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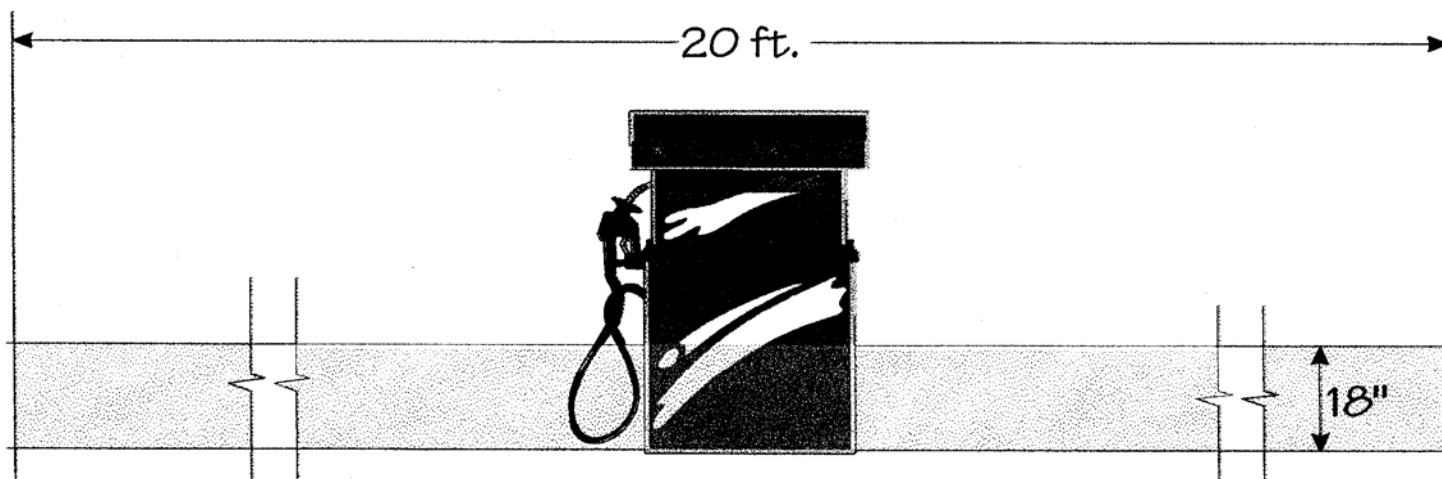
## ***IMPORTANT SAFETY INSTRUCTIONS***

### **READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE**

**WARNING:** TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK OR INJURY: Use only manufacturer's options and attachments. – Do not spray near open flame. – Do not spray on electrical equipment. – If any disposal of product is necessary, adhere to all local, state and federal laws governing its disposal. – Avoid contact with skin and eyes. – Do not spray directly on plastic or vinyl surfaces.

### **DANGER:**

This equipment incorporates parts such as switches, motors, or the like that tend to produce arcs or sparks which can cause an explosion. When located in gasoline dispensing and service stations, install and use at least 20 feet horizontally from the exterior enclosure of any pump and at least 18 inches above driveway or ground level.



## **\*FILL OUT YOUR WARRANTY CARD AND RETURN IT TO THE FACTORY TO REGISTER YOUR COMBO VAC.**

Fragramatics Mfg. Co., Inc. warrants this equipment against defects in workmanship and material and will remedy any defect according to the terms of this *Limited Warranty*.

Fragramatics will repair or replace at its option, any defective parts or component(s) for a period of one (1) year from the date of purchase. This *Limited Warranty* extends to the original purchaser only.

To make a request or claim for service under the terms of this warranty, the original purchaser must contact Framagramatics and provide the product serial number, a description of the problem (including some indication of the parts or components felt to be defective), and the date of purchase. No parts, components or the equipment should be returned without authorization from us.

The original purchaser shall be responsible for all shipping charges. Any item authorized by Framagramatics for return under the terms of this *Limited Warranty* must be shipped prepaid, in the original shipping container or equivalent to Framagramatics or to a local service center as authorized and determined by Framagramatics. The purchaser assumes the risk of loss or damage in transit. (Please refer to your owner's manual or contact Framagramatics if you need further information about proper shipping procedures).

