Dixie-Narco, INC.

SERVICE MANUAL

PERRIER GROUP
SERIES 90
SINGLE PRICE
E-MODEL VENDERS

Beginning Serial #0001-6368DU
October 1996

Operation Manual
Set-Up
Troubleshooting

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803,902,560.01

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GENERAL INFORMATION

VENDER SAFETY PRECAUTIONS

Please read this manual in its entirety. This service information is intended to be used by a qualified service technician, who is familiar with proper and safe procedures to be followed when repairing, replacing or adjusting any Dixie-Narco vender components. All repairs should be performed by a qualified service technician who is equipped with the proper tools. Use only genuine Dixie-Narco Factory replacement components.

Repairs and/or servicing attempted by untrained persons can result in hazards developing due to improper assembly or adjustments while performing such repairs. Persons not having the proper background may subject themselves to the risk of injury or electrical shock which can be serious or even fatal.

PRODUCT IDENTIFICATION

The date of manufacture of a Dixie-Narco product is determined by the date code incorporated in the serial number.

The vender serial number takes the form xxxx-yyyyzz. The first 4 digits (xxxx) identify the specific vender. The next 4 digits (yyyy) identify the manufacturing run that the vender was built in. The last two alpha characters (zz) identify the quarter and the year the vender was built. The first alpha character identifies the quarter:

A = 1st quarter
B = 2nd quarter
C = 3rd quarter
D = 4th quarter

The second alpha-character identifies the year:

U = 1996
V = 1997
W = 1998
X = 1999
Y = 2000
Z = 2001

SERIES 90 CAN & BOTTLE VENDER
INSTALLATION & SET-UP

Receiving Inspection

Upon receipt, inspect the vender for shipping damage. If there is any damage, have the driver note the damage on the Bill of Lading and notify Dixie-Narco. Although the terms of the vender sale require that the consignee originate shipping damage claims, Dixie-Narco will gladly help if you must file a claim.

Unpacking The Vender

Remove the stretch wrap and top covers from the vender. If flavor cards were shipped with the vender, they will be in an envelope affixed to the back of a vender in the shipment.

NOTE: **DO NOT STORE THE VENDER OUTDOORS WITH STRETCH WRAP ON. THIS COULD CAUSE THE STRETCH WRAP TO BOND TO THE VENDER'S SURFACE, WHICH COULD DAMAGE THE FINISH.**

Remove the shipping boards from the bottom of the vender. The shipping boards are attached by the leveling legs. Remove the shipping boards by **unscrewing** the leveling legs. This will avoid unnecessary damage to the leveling legs or the base. A 1½" "socket-type" wrench should be used on the bottom of the leveling legs. Be sure to replace the legs after removing the shipping boards.

To open the vender, locate the door lock keys which are secured inside the coin return cup. After unlocking the door, rotate the "T"-handle counter-clockwise until the door can be opened. Once inside, check the coin box on the door for any additional parts, pricing labels, or information concerning factory equipped accessories. Check the "T"-handle for proper alignment and locking functions. Check the lamps for proper installation.

WARNING: INSURE THAT POWER IS DISCONNECTED FROM THE VENDER OR THAT THE POWER INTERRUPT SWITCH (IF PROVIDED) IS NOT DEFEATED BEFORE INSPECTING OR REPLACING THE LAMPS. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY SUBJECT THE USER TO THE RISK OF INJURY OR ELECTRICAL SHOCK WHICH CAN BE SERIOUS OR FATAL.

Electric Power Needed

Refer to the vender serial number plate to determine the proper voltage and frequency the machine requires (domestically this requirement is 115 volt, 60 hertz). Domestic venders will operate at +/- 10% of the specified voltage. For domestic models this is between 103 volts and 127 volts. Single phase, alternating current is required. The vender must be plugged in its own properly rated circuit with its own circuit protection (fuse/circuit breaker).

DO NOT USE AN EXTENSION CORD.

Ground The Vender

The vender is equipped with a three wire power supply cord and **MUST** be plugged into a properly grounded outlet.

DO NOT REMOVE THE GROUND PIN OR IN ANY WAY BYPASS THE GROUNDING OF THE VENDER. If the outlet will not accept the power cord plug, contact an electrician to install a proper AC outlet.

WARNING: Failure to comply with these instructions may subject the user to the risk of injury or electrical shock which can be serious or fatal.

COIN CHANGERS AND OTHER ACCESSORIES

The Series 90 Vender must have a single price coin changer installed. Most styles can have a bill acceptor installed. If the coin changer and other accessories are not factory installed, refer to the instructions received from the manufacturer of the coin changer and other accessories for proper set-up and installation.

Installing a Coin Changer

Hang the coin changer on its mounting plate and secure it by tightening the three securing screws in the vender. Set the vend price according to the instructions for the coin changer. Also, set the escrow mode in the coin changer to "Escrow To Price" and if required, set the coin changer for the proper bill acceptor interface. Plug the coin changer into the 8 pin Jones socket in the vender. Manually load all coin changer coin tubes with at least 10 coins in each, and "prime" the coin changer by making one correct change transaction.

NOTE: If a bill acceptor is being used, the bill acceptor must be interfaced to the coin changer. Refer to the instructions provided by the manufacturer of the coin changer and the bill acceptor.

The following single price coin changers will work properly with the Series 90 Vender:

MARS Electronics Int.	Coin Acceptors, Inc.	Crane Int'l. Currency	CONLUX-USA
TRC 6200 MC 5802	3340-S S75-9400B-977	525E	US-111A-I
TRC 6200C MC 5800	9340-S S75-9800B-907	525C	US-111A-ID
TRC 6800 MC 5800 DH	9360-S	525EC	USA-121 A-OC
TRC 6800 H	9370-S	500	
TRC 6800 C	S300E9240	510	
TRC 6800 HC			

Placing The Vender On Location

CAUTION: **DO NOT TRANSPORT THE VENDER TO OR FROM THE LOCATION WHEN IT IS LOADED WITH PRODUCT; DAMAGE TO THE VENDER MAY RESULT.**

The vender must be located on a solid, flat, and level surface.

The vender must be positioned close enough to an electrical outlet that an extension cord is not required. If securing the vender to the floor or wall is required, call the Dixie-Narco Factory Service Department for suggestions.

Level The Vender

Level the vender. When the vender is level, the door can be opened to any position and it will not move by itself. Open the door to several different positions before deciding that the vender is level. A carpenter's level will help to verify that the machine is level. Make sure that all of the leveling legs are in contact with the floor. If you cannot level the vender, select another location. Do not place any objects under the machine.

DANGER: **THE VENDER MUST BE PROPERLY LOCATED AND LEVELED TO MINIMIZE THE RISK OF INJURY OR DEATH FROM TIPPING IN THE EVENT OF MISUSE OR VANDALISM.**

Space The Vender

Do not block the rear of the vender. Keep the vender 4 inches (10 cm) from the wall to insure adequate air flow to the condenser and compressor. At the front of the vender, make sure that nothing obstructs the air intake at the bottom of the main door. At the rear of the vender, make sure that nothing obstructs the air exhaust at the bottom of the cabinet.

Installing Flavor Cards

The flavor cards may be inserted one of two ways: 1) in the selection buttons, or 2) in the flavor card carrier.

1.) Swing the coin changer mounting plate away from the outer door exposing the back of the select buttons. The flavor cards are inserted in the back of the selection buttons from either side. Ensure the flavor cards are placed in the select buttons that correspond to the column in which the product is loaded.

2.) Swing the coin changer mounting plate away from the outer door, exposing the back of the select panel. Remove the flavor card carrier. Ensure the flavor cards are placed in the select button flavor card carrier position that corresponds to the column in which the product is loaded. Install the flavor card carrier back into position.

CLEANING THE VENDER

DO NOT USE A WATER JET OR NOZZLE TO CLEAN THE VENDER.

