

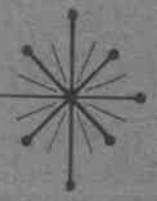
Bryan Staubs

# DIXIE-NARCO SERVICE MANUAL

**Bottle/Double Depth Can Venders**

**Single Port**

9-RELAY



MODELS —

THE "ADAPTABLES"

**DDDB-300-6**

**DDDB-348-6**

**DDDB-420-6**



— WARRANTY —

Dixie-Narco Warrants to the original purchaser of a Dixie-Narco unit all parts thereof (except light bulbs, fuses, or finish) to be free from defects in material and workmanship, under normal use and service for a period of 15 months from the date of shipment of the unit from either our plant or warehouse.

The term "original purchaser" as used in this warranty shall be deemed to mean that person, firm, association, or corporation to which the machine was sold originally.

Dixie-Narco's obligation under this warranty is limited to repairing or replacing without charge any part which upon our examination and to our satisfaction was defective in material or in workmanship and which failed under normal operating conditions and service.

The hermetically sealed refrigeration system, consisting of the motor compressor, condenser, evaporator and the refrigerant tubing is warranted for a total period of five (5) years and three (3) months from date of shipment.

The vend motor is warranted for a total period of five (5) years and three (3) months from date of shipment.

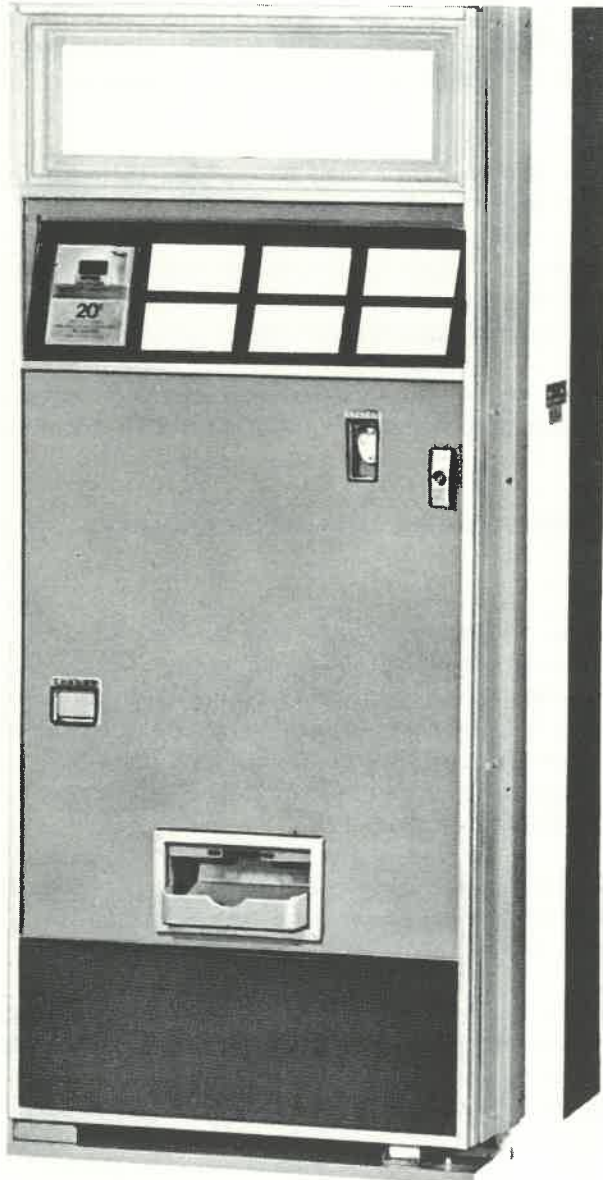
The five year warranty does not apply to any electrical controls, fan motors, overload switches, starting relays, temperature controls, wiring harnesses, cabinet or finish. Dixie-Narco's obligation under this warranty on the sealed refrigeration system referred to above is limited to repairing and returning or replacing at Dixie-Narco's option any unit with a similar unit when upon examination and to our satisfaction it was determined to have been defective. If our examination reveals that the unit is inoperative because of a defective accessory, both cost of repairs and freight charges will be paid by the customer.

Dixie-Narco will pay transportation charges under this warranty on all parts replaced or repaired when transportation has been made in the most economical way. If special handling or special transportation is used or requested, the charges will be paid by the customer.

This warranty only applies to units located within the United States and when operated in normal conditions and with electrical power supplies of 110/120 volts, 60 cycle. Further, the warranty is voided when a unit or any part has been subject to misuse, neglect, alteration without proper authorization, accident, or damage caused by transportation, flood, civil disorder, fire or the Acts of God.

"Return Material Tags" indicating model number of unit, serial number, and explanation of defect, must accompany all returned parts or units. "Return Material Tags" will be furnished upon request.

TITLE PAGE



**DDDB-300-6**

Height: 66 1/2  
Width: 37 1/8  
Depth: 26  
Shipping Weight: 640 lbs.  
Capacity:  
    Bottle—Regular 168  
    Can—12 oz. 300

**DDDB-348-6**

Height: 72  
Width: 37 1/8  
Depth: 26  
Shipping Weight: 660 lbs.  
Capacity:  
    Bottle—Regular 204  
    Can—12 oz. 348

**DDDB-420-6**

Height: 79 1/2  
Width: 37 1/8  
Depth: 26  
Shipping Weight: 715 lbs.  
Capacity:  
    Bottle—Regular 240  
    Can—12 oz. 420

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**WHAT TO DO WHEN YOU GET A NEW VENDOR  
— SET IT UP —**

**KEYS**

Keys are tied inside the can/bottle delivery port.

**SERIAL NUMBER PLATE**

The serial number plate is attached to the right side of the cabinet.

**COIN MECHANISM**

The coin mechanism is shipped in a separate package.

To install, do this:

1. Open the inner door.
2. Remove the slug rejector.
3. Line the three holes in the coin mechanism with the three screws and push the coin mechanism over the three screws. Let the coin mechanism drop down onto the screws, tighten the screws.
4. Reinstall the slug rejector.
5. Connect the changer plug to the socket.

**APPLICATION OF CUSTOMER INSTRUCTION PLATE**

1. Clean and dry the surface of the inset in the selector panel.
2. Remove the "backing" from the plate (pressure sensitive).
3. Apply to the surface of the inset and press or roll firmly in place.

**— LOAD THE VENDER —**

**ADJUSTMENTS**

1. The DDDDB-300-6, DDDDB-348-6 and DDDDB-420-6 are shipped set to dispense cans.
2. For adjustments, look under "Things To Adjust".

**LOAD THE VENDER**

1. Read thoroughly, "Things To Adjust".
2. Adjust for dispensing cans or bottles.
3. Load the vender with eight (8) cans or bottles.
4. Install coin changer.
5. Plug vender "In"—Dispense cans or bottles to check vending operation.

**WHAT TO DO WHEN YOU GET A NEW VENDER (Cont.)**

**– LOAD THE VENDER – (Cont.)**

**OPERATIONAL CHECKS**

1. Plug service cord into outlet with correct voltage. (See serial number plate.) Do Not use extension cords with less than 16 gauge wire.
2. The vender must be grounded. If 3 prong outlet is available, plug vender directly into outlet. If 3 prong outlet is not available, plug the vender into 2 prong outlet, using 2 prong adapter. Be sure to ground "pigtail" on adapter.
3. Make sure that nothing obstructs air intake at bottom of door. Check rear of cabinet occasionally to be sure that exhaust is not blocked by waste paper, etc.

**CARE AND MAINTENANCE**

1. **Exterior cleaning.** Wash cabinet periodically with soap and water. Wax often, using a good automotive wax.
2. If corrosion occurs on cabinet interior, rub it off with fine steel wool and paint over spot with aluminum paint, or zinc rich.
3. Keep condenser clean. Use brush or vacuum cleaner to remove dust accumulation from condenser.

**PRODUCT SELECTION**

The six (6) vend stacks are numbered 1 thru 6 from right to left. The corresponding selections on the front door selector panel are as in sketch below:



WHAT TO DO WHEN YOU GET A NEW VENDER (Cont.)

— CHECK IT OUT —

What To Do	What Should Happen	What Shoudn't Happen
Plug the supply cord in, close the vender door.	The compressor runs. The condenser fan runs. The evaporator fan runs.	The refrigerant lines rattle.
Put in correct change.	"Correct change only" window lights.	Some cans or bottles are frozen or the next to be vended cans or bottles are above the temperature of 38° F.
Load the money tubes and put a quarter into the vender.	Push the select button to dispense a can or bottle.	
Fully load the vender with warm cans or bottles and let it run over night, then vend a can or bottle from each vend stack.	A can or bottle may be dispensed from the vend stack and correct change is returned.	
	The first can or bottle vended has a temperature of 32° to 34° F.	

— PUT IT TO WORK —

SPACE NEEDED

Size of the working space needed around the vender is shown on the title page of this manual. DO NOT block the rear of the vender. Keep the vender 4 inches from the wall to provide adequate ventilation for the condenser. Make sure that nothing obstructs air intake at the bottom of the door.



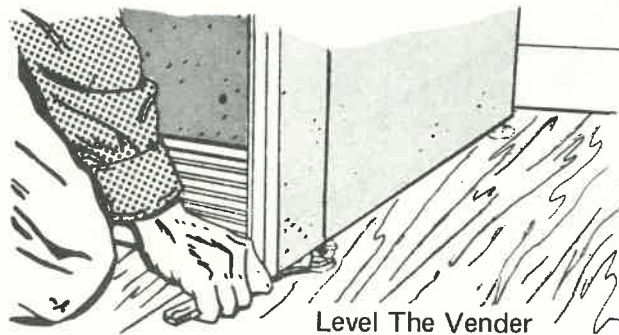
## WHAT TO DO WHEN YOU GET A NEW VENDER (Cont.)

### — PUT IT TO WORK — (Cont.)

#### LEVEL THE VENDER

Level the vender. When the vender is level then the door can be opened to any position and it will not move by itself. Try it half closed, straight open and wide open before you decide that the vender is level.

Make sure that all of the leveling screws are touching the floor.



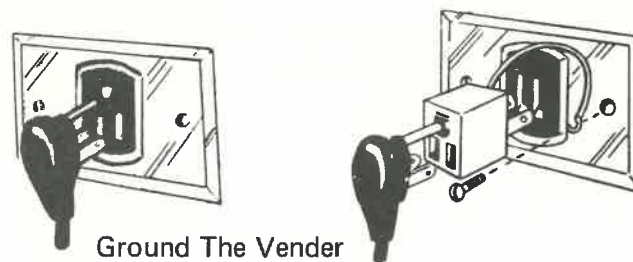
#### ELECTRIC POWER NEEDED

Look at the serial number plate on the right side to find out what the vender's power needs are. Be sure that the vender gets the right power.

The vender uses 115 volts single phase, either 50 or 60 cycle, alternating current. The voltage must never be lower than 90 or above 125.

#### GROUND THE VENDER

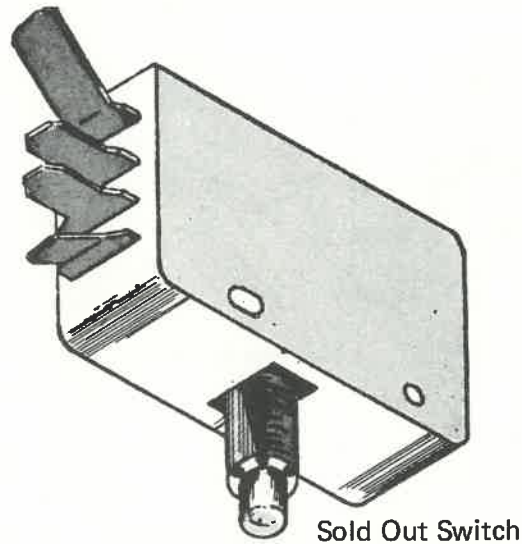
This vender is made with a three prong plug on the supply cord. It grounds when the plug is put into a three prong outlet. If there is no three prong outlet near the vender, use a two prong adapter. If a two prong adapter is used, make sure the adapter's ground wire is connected to a good ground.



HOW THE VENDING MECHANISM WORKS

— ELECTRICAL PARTS —

LAMP SOLD OUT SWITCH 1, 2, 3, 4, 5 & 6



The lamp sold out switch (one for each vending circuit) is located near the bottom of the column at the front and is fastened with screws.

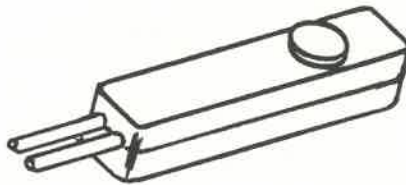
The N.O. contact of the (lamp) sold out switch is in the Vend Relay Coil Circuit and the Coin Changer Magnet Circuit. This N.O. contact (kept closed by can or bottle) is in parallel with all of the other N.O. contacts of the Lamp Sold Out Switches and when all are open, the coin changer magnets are turned off and the changer will not accept coins.

The N.C. contact of the (lamp) sold out switch is in the sold out lamp circuit (kept open by can or bottle). When not kept open by can or bottle, this N.C. contact closes and completes the sold out lamp circuit.

## HOW THE VENDING MECHANISM WORKS (Cont.)

### – ELECTRICAL PARTS – (Cont.)

#### SOLD OUT LAMPS

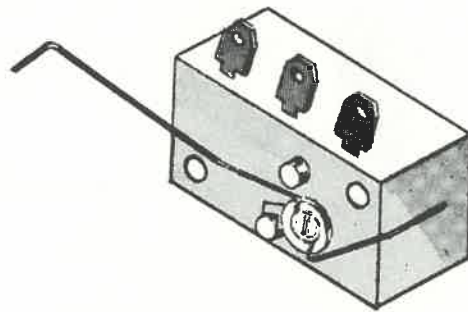


Sold Out Lamp

The sold out lamp (one for each vending circuit) snaps into and is secured by plastic clips (part of the select button) to the back of the select button in the Selector Panel.

The sold out lamp is turned on by the closing of the N.C. contacts of the lamp sold out switch.

#### COIN VEND SWITCH (Coin Changer)



Coin Vend Switch

The coin vend switch is located below the slug rejector and is fastened to the coin changer housing with two (2) screws and nuts.

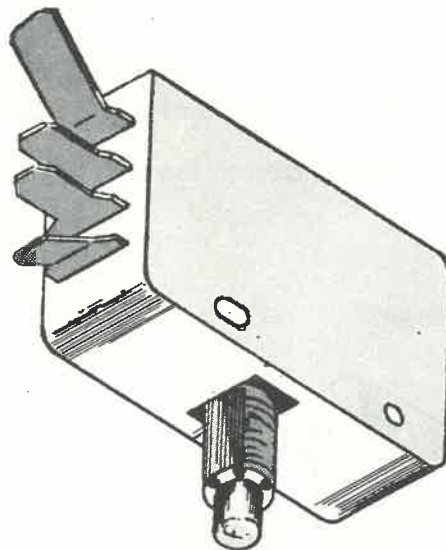
The N.O. contact of the coin vend switch is in the vend relay coil and the coin changer magnet circuits. This N.O. contact closes and completes the vend relay coil circuits.

The N.C. contact of the coin vend switch is in the select relay coil circuits. This N.C. contact closes in the select relay coil circuits to set up these circuits so that a selection can be made.

HOW THE VENDING MECHANISM WORKS (Cont.)

— ELECTRICAL PARTS — (Cont.)

VEND SOLD OUT SWITCH N.O. 1, 2, 3, 4, 5 & 6



Sold Out Switch

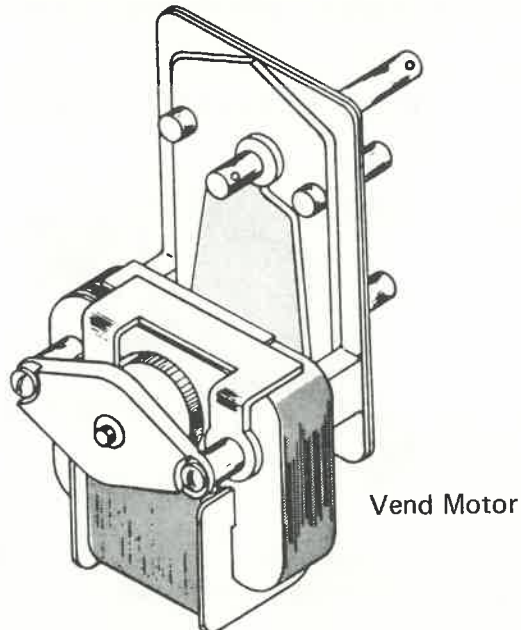
The vend sold out switch (one for each vending circuit) is located on a bracket at the base of each vend stack.

The N.O. contact of the vend sold out switch is in the Vend Relay Coil Circuit. This N.O. contact (held closed by can or bottle) stays closed in vend relay coil circuit so the Vend Relay Coil Circuit can be completed.

## HOW THE VENDING MECHANISM WORKS (Cont.)

## - ELECTRICAL PARTS - (Cont.)

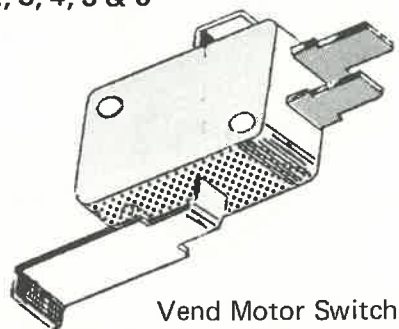
## VEND MOTOR



The vend motor (one for each vending stack) is mounted on a bracket at the front of the vender.

The vend motor is in the vend motor coil circuit. The vend motor runs when N.O. select relay switch No. 2 closes and completes the vend motor circuit. The vend motor continues to run through the N.O. contact, (worked by the vend motor cam) of the vend motor switch. The vend motor stops when the vend motor switch arm drops off of the high side of the vend motor cam.

## VEND MOTOR SWITCH 1, 2, 3, 4, 5 &amp; 6

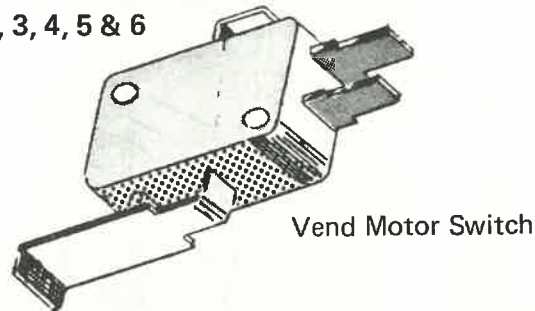


The Vend Motor Switch is located on a bracket adjacent to the Vend Motor and is secured with two (2) screws. The arm of the switch is worked by the Vend Motor Cam.

HOW THE VENDING MECHANISM WORKS (Cont.)

— ELECTRICAL PARTS — (Cont.)

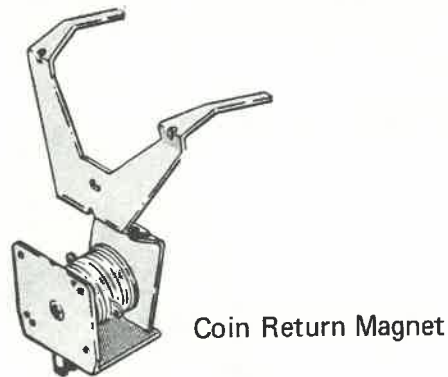
VEND MOTOR SWITCH 1, 2, 3, 4, 5 & 6



The N.C. contact of the Vend Motor Switch is in the Select Relay Coil Circuit. This N.C. contact opens and breaks the Select Relay Coil Circuit.

The N.O. contact of the Vend Motor Switch is in the Vend Motor Coil Circuit. This N.O. contact closes in the Vend Motor Coil Circuit to keep the Vend Motor running until the arm of the Vend Motor Switch drops into the cam notch and the Vend Motor stops.

MAGNETS (Coin Changer)



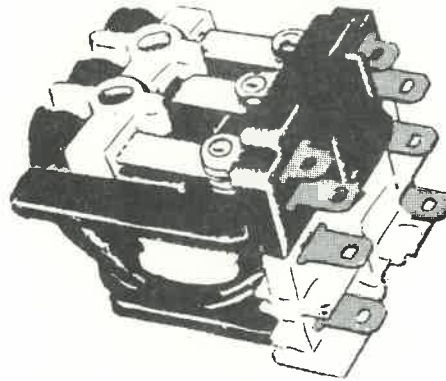
The magnets are in the coin changer behind the coin rejector.

The magnets N.O. and N.C. are in the Vend Relay Coil Circuit. The coin changer magnets are turned off when the N.C. Vend Relay Switch No. 1 opens and breaks the coin changer magnet circuit.

HOW THE VENDING MECHANISM WORKS (Cont.)

– ELECTRICAL PARTS – (Cont.)

**RESET RELAY**



**RESET RELAY**

The reset relay is located in the Relay Junction Box and is secured by the terminals in the socket.

The reset relay is in the reset coil circuit and is "ON" except during the vending cycle.

The reset relay is turned "OFF" when the N.C. Select Relay Switch No. 1 opens and breaks the Reset Relay Coil Circuit.

**RESET RELAY SWITCH No. 1 N.C. (There is no N.O.)**

The N.C. contact of Reset Relay Switch No. 1 is in the Delay Relay Coil Circuit. This N.C. contact closes and completes the Delay Relay Coil Circuit.

**DIXIE-NARCO**

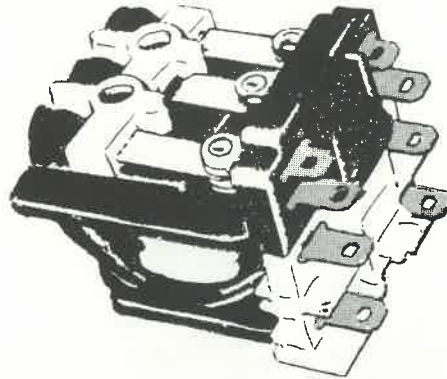
**HOW THE VENDING MECHANISM WORKS (Cont.)**



## HOW THE VENDING MECHANISM WORKS (Cont.)

### – ELECTRICAL PARTS – (Cont.)

#### DELAY RELAY



The delay relay is located in the Relay Junction Box and is secured by screws.

