch leaf for that selection only.

II. ELECTRICAL OPERATIONS:

(A) PARTS DESCRIPTION:

The vending portion of the electrical circuits are all 24 VOLTS DC current, but the REFRIGERATION SYSTEM is still operated off the initial 110 VOLTS of incoming current to the vender. The current is passed through a transformer that changes the initial 110 VOLTS AC to 20 VOLTS AC. The current then passes through a rectifying power supply, which converts the current from 20 VOLTS AC to 24 VOLTS DC.

All the vending circuits, including the changer, are rated at 24 VOLTS DC and when changing any of the following electrical parts, this should be kept in mind:

(1) VEND MOTOR W/SWITCH. (389545)
(2) SELECTION SWITCH. (368299)
(3) SOLD-OUT SWITCH. (390246)
(4) CHANGER, MAKA. (389662-28)
(5) POWER SUPPLY ASSEMBLY. (134827)
(6) CREDIT RELAY. (390028)
(7) CORRECT CHANGE LIGHT. (390020)
(8) SOLD-OUT LIGHT. (389936)

NOTE !!!

As stated before, all the vending parts in the electrical portion of the vending circuit are rated for 24 VOLT DC operation. Only the refrigeration system is operated off the base 110 VOLT AC current that is supplied at the wall receptacle.

OPERATIONS IN GENERAL:

In order for this vender to operate properly, and accept money to allow the customer to purchase the product of their choice, there must be at least (2) cans in position to vend in the column of their choice. One (1) can in each column will allow the sold-out switch to be actuated and to light the sold-out light on the selected column.

With the vender loaded as stated, and the changer with sufficient coins in the change tubes, this will activate the C.R.E.M.S., and the vender is ready to vend a chosen product.

NOTE !!! KEEP IN MIND THAT THIS VENDER IS A 24 VOLT DC VENDER IN THE VENDING CIRCUIT ONLY.

continuation...

Step #1. As the coins are inserted into the changer, they pass a sensor or a switch, and when enough money has been put into the vender for the proper selling price, the credit relay will energize. This circuit comes from pin (3) of the changer to the credit coil, and from pin (2) of the changer to the other side of the relay coil. The circuit also comes through the COMMON to NORMALLY OPEN set of points (7) to (4) on the credit relay, and through the COMMON TO NORMALLY CLOSED CONTACTS of the contacts of the MOTOR CARRIER switches from the POWER SUPPLY mounted on the door.

Step #2. With the credit relay energized, the C.R.E.M.S. are now de-energized to prevent any coins to the changer. At this time, the customer is able to select any product that does not have a sold-out light on. All of the other selections have a circuit to them at this time. When the selection is pressed, it sends a circuit to the selected motor, to start the motor, that in turn, augers out the product. The circuit to the selected motor is routed to it through the COMMON TO NORMALLY OPEN set of points of the actuated motor carrier switch. The sold-out light is lit at this time momentarily.

Step #3. The motor continues to operate through the actuated carrier switch by the action of a built-in cam on the shaft of the motor that keeps the switch in an actuated position. All of this takes place through the energized set of points (7) & (4) on the credit relay, and the energized relay coil through pins (6) & (9) of the relay.

Step #4. As the motor continues to operate its cam, the credit relay circuit is cancelled, the C.R.E.M.S. circuit is cancelled, and the motor continues to operate through the carrier switch.

Step #5. As the motor continues to operate, a product is augured out of its position and another is augured into place ready to vend. When the carrier is de-actuated by the action of the motor cam, the motor stops, the C.R.E.M.S. are energized to allow the acceptance of money, and the vender has been returned to standby, ready to vend the next selection.

ELECTRICAL STEP-BY-STEP OPERATION:

The following pages will cover the step-by-step of the vending circuit of the WORKPLACE VENDER.

ELECTRICAL ABBREVIATIONS: These are shown on the diagrams that are to follow on the next few pages of the step-by-step.

ELECTRICAL SYMBOLS:

ABBREVIATIONS:

C.R.E.M.S. .....Coin Return Electro-Magnets
N.C. .....Normally Closed
N.O. .....Normally Open
C .....COMMON
C.C. .....Correct Change
S.O. .....Sold-Out
SEL .....Selection
MTR .....Motor

SYMBOLS:

Switch .....

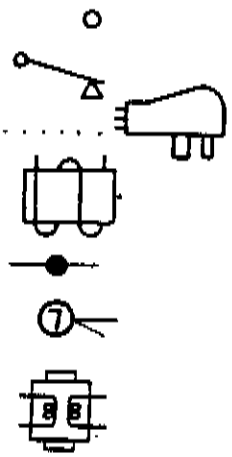
Service Cord Line Plug .....

Coil .....

Wire Junction .....

Electrical Plug & Receptacle .....

Transformer .....



STAND-BY CIRCUIT. POWER ON VENDER LOADED AND CHANGER READY TO ACCEPT COINS.

1. Line (1) power is provided through a transformer to convert it 20 VOLTS AC, then through a power supply where it is converted to 24 VOLTS DC. This, in turn, will energize the C.R.E.M.S. through the C to N.O. points of all of the motor carrier switches, starting with the last switch in the circuit and to the first switch in the motor carrier circuit. The circuit also travels through contacts common to (7) and N.O. contacts (1) of the de-energized credit relay.

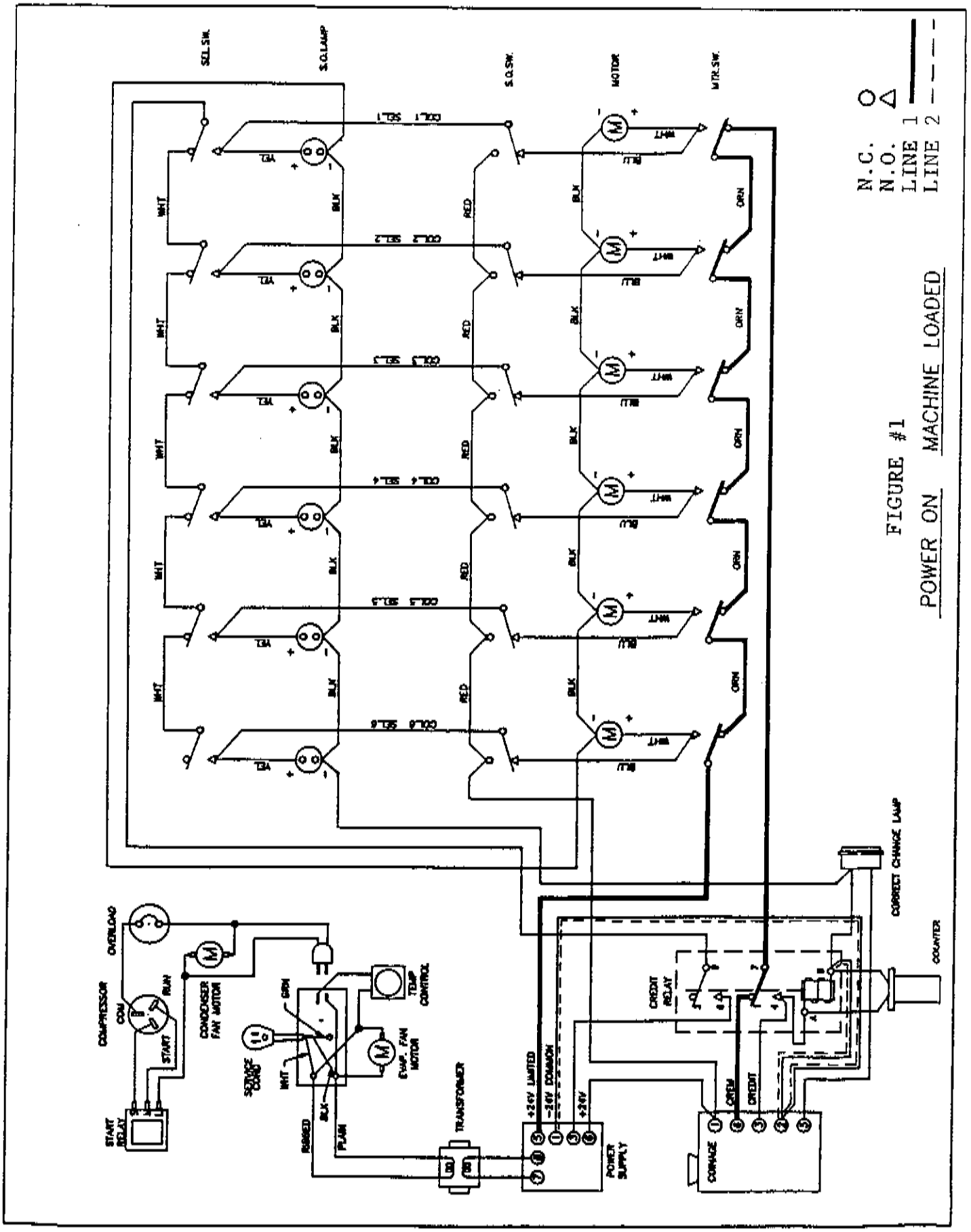


FIGURE #1

POWER ON MACHINE LOADED

CREDIT ESTABLISHED:

2. When the proper money is inserted into the changer, the credit relay will be energized by the coinage circuit, and through the motor switches, and through contacts (7) and (4) of the energized credit relay coil circuit. Through these contacts (7) and (4) the credit relay is held energized for the credit relay holding circuit.

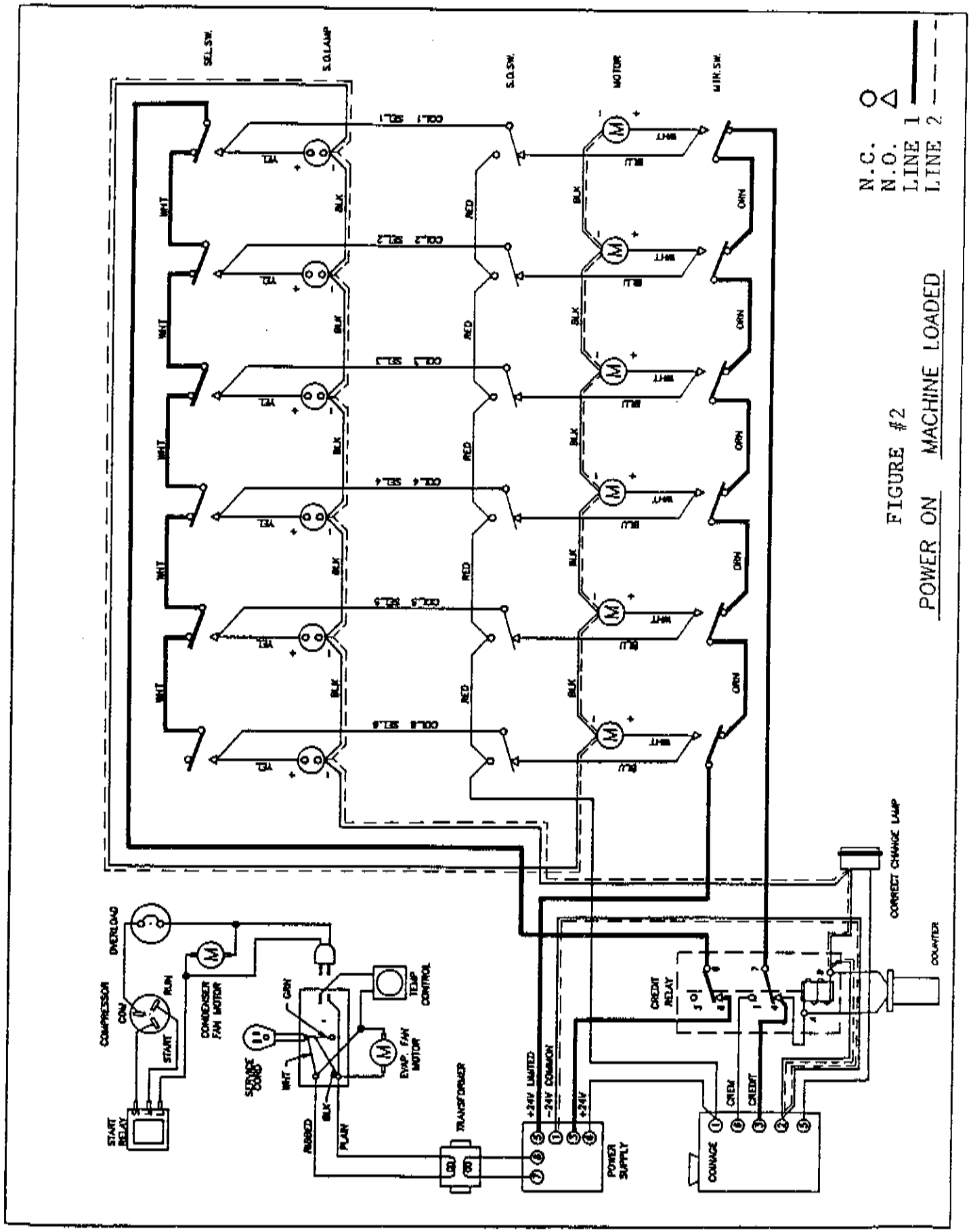


FIGURE #2

POWER ON MACHINE LOADED

3. With the credit being held, a circuit is now available to all the selection switches that are not on sold out. The sold-out lamp has momentarily actuated from the COMMON to NORMALLY CLOSED position, the switch has transferred a circuit through the COMMON to NORMALLY OPEN POSITION to activate the motor of selection #6, the credit relay is still energized at this time, and C.R.E.M.S. are still de-energized.