SIGN FACE

The polycarbonate sign face requires proper cleaning to prolong the service life of this item. It is recommended that you periodically clean the sign face as follows:

1. Rinse the sign with a soft cloth or sponge soaked in warm water.
2. If necessary, use a mild soap to loosen any dirt or grime. To prevent damage, **DO NOT SCRUB** or use a brush or squeegee, as some signs have a clear ultraviolet resistant coating to prevent yellowing.
3. Repeat the above steps as necessary, then dry using a soft cloth to prevent spotting.

CABINET

* Wash the cabinet with a good detergent or soap mixed in warm water.
* Wax the vender 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.
* Repair any scratches on painted surfaces to prevent corrosion.

WARNING: THE COMPRESSOR ELECTRICAL CIRCUIT IS ALWAYS LIVE WHEN THE PLUG IS CONNECTED TO AN ELECTRICAL OUTLET.

REFRIGERATION CONDENSER

* Check the condenser periodically for dirt or lint build up.
* Remove the build up with a brush or vacuum, or blow the dirt out of the condenser with compressed air and approved safety nozzle.
* Ensure nothing obstructs air intake at the bottom of the main door.
* Ensure nothing obstructs air exhaust at the rear of the cabinet.

COIN ACCEPTOR

* Follow the Coin Acceptor Manufacturer's instructions.

LUBRICATING THE VENDER

The vender refrigeration system does not require any field lubrication. The hermetic refrigeration system and fan motors are manufactured with lifetime lubrication.

TIME	*COMPONENT*	*LUBRICANT EXAMPLE*
Every 6 Months (or as needed)	**Main Door** 1. Lock Bolt & Nut Retainer 2. Hinge Pivot Points	Mechanics Friend
	Inner Door 1. Hinge Pivot Points	Mechanics Friend
Every Year (or as needed)	**Inner Door** 1. Door Gasket	Petroleum Jelly

Temperature Control Adjustments

Adjustment #1 - Temperature Adjustment

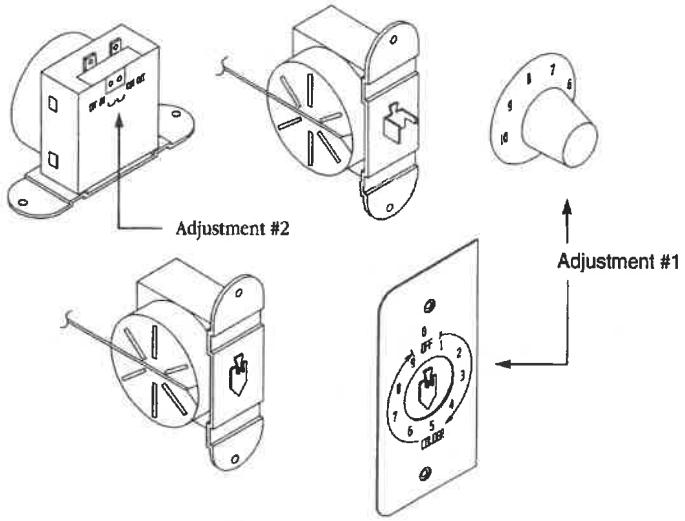
Turn the adjustment clockwise for colder product and counter-clockwise for warmer product. This will change the cut-out temperature only, the cut-in temperature remains constant.

Adjustment #2 - Altitude Adjustment

WARNING:
DISCONNECT POWER TO THE VENDING MACHINE BEFORE PROCEEDING WITH THIS ADJUSTMENT.

The control is factory set for an altitude of 152 M (500 ft.). For higher altitudes, adjust the inside range screws to prevent freeze-up of the product. Adjust the inside range screws as follows.

ALTITUDE		CUTLER-HAMMER 9531N272
Meters	**Feet**	**Turn both screws counter clockwise**
610	2,000	1/8 Turn
1219	4,000	1/4 Turn
1829	6,000	1/2 Turn
2438	8,000	5/8 Turn

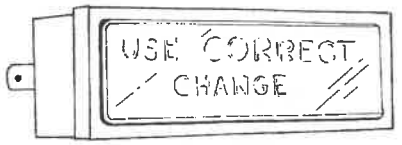


- CHECK IT OUT -

WHAT TO DO	WHAT SHOULD HAPPEN
Plug the power cord in.	The compressor, condenser fan, and evaporator fan run, "Use Correct Change" window lights and "Sold Out" lamps light. The fluorescent tubes light.
Load at least six beverages in each column.	Sold out lights go off.
Close the vender door, put in correct change, and push a select button.	Product is dispensed and delivered.
If a dollar bill validator is used: Load the changer with at least 10 quarters, 10 dimes, and 10 nickels. Prime the coin changer, insert $1 bill in the validator.	Correct change is paid back.
Push a select button.	Product is dispensed and delivered.
Once the vender is placed on location, load the changer money tubes. Fully load the vender with product and allow it to run overnight.	Return to the vender the next day and vend a product from each column. A cold product is dispensed from each column and correct change is returned. The first product vended has a temperature of 0^0 C (32^0 F) to 1^0 C (34^0 F).

ELECTRICAL PARTS AND FUNCTIONS

CORRECT CHANGE LAMP



Correct Change Lamp
904,700,180.31
Single Price (English)

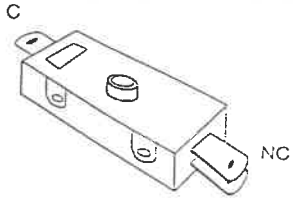
OR

Correct Change Lamp
804,700,540.21
Single Price (125 VAC)

The Correct Change Lamp is mounted in the Coin Insert Casting.

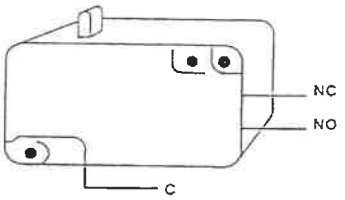
The Correct Change Lamp is controlled by the Coin Changer and is "OFF" when coins are in the tubes of the Coin Changer.

SELECT SWITCH



Select Switch
804,100,510.01 - Single Price

OR



Select Switch
804,100,710.21 - Single Price

The Select Switch is located in the Select Panel behind the press button and is secured with two (2) screws.

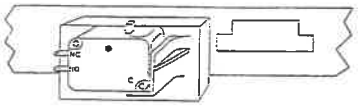
The normally open contact of the Select Switch is in the Sold-Out Lamp and Vend Motor Coil Circuits. When a Select Button is pushed, the normally open contact closes and completes the Sold Out Lamp Circuit and the Vend Motor Coil Circuit.

The normally closed contact of the Select Switch is in the Select Panel Circuit.

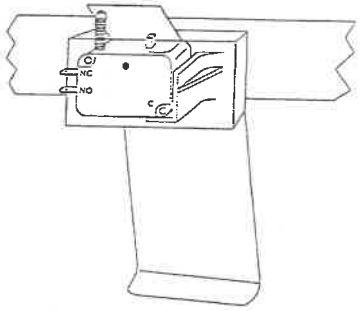
SOLD OUT SWITCHES (2 in a cluster)

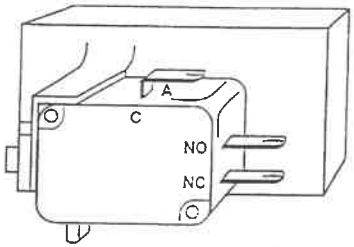
The Sold Out Switch is located on the Front Mechanism Plate under the Vend Motor Cover.

The Sold Out Switches are the "snap in" type. To install, place the switch in position over the opening, push in and at the same time, slide to the right.



Sold Out Switch Pak
804,100,910.01 -Single Price





A) Front Sold Out Switch (one for each column)

The normally closed contact of the front Sold Out Switch is in the Vend Relay Coil Circuit and the Coin Changer Inhibit Circuit. This normally closed contact (kept closed by can or bottle) is in parallel with all the other normally closed contacts of the Front Sold Out Switches and when all are open, the coin changer will not accept coins.