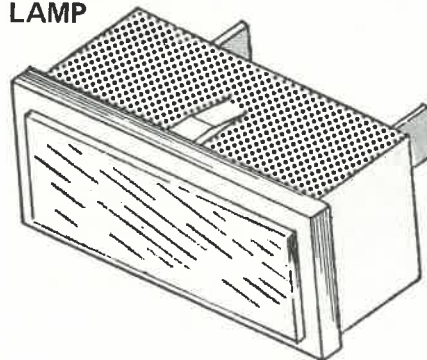
The delay relay is in the delay relay coil circuit and is "ON" only during the vending cycle.

The delay relay is turned "ON" when the N.C. reset relay switch No. 1 closes and completes the delay relay coil circuit.

Delay Relay Switch No. 1 N.C. (There is no N.O.)

The N.C. contact of Delay Relay Switch No. 1 is in the Vend Relay Coil circuit and the Coin Changer Magnet Circuit. This N.C. contact opens and breaks the Vend Relay Coil Circuit.

#### CORRECT CHANGE LAMP



Correct Change Lamp

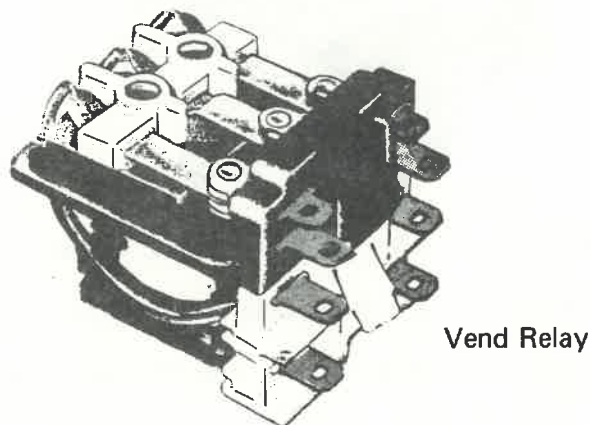
The correct change lamp is mounted in the coin insert casting and is retained by projections top and bottom.

The correct change lamp is in the coin tube switch circuit and is "ON" when coins are in the tube.

HOW THE VENDING MECHANISM WORKS (Cont.)

– ELECTRICAL PARTS – (Cont.)

VEND RELAY



The Vend Relay is located in the Relay Junction Box and is secured by screws.

The Vend Relay is in the Vend Relay Coil Circuit. The Vend Relay is turned "ON" when the N.O. contact of the Coin Vend Switch closes and completes the Vend Relay Coil Circuit. The Vend Relay is turned "OFF" when the N.O. contact of the Reset Relay Switch No. 1 opens and breaks the Vend Relay Coil Circuit.

**VEND RELAY SWITCH No. 1**

The N.O. contact of Vend Relay Switch No. 1 is in the Vend Relay Coil Circuit. This N.O. contact closes in and keeps the Vend Relay Coil Circuit completed.

The N.C. contact of Vend Relay Switch No. 1 is in the Vend Relay Coil Circuit. This N.C. contact opens and breaks the Coin Changer Magnet Circuit.

**VEND RELAY SWITCH NO. 2 N.O. (There is no N.C.)**

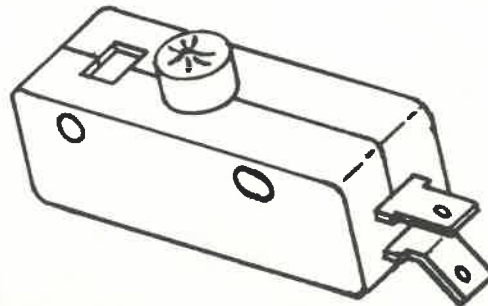
The N.O. contact of Vend Relay Switch No. 2 is in each of the Select Relay Coil Circuits. This N.O. contact closes in the Select Relay Coil Circuits to set up these circuits so that a selection can be made.

HOW THE VENDING MECHANISM WORKS (Cont.)

– ELECTRICAL PARTS – (Cont.)

**SELECT SWITCH No. 1, 2, 3, 4, 5 & 6**

Select Switch

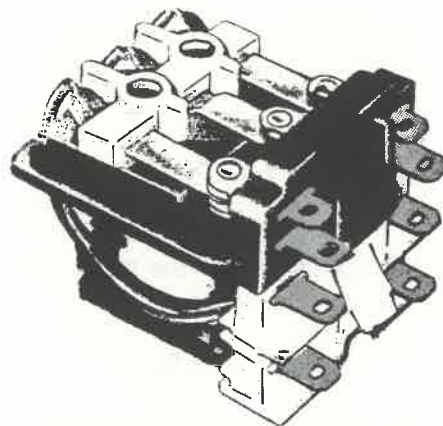


The Select Switch is located in the selector panel behind the push button and is secured with two (2) screws.

The N.O. contact of the Select Switch is in the Select Relay Coil Circuit. This N.O. contact closes and completes the Select Relay Coil Circuit.

The N.C. contact of the Select Switch is in the Select Relay Coil Circuits. This N.C. contact opens and breaks all other Select Relay Coil Circuits so that only one (1) selection can be made.

**SELECT RELAY**



Select Relay

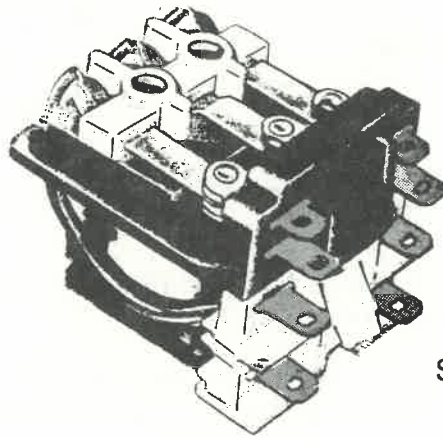
The Select Relay is located in the Relay Junction Box and is secured by screws.

The Select Relay Coil Circuit is closed and completed by the closing of the N.O. contact of the Select Switch.

HOW THE VENDING MECHANISM WORKS (Cont.)

– ELECTRICAL PARTS – (Cont.)

SELECT RELAY (Cont.)



Select Relay

SELECT RELAY SWITCH No. 1

The N.O. contact of Select Relay Switch No. 1 is in the Select Relay Coil Circuit. This N.O. contact closes in and keeps the Select Relay Coil Circuit completed.

The N.C. contact of Select Relay Switch No. 1 is in the Reset Relay Coil Circuit. This N.C. contact opens and breaks the Reset Relay Coil Circuit.

SELECT RELAY SWITCH No. 2 N.O. (There is no N.C.)

The N.O. contact of Select Relay Switch No. 2 is in the Vend Motor Coil Circuit. This N.O. contact closes and completes the Vend Motor Coil Circuit.

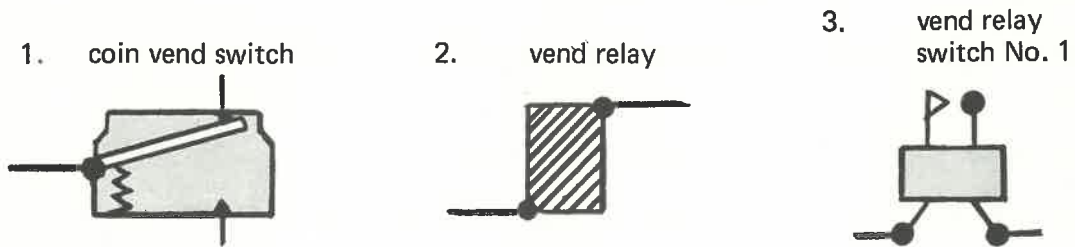
HOW THE VENDING MECHANISM WORKS (Cont.)

VENDING CYCLE AND  
STUDY—  
ACROSS THE LINE WIRING DIAGRAM

Study the written vending cycle beginning on Page 18 in connection with the across the line wiring diagram. The Across The Line Wiring Diagram can serve as an excellent "trouble shooting chart".

Example: Vender accepts coin.  
Vend relay is energized but immediately "pops" out.

Do This: Look at Across The Line Wiring Diagram and locate:



- Observations:
1. Vend relay coil is the affected circuit.
  2. N.O. coin vend switch is in the vend relay coil circuit.
  3. N.O. Vend Relay Switch No. 1 is also in the vend relay coil circuit.
  4. N.O. Vend Relay Switch No. 1 is the "holding switch" for this circuit.

Conclusions: 1. N.O. Vend Relay Switch No. 1 did not "hold" or keep the circuit closed.

Why?

- Check:
1. Gap between contacts (too far apart).
  2. Dirt between contact.
  3. Weak coil on Vend Relay.

HOW THE VENDING MECHANISM WORKS (Cont.)

— VEND CYCLE —

What Does It	What Happens	
A coin	Pushes the coin vend switch arm down and;	
The N.O. contact of the coin vend switch	Closes and completes the vend relay coil circuit.	
The Vend Relay Coil	Closes the N.O. contact of Vend Relay Switch No. 1 in the Vend Relay Coil Circuit and at the same time,	Opens the N.C. contact of Vend Relay Switch No. 1 in the Coin Changer Magnet Circuit and at the same time,
	Closes the N.O. contact of vend relay switch No. 2 in the select relay coil circuit.	
A spring (in the coin vend switch)	Pulls the vend switch arm back up and,	
The N.C. contact of the coin vend switch	Closes in the select relay coil circuit.	
The customer	Pushes a select button	
The select button	Works the N.O. contact of the select switch.	
The N.O. contact of the select switch	Closes and completes the select relay coil circuit.	
The N.C. contact of the select switch	Opens in the select relay coil circuit.	
The select relay coil	Closes the N.O. contact of select relay switch No. 1 and at the same time	Opens the N.C. contact of select relay switch No. 1, and at the same time,
The N.O. contact of select relay switch No. 2	Closes and completes the vend motor coil circuit and at the same time,	
The N.C. contact of select relay switch No. 1	Opens and breaks the reset relay coil circuit and at the same time,	

REFER TO PAGE 59.1, DIAGRAM No. C4680.45

**HOW THE VENDING MECHANISM WORKS (Cont.)**  
**— VEND CYCLE — (Cont.)**

<b>What Does It</b>	<b>What Happens</b>
The reset relay coil	Closes the N.C. reset relay switch No. 1 in the delay relay coil circuit.
The N.C. contact of reset relay switch No. 1	Closes and completes the delay relay coil circuit, and,
The delay relay coil	Opens the N.C. delay relay Switch No. 1 in the vend relay coil circuit and the coin changer magnet circuit, and at the same time,
The N.C. contact of delay relay switch No. 1	Opens and breaks the vend relay coil circuit, and at the same time,
The vend motor	Turns the vend motor cam and,
The vend motor cam	Works the arm of the vend motor switch and,
The N.O. contact of vend motor switch	Closes in the vend motor coil circuit, (rides to high side of cam) to keep this circuit completed.
The N.C. contact of the vend motor switch	Opens and breaks the select relay coil circuit (rides to high side of cam), and
The N.C. contact of select relay switch No. 1	Closes in the Reset Relay Coil Circuit and,
The offset connector	Turns the oscillator and
The can or bottle	Vends and,
The vend motor switch arm	Drops into the cam notch and,
The N.O. contact of the vend motor switch	Opens in the vend motor coil circuit and,
The vend motor	Stops, and at the same time,
The N.C. contact of reset relay switch No. 1	Opens and breaks the delay relay coil circuit, and,
The delay relay coil	Closes the N.C. delay relay switch No. 1 and,
The N.C. contact of delay relay switch No. 1	Closes and completes the coin changer magnet circuit.

**REFER TO PAGE 59.1, DIAGRAM No. C4680.45**

HOW TO TAKE CARE OF THE VENDER

– WHAT TO CLEAN –

**CABINET**

Wash the vender exterior with either soap and warm water or a good detergent and warm water.

Wash all plastic parts with a mild soap and warm water.

The vender should be waxed often with a good grade of automobile wax.

Any corrosion inside the vender should be removed with fine steel wool and the area should be painted with aluminum paint.

Keep the condenser clean.

**SLUG REJECTOR**

Use a clean cloth to remove loose dirt. A dirty rejector should be cleaned with hot water and a good detergent. Dry it with a clean cloth.

Lubricate only the moving parts of the slug rejector. Oil should not be used on these moving parts.

– WHEN AND WHAT TO LUBRICATE –

HOW OFTEN	PART	LUBRICANT
Every Six months	Main Door	Mechanics Friend
	1. Lock bolt and nut retainer	Mechanics Friend
	2. Hinge pivot points	Slipicone
Every Year	3. Door gasket, hinge side	
Every Six months	Inner Door	Mechanics Friend
	1. Latch assembly	Mechanics Friend
	2. Hinge pivot points	



HOW TO TAKE CARE OF THE VENDER

HOW TO TAKE CARE OF THE VENDER (Cont.)

– THINGS TO ADJUST – (Cont.)

TEMPERATURE CONTROL — Ranco No. A12-1558  
 Cutler Hammer No. 9531N43

This is a "Constant Cut-In" type of control which has two (2) adjustments: They are:

1. The temperature control cam on the outside of the temperature control box.
2. The inside range screw which is under the fibre cover of the temperature control box of the RANCO, and on the side wall of the Cutler-Hammer (near terminal cover).

NOTE: The differential screw located between the terminals of the control is sealed and MUST NOT BE CHANGED.

As to No. 1 Adjustment:

The temperature control cam is set in an approximate neutral position. It can be used to make cut-out temperature colder by turning the cam clockwise—or—to make the cut-out temperature warmer by turning the cam counter-clockwise. When the cam is used the cut-in temperature (which governs the defrost) remains constant.

As to No. 2 Adjustment:

The inside range screw or screws are used for the altitude adjustment, see altitude below. This screw adjusts both the cut-out and cut-in settings on the RANCO. It may also be used for colder temperatures by turning the screw counter-clockwise or warmer by turning screw clockwise.

On the Cutler-Hammer there are two (2) screws provided, one (1) for cut-in and one (1) for cut-out, both must be adjusted for altitude corrections. For temperature adjustment, turn screws clockwise for colder and counter-clockwise for warmer. When adjusting for temperature **DO NOT TURN** more than 1/8 of a turn at a time. Let the machine run over night before making further adjustment.

**TEMPERATURE CONTROL ALTITUDE ADJUSTMENT**

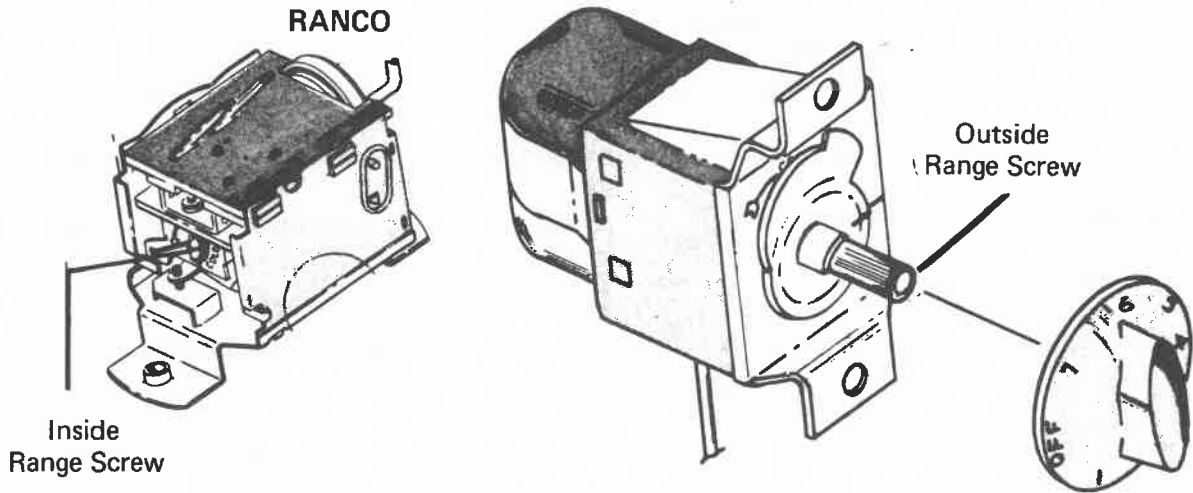
Control is factory set at altitude of 500 ft. For higher altitudes, control should be adjusted to prevent freeze-up of product. Adjust inside range screw as follows:

ALTITUDE FT.	RANCO SCREW CLOCKWISE	CUTLER-HAMMER BOTH SCREWS COUNTER-CLOCKWISE
2000	1/4 turn	1/8 turn
4000	1/2 turn	1/4 turn
6000	3/4 turn	1/2 turn
8000	1 turn	5/8 turn

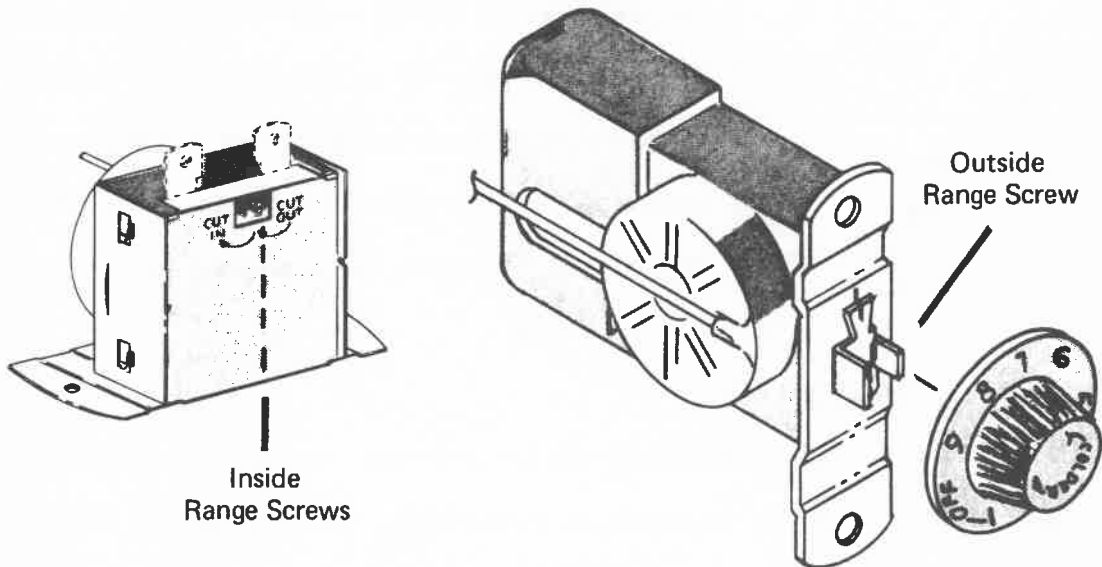
HOW TO TAKE CARE OF THE VENDER (Cont.)

— THINGS TO ADJUST — (Cont.)

TEMPERATURE CONTROL



CUTLER — HAMMER



## HOW TO TAKE CARE OF THE VENDER (Cont.)

### — THINGS TO ADJUST — (Cont.)

#### BOTTLE AND CAN ADJUSTMENTS

#### GENERAL

This vender is so designed to vend either cans or bottles. Can Dividers are installed in venders when shipped from factory. Bottle guides and shims are packaged separately.

#### A. ADJUSTMENTS — BOTTLE VENDING

To convert the vender from cans to bottles; remove the vertical can dividers which are located on the side walls of the columns. In order to remove the dividers, the locking finger near the top of the divider must be rotated out to clear the column. Then the divider can be lifted out.

When shipped from the factory these dividers are on the side walls of the columns.

#### STEP 1. FIG. I TIMING CAM

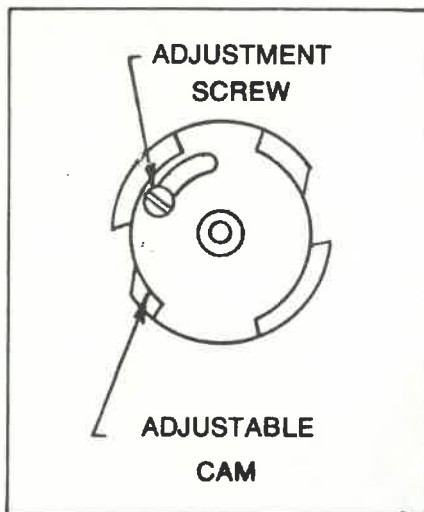


FIG. I

When converting from cans to bottles it will be necessary to change the adjustable cam on the timing cam assembly. The timing cam is located on the vend motor shaft; therefore it will be necessary to remove the cover from over the vend motors. Loosen the screw and position the adjustment cam so that only two (2) notches will be visible, as shown in Fig. II. Make sure the adjusting screw is securely tightened after adjustment. When shipped from the factory, this adjustable cam is set at four (4) notches.

#### STEP 2. BOTTLE DIAMETERS FIG. II

To accommodate the bottles of various diameters it is necessary to use shims, a combination of formed and flat, or just flat shims, as shown in Fig. II and on Page 5. The flat shim fits between the formed shim and the column side. The tab on the wide end of both shims extends thru the hole in the front flange of the column side.

## HOW TO TAKE CARE OF THE VENDER (Cont.)

— THINGS TO ADJUST — (Cont.)