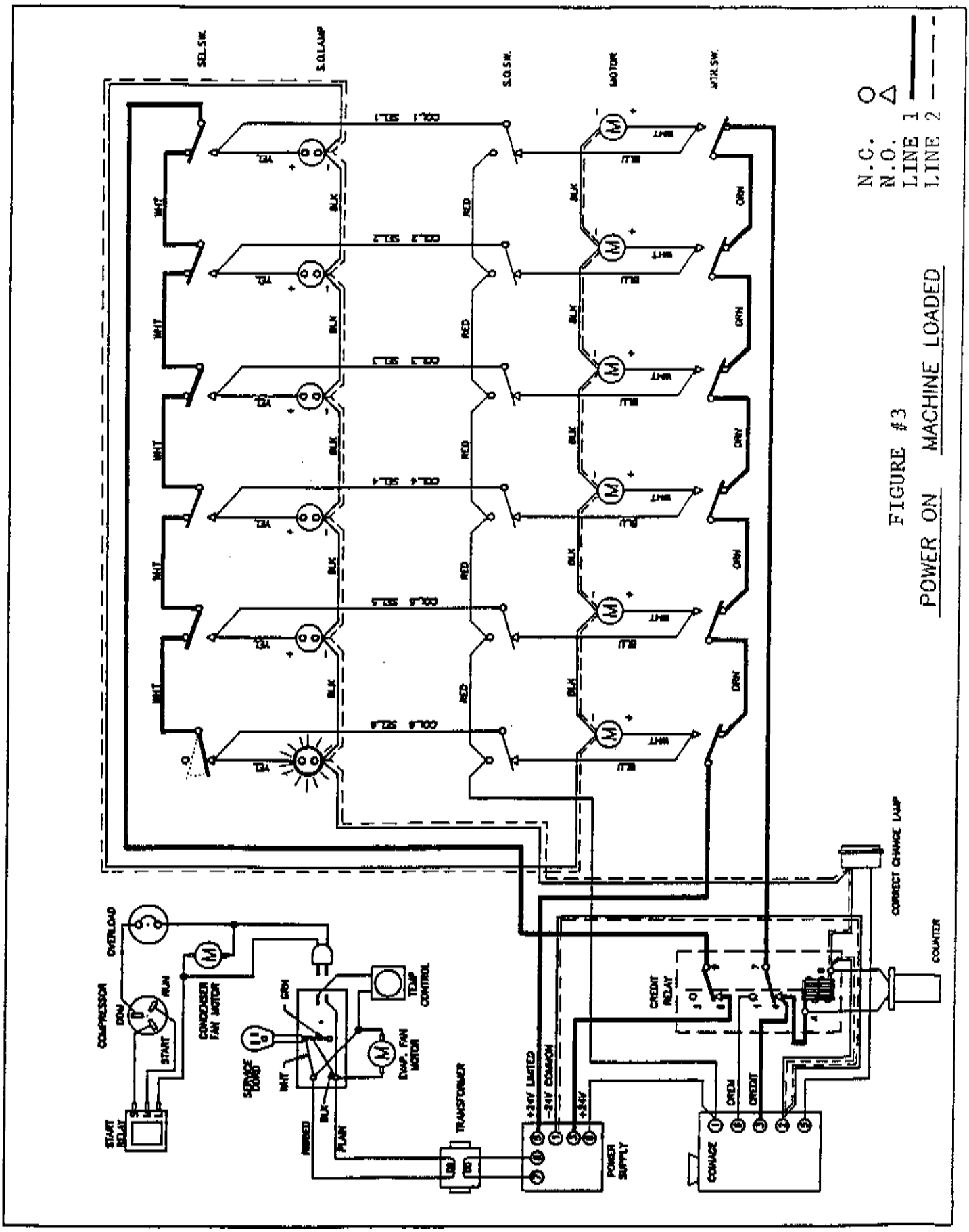


FIGURE #3

POWER ON MACHINE LOADED

MOTOR RUN CIRCUIT.

4. As the motor continues to run through the motor carrier circuit, and the action of the motor cam, one product has been augured out of the stack and another product augured into its place ready for the next vend. As soon as the motor carrier switch was actuated, the circuit to the credit relay coil was removed to release the credit, the C.R.E.M.S. are still de-energized at this time.

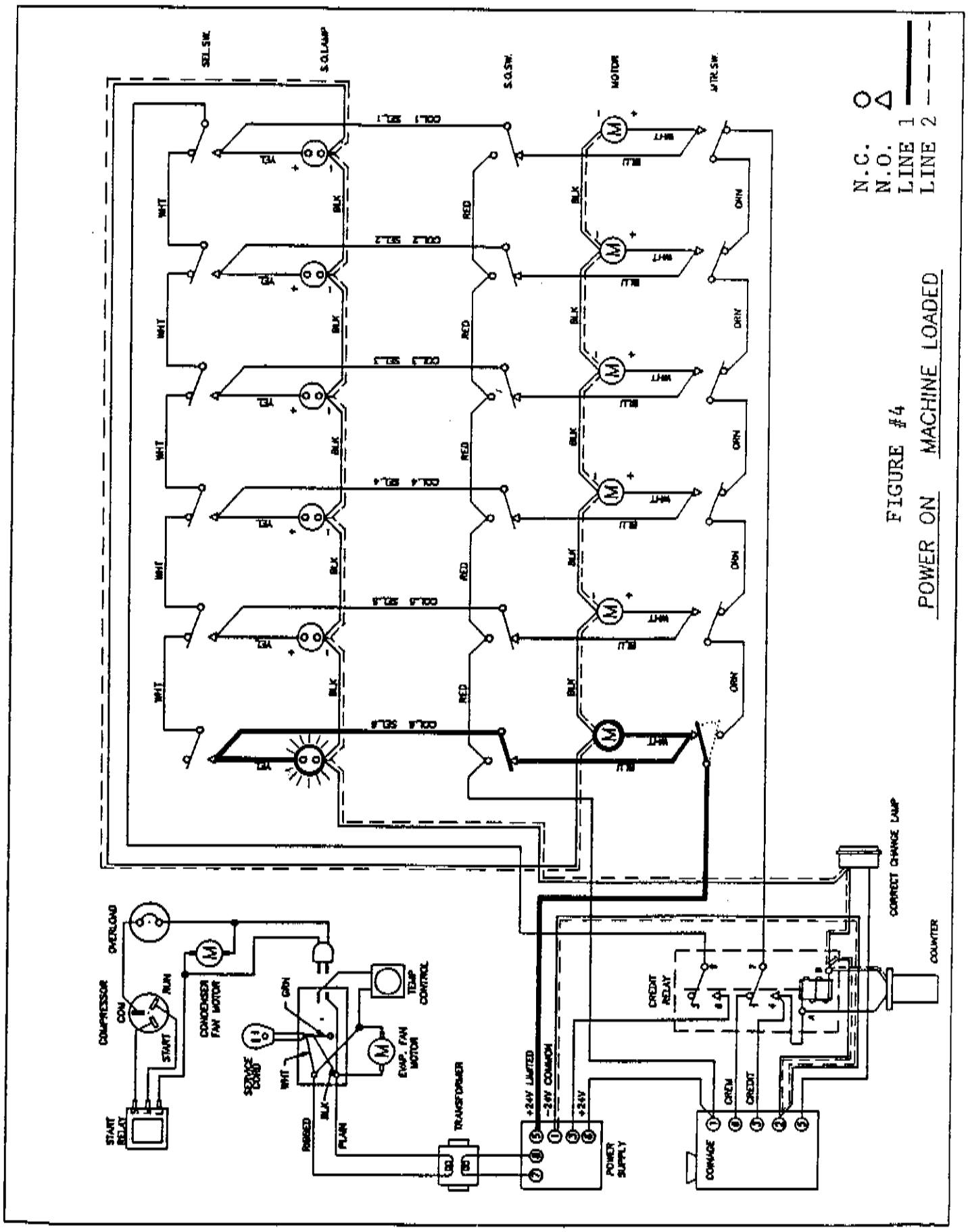


FIGURE #4

POWER ON MACHINE LOADED

5. The motor continues to operate through its cam until the valley of its cam allows the actuator of the switch to be de-actuated to its COMMON to NORMALLY OPEN position which will stop the motor, energize the C.R.E.M.S. and bring the vender into a standby condition, ready to accept money, and to be ready for the next vend cycle.

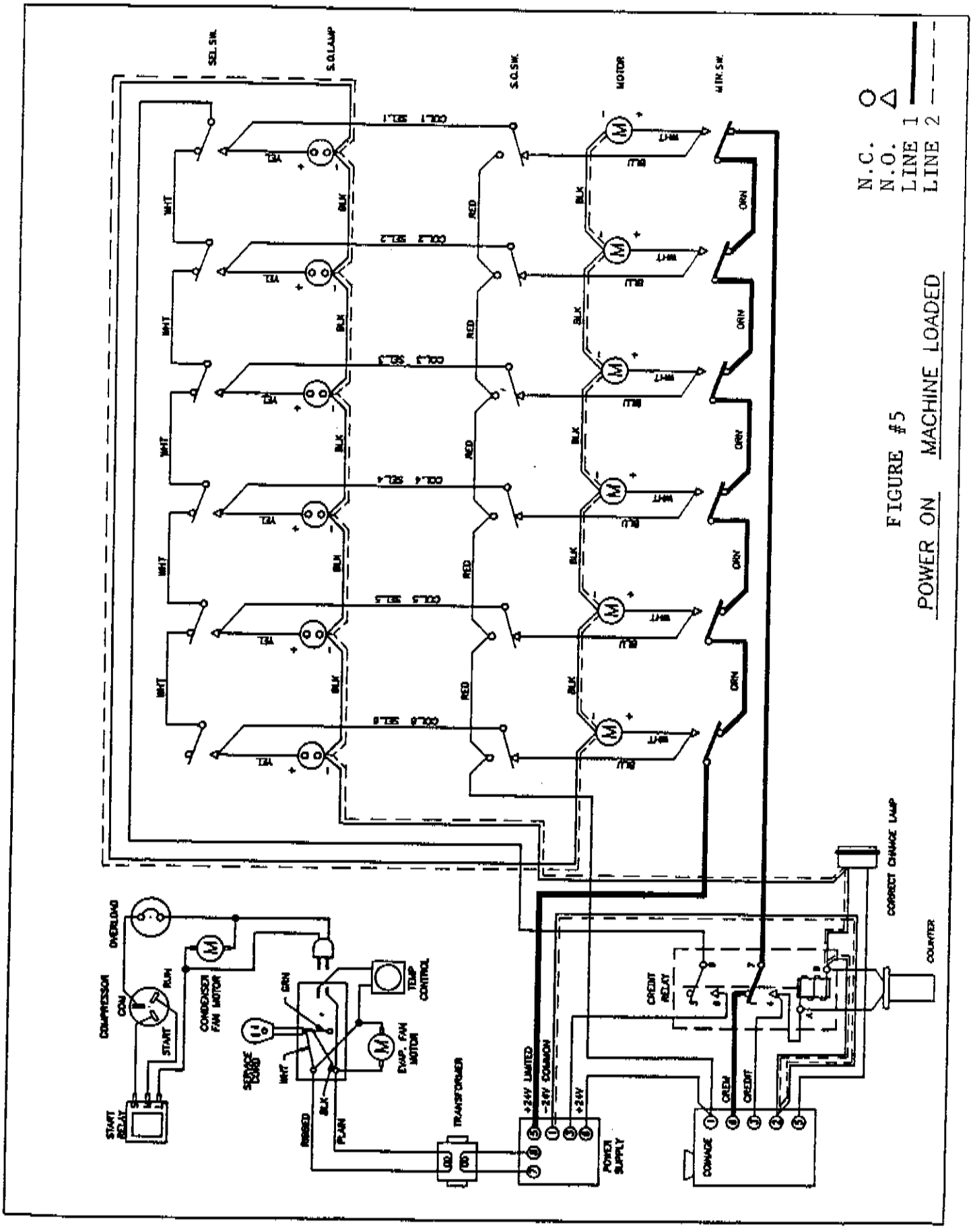


FIGURE #5

POWER ON MACHINE LOADED

REFRIGERATION OPERATION

A. Basic Refrigeration Principle

B. Detailed Refrigeration Cycle

C. Parts Description
Parts Location and Freon Flow Chart (last page)

A. BASIC REFRIGERATION PRINCIPLE

What a refrigeration system really accomplishes is the transfer of heat. The refrigeration system removed the heat from product area and then transfers it to the condenser where it is dissipated. In the vending machine application of this process, large quantities of the heat have to be transferred economically, efficiently, and that can be repeated continuously without loss of refrigerant over an extended period of time. The most common system used in the vending industry is the vapor compression (or simple compression) cycle system. It consists basically of three elements: an evaporator, a compressor, and a condenser, (all part of a "sealed system").