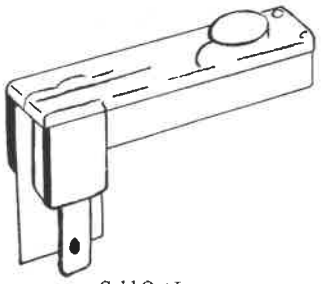
The normally opened contact of the front Sold Out Switch has no function.

B) Vend Sold Out Switch (one for each vending circuit)

The normally closed contact of the Vend Sold Out Switch is in the Vend Motor Circuit. This normally closed contact (held closed by can or bottle) stays closed in the vend motor circuit so the Vend Motor Circuit can be completed.

The normally open contact of the Vend Sold Out Switch is in the Sold Out Lamp circuit (kept open by a can or bottle). When not kept open by a can or bottle, the normally open contact closes and completes the Sold Out Lamp Circuit.

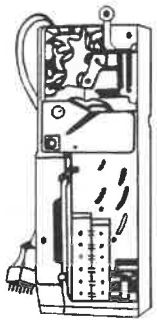
SOLD OUT LAMPS



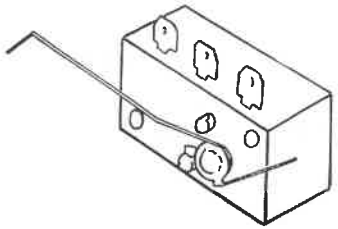
Sold Out Lamp
804,700,510.01 - Generic Round

The Sold Out Lamp (one for each vending circuit) is secured to the back of the select button in the Selector Panel. The Sold Out Lamp is turned on by the closing of the normally open contact of the Vend Sold Out Switch.

COIN VEND SWITCH
(Coin Changer)



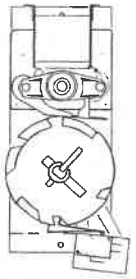
Coin Changer



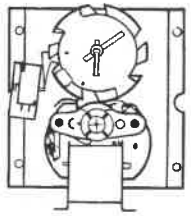
Coin Vend Switch
(Used in mechanical coin mechs)

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 normally open contact of the Coin Vend Switch is in the vend relay coil and the coin changer magnet circuits. This normally open contact closes and completes the vend relay circuits.
The normally closed contact of the Coin Vend Switch is in the Vend Motor Coil Circuits. This normally closed contact closes in the Vend Motor Coil Circuits to set up these circuits so that a selection can be made.

VEND MOTOR



For Narrow Column

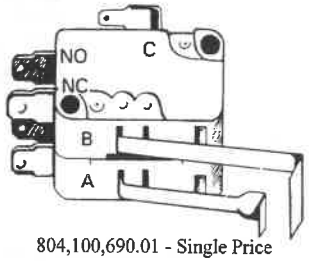


For Wide Column

The Vend Motor (one for each vending stack) is mounted on a bracket on the front of the Front Mechanism Plate.

The Vend Motor is in the Vend Motor Coil Circuit. The Vend Motor runs when a select button is pushed. The normally open contact of the select switch closes and completes the Vend Motor Coil Circuit. The Vend Motor continues to run through the normally open contact (closed by the Vend Motor Cam) of the Vend Motor Switch. The Vend Motor stops when the Vend Motor Switch arm drops off the high side of the Vend Motor Cam.

VEND MOTOR SWITCH



804,100,690.01 - Single Price

A. Vend Motor Switch

The Vend Motor and the By-Pass Switches are secured together and referred to as a Cluster Switch. The Cluster Switch, one (1) for each circuit, is located on the Vend Motor Assembly and secured by two (2) screws.

The normally open contact of the Vend Motor Switch (A) is in the Vend Motor Coil Circuit. This contact closes to keep the Vend Motor running and at the same time lights the Sold Out Light, until the arm of the Vend Motor Switch drops into the cam notch and the Vend Motor stops.

The normally closed contact of the Vend Motor Switch has no function.

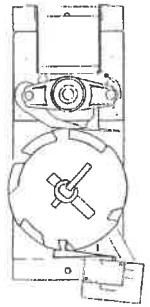
B. By-Pass Switch

The By-Pass/Vend Motor Switches are together and do not come apart. The By-Pass Switch, one (1) for each circuit, is located on the Vend Motor Assembly secured by two (2) screws. This switch is a by-pass around the Vend Motor Switch to keep the Coin Changer Inhibit Circuit closed if the Vend Motor stops or is stopped when the arm of the Vend Motor Switch is top side of the vending cam, i.e. all other vending circuits are operative.

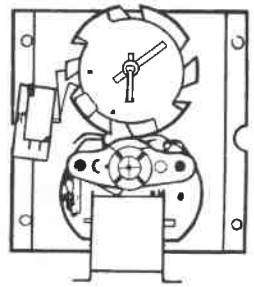
The normally open. contact of the By-Pass Switch, (held closed by the vending cam), is in the Coin Changer Inhibit Circuit. Shortly after the beginning of the vending cycle, the arm of the switch (worked by the vending cam) drops into the cam notch and this normally open contact opens in the Coin Changer Circuit. When the arm of the switch reaches the top side of the cam, the normally open contact closes and restores power to the changer circuit. The normally open contact remains closed at the end of the vending cycle.

The normally closed contact of the By-Pass Switch is in the Coin Changer Circuit. This normally closed contact opens in the Coin Changer Circuit. The normally closed of the By-Pass Switch is also in the Vend Motor Coil Circuit. The normally closed contact closed in the Vend Motor Coil Circuit to keep the Vend Motor running until the normally open contact of the vend motor switch closes to keep the Vend Motor running.

HOW THE VEND/BY-PASS SWITCHES WORK



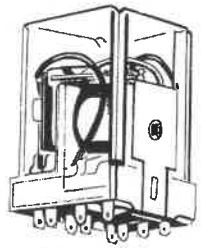
For Narrow Column
Figure 1



For Wide Column
Figure 2

1. The Vend Motor and Vend Motor Switches are shown in the stand-by position. (See figure 1 and figure 2)
   The arm of the Vend Motor Switch A is in the cam notch (low cam).
   The arm of the By-Pass Switch B is on top of the cam (high cam).
2. a. Set up a credit.
   b. Make a selection.
   (Pushing a select switch causes the vend motor to run and the arm of the by-pass switch drops in the cam notch and breaks the circuit to the vend relay coil - cancels credit.)
   c. The Vend Motor continues to run through the notch.
   d. The arm of the Vend Motor switch reaches high cam causing the vend motor to continue to run.
   e. A fraction of a second later, the By-Pass switch arm reaches high cam and forms a by-pass around the Vend Motor Switch. If a jam occurs, all other selections will work.
   f. The Vend Motor continues to run to the stand-by position.

VEND RELAY



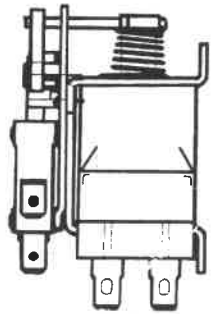
804,200,170.11

VEND RELAY SWITCH NO. 1 Normally Closed (the Normally Open contact is not used)
The normally closed contact of the Vend Relay Switch No. 1 is the Coin Changer Inhibit Circuit. When this normally closed contact opens, the Coin Changer is inhibited.

VEND RELAY SWITCH NO. 2 Normally Open (the Normally Closed contact is not used)
The normally open contact of the Vend Relay Switch No. 2 is in each of the Vend Motor Coil Circuits. This contact closes in the Select Panel and provides power to the select switches circuit so that a selection can be made.

VEND RELAY SWITCH NO. 3 Normally Open (the Normally Closed contact is not used)
The normally opened contact of the Vend Relay Switch No. 3 is in the Vend Relay Coil Circuit. This normally open contact closes and keeps the Vend Relay Coil energized.