## BOTTLE AND CAN ADJUSTMENTS (Cont.)

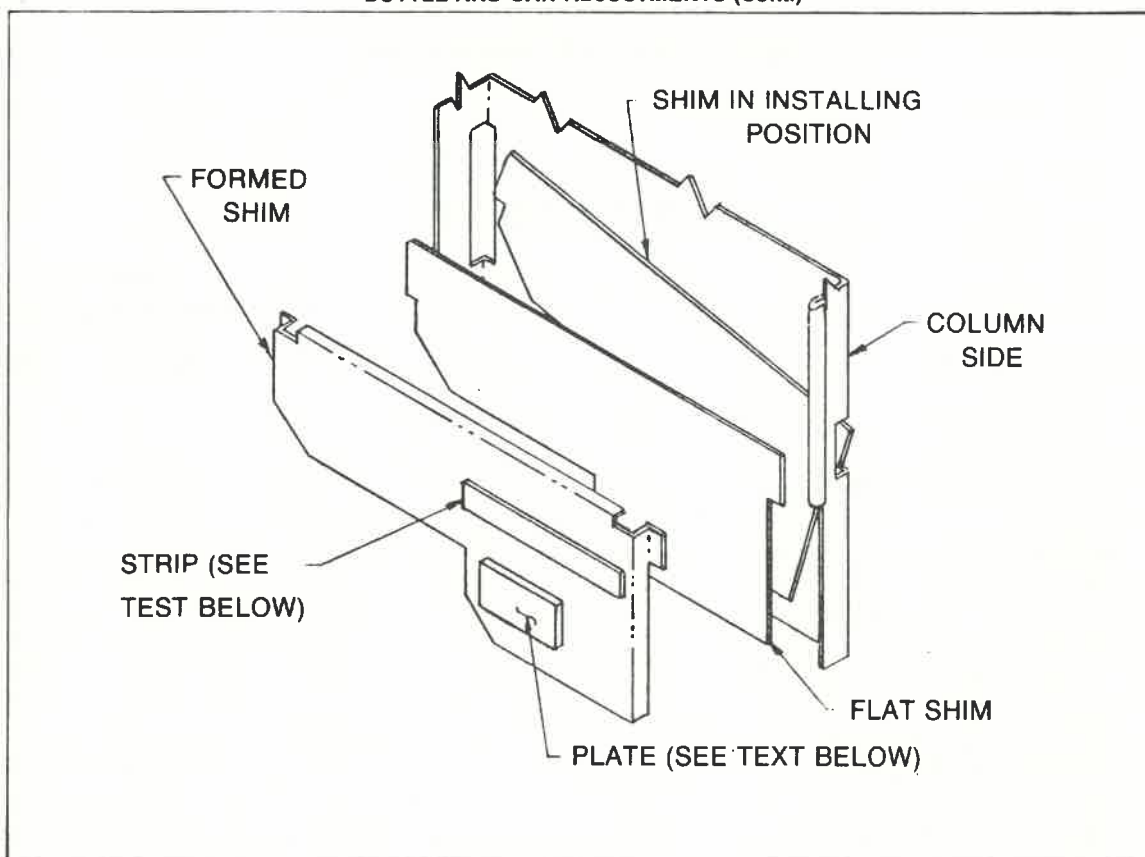


FIG. II

The tab on the narrow end of both the flat and formed shim extends thru a slot in the rear flange of the column side. To install either the flat or formed shims, engage the tabs on the wide end of the shims in the slot on the front column flange, with shim at approximately 45° up angle. Lower narrow end of shim which will then drop into rear slot.

The chart on Page 5 specifies the proper number of formed shims and flat shims to be used on each side of a column to vend certain products. The shims used in conjunction with this list have a welded plate and strip on each formed shim, as shown in Fig. II.

Place the first bottle to be loaded on the lower bail. The second bottle must be placed on the top bail and not on the first bottle. From there on bottles will stack correctly.

**HOW TO TAKE CARE OF THE VENDER (Cont.)**

**— THINGS TO ADJUST — (Cont.)**

**BOTTLE AND CAN ADJUSTMENTS (Cont.)**

SHIM REQUIREMENTS

<u>Returnable Bottles</u>	<u>Shims Req'd.</u> <u>Each Side of Column</u>	
	<u>Formed</u>	<u>Flat</u>
6½ oz. Coca-Cola .....	1	1
6½ oz. Dr. Pepper .....	1	4
7 oz. Sprite, Tab, Fanta .....	1	0
7 oz. 7-UP .....	1	2
8 oz. Pepsi-Cola .....	1	0
10 oz. Coca-Cola .....	1	0
10 oz. Sprite, Tab, Fanta .....	1	0
10 oz. Pepsi-Cola .....	1	0
10 oz. Dr. Pepper .....	1	0
10 oz. 7-UP .....	1	0
10 oz. Royal Crown Cola .....	1	0
10 oz. Diet Dr. Pepper .....	1	0
12 oz. Coca-Cola .....	0	0
12 oz. Sprite, Tab, Fanta .....	0	0
 <u>Non-Returnable Bottles</u>		
10 oz. Coca-Cola .....	0	4
10 oz. Dr. Pepper (embossed label) .....	0	4
10 oz. 7-UP (embossed label) .....	0	4
10 oz. Pepsi-Cola (embossed label) .....	0	4
10 oz. Paper Label 2¾" Dia. × 7¾" High .....	1	0
16 oz. 2⅝" Dia. × 9½" High .....	0	0
16 oz. 2¾" Dia. × 9⅛" High .....	0	0
16 oz. Coca-Cola .....	Contact Dixie-Narco	

**CANS**

12 oz. 2 <sup>11</sup> / <sub>16</sub> " Dia. × 4 <sup>13</sup> / <sub>16</sub> " High .....	0	0
--	---	---

NOTE: If bottles under 2¼" dia., or cans of a different height or diameter are to be vended, contact Dixie-Narco, Inc. for additional information.

## HOW TO TAKE CARE OF THE VENDER (Cont.)

— THINGS TO ADJUST — (Cont.)

## BOTTLE AND CAN ADJUSTMENTS (Cont.)

## STEP 3. BOTTLE LENGTH—FIG. III

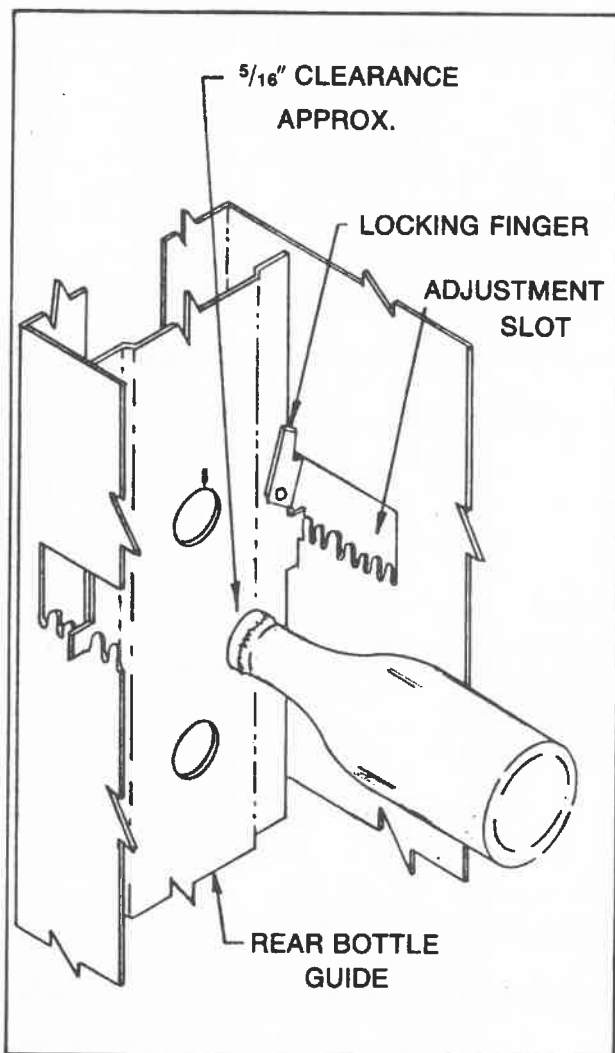


FIG. III

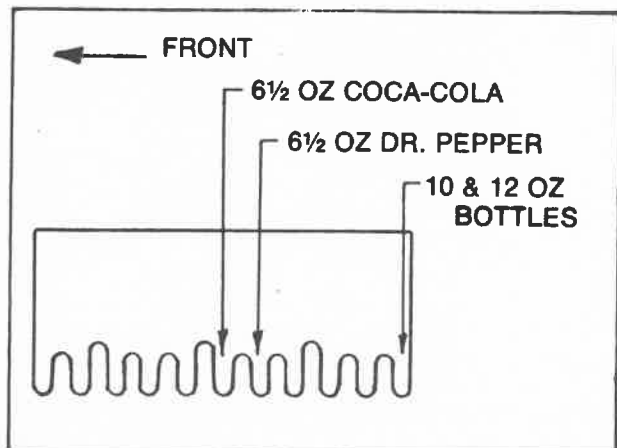


FIG. IV

Fig. III shows the position of the rear bottle guide. Before positioning the rear guide, the locking finger must be released.

Once the rear guide is in the proper position, the locking finger must be rotated into the adjustment slot. This will prevent the rear guide from being dislodged.

For shipping purposes, the bottle guides and shims are shipped in a separate container.

Please refer to Fig. IV for examples of rear guide position for different bottle lengths. When adjusting the rear guide for bottle lengths, move the rear guide as much as necessary, to allow approximately  $\frac{5}{16}$ " backward and forward movement of the bottle. It is very important that the top and bottom tabs on both sides of the rear guide are in corresponding adjusting slots.

**HOW TO TAKE CARE OF THE VENDER (Cont.)**

**— THINGS TO ADJUST — (Cont.)**

**BOTTLE AND CAN ADJUSTMENTS (Cont.)**

ADJUSTMENT SOLD OUT SWITCHES

The assembly of the front sold out switches is so designed as to provide four (4) different levels of sold out conditions. By removing the cover, the mounting plate supporting the sold out switches can be adjusted to allow the following number of containers to remain in each column when sold out occurs:

Lowest position	1 bottle	2 cans
Second position	2 bottles	4 cans
Third position	3 bottles	6 cans
Fourth position	4 bottles	8 cans

B. ADJUSTMENTS — CAN VENDING

General:

The mechanism in this vender is so designed, to vend in tandem, 12 oz. cans of  $2\frac{1}{16}$  diameter  $\times$   $4\frac{13}{16}$  long, without any special equipment. Shims are not required when vending cans of this size. If cans of a different size are to be vended, please contact the factory for additional instructions.



## HOW TO TAKE CARE OF THE VENDER (Cont.)

### — THINGS TO ADJUST — (Cont.)

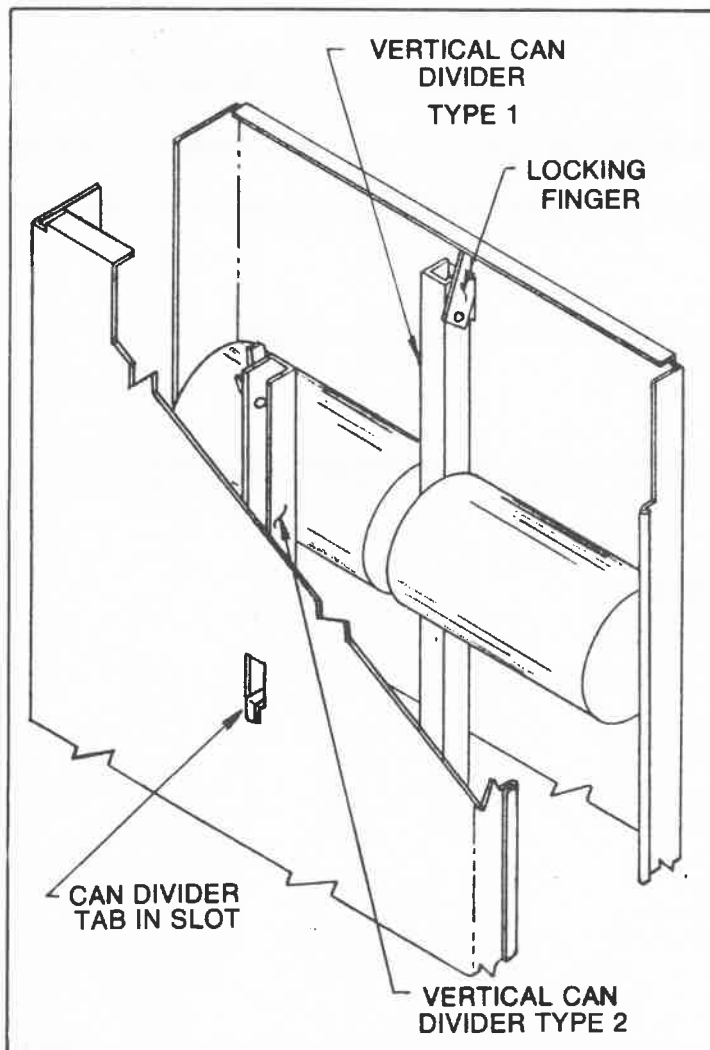
#### BOTTLE AND CAN ADJUSTMENTS (Cont.)

##### STEP 1. REMOVAL REAR GUIDE

When converting from bottles to cans, remove the rear guides and store them in a safe place for future use. To do this, rotate the locking finger to clear the adjusting slot and then lift the guide out of each column. The back flanges of the columns act as the rear guide when vending double depth cans.

##### STEP 2. FIG. V VERTICAL CAN DIVIDER

Before the Can Dividers can be installed, it will be necessary to remove the formed shims and/or the flatshims from each column.



There are two types of vertical can dividers. Type 1 has one notch at the bottom. Type 2 has two notches at the bottom. Place a can divider with one notch (Type 1) on the right-hand wall of each column. Then place a can divider with two notches (Type 2) on the left-hand wall of each column. Make sure that all retaining tabs on the can divider are properly positioned in the slots of the sides of the column.

**HOW TO TAKE CARE OF THE VENDER (Cont.)**

**— THINGS TO ADJUST — (Cont.)**

**BOTTLE AND CAN ADJUSTMENTS (Cont.)**

After placing the vertical can divider in position, as indicated in Fig. V, engage the locking finger near the top of each can divider into its lock slot. This prevents the divider from being dislodged. (This is important.)

**STEP 3. INITIAL LOADING**

The bails must be to the extreme left or right position to permit the correct loading of cans. When loading cans make sure that the cans are positioned between the vertical can divider and the rear flange, as well as between the vertical can divider and the front flange of the column.

Correct loading will prevent service calls and assure proper vending of cans.

**CAUTION: Load front and back of columns evenly, so that the sold out switches in front can function properly.**

**Any extra cans should be loaded in back.**

**HOW TO TAKE CARE OF THE VENDER (Cont.)**

— THINGS TO ADJUST — (Cont.)

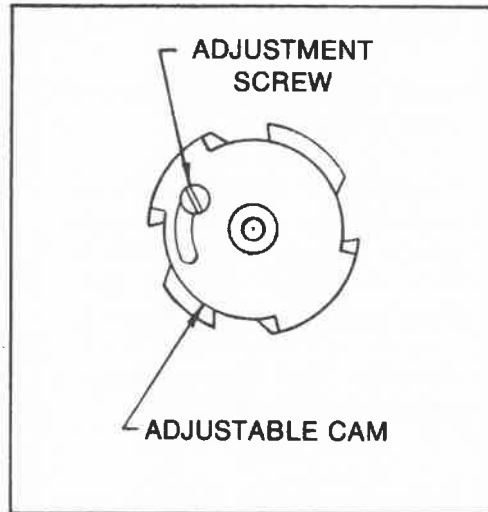
**BOTTLE AND CAN ADJUSTMENTS (Cont.)**

FIG. VI

**STEP 4. FIG. VI — TIMING CAM**

Figure VI shows the correct setting of the adjustable cam on the timing cam assembly, when vending cans in tandem. As this timing cam assembly is located on the shaft of the vend motor, it will be necessary to remove the cover over the vend motors to make this adjustment. (Make sure the adjusting screw is securely tightened after adjustment.) When properly adjusted, there should be four open slots.

When shipped from the factory the adjustable cam is set at four (4) notches.

**HOW TO CORRECT COMMON VENDING TROUBLES**

**— REJECTS ALL GOOD COINS —**

A Possible Cause Is	To Make Sure	This Is What To Do
<p>Vender not plugged in.</p> <p>Slug rejector is neither vertical nor level.</p> <p>Blocking fingers remain in coin path.</p> <p>The coin paths are dirty.</p> <p>The slug rejector is out of adjustment or the scavenger gate is not closed.</p> <p>Low voltage.</p> <p>N.C. contact of Vend Relay Switch #1.</p> <p>N.O. contact of Reset Relay Switch #1.</p> <p>N.C. contact of Delay Relay Switch #1.</p>	<p>Look, if not</p> <p>Look at it and try a coin. If coin is rejected,</p> <p>Remove the Slug Rejector — unplug the vender. Touch prods of test lamp to either side of electro magnet coil, lamp should light, if it doesn't,</p> <p>Remove the slug rejector, look at it, if it is dirty,</p> <p>Remove the slug rejector. Put a coin in, if it rejects the coin,</p> <p>Check with a volt-meter, if voltage is low,</p> <p>Put prods of test lamp to N.C. and C. contact. Lamp should light, if it doesn't,</p> <p>Energize Reset Relay Coil. If contact touches,</p> <p>If contact is touching,</p>	<p>Plug vender in.</p> <p>Level the vender.</p> <p>Put in a new coil or magnet coil assembly.</p> <p>Clean it with warm water, a good detergent. Dry it thoroughly.</p> <p>Adjust the slug rejector.</p> <p>Correct with location outlet.</p> <p>Clean contact with Cobehn or put in new relay.</p> <p>Clean contact with Cobehn or put in new reset relay.</p> <p>Clean contact with Cobehn.</p>

**HOW TO CORRECT COMMON VENDING TROUBLES (Cont.)**

— ACCEPTS COINS BUT DOES NOT LET A CAN OR BOTTLE VEND —

A Possible Cause Is	To Make Sure	This Is What To Do
Vend Switch Coin Changer.	Put the prods of a test lamp to N.C. and C. contacts. Lamp should light, if it doesn't,	Put in a new Vend Switch
Vend Switch Coin Changer.	Put the prods of a test lamp to N.O. and C. contacts. Push the switch arm down, lamp should light, if it doesn't,	Put in a new Vend Switch.
Vend Relay Coil.	Put the prods of a test lamp to either side of the coil. Lamp should light, if it doesn't,	Put in a new Vend Relay or Coil.
N.O. contact of Vend Relay Switch #1 or N.O. contact of Vend Relay Switch #2	Energize Vend Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or put in new relay.
N.O. contact of Select Switch #1.	Put the prods of a test lamp to N.O. and C. contacts. Push switch arm down, lamp should light, if it doesn't,	Put in a new Select Switch.
N.O. contact of Sold Out Switches (1, 2, 3, 4, 5 & 6)	Put the prods of a test lamp to N.O. and C. contacts. Push switch arm down, lamp should light, if it doesn't,	Put in a new Sold Out Switch.
Reset Relay Coil.	Put the prods of a test lamp to either side of the coil. Lamp should light, if it doesn't,	Put in a new Reset Relay.

**HOW TO CORRECT COMMON VENDING TROUBLES (Cont.)**

— ACCEPTS COINS BUT DOES NOT LET A CAN OR BOTTLE VEND — (Cont.)

A Possible Cause Is	To Make Sure	This Is What To Do
N.C. contact of Reset Switch #1.	Energize Reset Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or replace relay.
Select Relay Coil.	Put the prods of a test lamp to either side of the coil. Lamp should light, if it doesn't,	Put in a new Select Relay.
N.O. Contact of Select Relay Switch #1.	Energize Select Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or replace relay.
N.C. contact of Select Relay Switch #1.	Energize Select Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or replace relay.
Vend Motor.	Put the prods of a test lamp to either side of the coil. Lamp should light, if it doesn't,	Put in a new vend motor.
N.C. contact of Vend Motor Switch.	Put the prods of a test lamp to N.C. and C. contacts. Lamp should light, if it doesn't,	Put in a new switch.
N.O. contact of Vend Motor Switch.	Put the prods of a test lamp to N.O. and C. contacts. Lift switch arm up, lamp should light, if it doesn't,	Put in a new switch.

**HOW TO CORRECT COMMON VENDING TROUBLES (Cont.)**

— ACCEPTS COINS BUT VENDS NO CANS  
OR BOTTLES, THAT IS, ALL VENDING CIRCUITS ARE BROKEN —

A Possible Cause Is	To Make Sure	This Is What To Do
N.C. contact Coin Vend Switch.	Put the prods of a test lamp to N.C. and C. contacts. Lamp should light, if it doesn't,	Put in a new Vend Switch.
N.O. contact of Vend Relay Switch #2.	Energize Vend Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or put in new relay.
N.C. contact of Select Relay Switch #1.	Energize Select Relay Coil. If contact does not touch or if it touches and then opens,	Clean contact with "Cobehn" or replace relay.

## HOW THE REFRIGERATION SYSTEM WORKS

### — MECHANICAL PARTS —

#### COMPRESSOR MOTOR

The compressor motor (sealed in the compressor housing) drives the compressor with a shaft that is shared by both parts.

#### COMPRESSOR

The compressor (sealed in the compressor housing) sucks cold, low pressure freon gas from the evaporator and pumps hot, high pressure freon gas out to the condenser.

#### CONDENSER

The condenser, located in the base of the vender, at the front, takes heat out of the hot, high pressure gas that comes from the compressor. The gas loses heat as it goes through the condenser coils, and changes into a liquid because it is still under high pressure.

#### CONDENSER FAN

The condenser fan (between the condenser and motor compressor) first sucks air from the outside of the vender through the condenser. This air takes heat from the condenser first and then is blown over the compressor housing from which it also takes heat before going back outside of the vender. The condenser fan runs when the motor compressor runs.

#### MOLECULAR STRAINER DRYER

The molecular strainer dryer is in the liquid line between the condenser and the capillary tube. This dryer traps and holds water molecules but lets oil molecules and freon molecules go through into the capillary tube.