REPLACEMENT OR REPAIR OF PARTS OR COMPONENTS IN ACCORDANCE WITH THE ABOVE *LIMITED WARRANTY* SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST FRAGRAMATICS.

This *Limited Warranty* does not cover equipment that has been damaged due to misuse, mis-application, attempted theft, vandalism, accident, connection to an improper voltage supply or as a result of modification by other than Framagramatics. Components such as filters, gaskets, electrical components, hose fabric, rubber, plastic parts, or similar items are subject to wear or consumption during normal operation and this normal disintegration is not covered by the *Limited Warranty*.

Fragramatics makes no warranty concerning the compliance of the equipment with any local, state, or federal/national laws or regulations. The purchaser agrees to accept full responsibility for complying with such laws.

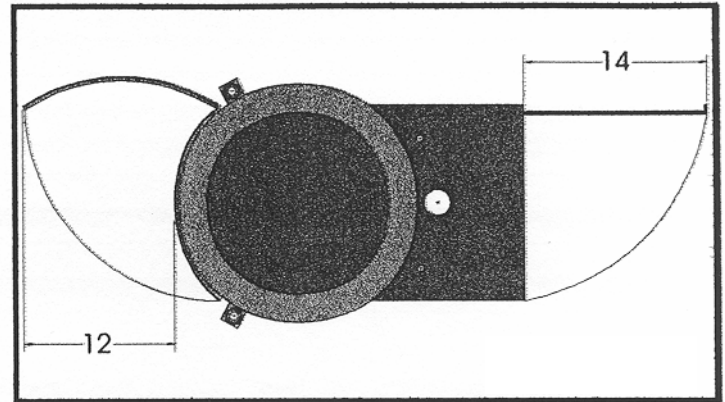
THERE ARE NO WARRANTIES OTHER THAN THOSE ON THE FACE HERE OF DESCRIBED ABOVE AND THEY ARE IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

FRAGRAMATICS MFG. CO., INC. SHALL NOT BE LIABLE FOR INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES INCLUDING WITHOUT LIMITATION DAMAGES RESULTING FROM PERSONAL, BODILY INJURY OR DEATH OR DAMAGES TO OR LOSS OF USE OF PROPERTY.

# Proper Placement

MODEL  
FV3

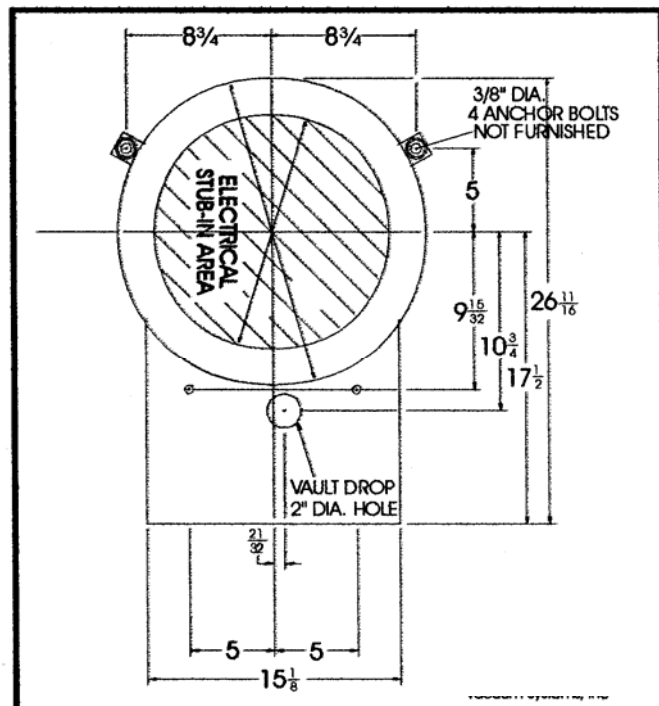
Consider vehicle traffic, ease of access, weather protection and lighting to enhance vacuum serviceability and income. Refer to SAFETY INSTRUCTIONS sheet in this manual for restrictions concerning placement of these units in gasoline dispensing locations and service stations. For vacuum island layouts, see next four (4) pages.