SEQUENCE RELAY (not on all venders)



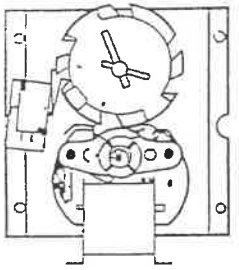
804,200,190.01

The sequence relay is located on a bracket adjacent to the Vend Relay (credit relay) on the main door and secured with two (2) screws.
When a credit is set up by the Coin Changer and the vend relay is energized, the normally open vend relay switch #2 closes and completes the sequence relay coil circuit.
The sequence relay coil circuit is broken when any select buttons are pushed, opening the normally open contact in the sequence relay coil circuit.

VEND MOTOR WIDE COLUMN

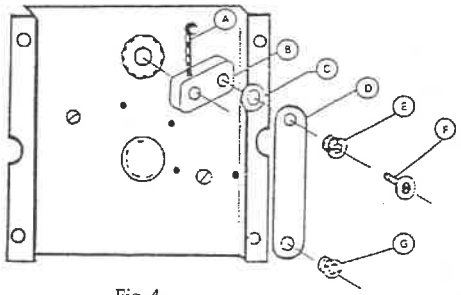
Mounted on the Vender with the Vend Switch on the left side (See Fig. 3). The Linkage and Drive Arm assembly is used to connect the Vend Motor to the Oscillator. (See Fig. 4)

Vend Motor Switch
804,100,690.01 - Single Price



Vend Motor - Wide Column
609,070,600.33 - Single Price

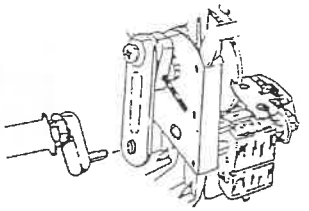
Fig. 3

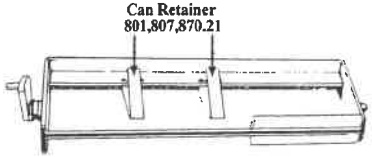


A	Drive Pin	900,901,940.41
B.	Drive Arm, Zinc	801,200,950.91
C.	Washer	900,700,600.01
D.	Linkage Arm, Zinc	801,201,590.21
E.	Nyliner (Top)	901,803,160.01
F.	Truss Screw #8-32x½	900,303,180.01
G.	Nyliner (Bottom)	901,804,770.01

Fig. 4

Nyliner (Rear Stack)
801,803,170.01



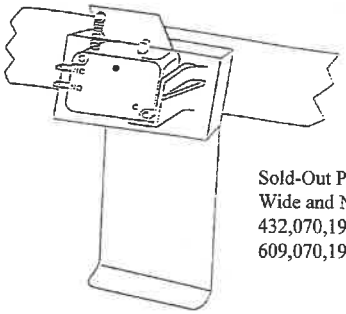


Oscillator Assembly
609,070,500.03 - Bottles
609,070,400.03 - Cans (shown)

Nyliner (front stack)
901,804,230.01

Sold Out Spring
901,700,740.01

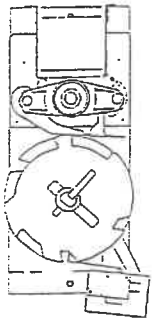
Sold-Out Switch Assy. Snap In
804,100,910.01 - Single Price
(Insulator and Switch are one piece)



Sold-Out Paddle
Wide and Narrow
432,070,190.23 - Standard
609,070,190.03 - Special use only

VEND MOTOR NARROW COLUMN

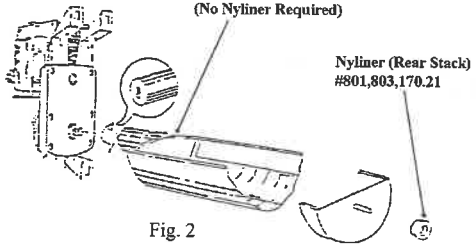
Mounted on the Vender with the Vend Motor Switch on the underside (See Fig. 1). The shaft of the Vend Motor slides into a slot in the Vend Rotor (See Fig. 2).



Vend Motor - Narrow Column
609,070,800.03 - Single Price

Vend Motor Switch
804,100,690.01 - Single Price

Fig. 1



Vend Rotor
801,201,560.31

Fig. 2

Package Description: 16.9 PET "Perrier" Water Bottle
Logos include: Arrowhead, Calistoga, Ice Mountain, Poland Springs, Ozarka, Zephyrhills, & Deer Park

Package Diameter: 2.51" (63.7 mm) **Package Height:** 8.00" (203.1 mm)

Dixie-Narco E-Model Venders

Parts Listed Need Per Column:

Wide Column Set-Up: 2 deep

4 - 801,809,720.01	3/16" flat shim (2 each side)
2 - 801,809,810.01	3/32 short flat shim (1 each side)
1 - 324,010,210.03	oscillator paddle extension
1 - 900,302,020.11	screw
1 - 801,809,800.11	vending cam, grey
1 - 801,809,790.11	adjustable cam, red

Cam set in hole # 3.
Rear spacer set in hole #18.
Load bottles caps to the back.

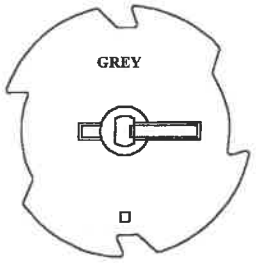
Narrow Column Set-Up: 2 deep

1 - 609,070,150.03	bottle shim, right
1 - see list	bottle divider assy.
609,072,300.03	for 501E
609,072,400.03	for 600E
1 - 609,070,300.03	rod and spring assembly

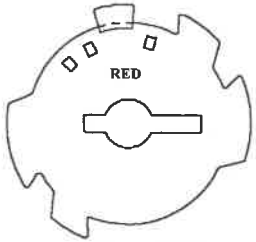
Place rod and spring assembly in position "B" of the rotor.
Cam set in hole #3.
Rear spacer set in hole #18.
Load rear bottles first with caps to the back, hang bottle divider in place, then load front bottles caps to the back.

For set-up of packages not listed or for assistance with any problems contact Dixie-Narco Technical Service Department at 800-688-9090 between the hours of 8:00 AM and 4:30 PM EST Monday through Friday.

CAMS FOR VEND MOTORS

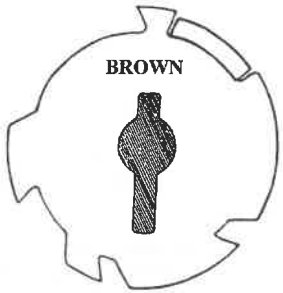


1. **Vending Cam For:**
   a. DNCB E-Models single, double, or triple depth wide column.
   b. Color of Cam is Grey.
   c. Part# 801,809,800.11



2. **Adjustable Cam For:**
   a. DNCB E-Models single, double, or triple depth wide column.
   b. Color of Cam is Red.
   c. Part# 801,809,790.11

3. **Vending Cam For:**
   a. DNCB E-Models single, double, or triple depth narrow column.
   b. Color of Cam is Brown.
   c. Part # 801,806,180.21



4. **Adjustable Cam For:**
   a. DNCB E-Models single, double, or triple depth narrow column.
   b. Color of Cam is Brown.
   c. Part # 801,806,611.01

CAM INSTALLATION AND REMOVAL

TO INSTALL A VENDING CAM:

1. Select the Vending Cam required (See page 19).
2. Locate the Hub at the center of the Cam (See Fig. 6).
3. With the Hub facing you, slowly slide the Cam on the front shaft of the Vend Motor while depressing the Lock Tab. (See fig. 6).
   NOTE: Reference below for timing of the Motors.
4. A distinct click will be heard, when the tab has locked into the locator hole of the Motor shaft.

CAUTION: Depress the Switch Arm when installing the Cam to prevent possible damage to the Switch Arm.