In the compression system there are two existing pressures, the low (evaporating) pressure and the high (condensing) pressure. The refrigerant acts as the transportation medium in which heat is moved from the evaporator to the condenser, where this heat is dissipated (into ambient air). A change of state from liquid to vapor and back to liquid allows a refrigerant to absorb and discharge large quantities of heat efficiently.

The basic vapor compression system cycle is described below.

In the evaporator the refrigerant boils (evaporates to a vapor) at a temperature sufficiently low enough to absorb heat from a space which is being cooled. The boiling temperature is controlled by the pressure maintained in the evaporator (the higher the pressure, the higher the boiling point). The compressor removes the vapor (via suction lines) from the evaporator as it is formed at a rate sufficiently rapid enough to help maintain desired pressure. The compressor takes the low pressure vapor and compresses it, increasing both the pressure and temperature. The hot, high pressure gas is forced out the compressor discharge valve and into the condenser. The condenser dissipates the heat of the refrigerant vapor. As the temperature of the vapor

continuation...

decreases it is condensed into a liquid. This liquid flows from the condenser to the evaporator. This process in which the refrigerant absorbs heat at a low pressure and then under action of the compressor, is compressed and raised to a sufficiently high enough temperature to permit rejection of this heat is continuous as long as the compressor runs.

B. DETAILED REFRIGERATION CYCLE

The following cycle is a detailed description of a complete refrigeration cycle as it pertains to the refrigeration system as installed in Vendo equipment.

As the temperature in the cabinet rises, the liquid in the thermostat feeler bulb also rises in temperature. As this liquid becomes warmer it expands. This expanding liquid pushes against the temperature control bellows and actuates the temperature control switch. The temperature control switch turns both the compressor and condenser fans on. The condenser fan sucks air through the condenser, removing heat from the refrigerant in the condenser. The compressor sucks low pressure refrigerant in the condenser. The compressor sucks low pressure refrigerant vapors from the evaporator, compresses it and pumps it to the condenser (where excess heat is removed). The cooled gas in the condenser turns into a liquid. The high pressure from the compressor pumps this liquid through the drier (which removes any moisture and solid particles from the liquid) and capillary tube (which controls flow of liquid) to the evaporator. At the evaporator, the fan(s) blow the air of the cabinet over the evaporator, removing excess heat from the air. The liquid is heated up and boils turning into vapor, which is sucked into the compressor through the accumulator (which traps and allows evaporation of any liquid refrigerant after leaving evaporator) and suction line. The now falling temperature in the cabinet cools the liquid in the thermostat feeler bulb condensing it. As this liquid condenses, it releases the pressure against the temperature control bellows, de-actuating the temperature control switch. The de-actuated control switch turns off the compressor and condenser fan(s).

C. PARTS DESCRIPTION

1. COMPRESSOR (Part of a Sealed System - see Parts Section for part numbers) The compressor sucks in low pressure vapor from the evaporator and pumps out high pressure vapor to the condenser. The motor that drives the compressor is sealed inside a housing along with the compressor. The compressor is sealed inside a housing along with the compressor. The compressor is mounted to the refrigeration base, which is mounted in the bottom of the vender - outside the "sealed" refrigeration space.

2. CONDENSER (Part of a Sealed System) The condenser takes heat out of the high pressure vapor that has come from the compressor. As this vapor passes through the condenser it is changed into a liquid because it loses heat while remaining under high pressure. The condenser is mounted to the refrigeration base towards the front of the vender.

3. CONDENSER FAN ASSEMBLY (42321-35) (See Parts Section) The condenser fan pulls "cool" air from outside the vender, through the condenser and blows it out the back of the vender (and over the compressor). This "cool" air removes excess heat from refrigerant in the condenser. The condenser fan runs when the compressor runs. This fan assembly is mounted on the refrigeration base between the condenser and compressor.

4. DRIER (Part of a Sealed System) The drier is a molecular sieve strainer drier. It removes water from refrigerant liquid. It is mounted in the discharge line of condenser before capillary tube. If the system is tapped, this drier should be replaced to keep the system maintained.

5. CAPILLARY TUBE (Part of a Sealed System) The capillary tube has a very small inside diameter to help keep pressure in the evaporator low and pressure built-up in condenser. It also controls, but at a steady rate, the flow of refrigerant liquid to the evaporator. It is the connecting line between the condenser and evaporator.

continuation...

6. EVAPORATOR (Part of a Sealed System) The evaporator removes the heat from the air in a refrigerated space and transfers it to the refrigerant liquid. This liquid is evaporated into a vapor and is sucked out by the compressor. The evaporator is mounted inside the refrigerated space directly below the delivery chute.

7. ACCUMULATOR (Part of a Sealed System) The accumulator traps any refrigerant liquid that did not boil off into a vapor before it reaches the compressor. It allows any refrigerant liquid to boil off as a vapor to prevent damage to compressor. It is mounted in the suction line on the discharge side of the evaporator.

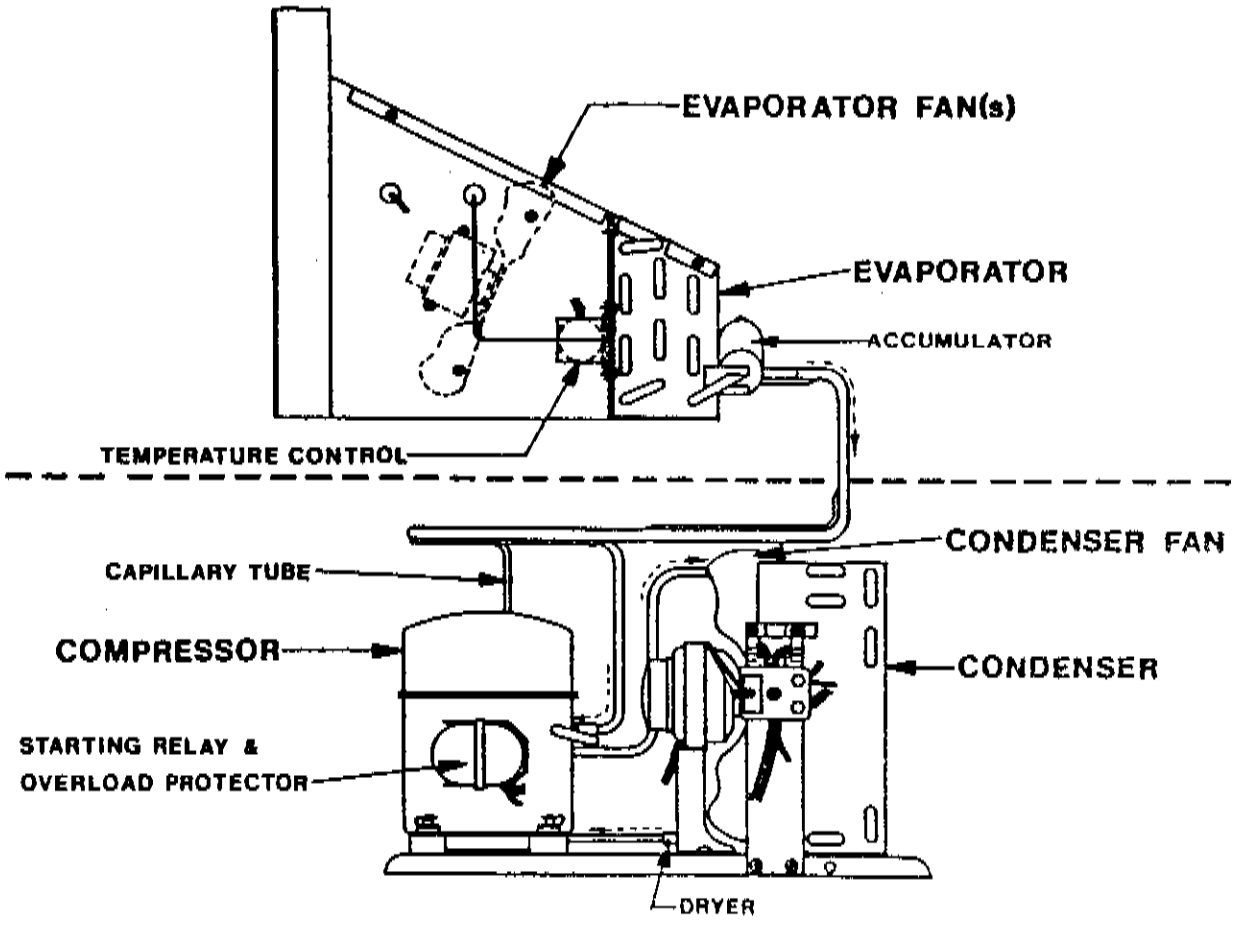
8. EVAPORATOR FAN ASSEMBLY (42321-44) (See Parts Section) The evaporator fan blows air of refrigerated space over the evaporator to remove excess heat from air. The air is then used to remove excess heat from product. The evaporator fan assembly is mounted to the evaporator mounting housing and pulls air from front of refrigerated space over evaporator, up rear of refrigerated space to vend stack. (NOTE: There are two evaporator fans on the 1/3 HP and the Super 1/3 HP units. One fan is running at all times.)

9. TEMPERATURE CONTROL (368794-1) (See Parts Section) The temperature control is made of two main parts: the thermostat feeler bulb and the temperature control box. The feeler bulb is a very narrow tube with a refrigerant liquid inside. It is mounted to the evaporator (above air flow of fan) and to the control box. As the liquid in the feeler bulb expands (warms up) it expands against a bellows in the control box, which actuates a temperature control switch (also located in the control box). As the liquid in the feeler bulb cools off, t contracts to turn the switch off. This switch turns the compressor and condenser fans on and off. The temperature control box is mounted to the side of the evaporator and is adjustable to control temperature of refrigerated space.

continuation...

10. STARTING RELAY (333894-21) See Parts Section) The starting relay is mounted in the terminal box on the side of the compressor housing. When the compressor first starts up the starting relay closes and completes a starting circuit. When the compressor motor gets up to speed, the starting relay opens and brakes the starting circuit.

11. THERMAL OVERLOAD SWITCH (45052-41) (See Parts Section) The thermal overload switch is mounted in the terminal box on the side of the compressor housing. If the compressor motor gets hot or draws too much current, the thermal overload opens and breaks the starting and running circuits of the motor. When the compressor cools off, the thermal overload closes to allow the compressor to run.



MAINTENANCE

The following section deals with general maintenance and servicing of the vender. It is intended as a basic guide only.

This section is divided into five parts: (8) Preventative Maintenance Suggestions; (II) Lubrication Guide; (III) Care and Cleaning; (IV) General Overview and Service Suggestions; (V) Basic Trouble Shooting.

I. PREVENTATIVE MAINTENANCE SUGGESTIONS

The following service call suggestions are given as steps to be taken whenever a vender is visited on site. They are provided as a "preventative maintenance" i.e., to help "prevent" major problems with the vender.

A. Observe vender and surrounding area for any unusual indications of problems. (Such as rust on cabinet, obstructions of air flow, dark spots on sign face, etc.).

B. Open door and visually check inside of vender. (Such as water accumulation, rust marks, moisture around edges of inner door, etc.).

C. Check product temperature for proper cooling.

D. Check evaporator drain for obstruction. (Water in evaporator area must drain to condensate pan.)

E. Empty condensate pan.

F. Clean condenser (Vanes free of dirt, lint).

G. Evaporator fan runs normally.

H. Compressor and condensate fan run normally.

I. Investigate any unusual sounds (Such as fan blades hitting something, refrigeration lines rattling, etc.).

J. Clean coin acceptor.

K. Deposit coin ($.05, $.10, $.25) to check for proper operation of coinage.

L. Test vend all selections.

M. Correct all problems (as necessary).

N. Test vender and make a report on problems.

II. **LUBRICATION GUIDE (SEE CHART BELOW)**
Lubricate indicate areas at intervals shown on chart.

INTERVAL	PARTS	LUBRICANT
Every 6 months	Top hinge of door Door hinge pin at base of cabinet "T" handle stud and Latch nut	Grade 2 High Low Temperature Grease

III. **CARE AND CLEANING**

A. GENERAL PROCEDURE (Painted metal areas)
Wash vender with soap and water. The exterior may be waxed with any good automobile wax.
NOTE: Interior corrosion may be removed with a fine grade of steel wool and then painted.