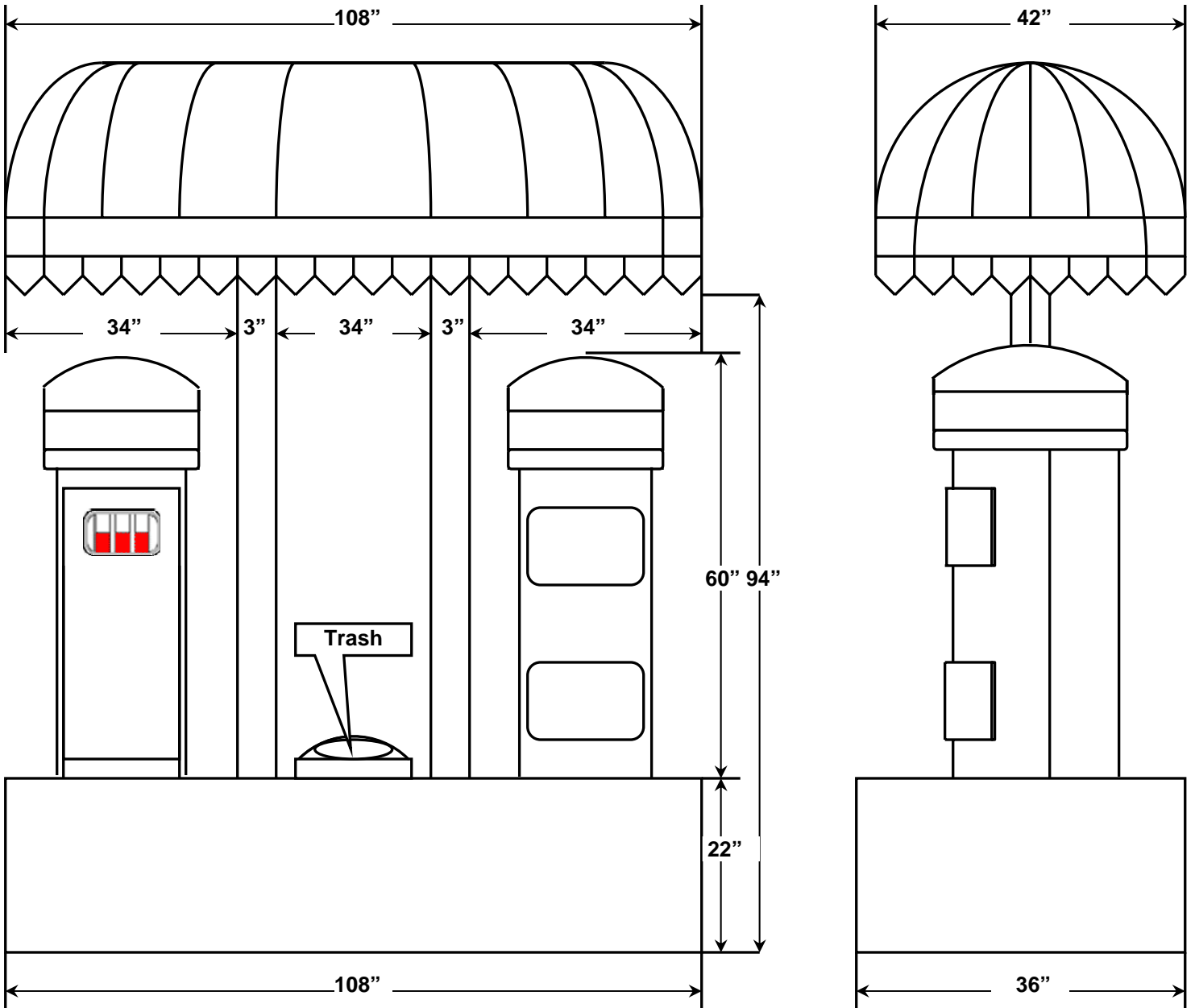
**CAUTION ELECTRICAL SHOCK  
HAZARD – DISCONNECT POWER  
PRIOR TO BEGINNING ANY  
SERVICE OR INSTALLATION  
WORK. CONTACT A TRAINED  
ELECTRICIAN IF YOU ARE UNSURE  
OF THESE PROCEDURES.**

## Site Planning

Select and prepare a solid, level site for a concrete or similar base. Consult local codes for foundation requirements. Note: Although we recommend 24" base height above grade, 20" base height above surrounding surface provides minimum protection from typical bumper damage and 30" base height should be considered maximum, considering coin acceptor position.