TO INSTALL AN ADJUSTABLE CAM:

1. Select the Adjustable Cam required. (See page 19).
2. Locate the Lift Tab on the outer edge of the Cam. (See fig. 5).
3. With the Lift Tab facing you, align the slot of the adjustable Cam with the Locking Tab of the vending Cam.
4. Place the Adjustable Cam on the Vending Cam.

   CAUTION: Depress the Switch Arm when installing the Cam to prevent possible damage to the Switch Arm.

5. Lift the Lock Tab of the Vending Cam, at the same time lift the Lift Tab of the Adjustable Cam and rotate the Adjustable Cam clockwise to the desired setting.

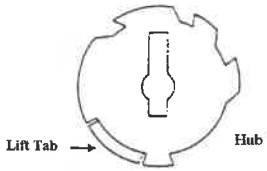


Fig. 5
Adjustable Cam

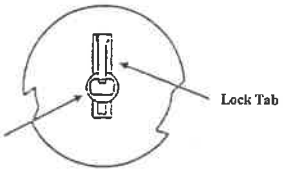


Fig. 6
Vending Cam

TO REMOVE AN ADJUSTABLE CAM:

1. Lift the Lift Tab and rotate the Adjustable Cam clockwise until the Vending Cam Lock Tab is aligned with the slot of the Adjustable Cam.
2. Remove the Adjustable Cam from the shaft of the Motor.

TO REMOVE THE VENDING CAM:

1. Depress (push in) the Lock Tab firmly to disengage it from the Motor shaft.
2. At the same time pull the Vending Cam towards you until it is removed from the Motor shaft.

TIMING

TO SET THE TIMING OF A NARROW COLUMN VEND MOTOR:

1. Make sure the hole through the rear shaft is in a horizontal plane. (If a pin were inserted in the hole, the pin would be horizontal.) See Fig. 8.
2. The Vend Rotor must be in the loading position when the Motor shaft is inserted in the end of the Rotor. See Fig. 8.
3. Insert the Motor shaft in the Rotor and secure the Motor.
4. Install the Vending Cam on the front shaft of the Motor making sure the Lock Tab is at the 9 o'clock position. See Fig 7.
5. Install the Adjustable Cam per the instructions given on the previous page.

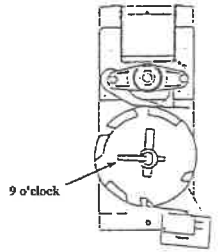


Fig. 7

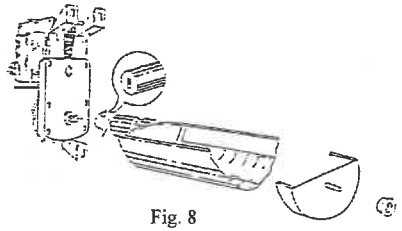


Fig. 8

TO SET THE TIMING OF A WIDE COLUMN VEND MOTOR.

1. Make sure the hole through the rear shaft is in a horizontal plane. (If a pin were inserted in the hole, the pin would be horizontal). See Fig 10.
2. Slide the Drive Arm (with linkage attached) on the rear shaft as shown. See Fig. 10.
3. Secure by installing the Groove Pin.
4. With the Oscillator in position, align the hole in the Linkage Arm with the pin of the Oscillator.
5. Slide the Linkage on the pin.
6. Install the Vending Cam on the front shaft of the Motor making sure that the Lock Tab is at 6 o'clock as shown. See Fig. 11.

NOTE: **When the screw holding the Linkage Arm to the Drive Arm is at the 12 o'clock position (See Fig. 10), the Lock Tab will be at the 6 o'clock position (See Fig. 11).**

7. Install the Adjustable Cam per the instructions on page 20.

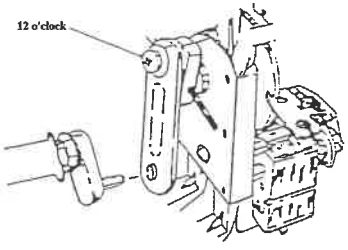


Fig. 10

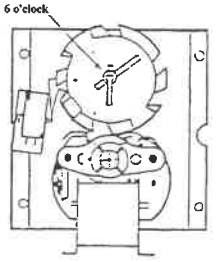
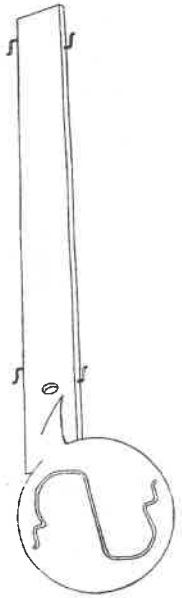


Fig. 11

REAR SPACER

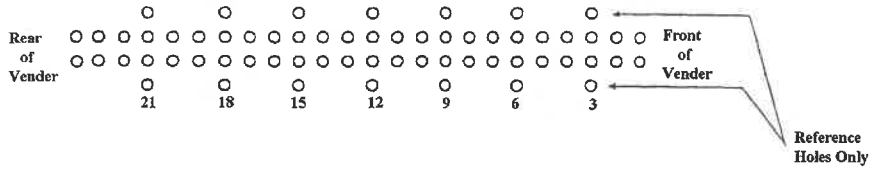
The Rear Spacer, one for each column, is located vertically at the rear of the column. The Springs, adjustable by hand, slide into the holes in the column wall for cans and other package settings.



Rear Spacer Assembly
497,073,900.13 - Wide 600E
497,074,000.13 - Wide 501E
497,073,700.13 - Narrow 600E
497,073,800.13 - Narrow 501E

FOR REFERENCE ONLY

Rear Spacer adjustment holes located in the sidewalls of the stacks.



VEND CYCLE
SINGLE PRICE

WHAT DOES IT	WHAT HAPPENS
1. Insert a coin.	1. Coin travels in the coin mechanism.
2. The coin.	2. Activates the coin vend switch or coin sensor and....
3. The normally open contact of the coin vend switch or sensor.	3. Closes and completes the vend relay coil circuit.
4. The vend relay coil is energized and ...	4. The normally open contact of vend relay switch #3 is closed, keeping the vend relay energized. The normally closed contact of the vend relay switch #1 is opened in the coin changer inhibit circuit. The normally open contact of the vend relay switch #2 is closed in the select panel circuit.
5. The coin vend switch or sensor resets and the normally closed contact of the coin vend switch or sensor...	5. Allows power to flow to the select panel and completes the sequence relay coil circuit (some models only).
6. A select button is pushed and the normally open contact in the select switch...	6. Closes and completes the circuit to the vend motor coil. The sold out light illuminates. The vend motor begins to run.
7. A short time later, the arm of the by-pass switch...	7. Drops into the notch of the cam and the normally open contact of the by-pass switch opens in the select panel circuit.
8. The normally open contact of the vend relay switch #3...	8. Opens in the vend relay coil circuit.
9. The normally open contact of the vend relay switch #2....	9. Opens in the vend motor coil circuit and opens and breaks the select panel circuit.
10. The normally closed contact of the vend relay switch #1....	10. Closes in the coin changer circuit and..
11. The normally closed contact of the by-pass switch...	11. Closes and completes the circuit to the vend motor coil.
12. The vend motor....	12. Continues to run.

WHAT DOES IT	WHAT HAPPENS
13. The vending cam...	13. Works the arm of the vend motor switch and the switch arm rises to the high side of the cam.
14. The normally closed contact of the vend motor switch opens.	14. And
15. The normally open contact of the vend motor switch closes.	15. The sold out lamp turns on and the vend motor circuit receives power to keep the motor running.
16. A short time later, the arm of the by-pass switch rides to the high side of the cam.	16. And
17. The normally open contact of the by-pass switch closes	17. Enabling the coin changer.
18. The vending cam	18. Continues to work the arm of the vend motor switch and the switch arm drops into the notch of the cam.
19. The normally open contact of the vend motor switch opens	19. Breaking the sold out lamp and vend motor coil circuits, the motor stops and the oscillator or rotor stops.
20. The normally closed contact of the vend motor switch closes.	20. We are back to stand-by in the vender.