B. FRESH PAINT SPLASHES, GREASE, AND GLAZING COMPOUND REMOVAL.
Before drying these conditions may be easily removed by rubbing lightly with VM&P grade Naptha (or equivalent grade solvent). After removal, use general cleaning procedure ("A" above).
NOTE: Almost all organic solvents or alcohols are NOT compatible cleaning materials for signs or decals. Care must be taken to use these materials only on painted surfaces.

C. LABELS AND STICKER REMOVAL
The use of kerosene, VM&P grade Naptha, or petroleum spirits are generally effective against these conditions.
IMPORTANT: See note in Section "B" above.

In cases where the label material does not allow penetration of solvent (such as vinyl) the application of heat (example: hair dryer) will soften the adhesive and promote removal. **CAUTION:** Excessive heat can cause surface damage.

After label material is removed, use general cleaning procedure ("A" above).

D. SCRATCH REMOVAL
Hairline scratches and minor abrasions can be removed (or minimized) by using any good quality automobile polish. Prior to general use, it is suggested that a sample product be tested first, in an inconspicuous area.

E. DECALS

When cleaning the decal faces the following cleaning procedure is recommended:

1) Wash sign with a mild soap or detergent and lukewarm water.
2) Using soft cloth or sponge, gently wash the sign. DO NOT SCRUB!
3) Rinse well with clean lukewarm water.
4) Dry thoroughly with a chamois or cellulose sponge (to prevent water spotting). DO NOT USE SQUEEGEE OR ABRASIVES OR SOLVENT.

NOTE: Almost all organic solvents, petroleum, spirits, or alcohol are NOT compatible cleaning materials for decals. Usage of any of these materials on decals could permanently damage them.

F. REFRIGERATION AREA

The condenser and evaporator must be kept clean for efficient operation. You must be sure that all vanes and tubing are clean and clear of obstruction to allow free air passage. Clean with a brush, a vacuum cleaner or compressed air. Cabinet drain must be kept open, clean as necessary.

G. GENERAL CAUTIONS

1) Do not use abrasive cleaners, highly alkaline cleanser; benzene, leaded gasoline, acetone, or carbon tetrachloride.

2) Never scrape with razor blades or other sharp instruments.

3) DO NOT clean in hot sun or at elevated temperatures.

IV. TROUBLE SHOOTING GUIDE

This guide is only a general list of probable causes, and should be used with that in mind.

The trouble shooting guide is done in three columns, Column One (1) - Problem, Column two (2) Possible Cause, Column Three (3) Suggested Cure.

If this doesn't show a particular problem, contact the Field Service Department at Vendo, 7209 N. Ingram Ave., Fresno, CA 93650 or call 1-800-344-7216, or in California 1-800-742-1815. Be sure to have the serial number and model number of the vender when you call.

POSSIBLE PROBLEM	POSSIBLE CAUSE	SERVICE SUGGESTION
Returns all good coins	No power to vender	Check power supply at the wall
	No power to changer	Check coin mechanism plugs for faulty harness wiring (see wiring diagram for circuit)
	Acceptor is out of adjustment or coin gate is not closed	Check coin mechanism
	Blocking fingers remain in coin path due to: 1) defective coin return electro-magnetic (C.R.E.M) or 2) bent blocking fingers	1. Check C.R.E.M. replace 2. Reform blocking fingers
	Coin paths are dirty	Clean acceptor with approved cleaner. DRY VERY THOROUGHLY
	Contacts of credit relay open	Check continuity of relay. Clean contacts with approved electrical cleaner. If still open - replace relay.
	Open motor carrier circuit	Check to see that motor carrier switch has returned to standby

continuation...

Money accepted no product vended	Credit relay does not energize	Test with cheater cord. If relay does not work, check diode jumper assembly; replace if necessary. If diode functions, then check credit relay; replace if necessary.
	No selections work	Check #1 selection switch, replace if necessary
	#1 Selection works 2 thru last does not	Check #2 selection switch, replace if necessary. This pattern can continue thru last selection switch. A selection circuit goes from 1 to 2 to 3, etc., to last.
	Sold out switch inoperative	Check switch-replace
	Motor starts, does not run	Check motor carrier switch, replace switch and motor
Vend motor runs until 2 or 3 products are vended or vend motors run continuously	Sticky motor switch (syrup)	Remove motor and clean
Refrigeration unit will not run at all	No power to vender	Check power supply Also check service cord connections
	Thermostat open (temperature control)	Check thermostat (apply insulated jumper across terminals if compressor starts, replace thermostat)
	Temperature Control bulb out of position	Check that bulb is in air flow

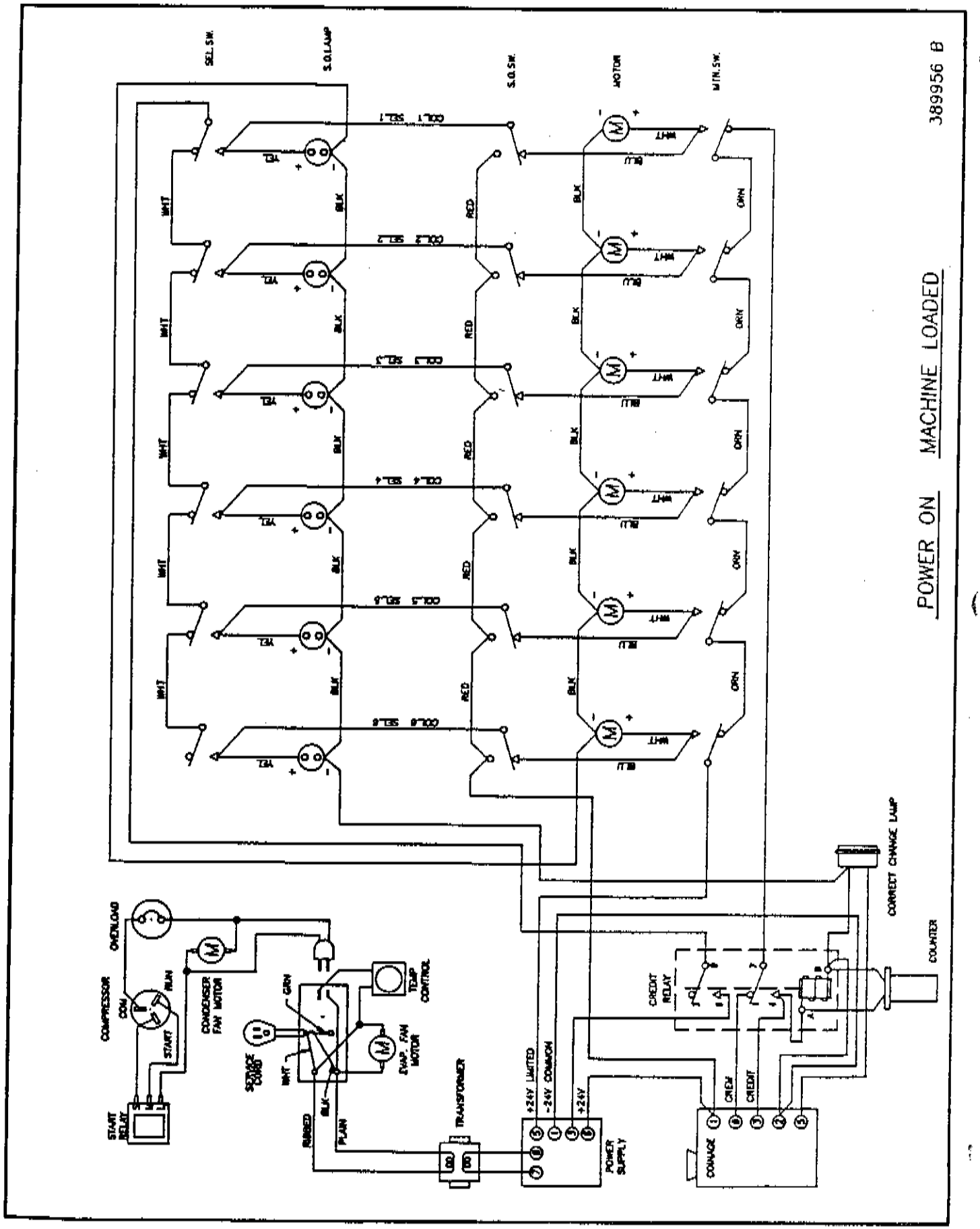
continuation...

Compressor will not start condenser fan motor running, unit cool (no power to compressor)	Overload protector inoperative	Check overload (apply insulated jumper across terminal, if compressor starts, replace overload)
Compressor runs but cabinet temperature warm	Condenser fan not working	Check circuit to run motor. Replace motor Check for obstruction of fan blade
	Blocked or dirty condenser	Check condenser vanes for obstruction, lint or dirt. Clean. Also check for proper air flow thru refrigeration area.
	Evaporator fan not working	Check circuit to fan motor. Replace motor also check for obstruction of fan blade.
	Bad inner door seal	Check for moisture on seal. Adjust inner door as necessary (see initial setup of service manual). Replace door seal.
	Thermostat set too high.	Adjust thermostat (see initial setup of service manual)
Compressor runs continuously	Thermostat inoperative	Check thermostat
Evaporator frosted over	Water at base of evaporator unit	Check for proper drainage (such as plugged drain, kink in drain tube, etc) Check door seal
	Thermostat inoperative (compressor runs continuously)	Check thermostat. replace if necessary
	Thermostat feeler bulb out of position	Adjust feeler bulb (see initial setup of service manual)

continuation...

Excessive noise	Fan motor noisy	Tighten bolts or replace
	Refrigeration base loose or bent	Tighten/straighten base
	Fan blades bent or hitting shroud	Straighten, relocate shroud position, or remove shroud.

NOTE: Any unauthorized break into a sealed system voids the warranty remaining on the sealed system. Any repairs that are authorized must be done after a thorough test has been made of the component parts, and all repairs must be made by a qualified refrigeration technician.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389956 B
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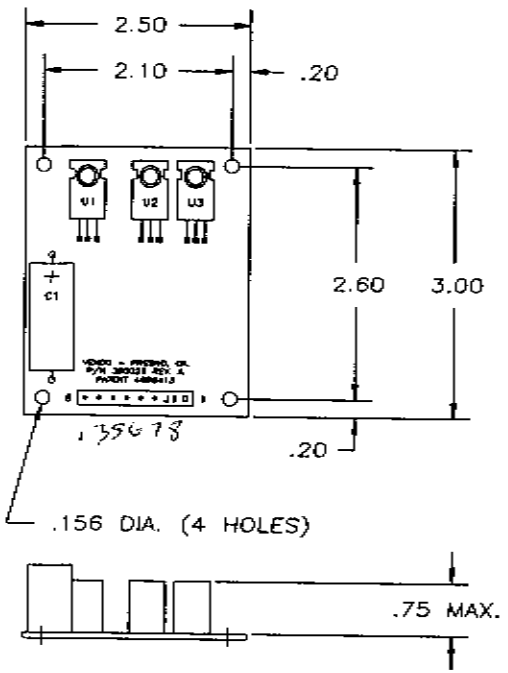
EVAP. FAN MOTOR
WHT
BLK
RUSSET
PLAIN
TRANSFORMER
+24V LIMITED
-24V COMMON
+24V
POWER SUPPLY
CREDIT RELAY
CORRECT CHANGE LAMP
COUNTER
COINAGE
CREW
CREDIT



1. 24 VOLT DC ELECTRONIC POWER SUPPLY, AS SUPPLIED BY VERSATILE CONROL SYSTEMS, 21 COMMERCIAL BLVD #14, NOVATO, CA., OR ENGINEERING APPROVED EQUIVALENT.
2. DIMENSIONS ARE FOR REFERENCE ONLY.
3. FOR COMPLETE POWER SUPPLY SPECIFICATIONS, REFER TO VENDO SPECIFICATION VS 2060.