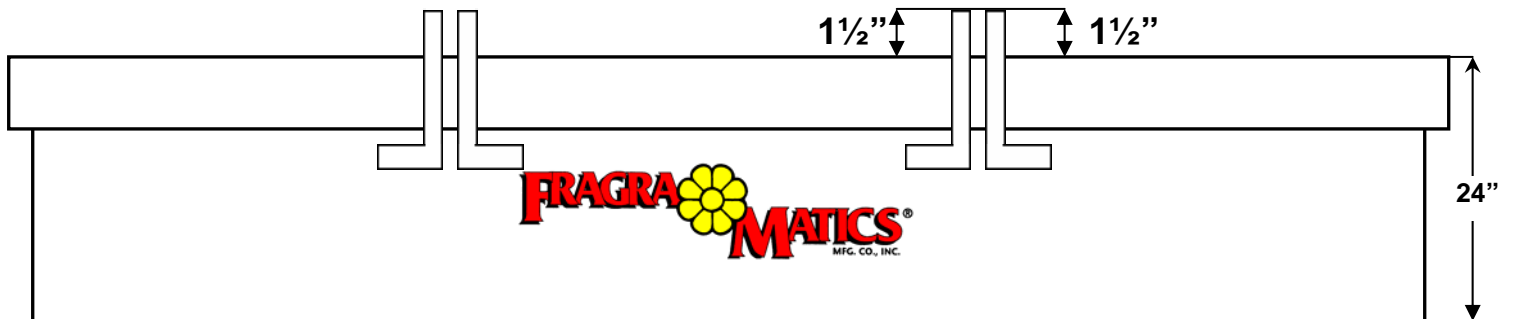
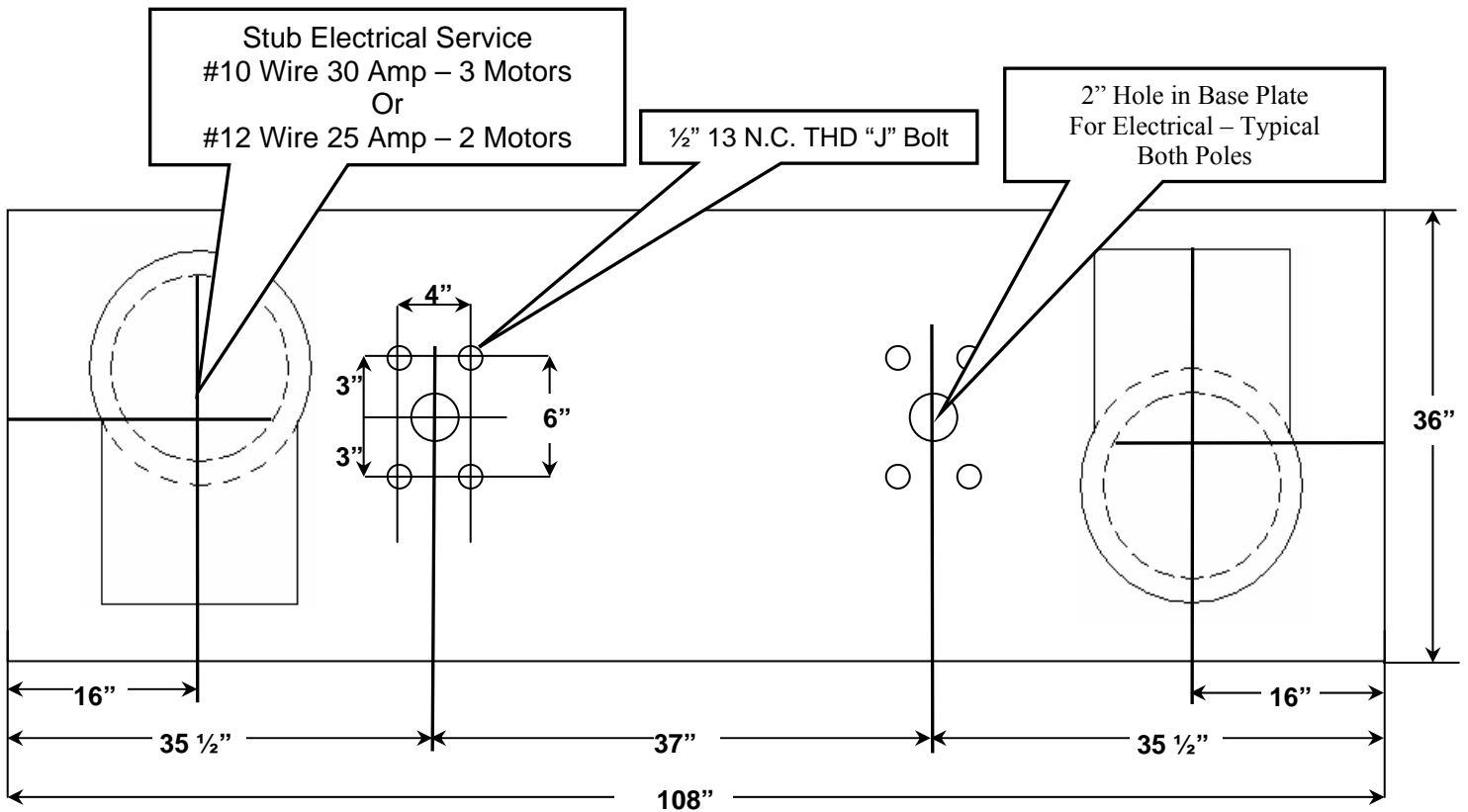
# Vacuum Island Layout