CORRECTIONS FOR COMMON SINGLE PRICE VENDER VENDING PROBLEMS

NOTE: When one or more circuits become inoperative on a Dixie-Narco vender, it is usually one component that has failed, and it is with this in mind that the accompanying troubleshooting schematic is presented.

Control Panel
Electrical Feed
Through Normally Closed of each Select Switch

Figure 1
Control Panel
(Select Button and Select Switch Location)

The control panel shown above represents a sample of the panels used on Dixie-Narco venders.

It is **important** to keep in mind the feed of electrical current through the select switches.

On the inside of the control panel, the select buttons and switches are numbered to assist identification. If not numbered, then the select button arrangement is shown in the foregoing diagram.

Figure 1 represents a control panel on which the select buttons are arranged in a vertical pattern and the power feed begins with the highest numbered switch and proceeds to the lowest numbered switch.

ACCEPTS COINS, WILLNOT VEND FROM ONE OR MORE COLUMNS

Although all circuit problems are not necessarily found to be one or more inoperative select switches, the examples listed below are typical of select switch problems found in the control panel. Refer to figure 1 on page 25.

Problem 1: Selections 9, 8, and 7 work.
Selections 6, 5, 4, 3, 2, and 1 do not work.
Recall the feed of the electrical current.

Answer: Check the normally closed and common of select switch 7.
Check the normally open and common of select switch 6.

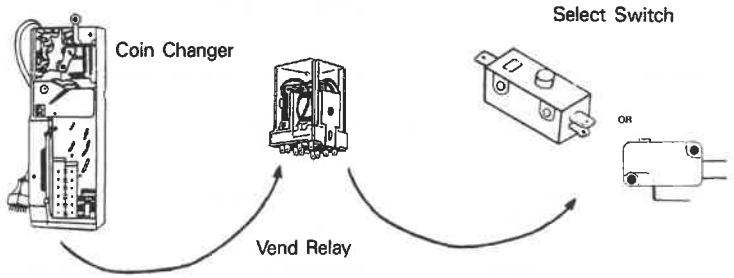
Problem 2: Selections 9, 8, 7, 6, 5, and 4 work.
Selections 3, 2, and 1 do not work.
Recall the feed of the electrical current.

Answer: Check the normally closed and common of select switch 4.
Check the normally open and common of select switch 3.

ACCEPTS COINS BUT WILL NOT VEND

Problem 1: All selections do not work.
Recall the feed from the electrical current.

Answer: Check the coin changer.
Check the vend relay.
Check the select switch that gets power first.

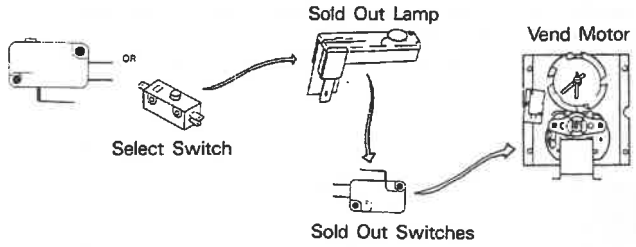


ACCEPTS COINS BUT WILL NOT VEND FROM ONE COLUMN

Problem 1: Accepts coins but will not vend from one column.

Example: Selection #3 will not vend.

Check: The normally open of select switch #3.
Note: If the sold-out lamp comes on when the button is pushed, the select switch is O.K.
Check: The sold out switch in the vending circuit.
Check: The vend motor.
Note: If the vend motor runs by depressing the vend switch, the vend motor is O.K.

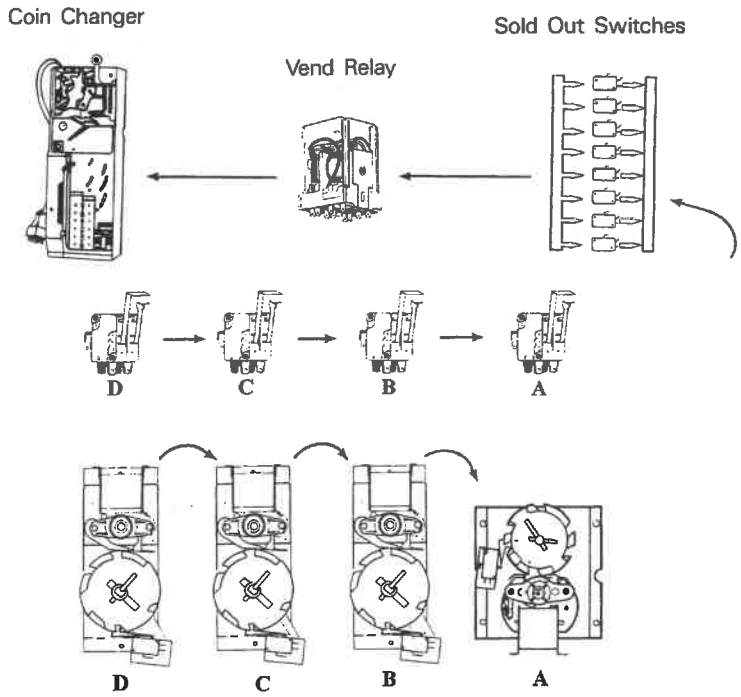


REJECTS ALL GOOD COINS

Problem 1: The coin changer will not accept coins.
Put product in each column.
Follow the arrow WHICH IS THE DIRECTION OF FLOW OF THE ELECTRICAL CURRENT.
(See figure below)

DO THIS:

1. Make sure there is product in each column. The sold out lamps are off.
2. Follow the arrows from left to right.
3. a. Push vend motor switch - motor D - Vend Motor cycles.
   b. Push vend motor switch - motor C - Vend motor does not cycle.
   The problem is the vend motor switch and by-pass switch on motor C and/or motor D.
   e. If the problem is not found, continue this procedure through motors B and A.
   f. If the problem is not found, replace the vend relay.
   g. If the problem is not found, the last component to check would be the coin changer.



DRIFTING MOTOR AND JACK-POTTING PROBLEM

SYMPTOM	THINGS TO CHECK	IF FAULTY, WHAT TO DO
1. The vend motor drifts: Both switch arms drop into the cam notch and the vend motor keeps running.	A. Vend Motor Switch	A. Replace the switch.
	B. Vend Motor Switch Arm relationship to the cam.	B. If too close to the cam, bend the arm away from the cam slightly or replace the switch.
	C. Check the pawl for looseness. It should be loose.	C. If tight, replace.
	D. Pawl Spring.	D. If off, correct. If elongated, replace.
	E. Actuator should be loose.	E. If actuator sticks to stator due to syrup, clean stator. If tight, clean at the pivot. If still tight, replace the motor.
2. Two beverages delivered in a cycle and the next cycle is a dry vend.	A. Shimming. B. Cam Setting.	A. Correct. B. Correct.
3. Two beverages delivered in a given cycle.	A. Shimming B. Cam Setting. C. Follow checking procedure for a drifting motor.	A. Correct. B. Correct. C. Correct.
4. Pre-Select, i.e. set up credit, push no button and product is vended time after time.	A. Select Switch; Sticking, incorrectly wired, or bad.	A. Replace or Correct.

ACCEPTS COINS AND WILL VEND,
THEN REJECTS COINS BUT WILL CONTINUE TO FREE-VEND

Problem 1:	Set up Credit	Push a Selection	It will vend
		Push same Selection	It will vend
	Rejects coins	Push same selection	It will continue to vend

Reason: The by-pass switch is not canceling the credit.