STORED ON DISK: 64

B	23365	.	ORC
A	23306		ORC

CRC 1-22-90

CRC 1-22-90

ULTRAVENDER

B

POWER SUPPLY – 24 V. DC

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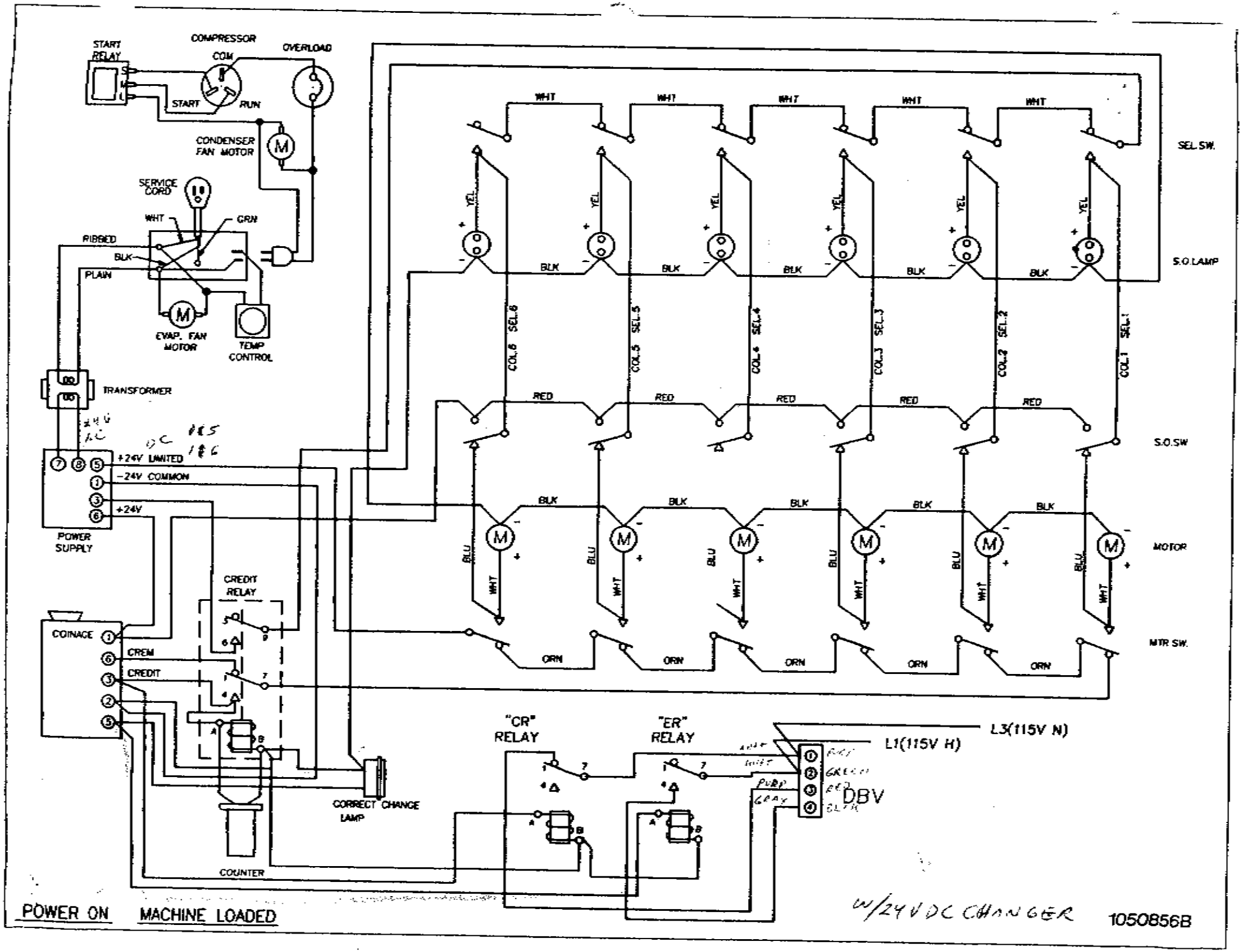
START RELAY
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COM
START
RUN
OVERLOAD
CONDENSER FAN MOTOR
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EVAP. FAN MOTOR
TEMP CONTROL
TRANSFORMER
+24V LIMITED
-24V COMMON
+24V
POWER SUPPLY
COINAGE
CREM
CREDIT
CREDIT RELAY
COUNTER
CORRECT CHANGE LAMP
"CR" RELAY
"ER" RELAY
DBV
L3(115V N)
L1(115V H)
SEL SW.
S.O. LAMP
S.O. SW
MOTOR
MTR SW.
WHT
YEL
BLK
RED
ORN
BLU
COL.6 SEL.6
COL.5 SEL.5
COL.4 SEL.4
COL.3 SEL.3
COL.2 SEL.2
COL.1 SEL.1
POWER ON MACHINE LOADED
W/24VDC CHANGER
1050856B

Vendo®

WORKPLACE VENDOR PARTS SECTION

LITERATURE NUMBER 390201A
MAY 1990

Vendo®

PARTS SECTION

PARTS SECTION A

PEPSI PARTS SECTION B

SERVICE SECTION S

continuation (Vendo Warranty)

IX. Title and risk of loss pass to the purchaser on delivery to the common carrier of the vending machine, replacement part and/or refrigeration system. All loss and damage claims are the responsibility of the purchaser and must be filed with the delivering carrier.

X. This Warranty DOES NOT include any service guarantee, either explicit or implied, nor will it extend to cover consequential damages or damages resulting from negligence, accident, vandalism or an act of God.

XI. The Vendo Company reserves the right to make design changes, additions to, and improvements upon any of our products without incurring any obligation to incorporate same on any products previously manufactured.

XII. This Warranty is in lieu of all other express warranties or other obligations or liabilities on our part, and we neither assume nor authorize any person to assume for us, any other obligation for liability in connection with the sale of said machines or parts thereof. All implied warranties beyond this limited Warranty are disclaimed by the Company.

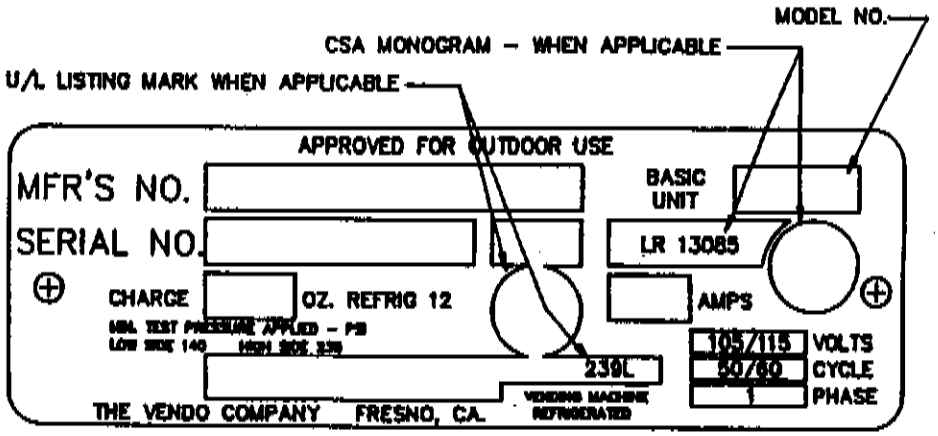
THE VENDO COMPANY
January 1, 1986

INTRODUCTION AND MODEL IDENTIFICATION:

The 1990 workplace vender has been specifically designed for use on those vending locations that require a lower cost vender for lower volume sales. This vender utilizes a serpentine vend mechanism that has proven to be highly reliable. It will vend only 12 oz. cans, and is not recommended for use in high volume, or quick product turn-over locations that are more suited for a Univendor vender.

The workplace vender features a 24-volt DC vending circuit designed for long life and reliability, powered by a step-down transformer and a rectifying power supply. The 1/5 HP refrigeration system, which was designed with economy in mind, utilizes standard 120 volts AC current to operate.

When requesting any parts or Technical Service help, make reference to the complete model and serial number. This information can be obtained from the serial plate that is attached to the left hand side of the outer door frame. (See Illustration).



MANUFACTURER'S MONTH CODE:

JANUARY----B	APRIL----H	JULY-------N	OCTOBER----R
FEBRUARY---D	MAY------K	AUGUST-----P	NOVEMBER---S
MARCH------F	JUNE-----M	SEPTEMBER--Q	DECEMBER---T

SPECIFICATIONS:

Sales Model	Height	Width	Depth	Shipping Weight	Refrig.
354	72"	39"	26"	385 approx.	1/5 HP

VENDING CAPACITY: 354 12-oz. cans

VENDO WARRANTY

NEW EQUIPMENT

I. This is a Limited Warranty.

II. The Vendo Company warrants, to the original purchaser, each part of each new vending machine for a period of fifteen (15) months from the date of shipment, to be free from defects in material and workmanship. This Warranty DOES NOT include light bulbs, fluorescent tubes, fuses, finish, or operating supplies.

III. In addition to the fifteen (15) month Warranty on each part of each new vending machine, the hermetically-sealed refrigeration system used in machines designed to vend bottles, cans, and aseptic cartons is warranted to be free from defects in materials and workmanship for an additional four (4) years, provided the hermetically-sealed portion of the system has not been opened.

IV. Hermetically-sealed refrigeration systems DO NOT include fan motors, temperature controls, capacitors, overload switches or starting relays which are covered by the fifteen (15) month Warranty.

V. To qualify for Warranty replacement, all returns must be completed within the Warranty period and accompanied by a record of the cabinet model and serial number. If return is found to be inoperative due to defects in material and/or workmanship, we will, at our option, repair or furnish a reconditioned or new replacement part or refrigeration system at no charge.

VI. The Vendo Company will pay normal transportation charges on parts and refrigeration systems replaced under this Warranty. If special handling or premium transportation is requested, these charges are assumed by the purchaser.

VII. This Warranty DOES NOT apply to machines located outside the United States, (with the exception of those units purchased and owned by the U.S. military and its instrumentalities), to reconditioned equipment, to equipment sold "as is, or to components designed to work on current other than 110/120 60 cycle or 208/220 50 cycle, as specified on the serial tag.

Vendo®

SERVICE SECTION

SERVICE SECTION INDEX

PARTS ORDERING PROCEDURES

WHEN ORDERING PARTS, INCLUDE THE FOLLOWING INFORMATION:

1. Shipping address.
2. Address where the invoice should be sent.
3. The part number or part identification.
   a. Always refer to the pertinent parts and service manual(s) for the correct part number and part description. If you do not have the right parts manual at the time of your order, contact THE VENDO COMPANY, 7209 NORTH INGRAM AVENUE, FRESNO, CALIFORNIA 93650 or call (800) 344-7216 (outside California) or (800) 742-1815 (within California) for our Parts Department.
   b. Do not hold the order pending receipt of the parts manual. Use as complete of a description as you can. Include the model and serial numbers of the machine, name of the assembly in which the part is used and, if practical, a sample part. Also, furnish any further information that will enable our parts department to pinpoint the exact part needed.
4. The quantity of parts required.
5. Always include on the order the **model number** and the **serial number** of the vendor for which the parts are needed.
6. List any special shipping instructions.
   a. Always note on the order if you require United Parcel Service (UPS), Air, Air Special, Truck or Parcel Post shipping. Normal mode of shipping from Vendo is UPS ground.
   b. If a specific carrier is desired, also note that on the order.
   c. Freight charges will be added to the parts invoice.
7. Sign and date the order. Keep a copy for your records.
8. When a purchase order is used, be sure that it is legible and visible.
9. Mail your order to THE VENDO COMPANY, 7209 NORTH INGRAM AVENUE, FRESNO, CALIFORNIA 93650.
10. All orders are carefully packed and inspected prior to shipment. Report any packing list discrepancies to Parts Department within five (5) days of receipt of order. Damage incurred during shipping should be reported at once and a claim filed with the terminating carrier.

NOTE: When "right" and "left" are used in connection with the name of a part, it is taken to mean that the person is facing the vendor with ALL doors closed.

MATERIAL RETURN PROCEDURE

All items returned must be accompanied by Material Return Tags (P/N L1496) clearly stating the reason for return. (Tags are available from our Parts Department upon request). To replace an inoperative part, please use the following instructions.

1. If a spare part was taken from your available parts stock and used to replace an operative part,

   a. Complete the return tag making sure to fill in ALL requested information.
   b. Keep top (white) copy for your records.
   c. Attach tag to inoperative part and send it by the cheapest method of transportation (usually UPS ground), to THE VENDO COMPANY, 4015 EAST RAINES ROAD, MEMPHIS, TENNESSEE 38118.
   d. A like part will be shipped:
      1) At no charge if our inspection shows that the inoperative part became defective in warranty.
      2) And invoiced if the inoperative part does not meet the terms of the warranty.

NOTE: The returned part will be scrapped to eliminate any further handling charges.

2. If spare part is not available.
   a. Order part using parts ordering procedure. The part will be shipped and invoiced to you.
   b. After the part is received, follow the procedure outlined above in Step 1.
      1) Be sure to check the box marked "credit" and to fill in the invoice number covering the part.
   c. If our inspection shows that the inoperative part was defective in warranty, a credit will be issued to cancel the invoice on which the replacement part was shipped. This credit will include any prepaid transportation charges.
      1) To receive credit, the inoperative part must be returned within 30 days from the date the replacement was shipped.
      2) Vendo does not issue cash credit for the return of any part or accessory.

REFRIGERATION RETURN PROCEDURE

Refrigeration units require a separate Refrigeration Return Tag (P/N L1322) for each unit returned. The procedure is the same as the material return, except the white (top) copy is attached to the unit, and you keep the copy for your records. All refrigeration units are to be returned to THE VENDO COMPANY, 4015 EAST RAINES ROAD, MEMPHIS, TENNESSEE 38118. The return tag must be filled out in its entirety. Refrigeration units should also be shipped via the cheapest method of transportation (usually UPS ground).