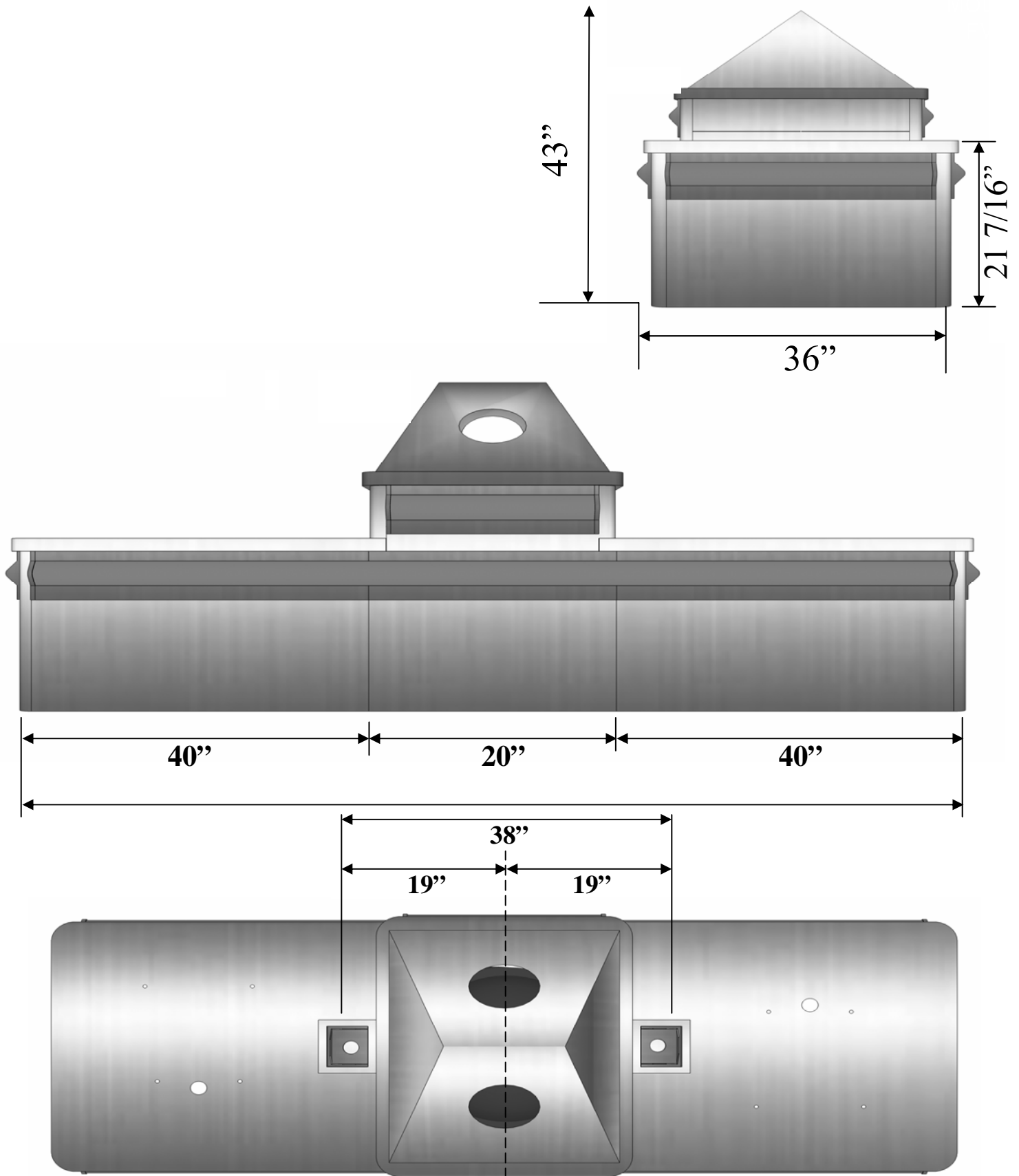
**Typical Layout – Brick or Concrete**

# Island Base Layout

MODEL  
FV3



**Typical Footprint – Brick or Concrete**



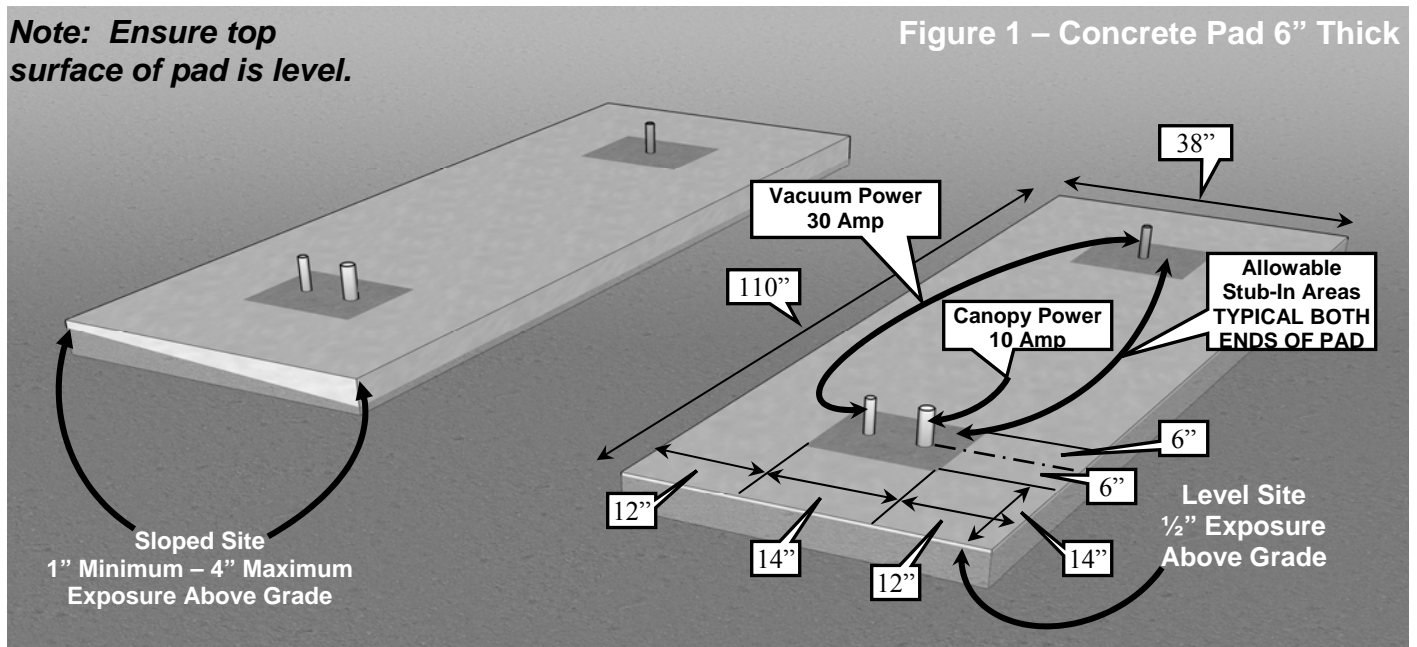
# Island Base Layout

MODEL  
FV3