Check:	The by-pass switch electrically	If faulty	replace
	The by-pass switch for a sticking plunger	If faulty	replace
	The by-pass for incorrect wiring	If faulty	correct

Set-Up credit	Push a selection	It vends
Push same selection	It does not vend	

REFRIGERATION PARTS AND FUNCTIONS

- MECHANICAL PARTS -

COMPRESSOR MOTOR

The compressor motor (sealed in the compressor housing) drives the compressor with a shaft that is shared by both parts. It is started by the temperature control switch and the starting relay. It is stopped by the temperature control switch and if subject to overload by the thermal overload switch.

COMPRESSOR

The compressor (sealed in the compressor housing) draws cold, low pressure refrigerant from the evaporator and pumps hot, high pressure refrigerant 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 pressure.

CONDENSER FAN

The condenser fan (between the condenser and the compressor motor), first draws 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 compressor motor runs.

FILTER/DRYER

The filter/dryer is in the liquid line between the condenser and the capillary tube. This dryer filters out any foreign particulate matter and also contains a desiccant to absorb any moisture that may be present in the system.

CAPILLARY TUBE

The capillary tube (between the condenser and the evaporator in the refrigerant line) has a very small inside diameter, and serves to control the refrigerant flow from the condenser into the evaporator.

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 drawn out by the compressor.

EVAPORATOR FAN

The evaporator fan draws 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 continuously when the vender is plugged in.

CONDENSATE PAN

The condensate pan (located in the compressor compartment) collects the water which condenses on the evaporator. The water is evaporated into the surrounding air by means of soakers. The soakers extend down into the pan to absorb the water. Exposure to the surrounding air evaporates the water in the soakers.

- ELECTRICAL PARTS -

TEMPERATURE CONTROL

The temperature control consists of a control bulb connected by a small metal tube to a bellows and switch. The control bulb is located in a slot in the evaporator fan housing. The bellows and a 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. When the control bulb is cool, the vapor shrinks back, and the bellows pulls in. These movements of the bellows work the switch, closing it when the bulb is heated and opening it when the bulb is cooled.

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 reaches the cut-in 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 reaches the cut-out setting, the temperature control switch opens in these circuits.

CAUTION: To adjust the temperature control see page 8.

THERMAL OVERLOAD ASSEMBLY

The thermal overload is a temperature activated switch that interrupts power to the compressor when excessive temperatures occur. This switch protects the compressor from the damage that will occur if the compressor continues to operate under adverse conditions. The overload also opens under abnormally high electrical current draw, protecting the motor windings from damage. Frequent overload trips may lead to warm product and be the first indication of a dirty condenser or other refrigeration related problems that require attention.

STARTING RELAY

The starting relay is a device that connects the start winding of the compressor during start up. The additional winding (start) helps the compressor motor come up to speed. Once it reaches speed the starting relay disconnects the start winding from the circuit.

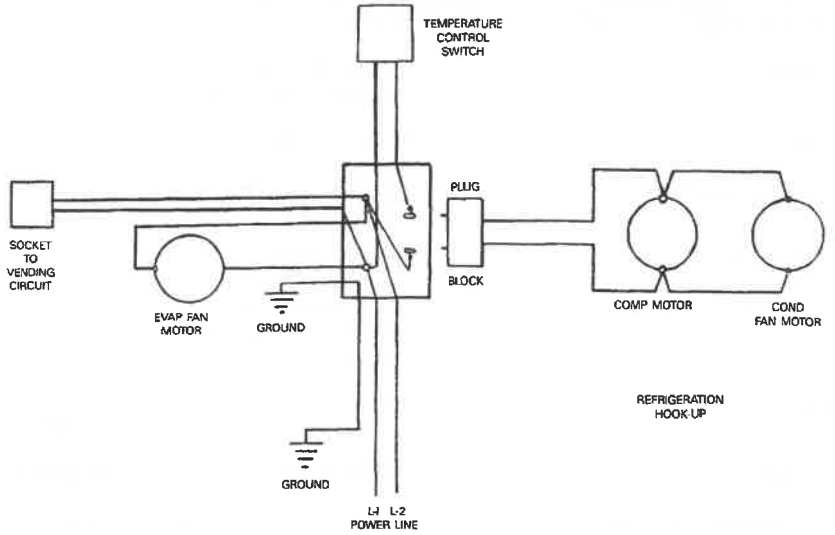
- ELECTRICAL OPERATION -

WHAT DOES IT	WHAT HAPPENS
WHEN THE VENDER TEMPERATURE GETS UP TO THE CUT-IN SETTING:	
The temperature control switch	Closes the run winding circuit of the compressor motor. Closes the start relay coil circuit. Closes in the condenser fan motor circuit.
THE HEAVY CURRENT, DRAWN BY THE RUN WINDING, ALSO FLOWS IN THE START RELAY COIL, AND:	
The start relay coil	Closes the start relay contacts and completes the start winding circuit of the compressor motor.
WHEN THE COMPRESSOR MOTOR GETS UP TO SPEED	
The spring in the relay The start relay coil The start relay contacts	Pushes the start relay contacts apart because no longer gets enough current to hold the contacts closed, open in the start winding circuit of the compressor motor.
IF THE COMPRESSOR MOTOR DRAWS TOO MUCH CURRENT AND CAUSES THE THERMAL OVERLOAD ASSEMBLY TO GET TOO WARM	
The thermal overload switch	Opens the run winding circuit and disconnects the compressor motor.
WHEN THE THERMAL OVERLOAD ASSEMBLY COOLS DOWN AGAIN	
The thermal overload switch	Closes the run winding circuit and the start relay coil circuit of the compressor motor.
WHEN THE VENDER TEMPERATURE GETS DOWN TO THE CUT-OUT SETTING	
The temperature control switch	Opens in the run winding circuit of compressor motor. Opens in the starting relay coil circuit.

COMPRESSOR MOTOR RUN WINDING CIRCUIT

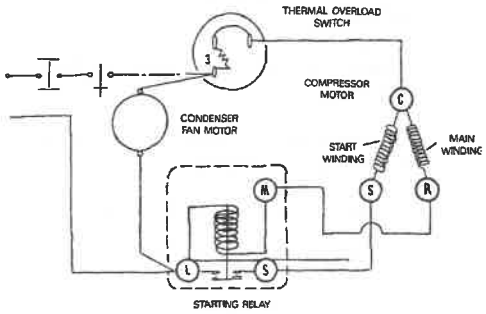
SWITCHES IN THE WIRING	WHAT THE SWITCHES DO	WHAT MAKES THE SWITCHES WORK
1. Temperature control switch	1. Turns the compressor and condenser fan motor on and off.	1. The temperature in the vender has come up to the cut-in point (or gotten down to the cut-out point) set on the temperature control switch.
2. Start Relay	2. Turns the start windings on & off.	2. The presence or absence of heavy current switches the relay which energizes or de-energizes the start windings.
3. Thermal Overload Switch	3. Protects the windings of the compressor.	3. Current drawn by the motor or heat from the compressor can raise the temperature of the thermal overload switch cut-off, which removes power from the compressor.

REFRIGERATION CIRCUIT DIAGRAMS

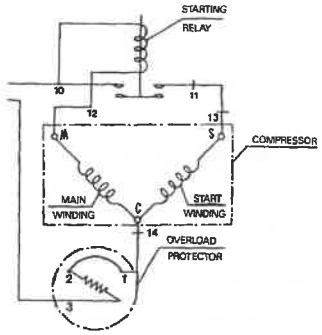


REFRIGERATION HOOK UP

Tecumseh



Embraco



REFRIGERATION CYCLE

WHAT DOES IT	WHAT HAPPENS
The rising temperature in the vender	Warms the temperature control bulb & the charge in it.
The charge in the control bulb	Expands in the control tube and stretches the temperature control bellows.
The bellows	Activates 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. Draws air through the condenser, cooling it and pushes air over the compressor cooling it.
The compressor	Draws low pressure refrigerant gas from the evaporator, compresses the gas, and pumps it to the condenser.
The condenser	Takes the heat out of the high pressure refrigerant gas.
More hot gas coming from the compressor	Pushes the liquid refrigerant into the capillary tube.
The capillary tube	Controls the flow of liquid refrigerant into the evaporator.
The evaporator	(Where the pressure is kept low by the suction of the compressor) Transfers heat from the air to liquid refrigerant.
The liquid refrigerant	Changes into gas at low pressure and is drawn into the compressor.
The falling temperature in the vender	Cools the temperature control bulb and the charge in it to a pre-determined temperature.
The charge in the control bulb	Shrinks & 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 off.
The compressor	Stops.
The condenser fan motor	Stops.