#### CAPILLARY TUBE

The capillary tube (between the condenser and the evaporator in the refrigerant line) has a very small inside diameter, so the flow of the liquid freon from the condenser into the evaporator is slow, but steady, even with the pressure the compressor builds up in the condenser. This helps to keep the pressure in the evaporator low.



## HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

### — MECHANICAL PARTS — (Cont.)

#### EVAPORATOR

The evaporator (in the vender cabinet) takes heat from the air in the vender cabinet and gives this heat to the liquid refrigerant. The liquid refrigerant is evaporated (boiled off) as a gas, and the gas is sucked out by the compressor and so the pressure is kept low.

#### EVAPORATOR FAN

The evaporator fan sucks warm air from around the cans or bottles in the cooling compartment and blows it across the evaporator. As the air goes across the evaporator, it gives up heat to the evaporator, then goes back to the cans or bottles, and takes heat from them. This fan runs all the time when the vender is plugged in.

#### CONDENSATE PAN

The condensate pan (located in the compressor compartment) collects the water which runs from the vender during the defrost cycle. The water is evaporated into the surrounding air by means of soakers, and the air movement resulting from the condenser fan blade rotation. The soakers extend down into the pan to absorb the water. Exposure to the surrounding air vaporizes the water in the soakers, and the water vapor is carried into the air by the action of the condenser fan blade.

### — ELECTRICAL PARTS —

#### TEMPERATURE CONTROL

The temperature control is the name of a part that is made up of a control bulb connected by a small metal tube to a bellows. The control bulb is in a tube back of the evaporator. The bellows and a switch known as the temperature control switch are in the temperature control box which is fastened to the right side inside the vender.

The control bulb and the bellows have a vapor in them. When the temperature of the vapor in the bulb rises, it builds up pressure in the bellows tube. This pushes the bellows out, makes it longer. When the control bulb is cool the vapor shrinks back, and the bellows pull in and get shorter. These movements of the bellows work the switch — called the temperature control switch — closing it when the bulb is heated and opening it when the bulb is cooled.

## HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

### — ELECTRICAL PARTS — (Cont.)

#### TEMPERATURE CONTROL (Cont.)

The contacts of the temperature control switch are in the compressor motor's running and starting circuits. They are also in the condenser fan motor circuit.

When the cabinet temperature gets up to the cut-on setting, the temperature control switch closes in the compressor motor's starting and running circuits and in the condenser fan circuit. When the cabinet temperature gets down to the cut-off setting, the temperature control switch opens in these circuits.

CAUTION: To adjust temperature control see pages 22 and 23 "Things To Adjust."

#### STARTING RELAY

The starting relay (in the terminal box on the side of the compressor shell) is an electromagnetic relay whose contacts are closed by the magnetic field of the relay coil, and are opened by gravity. It is made up of a relay coil and one set of contacts. The relay coil is in the running circuit of the compressor motor. The relay contacts are in the compressor motor's starting circuit and can complete or break only that circuit.

When the compressor motor and the condenser fan motor first start, the starting relay closes and completes the compressor motor starting, winding circuit. After the compressor motor gets up speed, the starting relay is opened by the force of gravity and the starting winding circuit is broken.

#### COMPRESSOR MOTOR

The compressor motor (sealed in the compressor housing) runs the compressor. It is started by the temperature control switch, the starting relay and the thermal overload switch. It is stopped by the temperature control switch; and, if it gets overloaded, by the thermal overload switch.

**HOW THE REFRIGERATION SYSTEM WORKS (Cont.)****— ELECTRICAL PARTS — (Cont.)****THERMAL OVERLOAD ASSEMBLY**

The thermal overload assembly (in the terminal box on the side of the compressor shell) is the name of a part that is made up of a switch (the thermal overload switch) and a heating wire. The heating wire is in the compressor motor's running and starting circuits. The thermal overload switch can complete or break the compressor motor's starting circuit and running circuit. If the compressor motor gets too warm, or draws too much current (which will make the heating wire get hot) the heat makes the thermal overload switch open in the running and starting circuit of the compressor and break those circuits. When the thermal overload assembly, the motor, and the compressor shell have all cooled enough to run safely, the thermal overload switch closes in these circuits and completes them.

**CONDENSER FAN MOTOR**

The condenser fan motor (between the condenser and the motor compressor) runs a fan that sucks air through the condenser coils. It starts when the temperature control switch is closed and it stops when the temperature control switch is open.

**HOW THE REFRIGERATION SYSTEM WORKS (Cont.)**

**— ELECTRICAL OPERATION —**

What Does It	What Happens
<b>WHEN THE VENDER TEMPERATURE GETS UP TO THE CUT-ON SETTING</b>	
The temperature control switch	<p>Closes in the running winding circuit of the compressor motor and completes that circuit.</p> <p>Closes in the starting relay coil circuit, and completes that circuit.</p> <p>Closes in the starting winding circuit of the compressor motor.</p> <p>Closes in the condenser fan motor circuit, completing the circuit.</p>
<b>THE HEAVY CURRENT, DRAWN BY THE RUNNING WINDING, ALSO FLOWS IN THE STARTING RELAY COIL, AND:</b>	
The starting relay coil	Closes the starting relay contacts in the starting winding circuit of the compressor motor, completing that circuit.
<b>WHEN THE COMPRESSOR MOTOR GETS UP TO SPEED</b>	
The force of gravity	Pulls the starting relay contacts apart because
The starting relay coil	No longer gets enough current to hold the contacts closed, and
The starting relay contacts	Open in the starting winding circuit of the compressor motor, and break that circuit.
<b>IF EITHER THE COMPRESSOR MOTOR OR THE CONDENSER FAN DRAWS TOO MUCH CURRENT AND CAUSES THE THERMAL OVERLOAD ASSEMBLY TO GET TOO WARM</b>	
The thermal overload switch	<p>Opens in the running winding circuit and the starting winding circuit of the compressor motor, and breaks both those circuits.</p> <p>Opens in the condenser fan motor circuit, and breaks that circuit.</p>

## HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

## — ELECTRICAL OPERATION — (Cont.)

What Does It	What Happens
<b>WHEN THE THERMAL OVERLOAD ASSEMBLY COOLS DOWN AGAIN</b>	
The thermal overload switch	<p>Closes in both the running winding circuit and the starting winding circuit of the compressor motor.</p> <p>Closes in the condenser fan motor circuit, and completes that circuit.</p>
<b>WHEN THE VENDER TEMPERATURE GETS DOWN TO THE CUT-OFF SETTING</b>	
The temperature control switch	<p>Opens in the running winding circuit of the compressor motor, and breaks that circuit.</p> <p>Opens in the starting relay coil circuit, and breaks that circuit.</p> <p>Opens in the starting winding circuit of the compressor motor.</p>

**HOW THE REFRIGERATION SYSTEM WORKS (Cont.)**

— ELECTRIC CIRCUITS AND CIRCUIT DIAGRAMS —

**CONDENSER FAN CIRCUIT**

Switches In The Wiring	What The Switches Do	What Makes The Switches Work
Temperature control switch	Turns the condenser fan motor on and off.	The temperature in the vender has come up to the cut-on point (or gotten down to the cut-off point) set on the temperature control.

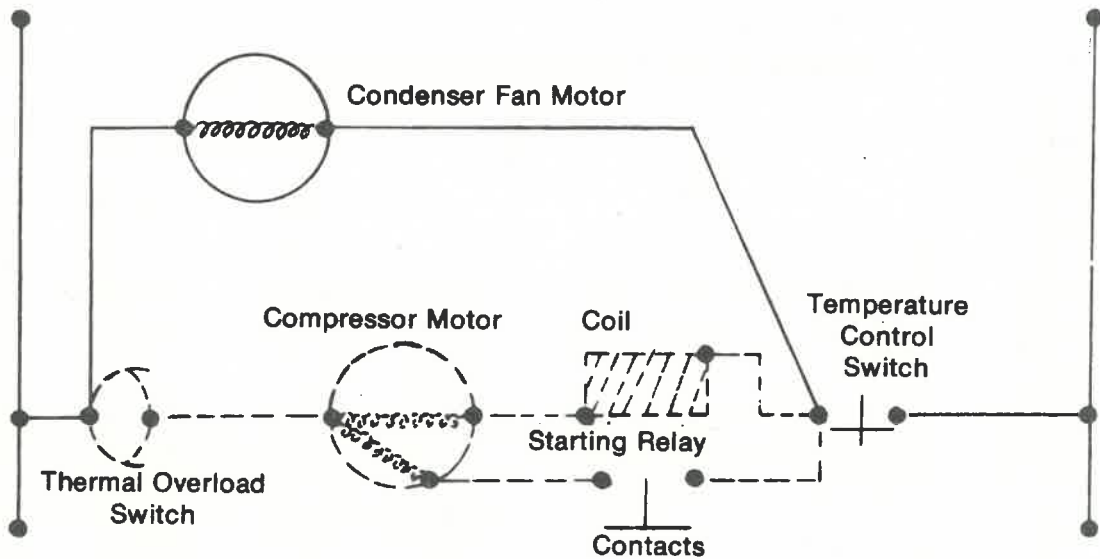
**COMPRESSOR MOTOR RUNNING WINDING CIRCUIT**

Switches In The Wiring	What The Switches Do	What Makes The Switches Work
Thermal overload switch	Turns the running windings of the compressor motor on.	Current drawn by the motor or heat from the compressor can raise the temperature of the thermal overload assembly and make the thermal overload switch cut off.

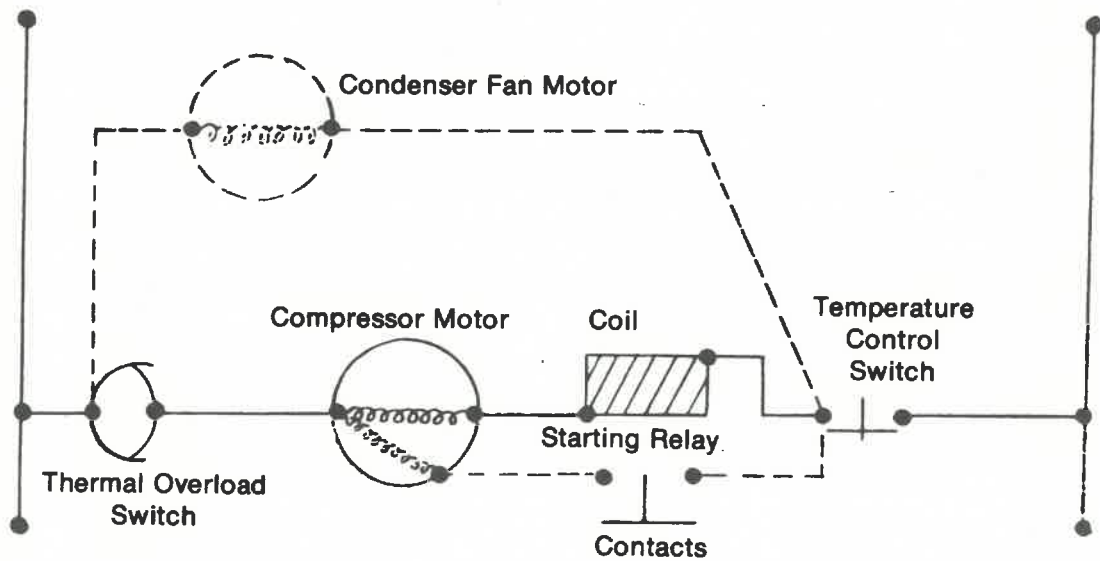
### HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

— ELECTRIC CIRCUITS AND CIRCUIT DIAGRAMS — (Cont.)

#### CONDENSER FAN CIRCUIT DIAGRAM



#### COMPRESSOR MOTOR RUNNING WINDING CIRCUIT DIAGRAM



**HOW THE REFRIGERATION SYSTEM WORKS (Cont.)**

**— ELECTRIC CIRCUITS AND CIRCUIT DIAGRAMS — (Cont.)**

**COMPRESSOR MOTOR STARTING WINDING CIRCUIT**

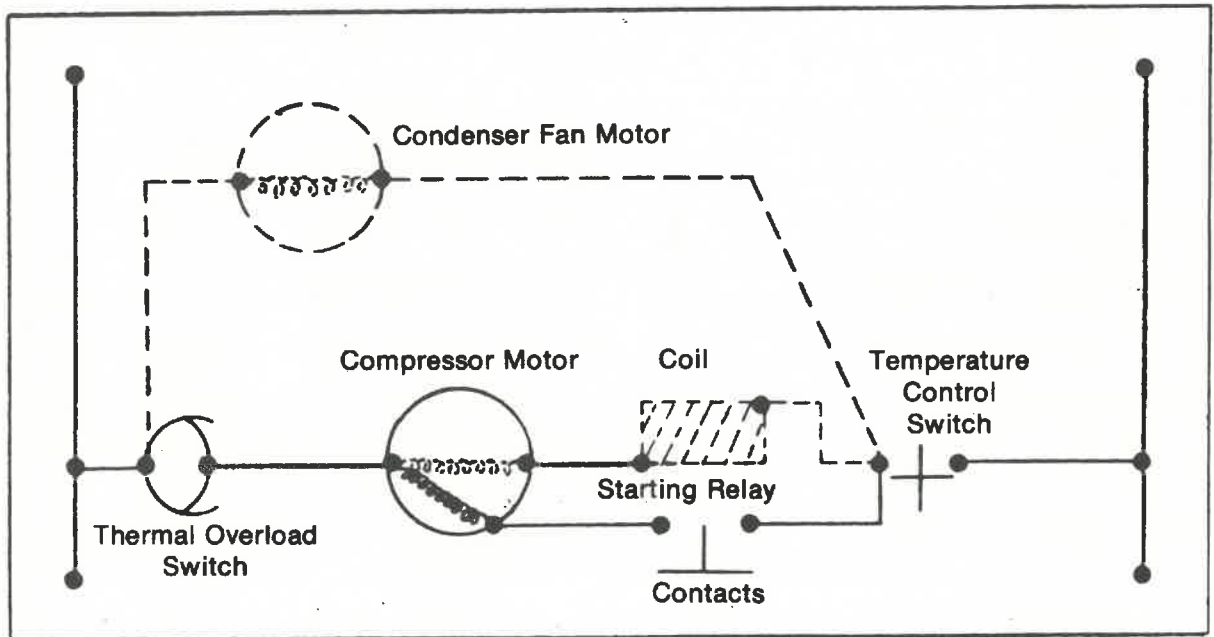
Switches In The Wiring	What The Switches Do	What Makes The Switches Work
Temperature control switch	Turns the starting windings of the compressor motor on.	The temperature in the vender has come up to the cut-on point set on the temperature control.
Starting relay contacts	Turns the starting windings of the compressor motor on and off.	The current drawn by the running winding of the compressor motor when it is first turned on also closes through the starting coil. This heavy current gives the relay coil enough power to close the contacts.
Thermal overload switch	Turns the starting windings of the compressor motor on and off.	Current drawn by the motor or heat from the compressor can raise the temperature of the thermal overload assembly and make the thermal overload switch open.



HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

— ELECTRIC CIRCUITS AND CIRCUIT DIAGRAMS — (Cont.)

COMPRESSOR MOTOR STARTING WINDING CIRCUIT DIAGRAM



## HOW THE REFRIGERATION SYSTEM WORKS (Cont.)

### — REFRIGERATION CYCLE —

<u>What Does It</u>	<u>What Happens</u>
The rising temperature in the vender	Warms the temperature control bulb and the liquid in it.
The liquid in the control bulb	Expands and pushes through the control tube and stretches the temperature control bellows.
The bellows	Moves, and closes the temperature control switch.
The temperature control switch	Turns the compressor motor on. Turns the condenser fan motor on.
The compressor motor	Drives the compressor.
The condenser fan motor	Drives the condenser fan.
The condenser fan motor	Sucks air through the condenser, cooling it.
The compressor	Sucks low pressure refrigerant gas from the evaporator, compresses the gas, and pumps it to the condenser.
The cooled condenser	Takes the heat out of the high pressure refrigerant gas.
The cooled gas	Turns into liquid refrigerant.
More hot gas coming from the compressor	Pushes the liquid refrigerant into the capillary tube.
The capillary tube	Lets only a certain amount of liquid refrigerant run into the evaporator.
The evaporator	(Where the pressure is kept low by the suction of the compressor) heats the liquid refrigerant.
The liquid refrigerant	Changes into gas at low pressure and is sucked back into the compressor.
The falling temperature in the vender	Cools the temperature control bulb and the liquid in it.

**HOW THE REFRIGERATION SYSTEM WORKS (Cont.)****— REFRIGERATION CYCLE — (Cont.)**

<u>What Does It</u>	<u>What Happens</u>
The liquid in the control bulb	Shrinks, and lets the temperature control bellows pull back.
The bellows	Move, and open the temperature control switch.
The temperature control switch	Turns the compressor motor off. Turns the condenser fan motor on.
The compressor	Stops.
The condenser fan motor	Stops.

(With the vender "plugged in" the evaporator fan motor runs constantly).

**HOW TO TAKE CARE OF  
THE REFRIGERATION SYSTEM****— WHAT TO CLEAN —**

Clean dirt and lint from the condenser with a brush, vacuum cleaner or compressed air.

**— WHEN AND WHAT TO LUBRICATE —**

The refrigeration system is sealed up and does not have to be oiled or greased. Enough oil is put into the condenser and evaporator fan motors when they are manufactured to last as long as they will run.

**— CORRECTING TROUBLES —**

When the refrigeration system is not working right, go to the table called "Correcting Common Refrigeration Troubles" on the next pages. Find your trouble, see what the possible causes are, and try the tests (in the center column); they will let you know when you have the true cause of the trouble. When you have found the cause of the trouble, either make the adjustment, repair the part or put a new part in, whatever the table says to do. This table does not list all of the possible causes of any of the troubles — but it does have all of the common causes. If your vender has a trouble that is not shown on the chart, or the trouble is not the result of one of the causes shown on the chart, study the section on "How The Refrigeration Mechanism Works" and you will be able to find out what is wrong and fix it.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES**

**TROUBLE**

The Compressor Will Not Run At All ..... 49

The Compressor Starts But Will Not Keep Running ..... 51

The Compressor Runs But The Cans/Bottles Aren't Cold Enough ..... 53

The Cans/Bottles Are Too Cold ..... 56

The Refrigeration Unit Is Noisy ..... 56

The Compressor Motor Never Stops Running ..... 57

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR WILL NOT RUN AT ALL**

A Possible Cause Is	To Make Sure	This Is What To Do
1. The vender is not plugged in.	Look; and if it isn't,	Plug the vender in.
2. The power is off.	Plug a 110V lamp into the outlet, if it doesn't light	Have someone who knows how, get power to the outlet.
3. The refrigeration unit is not made for the voltage it is getting.	Look at the nameplate on the vender to find out what voltage and cycle it is made for. Ask the local power company if they supply this kind of current. If they don't,	Put a vender in that is made for the kind of current you are getting.
4. A wire in the supply cord or control cable is broken.	Put the prods of 110V test lamp on terminal L of the starting relay and on terminal 3 of thermal overload switch (make sure the temperature control switch is closed). If it doesn't light,	Put a new supply harness on.
5. The thermal overload switch is stuck open.	Unplug the vender for at least 15 minutes. Then plug the vender in and put the prods of a 110V test lamp on terminal L of the starting relay and on the common terminal of the compressor motor. If the lamp doesn't light,	Put a new thermal overload assembly in.
6. The temperature control bulb is either touching the evaporator or it is covered with ice and frost.	Look at it. If it is touching the evaporator or is covered with ice or frost,	Defrost the evaporator and be sure the bulb is mounted right.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR WILL NOT RUN AT ALL (Cont.)**

A Possible Cause Is	To Make Sure	This Is What To Do
7. The temperature control bellows do not work.	Warm the temperature control bulb with your hand for about one minute. If the temperature control switch doesn't close,	Put a new temperature control in.
8. The temperature control switch contacts need cleaning.	Clean them and see if this helps.	Clean the faces of the contacts with "Cobehn."
9. The starting relay contacts aren't closing.	Warm the temperature control bulb to close the temperature control switch. If the starting relay contacts don't close at the same time,	Check the relay out as explained in the next two steps. If they do close, skip the next two steps and go on to step twelve of this section.
10.	Put the prods of a 110V test lamp across M of the relay and 3 of the overload protector. If the lamp does not light,	Put in a new relay.
11. The starting relay contacts are stuck open.	Warm the temperature control bulb to close the temperature control switch. If the starting relay contacts don't close when the temperature control switch does,	Put a new starting relay in.
12. The compressor motor's starting or running winding is burned out.	Unplug the vender. Take all wires off the compressor terminals. Connect a 110V line to compressor motor terminals (C) and (R). At once, with an insulated wire, connect (for 2 seconds) compressor terminals (R) and (S). If the compressor does not start,	Put a new motor compressor in.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR STARTS, BUT WILL NOT KEEP RUNNING**

A Possible Cause Is	To Make Sure	This Is What To Do
1. The thermal overload switch opens every time, or almost every time, the compressor motor starts.	Wait until the compressor motor stops, then unplug the vender and open the temperature control. See if switch is closed. If it is,	Check The "Possible Causes" in the next 6 steps. If it is not, skip the next 6 steps and go to step 8 of this section.
2. The tube from the compressor to the condenser is kinked or bent sharply.	Look, if it is,	Try to get the kink out.
3. The capillary tube is kinked or bent sharply.	Look, if it is,  If this does not help and no other cause can be found for the trouble,	Try to get the kink out.  Put a new capillary tube on.
4. The starting relay contacts are sticking closed.	Plug the vender back in. Then while the compressor is running see if the starting relay contacts stay closed. If they do,  If the starting relay contacts stick closed again after cleaning,	Clean the relay contacts with "Cobehn."  Put a new starting relay in.
5. The voltage at the vender is either too high or too low.	1. When an extension cord is not used on the supply cord; While the compressor is running put one prod of a volt meter on terminal (L) of the starting relay and the other prod on terminal (M) of the starting relay. If the voltage is not between 105V and 126V,	Have the person in charge of the vender tell the power company so they can take care of it.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR STARTS, BUT WILL NOT KEEP RUNNING (Cont.)**