COINAGE WARRANTY & SERVICE PROCEDURE

SPECIAL NOTE:

Any service required on the MAKA Changers that are installed in the Workplace Vendor will be handled by a MAKA authorized sales and service distributor in your area. Listed below are a few of the authorized sales and service distributors. In addition, you may call toll free 1-800-792-0101 to get the name and number of the sales and service distributor nearest you.

Heathco International
Seattle, Washington
(206) 281-7750

Weymouth Distributing
Los Angeles, California
(213) 740-5181

American Vending
Elk Grove, Illinois
(312) 439-9400

Anchor Sales
Denver, Colorado
(303) 377-1001

Coin Device Service
Atlanta, Georgia
(404) 448-5218

Hart & Price
Dallas, Texas
(214) 350-4143

United Changers
Medford, New York
(516) 924-3312

Betson Enterprises
Moonachie, New Jersey
(201) 440-2200

READING A PARTS LIST

1. ITEM NUMBER is found in two locations: One, identifying the part on the drawing; Two, identifying line on the parts list. The item number is the identifying reference that ties together information on the parts list to pictorial representation of part on the drawing.

2. PART NUMBER is the Vendo part number for that specifically identified part.

3. NUMBER REQUIRED is the quantity of the part as it is used on this particular assembly page. An A/R means "as required" and is normally used when two different part number columns are used and the quantity of the indicated part is different for each column.

4. PART NAME AND DESCRIPTION is the Vendo verbal description of that particular part.

EXAMPLE:

WORKPLACE VENDER

ITEM	PART NAME AND DESCRIPTION	REQ.	PART NUMBER
1.	THERMOSTAT	1	368794-1
2.	SELECTION BUTTON	1	389922
3.	SELECTION BUTTON HOUSING	1	389923
4.	SOLD-OUT LAMP	1	388936
5.	RELAY (24 VOLT)	1	390028
6.	VEND MTR. W/SWITCH	1	389545

NOTE!!! A TRIANGLE FOLLOWED BY A NUMBER IN PARENTHESES REFERS TO A FASTENER LISTED IN THE HARDWARE SCHEDULE, AND THE NUMBER IN PARENTHESES REFERS TO THE QUANTITY OF THE FASTENER TO ATTACH THE PART IN QUESTION.

LABELS AND DECALS

PART NUMBER	DESCRIPTION
389984	OUTER DOOR SIGN DECAL
389611	SAFETY LABEL
385159	COIN INSERT LABEL
385171	PRICE LABELS
389956	SCHEMATIC LABEL
389132	VOLTAGE/SERVICE LABEL

SUGGESTED SPARE PARTS LIST — WORKPLACE VENDER

PART NO.	QTY.	DESCRIPTION
		OUTER DOOR PARTS
390020	1	CORRECT CHANGE LIGHT — 24 VDC
389922	1	SELECTION BUTTON
389923	1	HOUSING — SELECTION BUTTON
368299	1	SELECTION SWITCH
388858	1	SPRING — SELECTION BUTTON
389936	1	SOLD-OUT LIGHT — 24 VDC LED
390028	1	CREDIT RELAY — 24 VDC
390026	1	POWER SUPPLY
134886	1	DIODE JUMPER ASSEMBLY
		STACK PARTS
389545	1	VEND MOTOR — 24 VDC
390264	1	SOLD OUT SWITCH
389895	1	MOTOR MOUNT
389862	1	AUGER
389892	1	UPPER PARTITION
389925	1	MIDDLE PARTITION
389893	1	LOWER PARTITION
		REFRIGERATION PARTS
333894-21	1	START RELAY — 1/5 HP
45052-41	1	OVERLOAD PROTECTOR — 1/5 HP
368794-1	1	TEMPERATURE CONTROL
42321-44	1	EVAPORATOR FAN MOTOR
42321-35	1	CONDENSER FAN MOTOR
390005	1	TRANSFORMER

FLAVOR LABELS

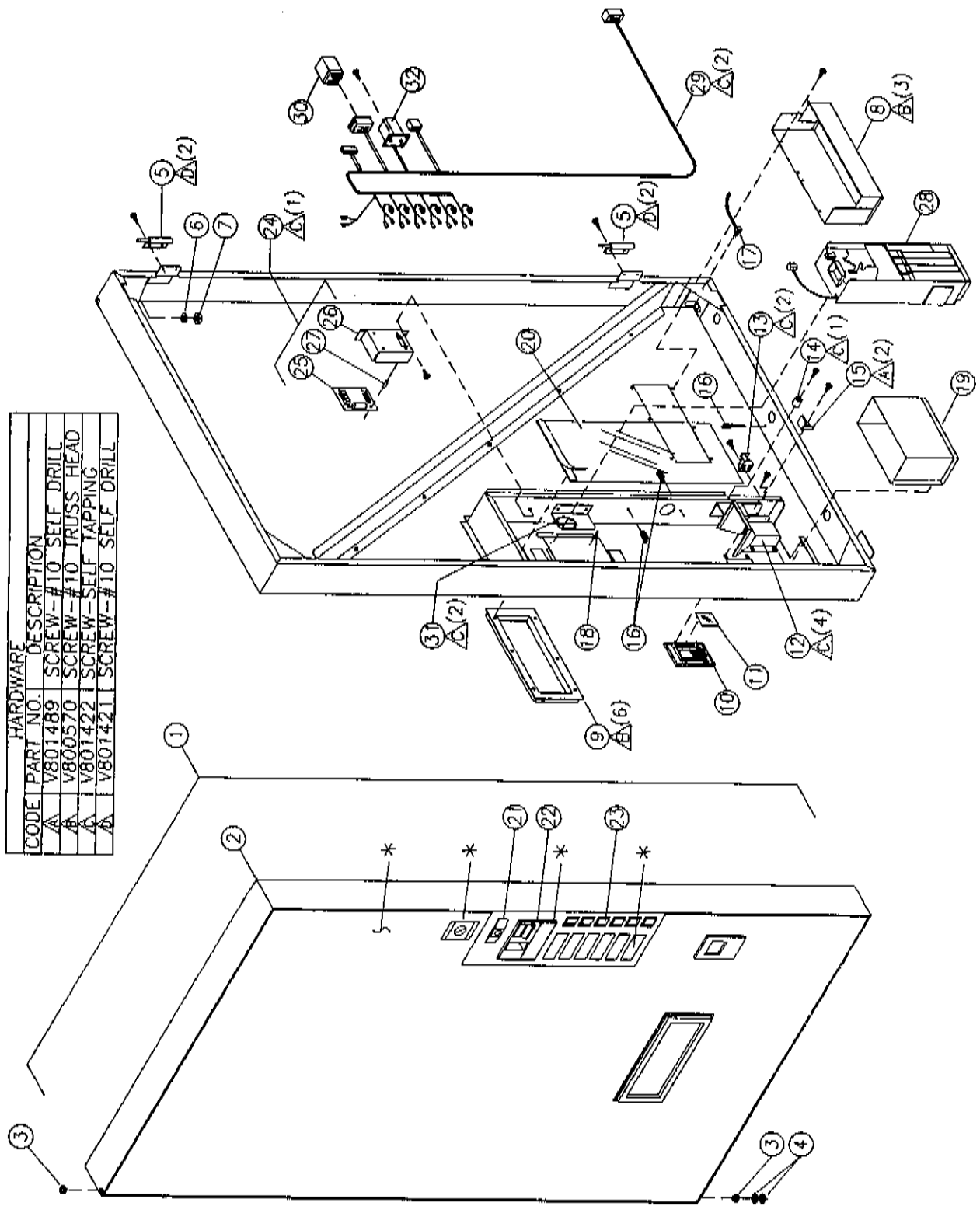
PART NO.	DESCRIPTION
389560	PEPSI
389560-1	DIET PEPSI
389560-2	PEPSI FREE
389560-3	MOUNTAIN DEW
389560-4	SLICE
389560-5	DIET SLICE
389560-6	SLICE MAND. ORANGE
389560-7	DIET PEPSI FREE
389560-8	DIET MOUNTAIN DEW
389560-9	CHERRY PEPSI
389560-10	APPLE SLICE
389560-11	DIET APPLE SLICE
389560-12	DIET MAND. ORANGE SLICE
389560-13	CHERRY COLA SLICE
389560-14	DIET CHERRY COLA SLICE
389560-15	DIET WILD CHERRY PEPSI
389560-16	SEVEN-UP
389560-17	DIET SEVEN-UP
389560-18	SEVEN-UP GOLD
389560-19	DIET SEVEN-UP GOLD
389560-20	CHERRY SEVEN-UP
389560-21	DIET CHERRY SEVEN-UP
389560-22	DR. PEPPER
389560-23	DIET DR. PEPPER
389560-24	PEPPER FREE
389560-25	SUGAR FREE PEPPER FREE
389560-26	ORANGE CRUSH
389560-27	STRAWBERRY CRUSH
389560-28	GRAPE CRUSH
389560-29	DIET ORANGE CRUSH
389560-30	DIET STRAWBERRY CRUSH
389560-31	DIET GRAPE CRUSH
389560-32	SUNKIST ORANGE
389560-33	DIET SUNKIST ORANGE
389560-34	A&W ROOT BEER
389560-35	DIET A&W ROOT BEER
389560-36	SQUIRT
389560-37	DIET SQUIRT
389560-38	WELCH'S GRAPE
389560-39	WELCH'S STRAWBERRY
389560-40	WELCH'S APPLE
389560-41	COUNTRY TIME LEMONADE
389560-42	HAWAIIAN PUNCH
389560-43	DAD'S ROOT BEER
389560-44	DIET DAD'S ROOT BEER
389560-45	BARQ'S ROOT BEER
389560-46	DIET BARQ'S ROOT BEER
389560-47	CANADA DRY GINGER ALE
389560-48	S. FREE C. DRY GINGER ALE
389560-49	SCHWEPPES SODA
389560-50	SCHWEPPES GINGER ALE
389560-51	SCHWEPPES TONIC
389560-52	CANADA DRY TAHITIAN TREAT
389560-53	DIET SCHWEPPES GINGER ALE
389560-54	BIG RED

Vendo®

WORKPLACE VENDOR PEPSI-COLA PARTS SECTION

AD Frills

LITERATURE NUMBER 390201B
MAY 1990



HARDWARE		
CODE	PART NO.	DESCRIPTION
A	V801489	SCREW-#10 SELF DRILL
B	V800570	SCREW-#10 TRUSS HEAD
C	V801422	SCREW-SELF TAPPING
D	V801421	SCREW-#10 SELF DRILL