(With the vender "Plugged In" the evaporator fan motor runs constantly)

REFRIGERATION

Symptom: Product Hot

Possible Cause: Compressor Will Not Run.

WHAT TO CHECK	SOLUTION
1. Is the vender plugged in?	1. **YES,** see step 2. **NO,** plug it in.
2. Is the compressor power cord plugged in?	2. **YES,** see step 3. **NO,** plug it in.
3. Is the temperature control on?	3. **YES,** see step 4. **NO, turn it on.**
4. Is there power at the wall outlet?	4. **YES,** see step 5. **NO,** consult an electrician.
5. Is the circuit breaker or fuse correct?	5. **YES,** see step 6. **NO,** replace or reset.
6. Is the vender power cord good?	6. **YES,** see step 7. **NO,** replace.
7. Is the compressor power cord good?	7. **YES,** see step 8. **NO,** replace.
8. Is the temperature control bulb located properly?	8. **YES,** see step 9. **NO,** correct.
9. Is the temperature control operational?	9. **YES,** see step 10. **NO,** replace.
10. Is the thermal overload operational?	10. **YES,** see step 11. **NO,** replace.
11. Is the start relay operational?	11. **YES,** see step 12. **NO,** replace.
12. Is the compressor operational?	12. **YES,** see step 13. **NO,** replace.
13. If all of the above steps fail...	13. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Product Hot

Possible Cause: Compressor Starts But Will Not Keep Running

WHAT TO CHECK	SOLUTION
1. Is the temperature control knob set on its highest setting?	1. **YES,** see step 2. **NO,** adjust the knob to a higher setting.
2. Domestically, is the voltage supply within +/- 10% of rating on serial plate?	2. **YES,** see step 3. **NO,** consult the power company.
3. Is the condenser clear of obstruction?	3. **YES,** see step 4. **NO,** clear or clean..
4. Is the condenser fan blade turning?	4. **YES,** see step 5. **NO,** free the obstruction or replace the blade if needed.
5. Is the condenser fan motor operational?	5. **YES,** see step 6. **NO,** replace.
6. Is the temperature control operational?	6. **YES,** see step 7. **NO,** replace
7. Is the tube from the compressor to the condenser free of kinks?	7. **YES,** see step 8. **NO,** repair or replace
8. Is the capillary tube free of kinks?	8. **YES,** see step 9. **NO,** replace.
9. Is the thermal overload operational?	9. **YES,** see step 10. **NO,** replace.
10. Is the start relay operational?	10. **YES,** see step 11. **NO,** replace.
11. If all of the above steps fail...	11. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Product Hot

Possible Cause: Miscellaneous

WHAT TO CHECK	SOLUTION
1. Is the evaporator fan motor working?	1. **YES,** see step 2. **NO,** replace motor.
2. Has the refrigeration system lost its charge?	2. **YES,** replace the refrigeration system. **NO,** see step 3.
3. If all of the above steps fail...	3. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Product Cold But Not Cold Enough

Possible Cause: Compressor Runs But Will Not Cool Product

WHAT TO CHECK	SOLUTION
1. Is the temperature control knob set properly?	1. **YES,** see step 2. **NO,** set properly.
2. Domestically, is the voltage supply between 103V and 127V?	2. **YES,** see step 3. **NO,** call the power company.
3. Is the temperature control probe located properly?	3. **YES,** see step 4. **NO,** correct.
4. Is the condenser clear of obstruction?	4. **YES,** see step 5. **NO,** clear, clean, or space the vender.
5. Is the evaporator fan free of obstruction?	5. **YES,** see step 6. **NO,** free any obstruction or replace.
6. Is the condenser fan free of obstruction?	6. **YES,** see step 7 **NO,** free any obstruction or replace.
7. Is the evaporator free of ice?	7. **YES,** see step 8 **NO,** defrost and check the following: gasket seal, port door seal, refrigerant charge.
8. Is the temperature control operational?	8. **YES,** see step 9 **NO,** replace.
9. Is the evaporator fan operational?	9. **YES,** see step 10 **NO,** replace.
10. Is the condenser fan motor operational?	10. **YES,** see step 11. **NO,** replace.
11. Is the refrigerant tubing free of kinks?	11. **YES,** see step 12. **NO,** repair or replace.
12. Is the overload operational?	12. **YES,** see step 13. **NO,** replace.
13. Is the start relay operational?	13. **YES,** see step 14. **NO,** replace.
14. Is there refrigerant in the system?	14. **YES,** see step 15. **NO,** charge system and check for leaks.
15. If all of the above steps fail...	15. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Product Too Cold or Frozen

Possible Cause: Compressor Runs Too Long or Continuously

WHAT TO CHECK	SOLUTION
1. Is the temperature control knob set properly?	1. **YES,** see step 2. **NO,** set properly.
2. Is the temperature control bulb located properly.	2. **YES,** see step 3. **NO,** correct..
3. Is the temperature control operational?	3. **YES,** see step 4. **NO,** replace.
4. Does the evaporator frost over completely while the system is running?	4. **YES,** see step 5. **NO,** check for leaks or a low charge.
5. If all of the above steps fail...	5. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Noisy Refrigeration Unit

WHAT TO CHECK	SOLUTION
1. Are the refrigerant lines free of contact with surfaces?	1. **YES,** see step 2. **NO,** correct..
2. Is the condenser fan blade obstructed or damaged?	2. **NO,** see step 3. **YES,** free any obstructions or replace the blade if need..
3. Is the evaporator fan blade obstructed or damaged?	3. **NO,** see step 4. **YES,** free any obstructions or replace the blade if needed..
4. Is the compressor noisy?	4. **NO,** see step 5. **YES,** replace.
5 If all of the above steps fail...	5. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.

REFRIGERATION

Symptom: Excessive Condensate

WHAT TO CHECK	SOLUTION
1. Is the door sealed properly? (This can be checked by inserting a piece of paper, thin plastic, or paper currency between the cabinet and the door seal when the main door is open. When the door is closed properly the paper should exert some resistance as it is pulled out.)	1. **YES,** see step 4. **NO,** Ensure the door is closed tightly. If door still does not seal properly, see step 2.
2. Is the motor cover interfering with the inner door?	2. **YES,** reinstall the motor cover properly. **NO,** see step 3.
3. Has the machine been vandalized?	3. **YES,** replace necessary components. **NO,** see step 4.
4. Are the drain pan soakers positioned properly?	4. **YES,** see step 5. **NO,** place soakers upright in pan so that air will flow over and through the soakers..
5. Are there fourteen fiberglass soakers in the pan?	5. **YES,** see step 6. **NO,** place fourteen fiberglass soakers in the condensate pan.
6. Are the condensate & evaporator free from obstruction?	6. **YES,** see step 7. **NO,** remove all debris and/or cans from the area around the evaporator and condenser. Clean the evaporator and condenser coils with a stiff brush or compressed air.
7. Is the delivery door misaligned?	7. **YES,** A. Level the vender properly. B. Align the inner and outer doors so that the delivery door does not stick open. **NO,** see step 8.
8. If all of the above steps fail?	8. Consult the Dixie-Narco Factory Service at 1-800-688-9090. Note: Have the vender model and serial number available.