A Possible Cause Is	To Make Sure	This Is What To Do
	<p>2. When an extension is used on the supply cord: Put a double socket on the plug end of the extension and plug it into the outlet. While the compressor is running, put the prods of a volt meter into one of the other sides of the double socket. If the voltage is not between 105V and 126V,</p>	<p>Have the person in charge of the vender tell the power company so they can take care of it.</p>
<p>6. The cut-on temperature is set too close to the cut-off temperature.</p>	<p>Put a thermometer on the control bulb. Read the temperature when the refrigeration unit cuts on. Read the temperature again when it cuts off. If the two temperatures are less than 16° F apart,</p>	<p>Turn the outside range screw clockwise.</p>
<p>7. The thermal overload switch opens after the compressor has been running a short time, but before the temperature control switch cuts off.</p>	<p>Wait until the compressor stops, then unplug the vender and open the temperature control box to see if the temperature control switch is closed. If it is,</p>	<p>Check the "Possible Causes" in the next 3 steps.</p>
<p>8. Not enough air is getting to the condenser.</p>	<p>See if there is anything around the outside of the vender. If there is,</p>	<p>Take it away.</p>
<p>9. The condenser is dirty.</p>	<p>Look. Also feel the tube from the compressor to the condenser. If the tube is very hot or if you see dirt on the condenser,</p>	<p>Clean the condenser with either a vacuum cleaner, a brush or compressed air.</p>
<p>10. The condenser fan motor is burned out.</p>	<p>With the condenser fan motor leads correctly connected to the compressor motor terminals (see wiring diagram) see if the condenser fan runs when the compressor does. If it doesn't,</p>	<p>Put a new condenser fan motor in.</p>



**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR RUNS BUT THE CANS/BOTTLES AREN'T COLD ENOUGH**

A Possible Cause Is	To Make Sure	This Is What To Do
1. The evaporator fan is not working.	Look. If it is not working,	Check the "Possible Causes" in the next step. If it is working, skip the next step and go on to step 3 of this section.
2. The evaporator fan motor is burned out.	Remove black rubber junction block located on the fan motor bracket. Connect a 110V line to the evaporator fan motor leads. If the evaporator fan motor doesn't start,	Put a new evaporator fan motor in.
3. The temperature control cam is set too warm (high).	Turn the outside range screw of the temperature control clockwise to a colder setting and let the vender run overnight. If the cans/bottles get cold enough,  If the cans/bottles did not get colder,	Leave the temperature control at that setting.  Put a new temperature control in.
4. The evaporator is covered with frost and ice.	Look at it.	Defrost the evaporator then check the "Possible Causes" in the next 2 steps. If it isn't, skip the next 2 steps and go to step 8 of this section.
5. The temperature control cam is set too cold and the evaporator is not defrosting.	Look at the evaporator for frost. If there is frost,  If the evaporator coil does not defrost on each cycle,  If, after the second setting, the coil still does not defrost,	Turn the inside range screw.  Turn the inside range screw.  Put a new temperature control in.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR RUNS BUT THE CANS/BOTTLES AREN'T COLD ENOUGH (Cont.)**

A Possible Cause Is	To Make Sure	This Is What To Do
6. The temperature control switch contacts stick closed.	If the unit runs all the time, and the evaporator builds up frost,	Put a new temperature control in.
7. The temperature control bulb sleeve is touching the evaporator.	Look at it. If it is touching the evaporator tube,	Bend the bracket so that there will be space between the bulb sleeve and the evaporator tube.
8. The control bulb is not in the sleeve (holder).	Look. If it is not,	Put the bulb in the sleeve (holder).
9. The temperature control bellows is not working.	Warm the temperature control bulb with your hand for about one minute. If the temperature control switch doesn't close,	Put a new temperature control in.
10. The refrigerant tubing is kinked or bent sharply.	Look. If it is,  If this does not help and no other cause can be found for the trouble,	Try to get the kink out.  Put some new refrigerant tubing in.
11. There isn't enough refrigerant in the refrigeration system or the capillary tube is partly plugged.	Let the vender run at least 15 minutes and then see if the evaporator is frosted all over. If it isn't,	Try to blow the plug out of the capillary tube, evacuate the system and then put a new charge of gas in the refrigeration unit.
12. The condenser isn't getting enough air.	See if there is anything around the outside of the vender to keep the air out. If there is,	Take it away.
13. The condenser is dirty.	Look. Also feel the tube from the compressor to the condenser. If the tube is very hot, or if you see dirt,	Clean the condenser with either a vacuum cleaner, a brush or compressed air.

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR RUNS BUT THE CANS/BOTTLES AREN'T COLD ENOUGH (Cont.)**

A Possible Cause Is	To Make Sure	This Is What To Do
14. The condenser fan motor is burned out.	With the condenser fan motor leads correctly connected to the compressor terminal, see if the condenser fan runs when the compressor does. If it doesn't,	Put a new condenser fan motor in.
15. The thermal overload switch is starting and stopping the compressor.	Unplug the vender for at least 15 minutes, then plug it in again. Be sure the temperature control switch is closed. (Warm the temperature control bulb with your hand to close it). If the compressor motor cuts off then on, then off while the temperature control switch stays closed,	Check the "Possible Causes" in steps 16 and 17.
16. The voltage at the vender is either too high or too low.	<p>1. When an extension is not used on the supply cord: While the compressor is running put one prod of a volt meter on terminal (S) of the starting relay and the other prod on terminal (L) of the starting relay. If the voltage is not between 105V and 126V,</p> <p>2. When an extension is used on the supply cord: Put a double socket on the plug end of the extension and plug it into the outlet. While the compressor is running, put the prods of a volt meter on terminal (S) of the starting relay and the other prod on terminal (L) of the starting relay. If the voltage is not between 105V and 126V,</p>	<p>Have the person in charge of the vender tell the power company so they can take care of it.</p> <p>Have the person in charge of the vender tell the power company so they can take care of it.</p>

**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

**THE COMPRESSOR RUNS BUT THE CANS/BOTTLES AREN'T COLD ENOUGH (Cont.)**

A Possible Cause Is	To Make Sure	This Is What To Do
17. The starting relay contacts are sticking closed.	Look and see. If they are,	Put a new starting relay in.
<b>THE CANS/BOTTLES ARE TOO COLD</b>		
1. The temperature control bulb is not in its tube.	Look and see. If it isn't,	Put the bulb in its tube.
2. The temperature control cam is set too cold.	Turn the outside range screw of the temperature control cam counter-clockwise to a warmer setting and let the vender run over night. If the cans/bottles get cold enough but not too cold, Unplug the vender and let the evaporator fan come to a stop.	Leave the temperature control cam at that setting
3. The temperature control switch is stuck closed.	Then block the fan blade so it can't turn. Remove the temperature control bulb from its tube and touch it to the evaporator tube. Plug the vender back in and let the compressor run until it cuts off, but not more than 30 minutes. If the vender has not cut off,	Put a new temperature control in.
<b>THE REFRIGERATION UNIT IS NOISY</b>		
1. The refrigerant lines rattle.	Hold them between your fingers. If the rattle stops,	Bend them gently away from whatever they are hitting.

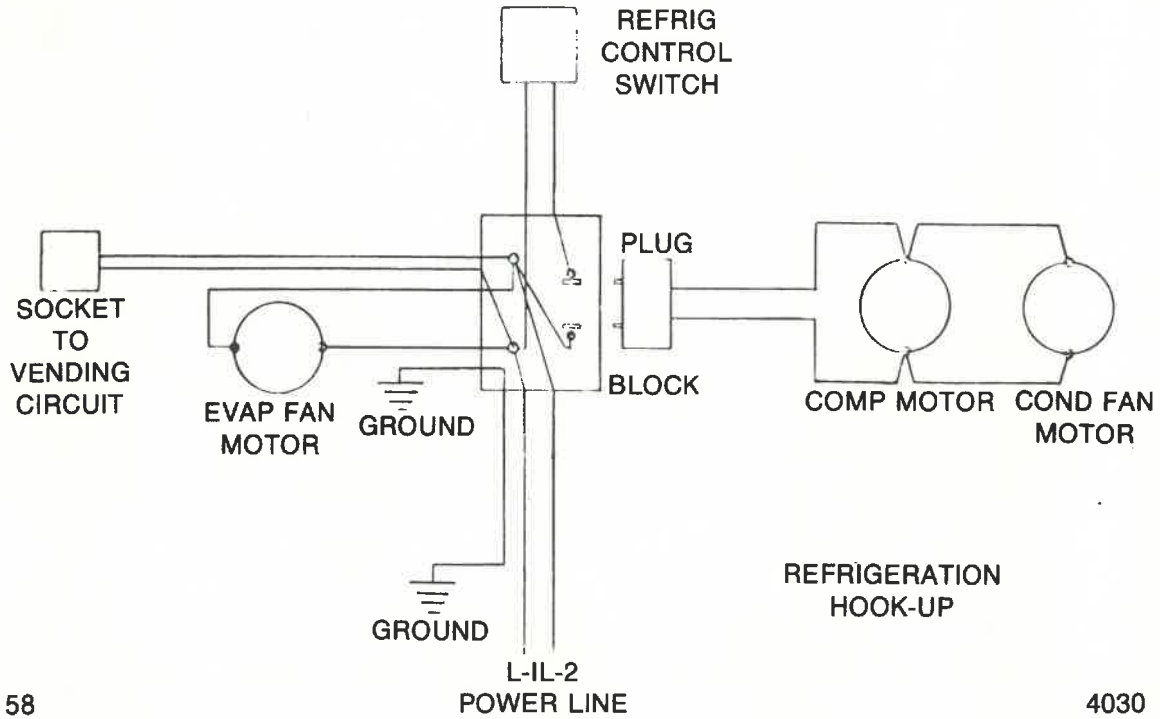
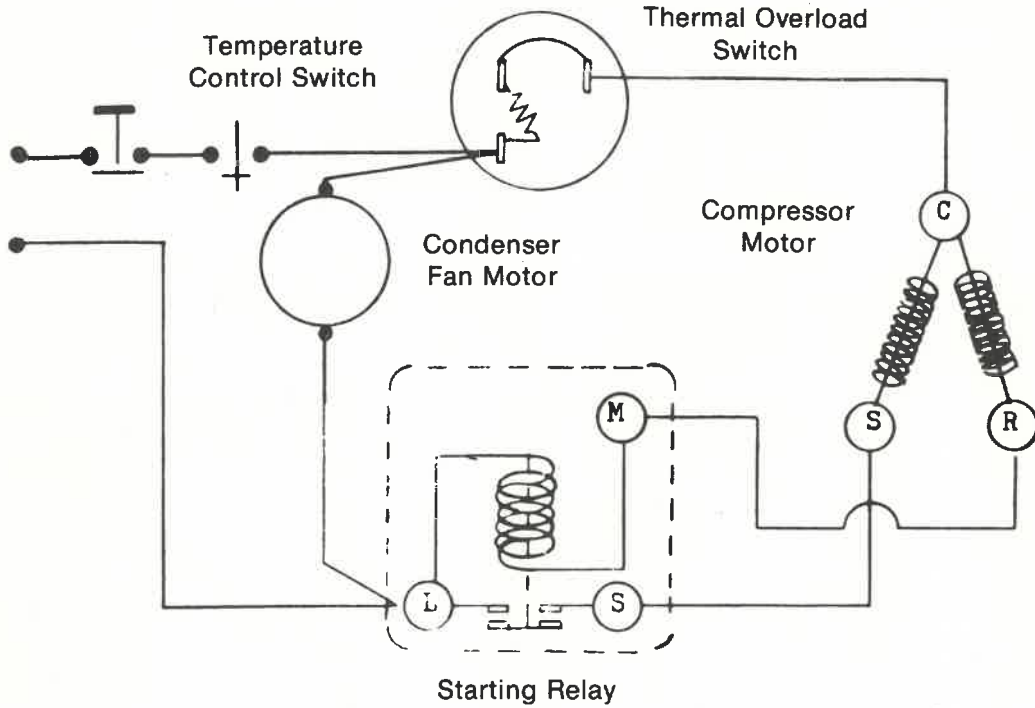
**HOW TO CORRECT  
COMMON REFRIGERATION TROUBLES (Cont.)**

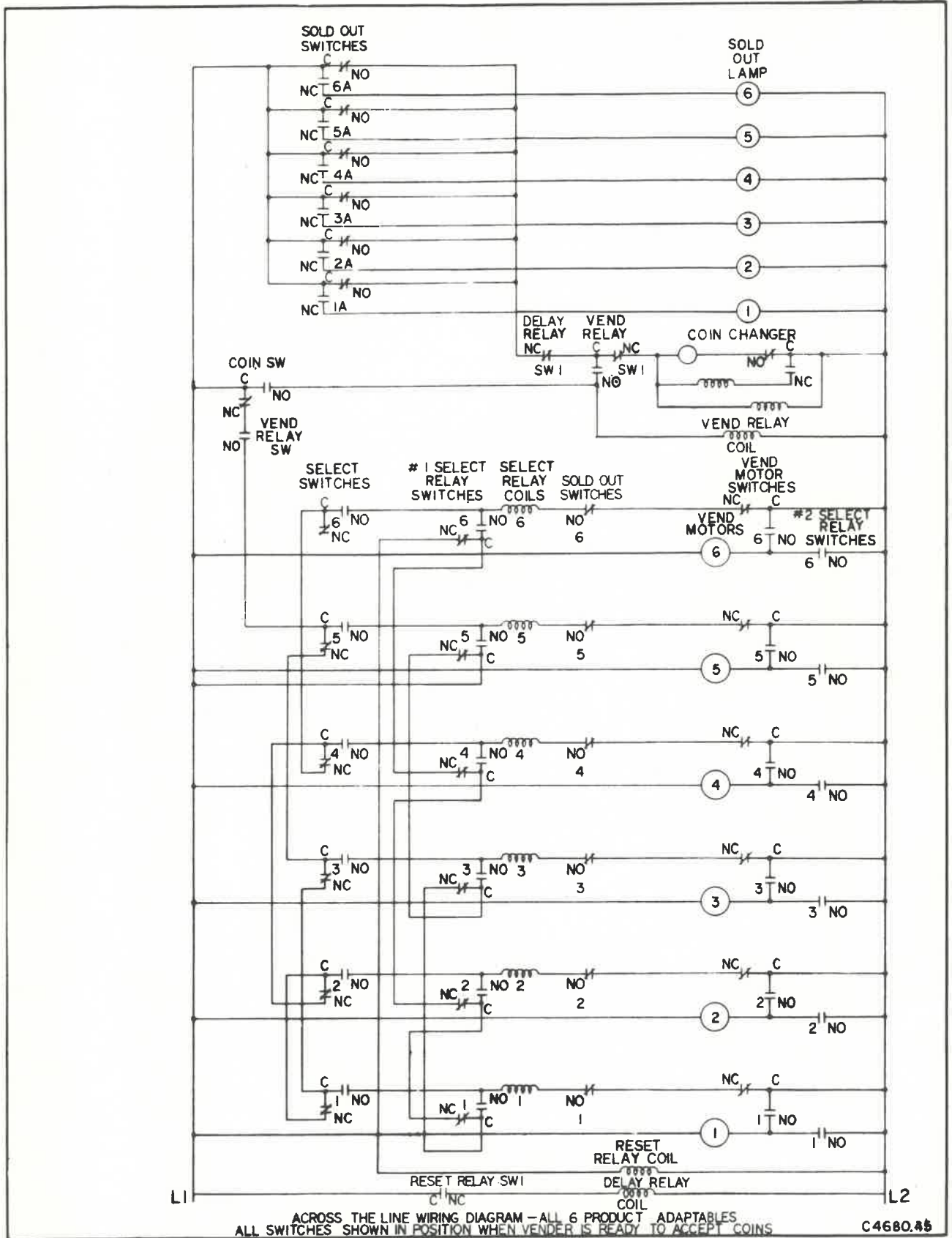
**THE COMPRESSOR MOTOR NEVER STOPS RUNNING**

A Possible Cause Is	To Make Sure	This Is What To Do
<p>1. The temperature control switch is stuck closed.</p> <p>2. The compressor has a broken valve or no refrigerant in the refrigeration system.</p>	<p>Turn the inside range screw cam and the range screw to their warmest settings. Let the vender run overnight, or until it stops. If the compressor motor doesn't stop running,</p> <p>The tube from the compressor to the condenser is not warm and the evaporator is not cold,</p> <p>If this does not help,</p>	<p>Put a new temperature control in.</p> <p>Put a new charge of refrigerant in the refrigeration unit.</p> <p>Put a new motor compressor in the refrigeration unit.</p>

### HOW TO CORRECT COMMON REFRIGERATION TROUBLES (Cont.)

— WIRING DIAGRAM —





ACROSS THE LINE WIRING DIAGRAM - ALL 6 PRODUCT ADAPTABLES  
ALL SWITCHES SHOWN IN POSITION WHEN VENDER IS READY TO ACCEPT COINS

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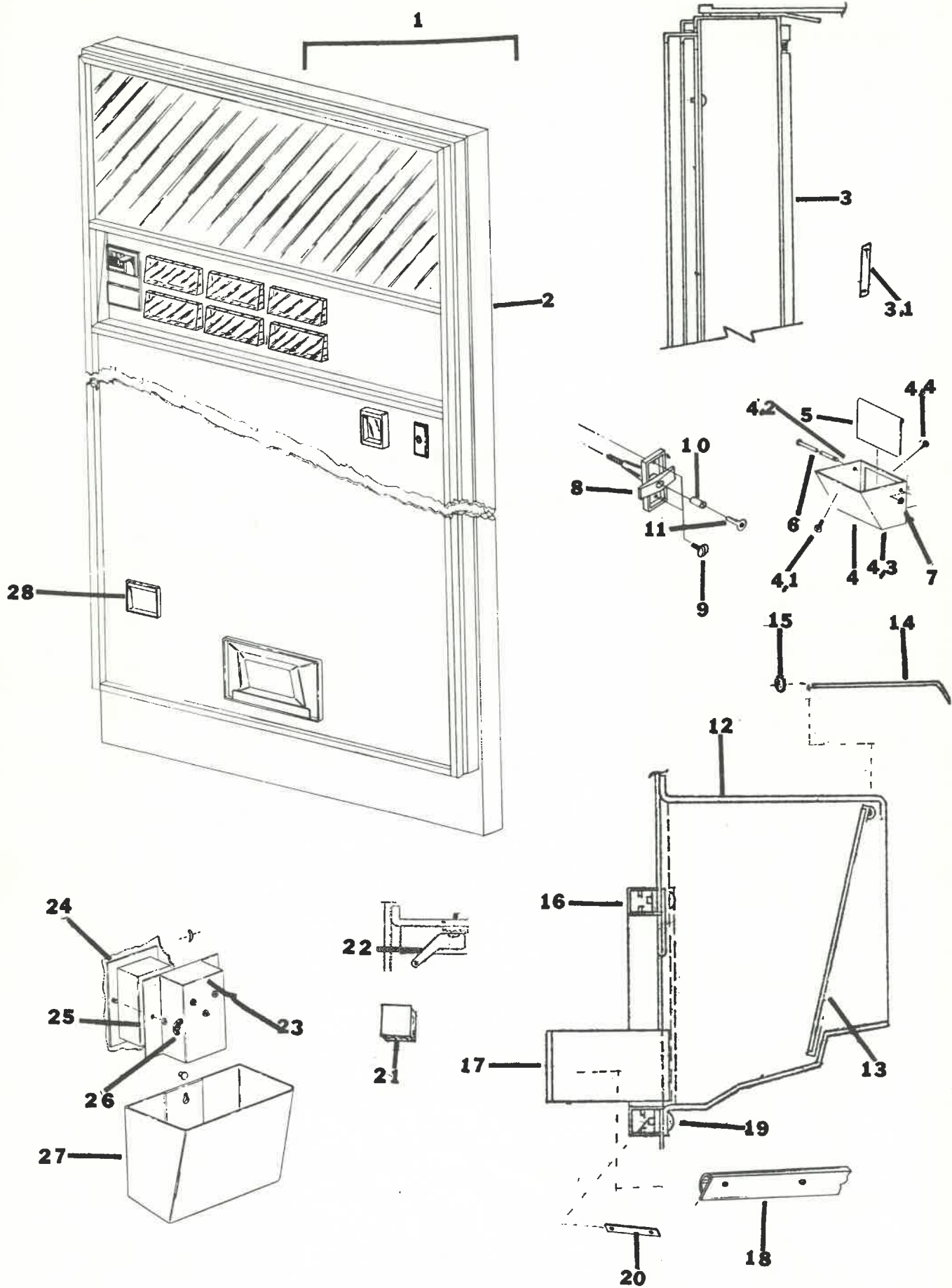