OUTER DOOR ASSEMBLY — WORKPLACE VENDOR

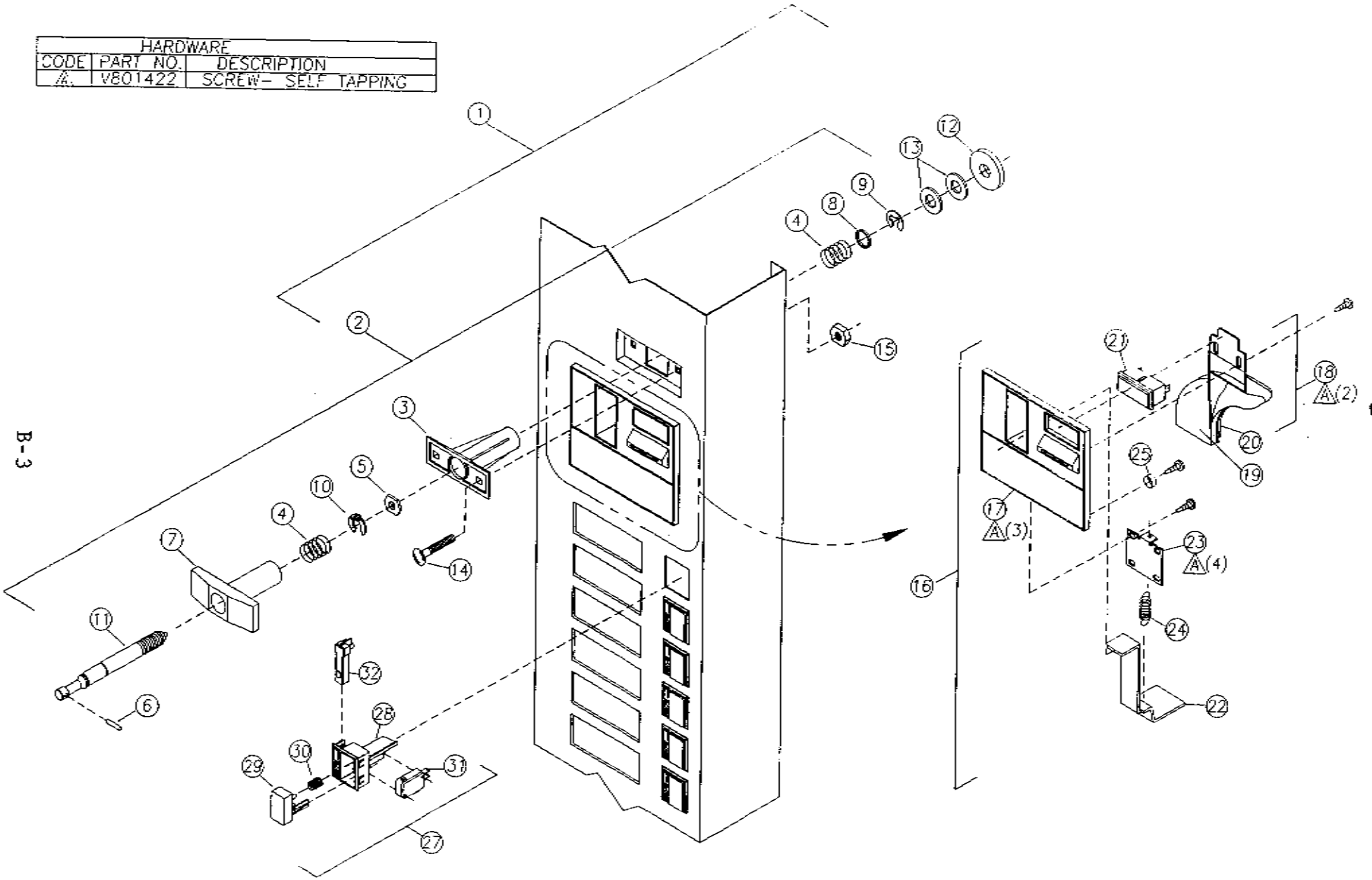
ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	133507-65	1	OUTER DOOR ASSEMBLY
2	133459-6	1	OUTER DOOR WELD ASSEMBLY
3	388094	2	BUSHING — HINGE
4	V801491	2	FLAT WASHER — HINGE
5	388149	2	HINGE LEAF — INNER DOOR
6	V801498	1	WASHER — TOP HINGE
7	V800885	1	LOCK NUT — TOP HINGE
8	389931	1	PRODUCT HOPPER
9	387125	1	EYELET TRIM
10	390017	1	COIN RETURN TRIM
11	389790	1	WINDOW — COIN RETURN
12	390016	1	CUP — COIN RETURN
13	388433	1	STRIKE — INNER DOOR LATCH
14	369466-2	1	BUMPER — INNER DOOR
15	388367	1	RAMP — INNER DOOR
16	384692-3	3	CLAMP — WIRE ROUTING
17	388359-1	1	TIE-DOWN — WIRING
18	V800762	3	SCREW — COINAGE MOUNT
19	134307-7	1	COIN BOX WELD ASSEMBLY
20	390024	1	RAIN CURTAIN/FOAM TAPE ASSEMBLY
21	134825	1	T-HANDLE ASS'Y (SEE PAGE B3)
22	134826	1	COIN INSERT ASS'Y (SEE PAGE B3)
23	134827	6	SELECTION BUTTON ASS'Y (SEE PAGE B3)
24	134828	1	POWER SUPPLY ASSEMBLY
25	390026	1	POWER SUPPLY
26	390027	1	COVER — POWER SUPPLY
27	390031	4	STAND-OFF — P.C. BOARD
28	389662-28	1	COINAGE — 24 V. DC
29	134570	1	DOOR HARNESS (W/ COUNTER)
30	390028	1	CREDIT RELAY — 24 V. DC
31	390202	1	BRACKET — RELAY/COUNTER
32	369016-3	1	COUNTER — 24 V. DC (REPLACEMENT)

* NOTE: FOR LABELS AND DECALS, SEE PAGE A5.

Black Relay 1009079

Kit 1015397

HARDWARE		
CODE	PART NO.	DESCRIPTION
A.	V801422	SCREW- SELF TAPPING

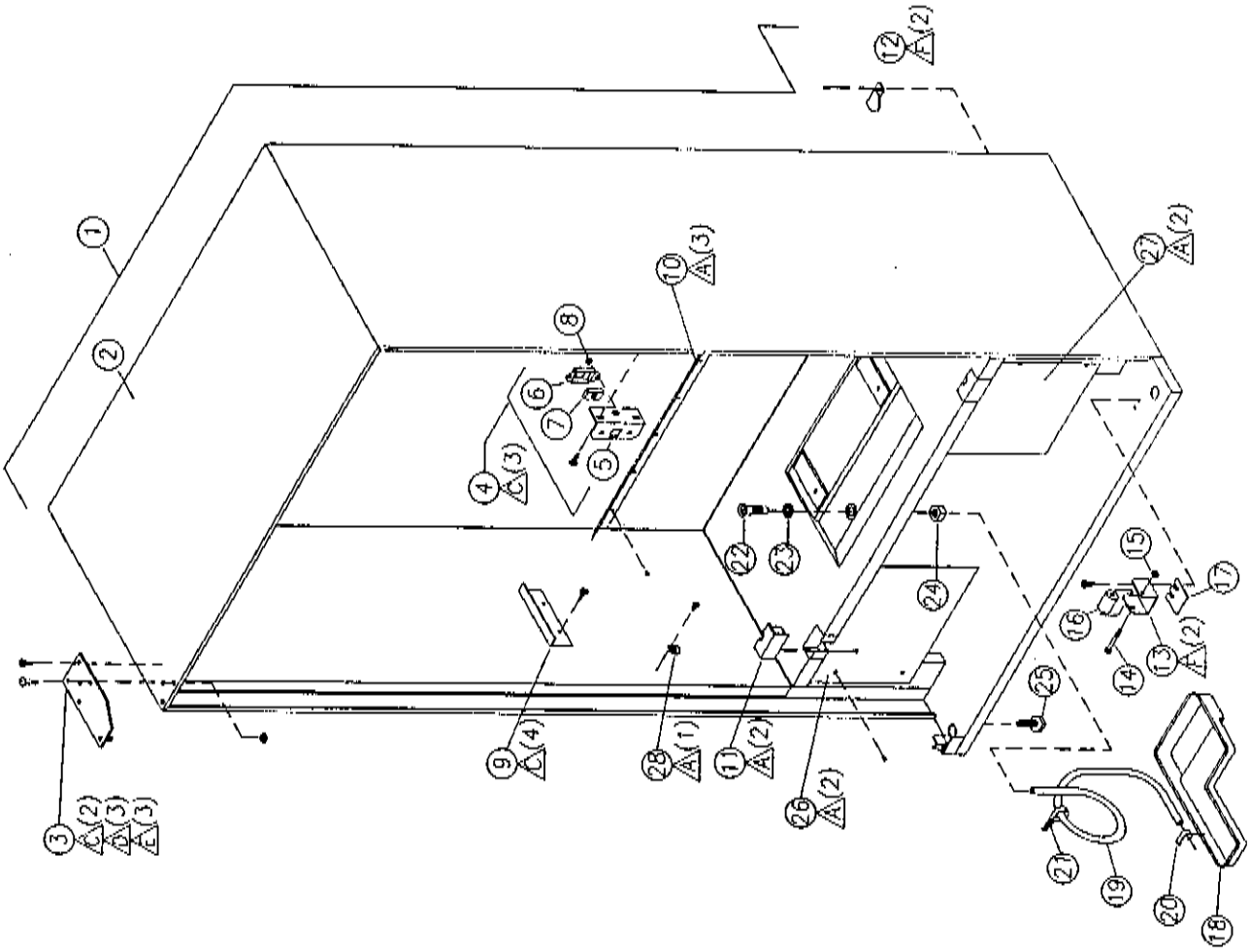


Vendo®

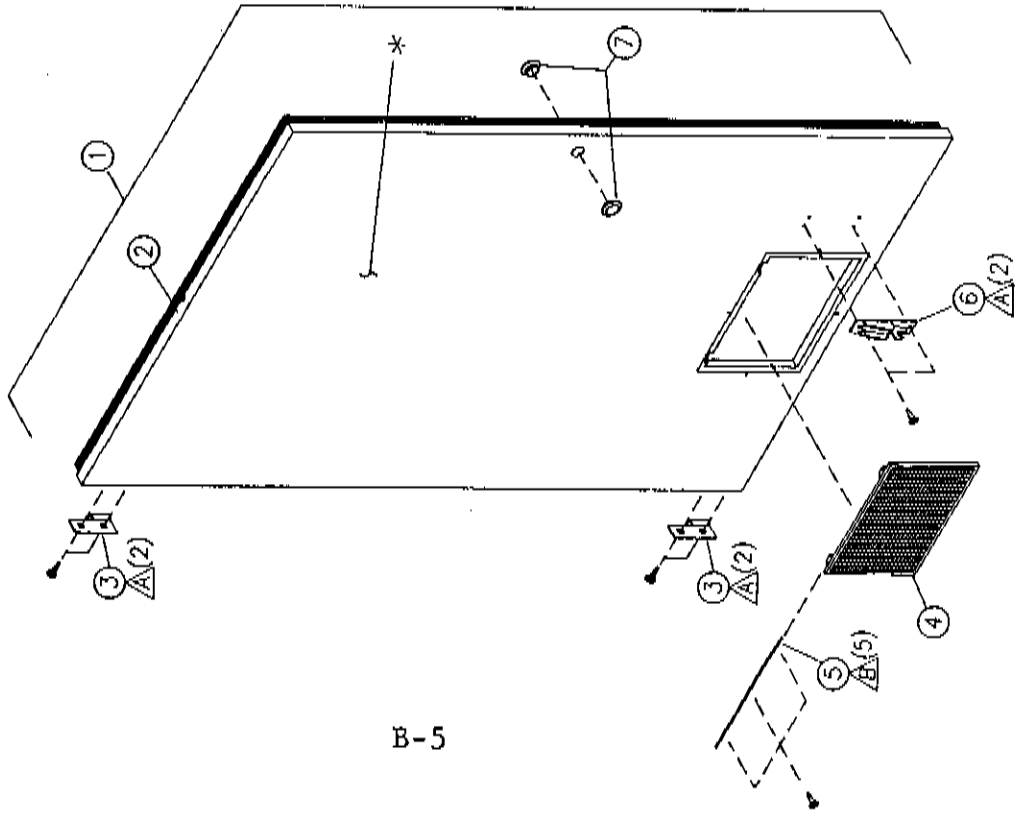
SELECTION PANEL — WORKPLACE VENDOR

ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	134825	1	T-HANDLE ASSEMBLY — COMPLETE
2	134746	1	T-HANDLE ASSEMBLY
3	387598	2	SPRING
4	387600	1	HEX WASHER
5	387601	1	PIN
6	387603	1	T-HANDLE
7	387718	1	WASHER
8	387719	1	RETAINER — E-RING
9	388589	1	RETAINER — E-RING
10	389949	1	STUD
11	387597	1	HOUSING — LATCH
12	388132	1	VAPOR SEAL
13	V801023	2	FLAT WASHER — 1/2" I.D.
14	V801434	2	CARRIAGE BOLT — 1/4"
15	V800959	2	HEX NUT — 1/4"
16	134826	1	COIN INSERT ASSEMBLY
17	~~389950~~	1	COIN INSERT PLATE 385047
18	134829	1	COIN INSERT CHUTE ASSEMBLY
19	389921	1	COIN ENTRANCE CHUTE
20	390004	1	COVER — COIN ENT. CHUTE
21	390020	1	CORRECT CHANGE LIGHT — 24 V. DC
22	390003	1	SCAVENGER LEVER
23	385265	1	RETAINER — SCAV. LEVER
24	385786	1	SPRING — SCAV. LEVER
25	337241-1	3	CUP WASHER
26	V801422	9	SCREW
27	134827	6	SELECTION BUTTON ASSEMBLY
28	389923	1	HOUSING — SELECTION BUTTON
29	389922	1	SELECTION BUTTON
30	388858	1	SPRING — SELECTION BUTTON
31	368299	1	SWITCH
32	389936	1	SOLD OUT LIGHT — 24 V. DC LED

* NOTE: FOR LABELS AND DECALS, SEE PAGE A5.