**PARTS AND PRICE LIST**

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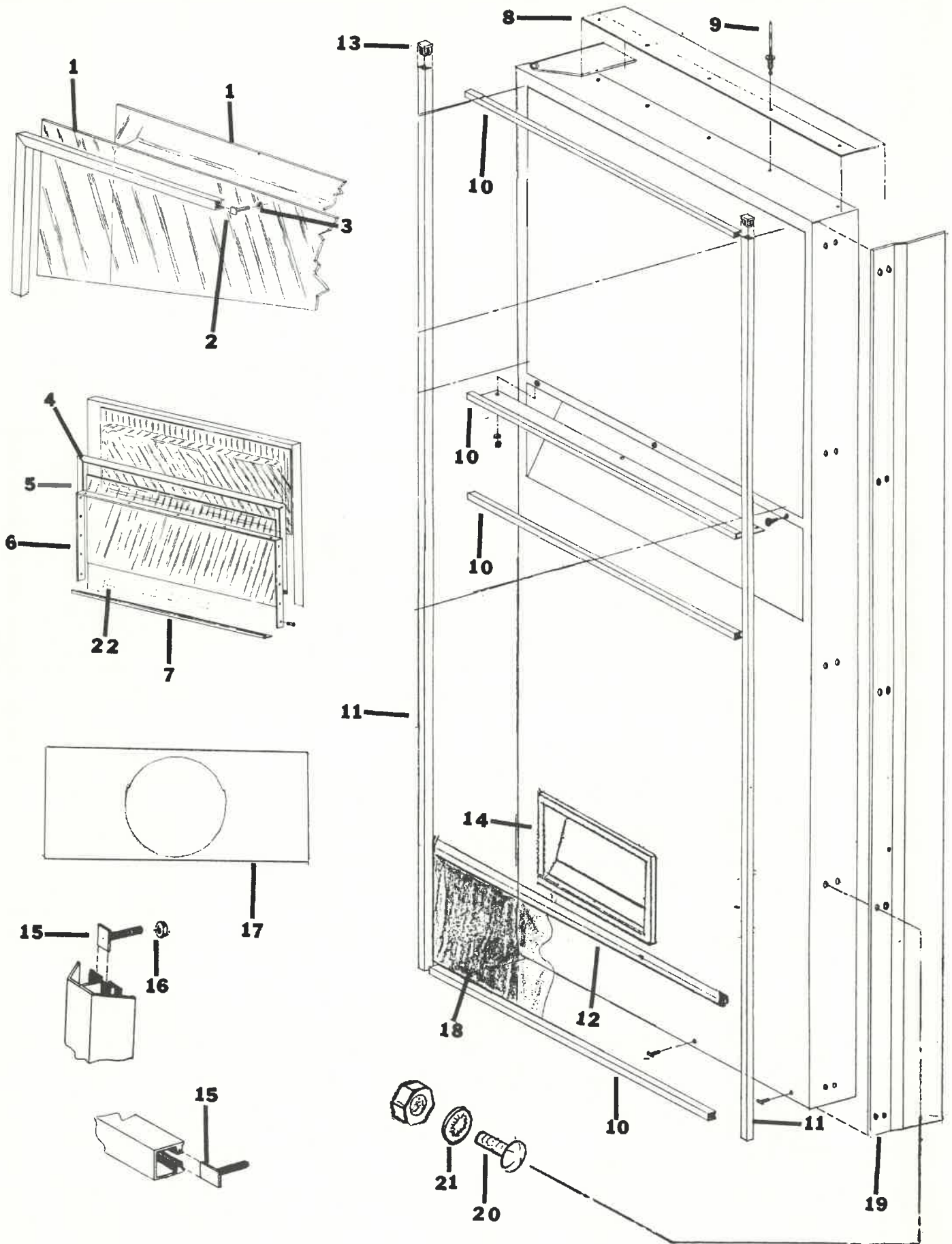


**DIXIE-NARCO**

**MAIN DOOR**

**Parts and Price List**

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	D209,050,200,13	\$170.00	D210,050,200,13	\$195.00	D211,050,200,13	\$200.00	Main Door Complete
2	D209,050,300,13	90.00	D210,050,300,23	100.00	D211,050,300,23	110.00	Main Door only less components
3	A802,000,910,01	.16/ft.	A802,000,910,01	.16/ft.	A802,000,910,01	.16/ft.	Gasket - (specify length)
3-1	903,500,310,01	.04/ft.	903,500,310,01	.04/ft.	903,500,310,01	.04/ft.	Nylon Tape, double face, to install gasket
4	B208,050,020,13	.85	B208,050,020,13	.85	B208,050,020,13	.85	Change Cup - Bottom
4.1	900,200,390,01	.04	900,200,390,01	.04	900,200,390,01	.04	Screw, Sems, #8 - 3/8"
4.2	B208,050,040,13	.85	B208,050,040,13	.85	B208,050,040,13	.85	Change Cup - Left Side
4.3	B208,050,030,13	.85	B208,050,030,13	.85	B208,050,030,13	.85	Change Cup - Right Side
4.4	900,301,600,01	.02	900,301,600,01	.02	900,301,600,01	.02	Screw, #4 x 3/8" - Secure Change Cup Frame
5	801,803,930,01	.50	801,803,930,01	.50	801,803,930,01	.50	Door - coin return
6	A900,501,820,01	.05	A900,501,820,01	.05	A900,501,820,01	.05	Hinge Pin
7	900,900,900,01	.02	900,900,900,01	.02	900,900,900,01	.02	Push Nut
8	A801,501,860,11	4.50	A801,501,860,11	4.50	A801,501,860,11	4.50	Pull out Handle
9	900,901,510,02	.10	900,901,510,02	.10	900,901,510,02	.10	Screw Machine 10-32 x 5/8
10	801,501,470,01	3.20	801,501,470,01	3.20	801,501,470,01	3.20	Lock W/2 Keys
11		.35		.35		.35	Key - only (specify numbers)
12	D801,803,950,01	5.50	D801,803,950,01	5.50	D801,803,950,01	5.50	Delivery Chute
13	C801,803,650,41	5.00	C801,803,650,41	5.00	C801,803,650,41	5.00	Delivery Door
14	A169,050,530,53	.50	A169,050,530,53	.50	A169,050,530,53	.50	Hinge Pin
15	900,800,580,01	.04	900,800,580,01	.04	900,800,580,01	.04	Locknut
16	B801,602,660,01	5.30	B801,602,660,01	5.30	B801,602,660,01	5.30	Trim - Discharge Port
17	B801,303,520,01	4.80	B801,303,520,01	4.80	B801,303,520,01	4.80	Discharge Member
18	A172,050,300,53	1.00	A172,050,300,53	1.00	A172,050,300,53	1.00	Bumper Assembly
19	900,600,230,02	.02	900,600,230,02	.02	900,600,230,02	.02	Screw S/M #8 x 1/2
20	900,901,840,01	.05	900,901,840,01	.05	900,901,840,01	.05	Tinnerman Clip
21	903,600,220,01	.20	903,600,220,01	.20	903,600,220,01	.20	Sponge Tape
22	801,501,620,01	.40	801,501,620,01	.40	801,501,620,01	.40	Latch Strike
23	B95,050,501,23	1.80	B95,050,501,23	1.80	B95,050,501,23	1.80	Housing Crown Puller
24	C801,200,300,81	.80	C801,200,300,81	.80	C801,200,300,81	.80	Frame Crown Puller
25	901,000,190,02	.50	901,000,190,02	.50	901,000,190,02	.50	Crown Puller
26	900,800,270,01	.02	900,800,270,01	.02	900,800,270,01	.02	Wing Nut 10-32
27	A169,050,570,43	1.40	A169,050,570,43	1.40	A169,050,570,43	1.40	Crown Catcher
28	D801,200,171,21	1.00	D801,200,171,21	1.00	D801,200,171,21	1.00	Frame - Change Cup

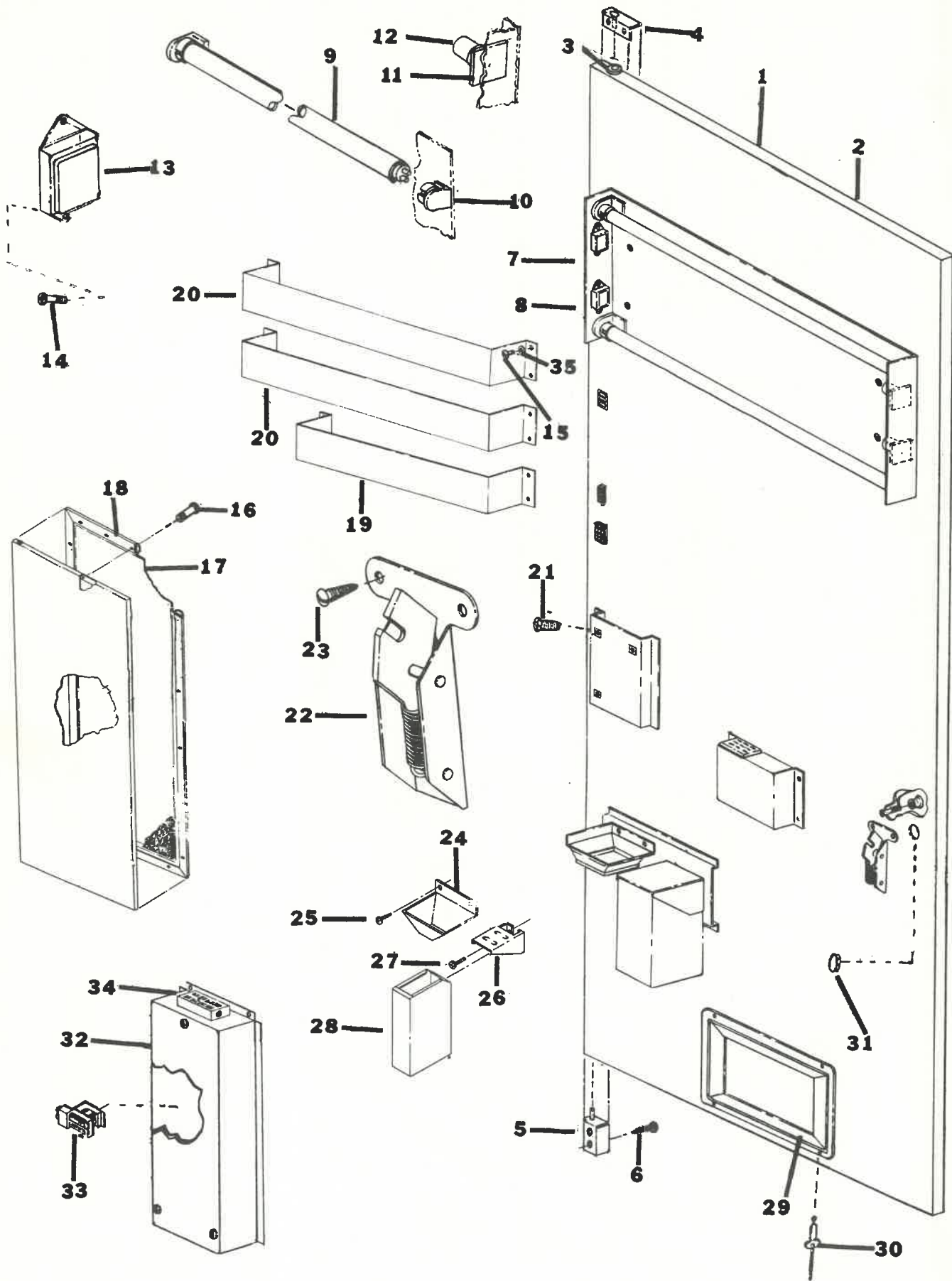


Parts and Price List

ILLUMINATED SIGN AND TRIM

DIXIE-NARCO

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDD420-6	PRICE	PART NAME AND DESCRIPTION
1	805,001,850.01	\$14.50	805,001,860.01	\$20.25	805,001,870.01	\$28.50	Sign - Two Piece
2	900,400,350.01	.05	900,400,350.01	.05	900,400,350.01	.05	Tee Bolt 8-32 x 3/4
3	900,300,500.01	.02	900,300,500.01	.02	900,300,500.01	.02	Nut 8-32
4	B209,050,020.03	.30	B209,050,020.03	.30	B209,050,020.03	.30	Sign retainer (top & bottom)
5	A209,050,010.03	.30	B210,050,010.03	.30	B211,050,020.03	.30	Sign retainer (sides)
6	A209,050,030.03	.40	A210,050,020.03	.50	B211,050,030.03	.60	Sign Frame (sides - left or right)
7	B211,050,040.03	.80	B211,050,040.03	.80	B211,050,040.03	.80	Sign Frame (top or bottom)
8	B164,151,141.13	2.00	B164,151,141.13	2.00	B164,151,141.13	2.00	Rain guard
9	901,100,500.01	.05	901,100,500.01	.05	901,100,500.01	.05	Pop Rivet
10	801,602,680.01	1.50	801,602,680.01	1.50	801,602,680.01	1.50	Horizontal Trim
11	801,602,740.01	3.00	801,602,750.01	3.50	801,602,730.01	3.90	Vertical Trim
12	A801,602,530.01	1.15	A801,602,530.01	1.15	A801,602,530.01	1.15	Divider Strip - kickplate
13	801,803,940.01	.30	801,830,940.01	.30	801,830,940.01	.30	Extrusion Cap
14	B801,602,660.01	8.00	B801,602,660.01	8.00	B801,602,660.01	8.00	Trim Discharge Port
15	902,700,160.02	.02	902,700,160.02	.02	902,700,160.02	.02	Tee Bolt 8-32 x 1/2
16	900,800,500.01	.02	900,800,500.01	.02	900,800,500.01	.02	Nut 8-32
17	903,807,260.01	.35	903,807,260.01	.35	903,807,260.01	.35	Trademark - Vinyl
18	C211,050,070.23	2.00	C211,050,070.23	2.00	C211,050,070.23	2.00	Kickplate - Metal
19	C166,150,330.53	11.50	C165,150,330.53	11.50	C164,150,330.73	11.50	Protective Plate - Door
20	900,201,200.01	.06	900,201,200.01	.06	900,201,200.01	.06	Carriage Bolt with nuts
21	900,700,390.01	.03	900,700,390.01	.03	900,700,390.01	.03	Lockwasher for 1/4 screw
22	903,600,410.01	.12/ft.	903,600,410.01	.12/ft.	903,600,410.01	.12/ft.	Gasket - Sign (specify length)

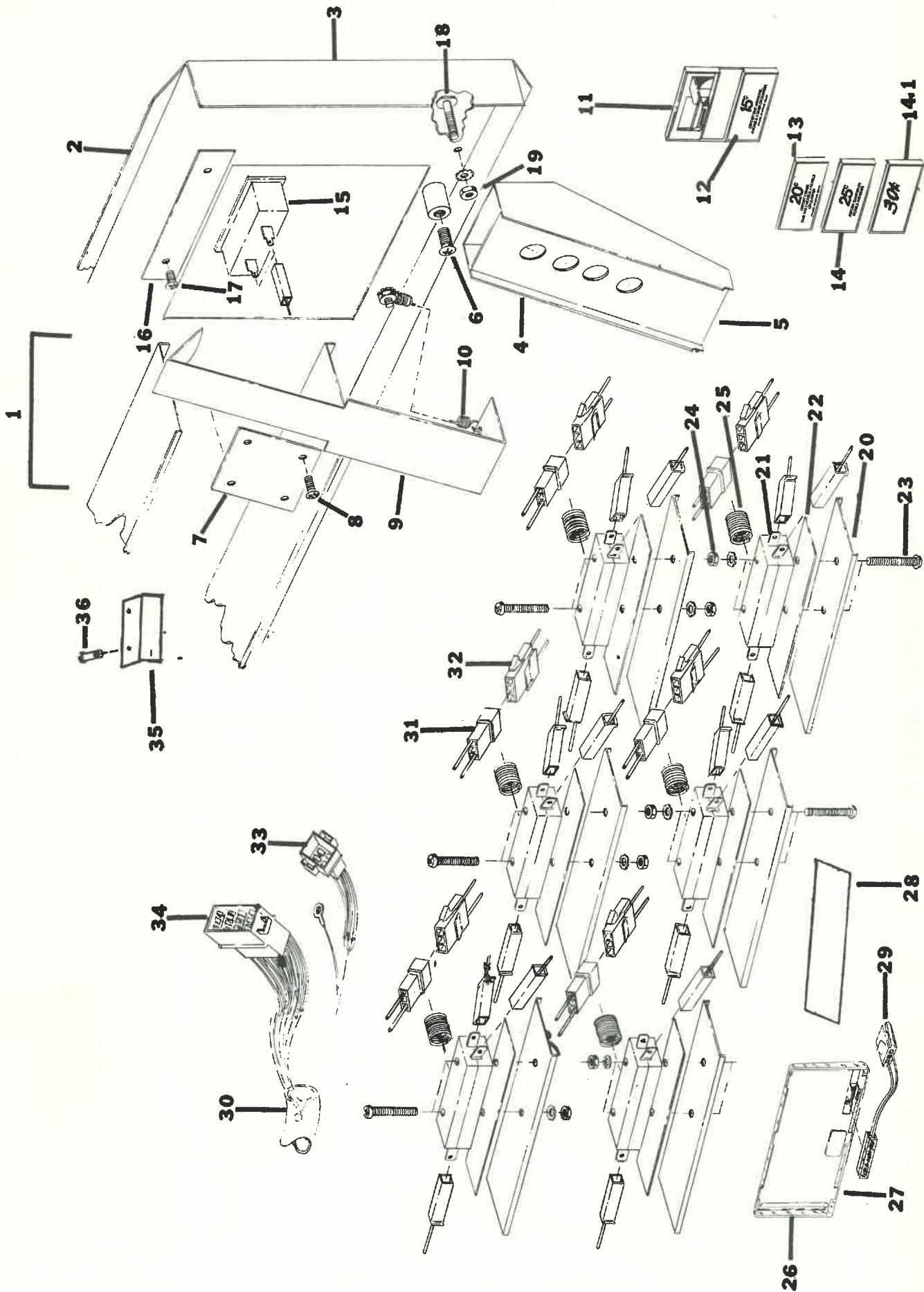


**DIXIE-NARCO**

**ASSEMBLY INNER DOOR**

**Parts and Price List**

ITEM NO.	DDDB300-6	PRICE	DDDB248-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	D209,050,100.03	\$110.00	D210,050,100.03	\$115.00	D211,050,100.13	\$120.00	Inner Door - Complete
2	C178,050,300.23	35.00	C177,050,300.23	40.00	C176,050,300.23	45.00	Inner Door - only
3	801,803,480.01	.10	801,803,480.01	.10	801,803,480.01	.10	Nyliner
4	A169,053,000.53	1.00	A169,053,000.53	1.00	A169,053,000.53	1.00	Top Hinge W/A
5	A169,051,101.03	1.00	A169,051,101.03	1.00	A169,051,101.03	1.00	Bottom Hinge W/A
6	900,200,390.01	.02	900,200,390.01	.02	900,200,390.01	.02	Screw Machine 8-32 x 3/8
7	C166,161,900.93	13.00	C166,161,900.93	13.00	C166,161,900.93	13.00	Fluorescent Lamp Panel Assembly
8	C166,161,040.33	3.00	C166,161,040.33	3.00	C166,161,040.33	3.00	Fluorescent Lamp Panel (Detail)
9	804,700,150.01	1.80	804,700,150.01	1.80	804,700,150.01	1.80	Fluorescent Lamp
10	904,901,230.01	.20	904,901,230.01	.20	904,901,230.01	.20	Lamp Holder
11	904,900,710.01	.20	904,900,710.01	.20	904,900,710.01	.20	Starter socket
12	804,800,410.01	.60	804,800,410.01	.60	804,800,410.01	.60	Starter
13	804,400,100.01	1.20	804,400,100.01	1.20	804,400,100.01	1.20	Ballast
14	900,300,040.01	.02	900,300,040.01	.02	900,300,040.01	.02	Screw S/M #8 x 3/4
15	900,901,510.02	.05	900,901,510.02	.05	900,901,510.02	.05	Screw Machine 10-32 x 5/8
16	900,600,230.02	.02	900,600,230.02	.02	900,600,230.02	.02	Screw S/M #8 x 1/2
17	C209,051,000.03	22.00	C210,051,000.03	24.00	C211,051,000.03	27.00	Panel - Inner Door S/A
18	B801,803,430.01	5.20	B801,803,420.01	5.20	B801,803,120.21	5.20	Gasket - Inner Door
19			C208,050,080.33	3.00			Pre-Cool Rack (small)
20	C211,050,080.23	3.50	C211,050,080.23	3.50	C211,050,080.23	3.50	Pre-Cool Rack (large)
21	900,201,220.01	.02	900,201,220.01	.02	900,201,220.01	.02	Screw Sems, 8-32 x 3/4
22	A169,053,100.43	1.50	A169,053,100.43	1.50	A169,053,100.43	1.50	Burst open latch S/A
23	900,600,230.02	.02	900,600,230.02	.02	900,600,230.02	.02	Screw S/M #8 x 1/2
24	B801,803,690.41	1.00	B801,803,690.41	1.00	B801,803,690.41	1.00	Charge Hopper
25	900,200,390.01	.02	900,200,390.01	.02	900,200,390.01	.02	Screw Sems 8-32 x 3/8
26	B801,303,260.11	.70	B801,303,260.11	.70	B801,303,260.11	.70	Hanger - Cash Box
27	900,200,390.11	.02	900,200,390.11	.02	900,200,390.11	.02	Screw, Sems 8-32 x 3/8
28	B146,050,901.23		B146,050,901.23	3.20	B146,050,901.23	3.20	Cash Box Assembly
29	C801,803,780.31	2.28	C801,803,780.31	2.28	C801,803,780.31	2.28	Frame - Discharge Port
30	901,100,460.01	.20	901,100,460.01	.20	901,100,460.01	.20	Pop rivet - 1/8
31	901,900,630.01	.10	901,900,630.01	.10	901,900,630.01	.10	Plug Button
32	D164,152,400.63	85.00	D164,152,400.63	85.00	D164,152,400.63	85.00	Relay Box Assembly
33	804,200,140.01	3.60	804,200,140.01	3.60	804,200,140.01	3.60	Relay
34	904,901,500.01	1.10	904,901,500.01	1.10	904,901,500.01	1.10	Socket - Coin Changer
35	900,700,270.01	.02	900,700,270.01	.02	900,700,270.01	.02	Washer, Lock





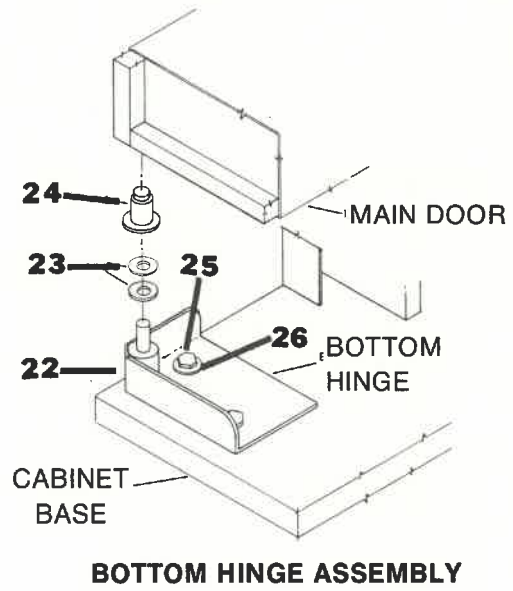
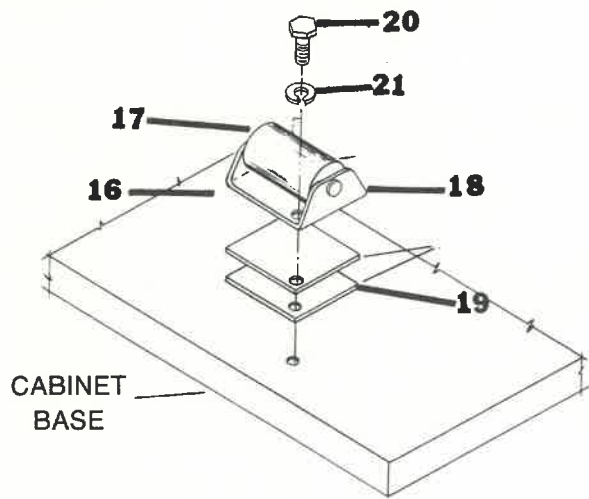
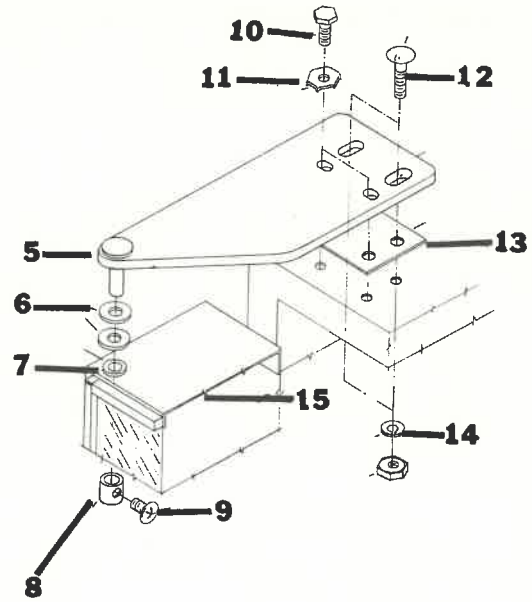
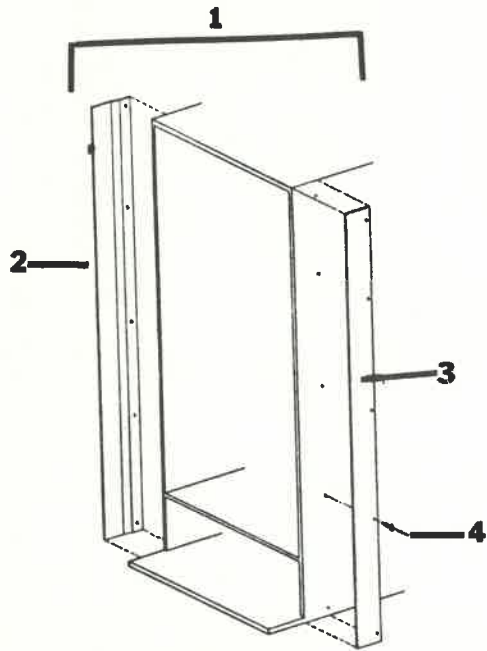
Parts and Price List

SELECTOR PANEL

DIXIE-NARCO

ITEM NO.	Dddb300-6	PRICE	Dddb348-6	PRICE	Dddb420-6	PRICE	PART NAME AND DESCRIPTION
1	D211,050,600.13	\$80.00	D211,050,600.13	\$80.00	D211,050,600.13	\$80.00	Selector Panel Assembly
2	C211,050,800.03	22.00	C211,050,800.03	22.00	C211,050,800.03	22.00	Selector Panel (only)
3	D211,050,210.03	6.75	D211,050,210.03	6.75	D211,050,210.03	6.75	Cover - Selector Panel
4	C801,803,620.21	.25	C801,803,620.21	.25	C801,803,620.21	.25	Coin Chute
5	B801,803,630.11	.25	B801,803,630.11	.25	B801,803,630.11	.25	Cover - Coin Chute
6	900,300,160.01	.02	900,300,160.01	.02	900,300,160.01	.02	Screw S/M #6 x 3/8
7	A203,050,120.13	.10	A203,050,120.13	.10	A203,050,120.13	.10	Retainer Plate - Plunger
8	900,300,160.01	.02	900,300,160.01	.02	900,300,160.01	.02	Screw S/M #6 x 3/8
9	B801,303,510.01	1.10	B801,303,510.01	1.10	B801,303,510.01	1.10	Plunger - Coin Return
10	A901,700,630.01	.35	A901,700,630.01	.35	A901,700,630.01	.35	Extension Spring
11	D801,200,920.11	3.00	D801,200,920.11	3.00	D801,200,920.11	3.00	Coin Insert
12	A803,807,360.11	.40	A803,807,360.11	.40	A803,807,360.11	.40	Instruction Sign 15¢
13	A803,807,370.01	.40	A803,807,370.01	.40	A803,807,370.01	.40	Instruction Sign 20¢
14	803,807,380.01	.40	803,807,380.01	.40	803,807,380.01	.40	Instruction Sign 25¢
14.1	803,807,670.01	.40	803,807,670.01	.40	803,807,670.01	.40	Instruction Sign 30¢
15	A904,700,180.11	1.00	A904,700,180.11	1.00	A904,700,180.11	1.00	Correct Change Lamp
16	A143,051,220.53	.05	A143,051,220.53	.05	A143,051,220.53	.05	Retainer
17	900,300,160.01	.04	900,300,160.01	.04	900,300,160.01	.04	Screw S/M #6 x 3/8
18	900,400,350.01	.05	900,400,350.01	.05	900,400,350.01	.05	T-Bolt 8-32 x 3/4
19	900,800,500.01	.05	900,800,500.01	.05	900,800,500.01	.05	Keps Nut 8-32 (Nut & Washer)
20	A208,050,150.53	.12	A208,050,150.53	.12	A208,050,150.53	.12	Switch Support & Stop
21	804,100,440.01	.65	804,100,440.01	.65	804,100,440.01	.65	Switch
22	A905,800,400.01	.02	A905,800,400.01	.02	A905,800,400.01	.02	Insulator
23	900,201,310.01	.02	900,201,310.01	.02	900,201,310.01	.02	Screw Machine #6 x 1/4
24	900,800,600.01	.02	900,800,600.01	.02	900,800,600.01	.02	Keps Nut #6-32 (Nut & Washer)
25	A901,700,430.01	.02	A901,700,430.01	.02	A901,700,430.01	.02	Spring
26	A801,803,880.01	2.00	A801,803,880.01	2.00	A801,803,880.01	2.00	Select Button Assembly #1 only
27	A801,803,890.01	1.60	A801,803,890.01	1.60	A801,803,890.01	1.60	Select Button Assembly #2 thru 6
*28	903,807,690.01	.22	903,807,690.01	.22	903,807,690.01	.22	Flavor Strips - Specify Flavor
29	A208,051,100.03	.75	A208,051,100.03	.75	A208,051,100.03	.75	Sold Out Lamp S/A
30	C211,051,200.13	9.00	C211,051,200.13	9.00	C211,051,200.13	9.00	Wiring Harness S/A
31	904,600,480.01	.20	904,600,480.01	.20	904,600,480.01	.20	Amp Loc Cap - 3 Way
32	904,600,470.01	.20	904,600,470.01	.20	904,600,470.01	.20	Amp Loc Plug - 3 Way
33	904,600,140.01	.25	904,600,140.01	.25	904,600,140.01	.25	Amp Loc Cap - 6 Way
34	904,600,340.01	.50	904,600,340.01	.50	904,600,340.01	.50	Amp Loc Cap - 12 Way
35	B208,050,110.33	.25	B208,050,110.33	.25	B208,050,110.33	.25	Reflector
36	900,200,390.01	.05	900,200,390.01	.05	900,200,390.01	.05	Screw, Sems 8-32 x 3/8

\*903,807,690.01 Is A Special Service Part Number Only

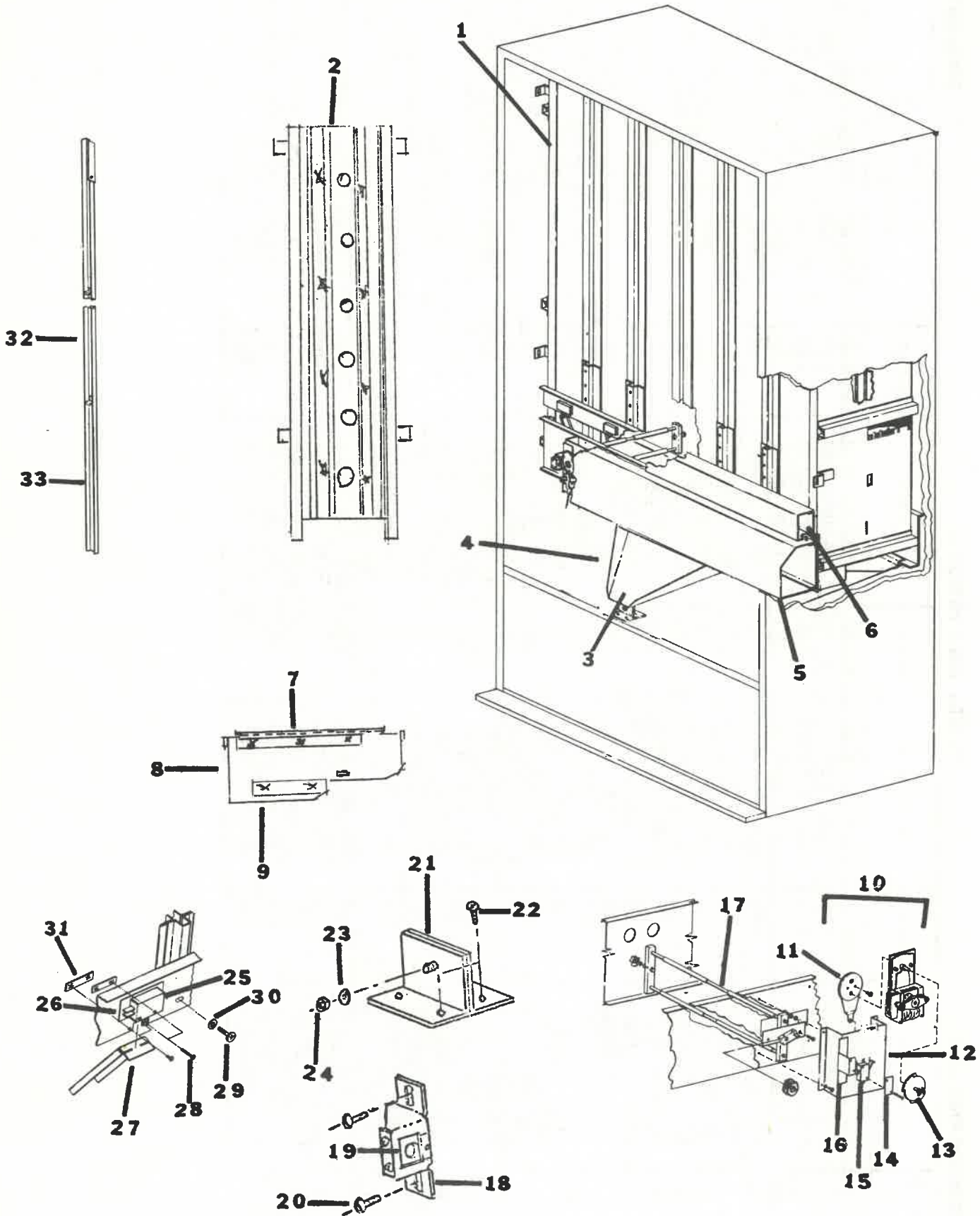


Parts and Price Lists

SHELL AND HINGES

DIXIE-NARCO

ITEM NO.	Dddb300-6	PRICE	Dddb348-6	PRICE	Dddb420-6	PRICE	PART NAME AND DESCRIPTION
1	D166,060,000.53	\$120.00	D165,060,000.63	\$130.00	D164,060,000.63	\$140.00	Shell and Tank Assembly
2	C164,000,030.63	11.50	C165,000,030.53	11.50	C164,000,030.63	11.50	Protective Plate - Left Side
3	B164,000,040.73	9.00	B165,000,040.63	9.00	B164,000,040.73	9.00	Protective Plate - Right Side
4	901,100,440.01	.20	901,100,440.01	.20	901,100,440.01	.20	Drive Rivet - 1/4"
5	B801,501,710.31	3.00	B801,501,710.31	3.00	B801,501,710.31	3.00	Cabinet Hinge - Top
6	900,700,600.01	.02	900,700,600.01	.02	900,700,600.01	.02	Flat Washer - Delrin
7	801,803,170.01	.05	801,803,170.01	.05	801,803,170.01	.05	Bearing - Nylon
8	A800,502,030.01	.35	A800,502,030.01	.35	A800,502,030.01	.35	Collar - Hinge Pin
9	A900,201,260.01	.12	A900,201,260.01	.12	A900,201,260.01	.12	Lock Screw
10	900,900,470.02	.02	900,900,470.02	.02	900,900,470.02	.02	Cap Screw - 1/4 - 20
11	903,000,070.02	.02	903,000,070.02	.02	903,000,070.02	.02	Lockwasher - 1/4 - 20
12	900,201,170.01	.05	900,201,170.01	.05	900,201,170.01	.05	Carriage Bolt and Nut
13	A169,000,150.13	.75	A169,000,150.13	.75	A169,000,150.13	.75	Hinge Spacer
14	903,000,070.02	.02	903,000,070.02	.02	903,000,070.02	.02	Lockwasher for 1/4 Bolt
15	A169,000,130.43	.30	A169,000,130.43	.30	A169,000,130.43	.30	Cover - Pocket - Hinge
16	A142,161,700.53	2.00	A142,161,700.53	2.00	A142,161,700.53	2.00	Roller Door Lifter assembly
17	A801,801,330.51	.60	A801,801,330.51	.60	A801,801,330.51	.60	Roller
18	A142,160,530.53	.40	A142,160,530.53	.40	A142,160,530.53	.40	Roller Bracket
19	A142,160,580.43	.40	A142,160,580.43	.40	A142,160,580.43	.40	Spacer - Roller Bracket
20	900,200,290.01	.05	900,200,290.01	.05	900,200,290.01	.05	Screw, Machine - 10-24 x 3/4
21	903,000,170.02	.02	903,000,170.02	.02	903,000,170.02	.02	Lockwasher
22	B169,000,100.73	3.00	B169,000,100.73	3.00	B169,000,100.73	3.00	Cabinet Hinge - Bottom
23	900,700,530.01	.05	900,700,530.01	.05	900,700,530.01	.05	Washer
24	A901,800,330.51	.10	A901,800,330.51	.10	A901,800,330.51	.10	Flanged Bushing
25	900,900,470.02	.02	900,900,470.02	.02	900,900,470.02	.02	Screw, Machine 1/4 - 20 x 3/4
26	900,700,710.01	.05	900,700,710.01	.05	900,700,710.01	.05	Lockwasher