HARDWARE		
CODE	PART NO.	DESCRIPTION
A	V801489	SCREW-#10 SELF DRILL
A	V800570	SCREW-#10 TRUSS HEAD
A	V801490	SCREW-1/4 SELF DRILL
A	V801434	1/4-20 CARR. BOLT
A	V800959	1/4-20 HEX NUT
A	V801360	1/4-20 X 1/2 SEMS SCREW



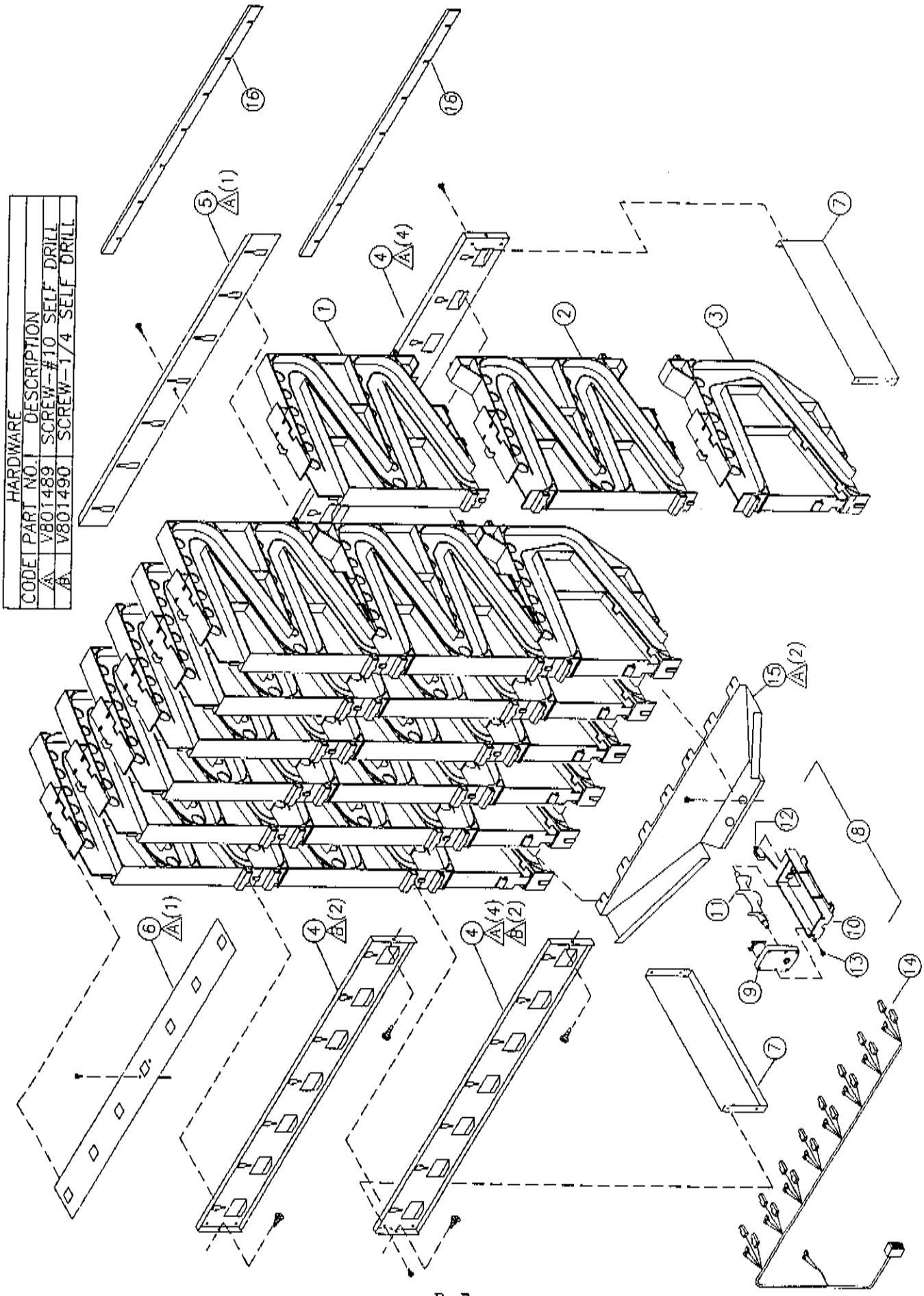
CABINET ASSEMBLY — WORKPLACE VENDOR

ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	134869	1	CABINET ASSEMBLY
2	134820	1	FOAMED CABINET/LINER ASSEMBLY
3	134821	1	TOP HINGE WELD ASSEMBLY
4	134822	1	LATCH NUT ASSEMBLY
5	134823	1	BRACKET/STUD ASSEMBLY
6	388770	1	CAGE — LATCH NUT
7	388771	1	LATCH NUT
8	V800959	2	NUT — 1/4"—20
9	389887	2	MOUNTING BRACKET — STACK
10	389942	1	AIR DEFLECTOR
11	388143	2	CLOSURE CAP
12	388387	2	BRACKET — REFRIGERATION
13	388096	1	BRACKET — DOOR ROLLER
14	V802053	1	BOLT — DOOR ROLLER
15	V802054	1	LOCK NUT
16	368656	1	DOOR ROLLER
17	388097	2	SHIM — DOOR ROLLER
18	339840	1	CONDENSATE PAN
19	340061	1	DRAIN TUBING
20	321304	1	CLAMP (TUBING TO PAN)
21	342621	1	STRAP — TUBING — ADJUSTABLE
22	388245	1	DRAIN — CABINET
23	387837	1	GASKET — DRAIN
24	387925	1	NUT — DRAIN
25	389788	4	LEVELING LEG
26	388403—1	1	AIR DAM — LEFT
27	388917	1	AIR DAM — RIGHT
28	324099—13	1	CLAMP — HARNESS

INNER DOOR ASSEMBLY — WORKPLACE VENDOR

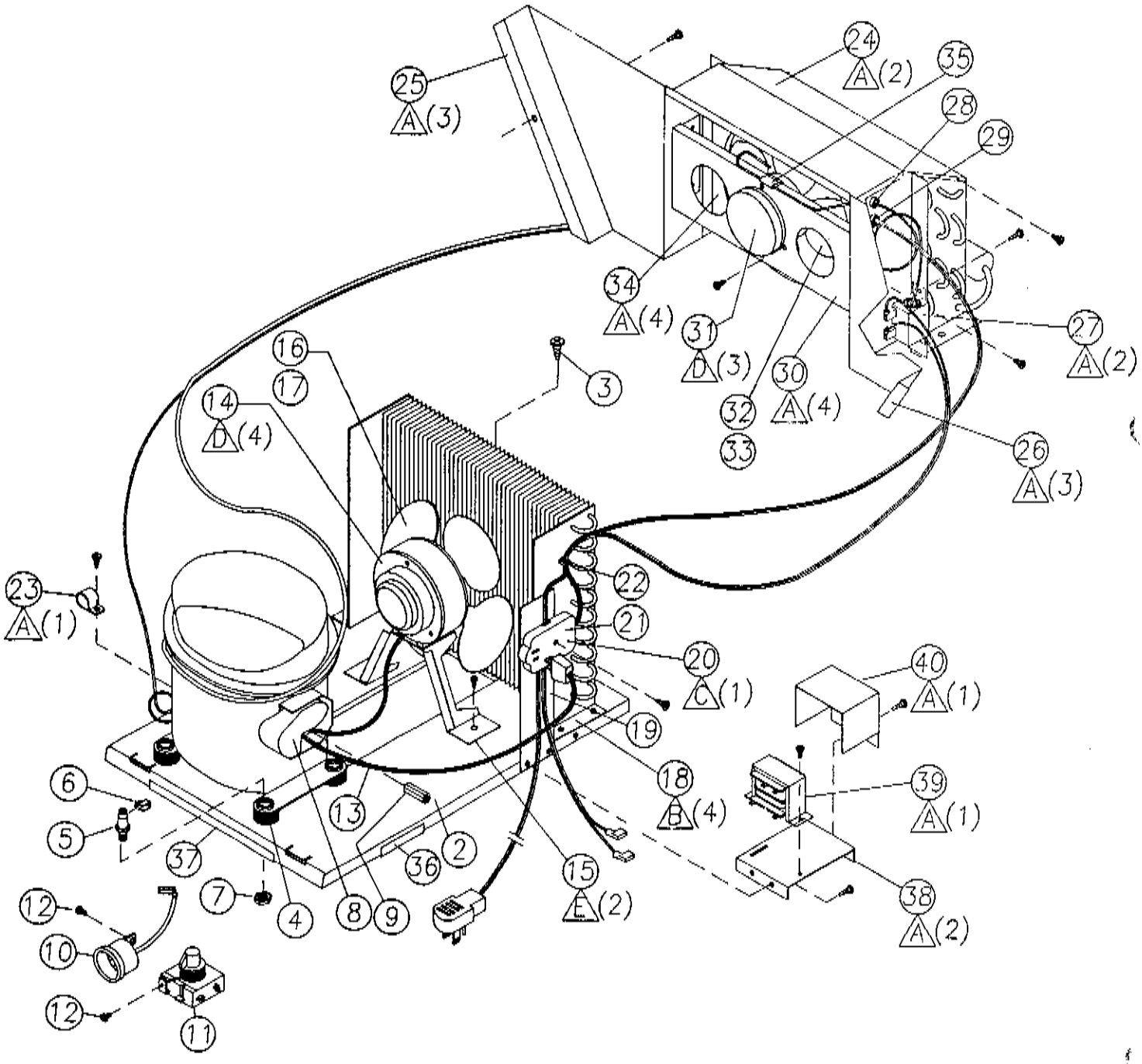
ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	134867	1	INNER DOOR PANEL ASSEMBLY
2	133438—1	1	FOAMED INNER DOOR PANEL
3	388148	2	HINGE LEAF — INNER DOOR
4	387270	1	EYELET DOOR
5	389985	1	HINGE ROD — EYELET DOOR
6	388435	1	LATCH — INNER DOOR
7	388090	2	GROMMET

* NOTE: FOR LABELS AND DECALS, SEE PAGE A5.


HARDWARE
CODE | PART NO. | DESCRIPTION
A | V801489 | SCREW-#10 SELF DRILL
B | V801490 | SCREW-1/4 SELF DRILL

STACK ASSEMBLY – WORKPLACE VENDOR			
ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	389892	7	PARTITION – UPPER
2	389925	7	PARTITION – MIDDLE
3	389893	7	PARTITION – LOWER
4	389927	3	FRONT STRAP
5	389928	1	REAR STRAP
6	389926	1	TOP SUPPORT
7	389929	2	BOTTOM SUPPORT
8	134819	6	AUGER/MOTOR ASSEMBLY
9	389545	1	VEND MOTOR – 24 V. DC
10	389895	1	MOTOR MOUNT
11	389862	1	AUGER
12	390264	1	SOLD-OUT SWITCH
13	V801475	2	SCREW
14	134569	1	VEND MECH HARNESS
15	389937	1	PRODUCT CHUTE
16	390256	2	REAR STRAP – TOP AND BOTTOM

HARDWARE		
CODE	PART NO.	DESCRIPTION
A	V801489	SCREW-#10 SELF DRILL
B	V800267	MACHINE SCREW
C	V800512	MACHINE SCREW
D	V800586	MACHINE SCREW
E	V801360	1/4-20 SEMS SCREW



REFRIGERATION ASSEMBLY – WORKPLACE VENDOR

ITEM NO.	PART NO.	QTY. REQ.	DESCRIPTION
1	134753	1	V89TA REPLACEMENT REFRIG. SYSTEM
2	388907	1	BASE – REFRIGERATION
3	V801343	1	SCREW – REFRIG. SYSTEM HOLD–DOWN
4	323090–1	4	GROMMET – COMPRESSOR MOUNT
5	343872	2	STUD – COMPRESSOR MOUNT
6	343874	2	CLIP – COMPRESSOR MOUNT
7	V800949	2	NUT – COMPRESSOR STUD
8	390032	1	COVER – TERMINAL
9	390033	1	FASTENER – COVER
10	45052–41	1	OVERLOAD PROTECTOR
11	333894–21	1	START RELAY
12	V802008	2	MACHINE SCREW – TERMINAL
13	344105	1	COMPRESSOR CORD
14	42321–35	1	FAN MOTOR – CONDENSER
15	389797	1	BRACKET – CONDENSER FAN
16	389602	1	FAN BLADE – CONDENSER FAN
17	V42323	1	RETAINER CLIP – FAN BLADE
18	916923	2	TINNERMAN – CONDENSER MOUNT
19	334052–1	1	BRACKET – SERVICE CORD
20	134754	1	SERVICE CORD
21	V800892	2	BRASS NUT – CORD EYELET
22	384692–3	1	CLAMP – WIRE ROUTING
23	324099–3	1	CLAMP – DRIER
24	388793	1	TOP COVER – EVAPORATOR
25	388795	1	LEFT EXTENSION – EVAPORATOR
26	388795–1	1	RIGHT EXTENSION – EVAPORATOR
27	368794–1	1	TEMPERATURE CONTROL
28	389747	1	BUSHING – TEMP. CONTROL PROBE
29	327699–2	1	BUSHING – EVAP. FAN WIRE
30	320266–1	1	BRACKET – EVAP. FAN MOTOR
31	42321–44	1	FAN MOTOR – EVAPORATOR
32	44190	1	FAN BLADE – EVAP. FAN
33	V42323	1	RETAINER CLIP – FAN BLADE
34	385434	1	ORIFICE PLATE – EVAP. FAN
35	914161	1	CLIP – TEMP. CONTROL PROBE
36	388304–1	2	EDGE TRIM – BASE (SHORT)
37	388304	1	EDGE TRIM – BASE (LONG)
38	390259	1	BRACKET – TRANSFORMER
39	390005	1	TRANSFORMER – 110V/20V STEPDOWN
40	390258	1	COVER – TRANSFORMER