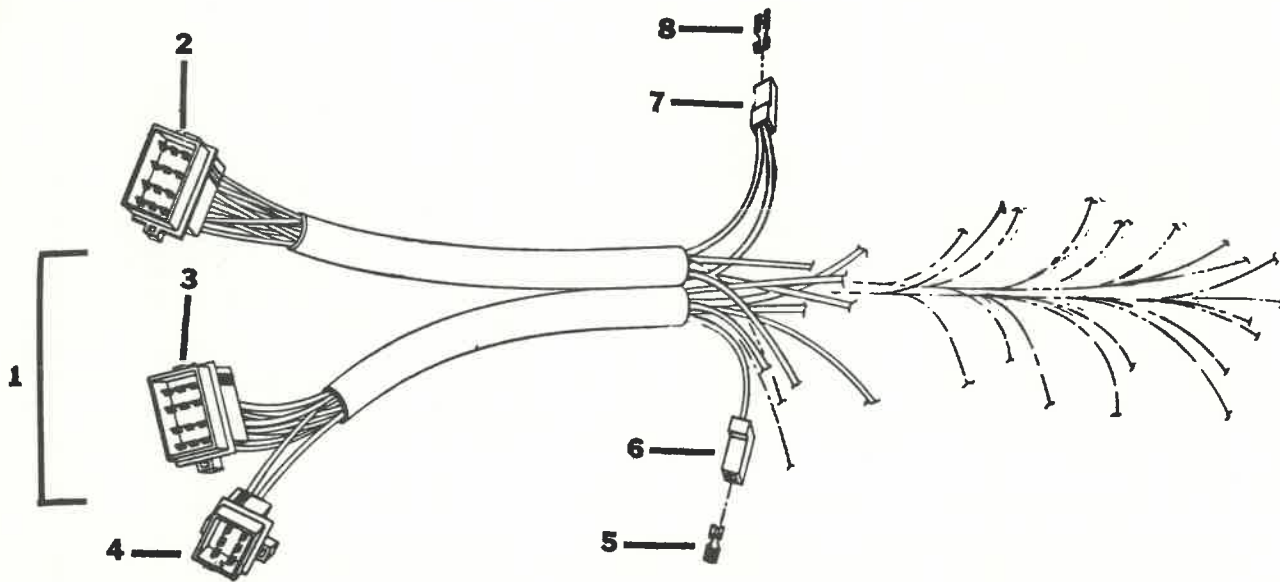


**DIXIE-NARCO**

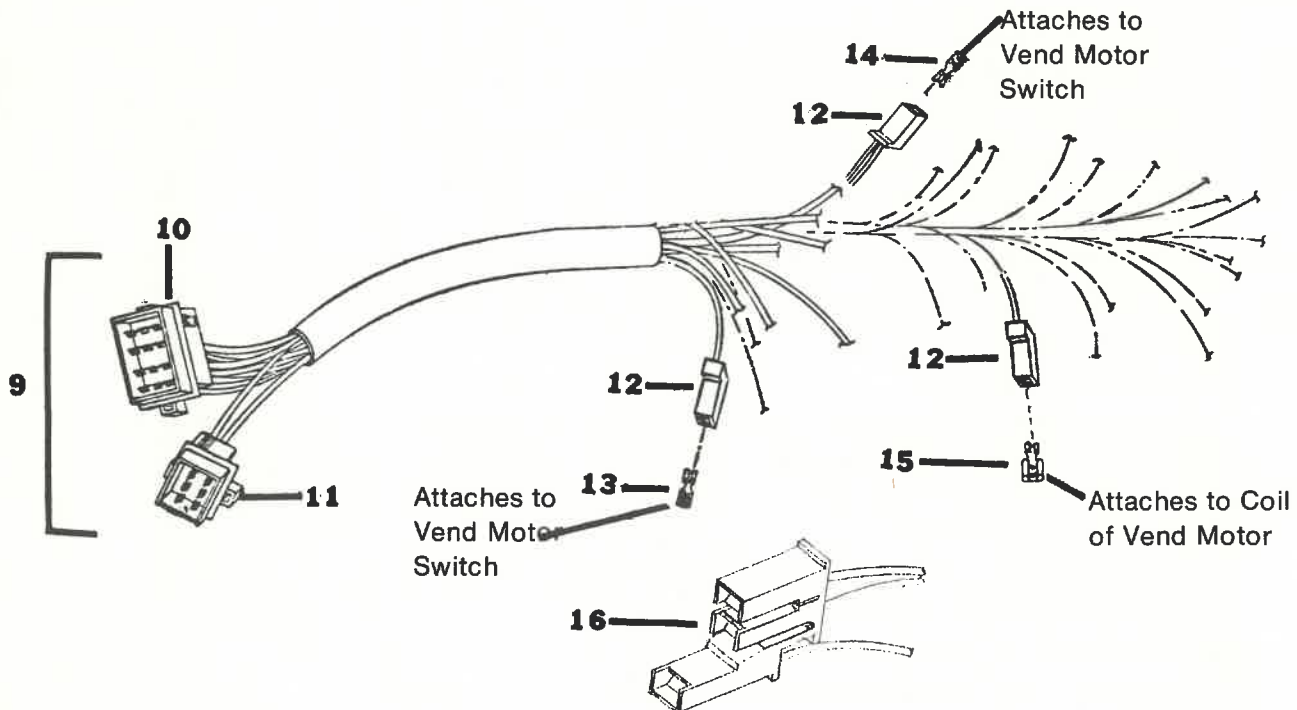
**VEND MECHANISM**

**Parts and Price List**

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	C209,070,000.13	\$210.00	C210,070,000.13	\$240.00	C211,070,000.13	\$270.00	Vend Mechanism Assembly
2	C172,070,400.53	3.80	C165,073,500.63	4.10	C164,073,500.63	4.60	Bottle Guide, Rear
3	D211,070,020.03	4.25	D211,070,020.03	4.25	D211,070,020.03	4.25	Liner Can & Bottle Chute
4	C211,070,100.03	11.50	C211,070,100.03	11.50	C211,070,100.03	11.50	Can & Bottle Chute Assembly
5	C176,070,250.03	5.00	C176,070,250.03	5.00	C176,070,250.03	5.00	Cover Vend Motor
6	B176,070,700.03	3.00	B176,070,700.03	3.00	B176,070,700.03	3.00	Cover - Sold out Switches - S/A
7	B172,071,800.33	1.00	B172,071,800.33	1.00	B172,071,800.33	1.00	Formed Shim, Left
8	B172,070,240.43	.50	B172,070,240.43	.50	B172,070,240.43	.50	Flat Shim
9	B172,071,700.33	1.00	B172,071,700.33	1.00	B172,071,700.33	1.00	Formed Shim, Right
10	D147,072,301.13	15.50	D147,072,301.13	15.50	D147,071,301.13	15.50	Vend Motor S/A
11	B147,072,100.43	2.50	B147,072,100.43	2.50	B147,072,100.43	2.50	Vending Cam S/A
12	C147,070,190.53	2.50	C147,070,190.53	2.50	C147,070,190.53	2.50	Bracket - Vend Motor
13	B147,073,700.33	2.50	B147,073,700.33	2.50	B147,073,700.33	2.50	Cam Assembly - Vend Motor
14	905,800,330.01	.02	905,800,330.01	.02	905,800,330.01	.02	Insulator Spacer
15	A147,070,290.33	1.50	A147,070,290.33	1.50	A147,070,290.33	1.50	Switch - Vend Motor
16	B176,070,290.03	.80	B176,070,290.03	.80	B176,070,290.03	.80	Bracket - Switch
17	C164,071,000.93	15.00	C164,071,000.93	15.00	C164,071,000.93	15.00	Oscillator Assembly
18	B169,000,080.53	3.50	B169,000,080.53	3.50	B169,000,080.53	3.50	Latch Strike Assembly - Main Door
19	A900,800,570.11	.30	A900,800,570.11	.30	A900,800,570.11	.30	Nut, Latch, Strike
20	900,200,290.01	.05	900,200,290.01	.05	900,200,290.01	.05	Screw, Machine, 10.24 x 3/4
21	B147,074,400.63	1.00	B147,074,400.63	1.00	B147,074,400.63	1.00	Bracket - Chute S/A
22	900,600,230.02	.02	900,600,230.02	.02	900,600,230.02	.02	Screw S/M #8 x 1/2
23	900,700,620.01	.05	900,700,620.01	.05	900,700,620.01	.05	Lockwasher
24	900,900,960.02	.02	900,900,960.02	.02	900,900,960.02	.02	Hex Nut T0-32
25	B804,100,410.01	1.60	B804,100,410.01	1.60	B804,100,410.01	1.60	Sold Out Switch
26	A905,800,390.01	.02	A905,800,390.01	.02	A905,800,390.01	.02	Insulator - Switch
27	B164,070,110.23	.90	B164,070,110.23	.90	B164,070,110.23	.90	Paddle - Sold Out Switch
28	900,301,530.01	.02	900,301,530.01	.02	900,301,530.01	.02	Screw S/M #4 x 1
29	900,901,890.02	.02	900,901,890.02	.02	900,901,890.02	.02	Screw, Machine #8 x 3/8
30	903,000,230.02	.02	903,000,230.02	.02	903,000,230.02	.02	Washer
31	900,901,530.01	.02	900,901,530.01	.05	900,901,530.01	.05	Speednut - I twin
32	C176,071,000.13	2.50	C176,071,000.13	2.50	C176,071,000.13	2.50	Can Divider Assembly Left Hand
33	B176,071,100.13	2.50	B176,071,100.13	2.50	B176,071,100.13	2.50	Can Divider Assembly Right Hand



RELAY BOX HARNESS



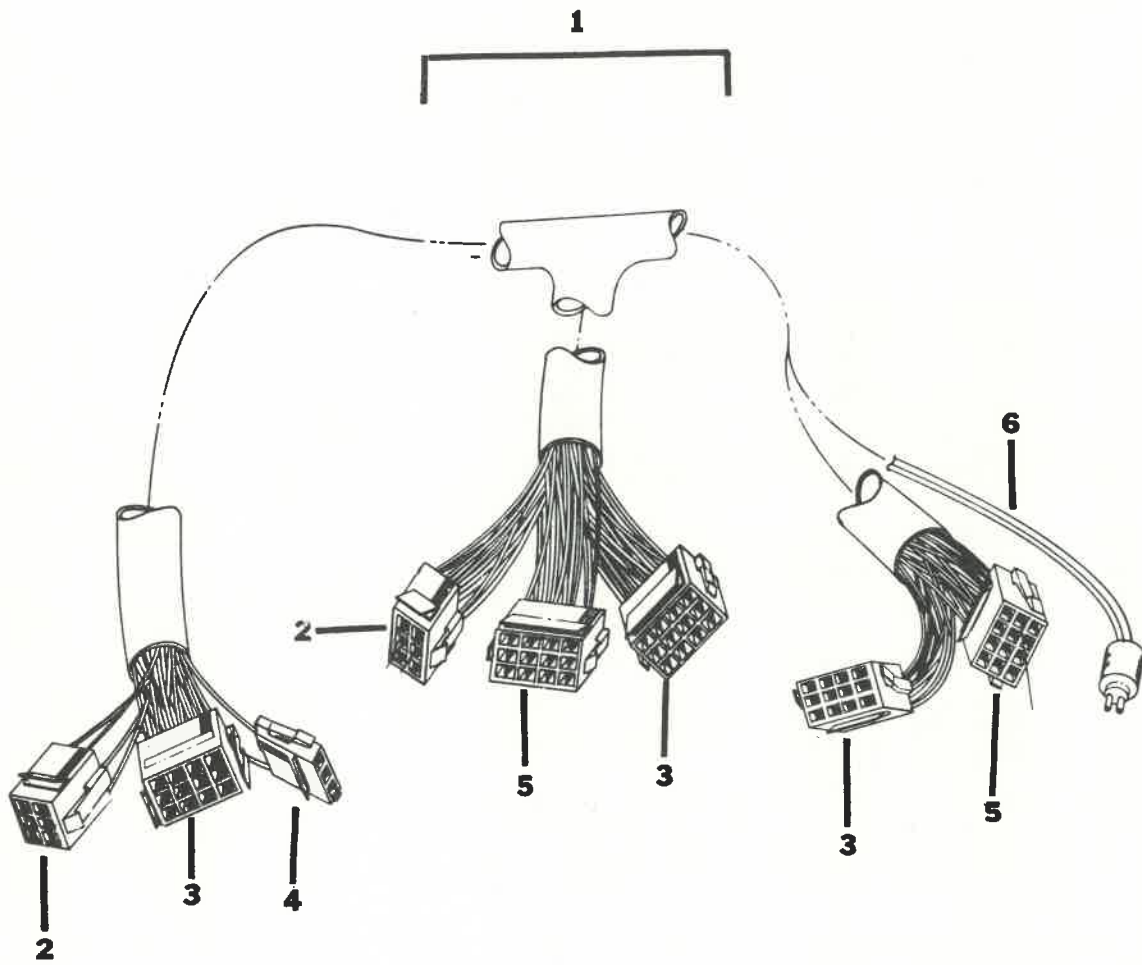
CABINET HARNESS

Parts and Price List

WIRING HARNESS

DIXIE NARCO

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	D164,151,900.63	\$10.00	D164,151,900.63	\$10.00	D164,151,900.63	\$10.00	Wiring Harness Relay Box
2	904,600,340.01	.20	904,600,340.01	.20	904,600,340.01	.20	Amp Loc Cap (12 ways)
3	A147,050,150.53	.50	A147,050,150.53	.50	A147,050,150.53	.50	Amp Loc Cap (Red) 12 ways
4	904,600,140.01	.20	904,600,140.01	.20	904,600,140.01	.20	Amp Loc Cap (6 ways)
5	904,600,520.01	.05	904,600,520.01	.05	904,600,520.01	.05	Faston Receptacles (1 wire)
6	904,600,540.01	.02	904,600,540.01	.02	904,600,540.01	.02	Receptacle Housing
7	904,600,540.01	.02	904,600,540.01	.02	904,600,540.01	.02	Receptacle Housing
8	904,600,530.01	.02	904,600,530.01	.02	904,600,530.01	.02	Faston Receptacles (2 wire)
9	F164,070,601.13	25.00	F164,070,601.13	25.00	F164,070,601.13	25.00	Wiring Harness Mechanism (complete)
10	A147,050,150.53	.50	A147,050,150.53	.50	A147,050,150.53	.50	Amp Loc Cap 12 ways (Red)
11	904,600,340.01	.20	904,600,340.01	.20	904,600,340.01	.20	Amp Loc Cap 12 ways
12	904,600,040.01	.05	904,600,040.01	.05	904,600,040.01	.05	Receptacle Housing
13	904,600,520.01	.05	904,600,520.01	.05	904,600,520.01	.05	Faston Receptacle (1 wire)
14	904,600,530.01	.02	904,600,530.01	.02	904,600,530.01	.02	Faston Receptacle (2 wire)
15	904,600,380.01	.05	904,600,380.01	.05	904,600,380.01	.05	Faston Receptacle
16	904,600,560.01	.20	904,600,560.01	.20	904,600,560.01	.20	3 Wire Receptacle Housing





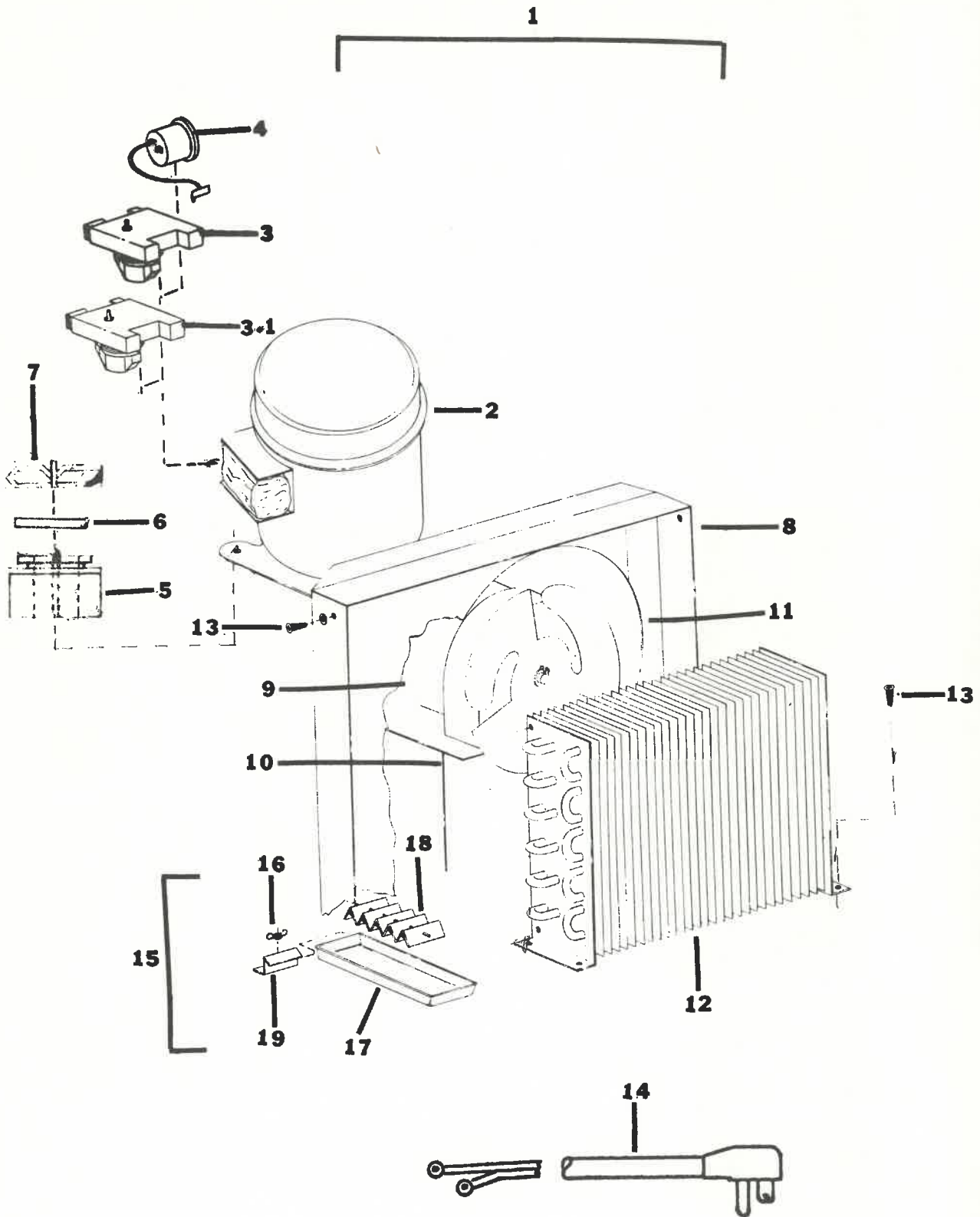
Parts and Price List

WIRING HARNESS, INNER DOOR

DIXIE NARCO

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	D147,050,601.03	\$18.00	D147,050,601.03	\$18.00	D147,050,601.03	\$18.00	Wiring Harness Inner Door (complete)
2	904,600,130.01	.20	904,600,130.01	.20	904,600,130.01	.20	Amp Loc Plug (6 way)
3	904,600,330.01	.20	904,600,330.01	.20	904,600,330.01	.20	Amp Loc Plug (12 way)
4	904,600,470.01	.10	904,600,470.01	.10	904,600,470.01	.10	Amp Loc Plug (3 way)
5	A147,050,140.43	.50	A147,050,140.43	.50	A147,050,140.43	.50	Amp Loc Plug (12 way - red)
6	A904,900,980.01	.40	A904,900,980.01	.40	A904,900,980.01	.40	Power Lead

4030

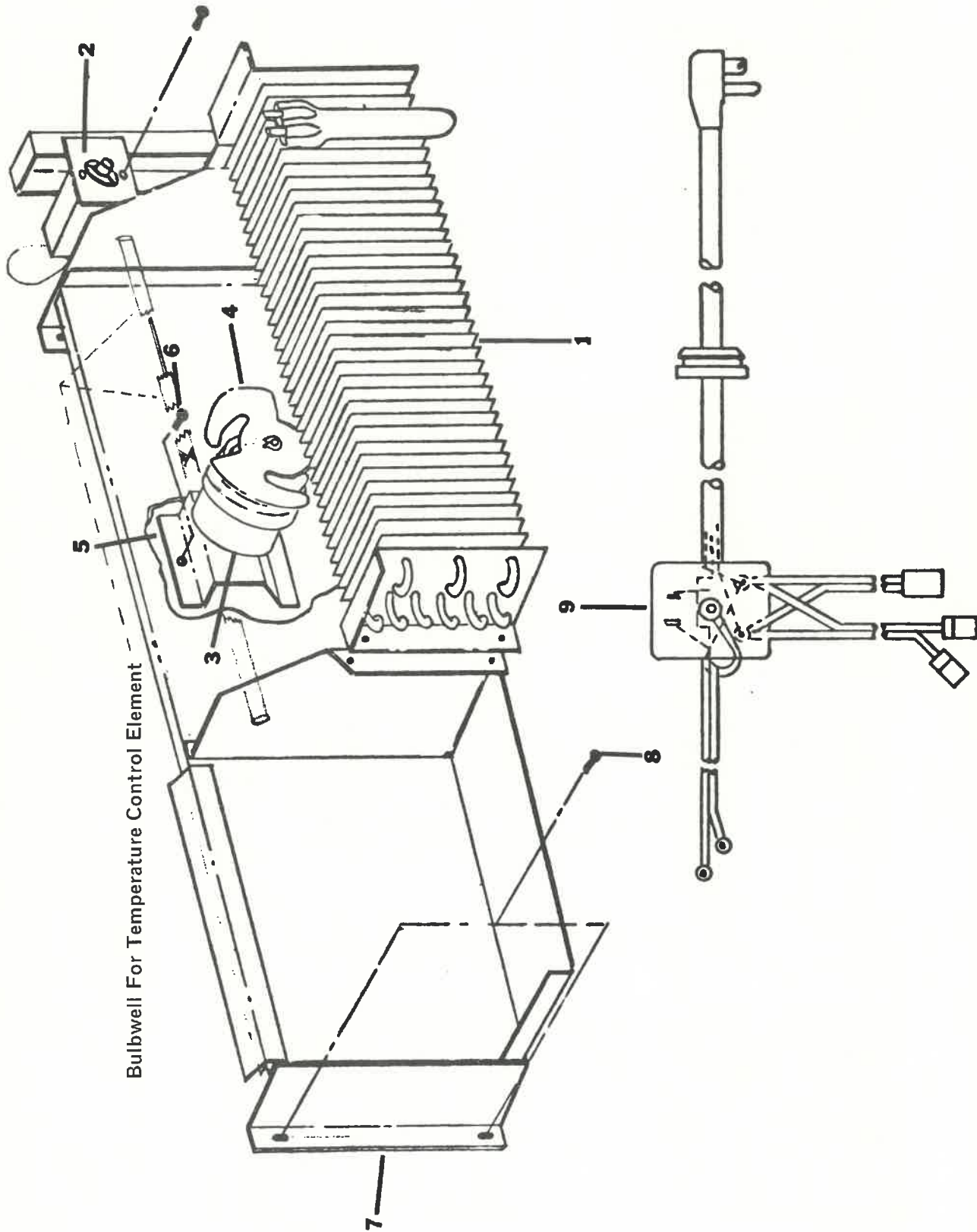


REFRIGERATION

Parts and Price List

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDD420-6	PRICE	PART NAME AND DESCRIPTION
1	F143,040,401.23	\$85.00	F143,040,401.23	\$85.00	F143,040,401.23	\$85.00	Refrigeration System Model 300 (complete)
2	802,500,170.01	59.70	802,500,170.01	59.70	802,500,170.01	59.70	Compressor Model AE3440A Tecumseh
3	Tec.8209660A09	1.75	Tec.8209660A09	1.75	Tec.8209660A09	1.75	Relay for AE3440A Model Compressor
*	(SP#9660-040-182)		(SP#9660-040-182)		(SP#9660-040-182)		Relay for AE3440A Model Compressor
3.1	Tec820RR12A10	1.75	Tec820RR12A10	1.75	Tec820RR12A10	1.75	Relay for AE3440A Model Compressor
*	(GE#3ARR12-PB-220)		(GE#3ARR12-PB-220)		(GE#3ARR12-PB-220)		Relay for AE3440A Model Compressor
4	8300MRT-A78	1.45	8300MRT-A78	1.45	8300MRT-A78	1.45	Overload for AE3440A Model Compressor
*	(SPMRT22AIN-34)		(SPMRT22AIN-34)		(SPMRT22AIN-34)		Overload for AE3440A Model Compressor
5	902,000,570.01	.10	902,000,570.01	.10	902,000,570.01	.10	Grommet - Compressor Mounting
6	A901,803,910.01	.04	A901,803,910.01	.04	A901,803,910.01	.04	Plug - Compressor Grommet
7	A900,901,880.01	.02	A900,901,880.01	.02	A900,901,880.01	.02	Retainer Clip - Compressor Mounting
8	902,100,160.02	.50	902,100,160.02	.50	902,100,160.02	.50	Shroud
9	802,302,120.02	9.00	802,302,120.02	9.00	802,302,120.02	9.00	Fan Motor - Morrill with 22" leads
10	900,102,970.02	.30	900,102,970.02	.30	900,102,970.02	.30	Fan Bracket
11	900,103,370.02	.70	900,103,370.02	.70	900,103,370.02	.70	Fan Blade
12	D808,700,090.32	2.40	D808,700,090.32	2.40	D808,700,090.32	2.40	Condenser
13	900,300,160.01	.02	900,300,160.01	.02	900,300,160.01	.02	Screw S/M #6 x 3/8
14	A904,900,610.81	1.20	A904,900,610.81	1.20	A904,900,610.81	1.20	Compressor leads with plug
15	B169,000,200.33	2.50	B169,000,200.33	2.50	B169,000,200.33	2.50	Pan & Soakers Assembly
16	900,800,270.01	.02	900,800,270.01	.02	900,800,270.01	.02	Wing Nut, 10-32
17	C801,803,800.21	1.10	C801,803,800.21	1.10	C801,803,800.21	1.10	Condensate Pan
18	901,900,020.01	.20	901,900,020.01	.20	901,900,020.01	.20	Soakers
19	B169,000,070.43	.50	B169,000,070.43	.50	B169,000,070.43	.50	Pan Retainer

\* Relative to Relays & Overloads, the numbers that appear in parenthesis ( ) are always stamped on the Relay and Overload. Either number can be used for ordering purposes.



REFRIGERATION SYSTEM

ITEM NO.	DDDB300-6	PRICE	DDDB348-6	PRICE	DDDB420-6	PRICE	PART NAME AND DESCRIPTION
1	C802,600,370.41	\$14.00	C802,600,370.41	\$14.00	C802,600,370.41	\$14.00	Evaporator
2	802,800,090.01	5.40	802,800,090.01	5.40	802,800,090.01	5.40	Temperature Control
3	B143,000,301.03	12.00	B143,000,301.03	12.00	B143,000,301.03	12.00	Fan Motor S/A
4	901,303,270.01	.70	901,303,270.01	.70	901,303,270.01	.70	Fan Blade, Torr. LU7727CW
5	B164,040,080.43	.50	B164,040,080.43	.50	B164,040,080.43	.50	Bracket, Evaporator Fan Motor
6	900,300,320.01	.02	900,300,320.01	.02	900,300,320.01	.02	Screw, Self Tapping, 10-32
7	C164,040,101.03	10.00	C164,040,101.03	10.00	C164,040,101.03	10.00	S/A Fan Housing
8	900,300,280.01	.05	900,300,280.01	.05	900,300,280.01	.05	Screw, S/M, #8 x 3/8
9	A143,000,200.83	8.00	A143,000,200.83	8.00	A143,000,200.83	8.00	S/A Main Wiring Harness