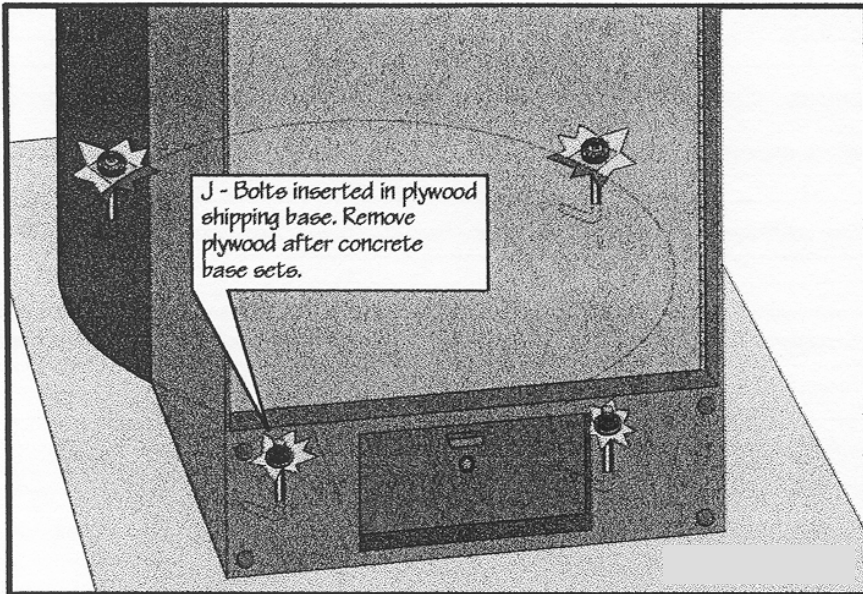
**Note: Ensure top surface of pad is level.**

Figure 1 – Concrete Pad 6" Thick



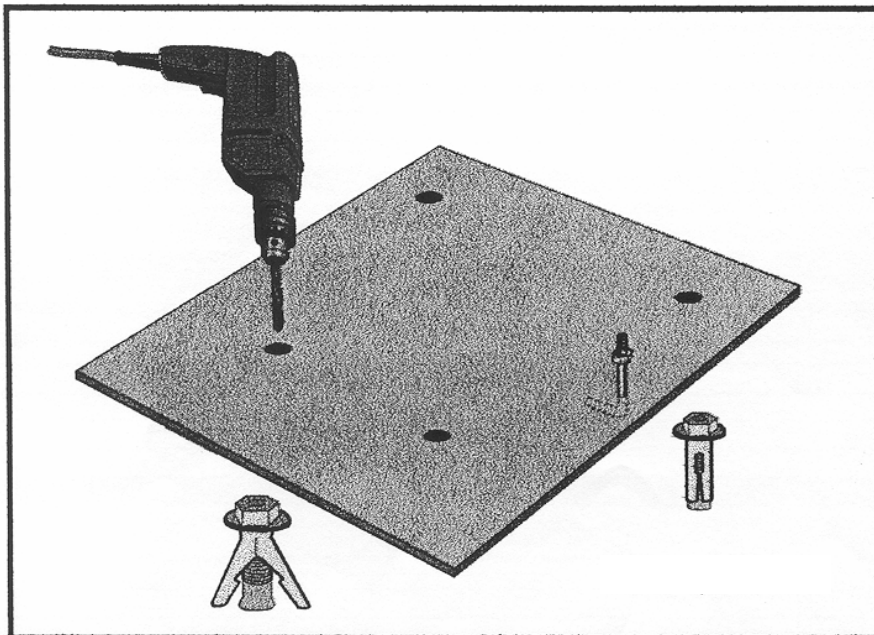


# Guide to Easy Installation



## Using "J" Bolts:

J-Bolts (new construction only). Carefully locate 4 "J" bolts (not provided) while forming concrete or masonry base. The plywood shipping base can be used as a locating fixture for the "J" bolts while the concrete is formed. See illustration to the left.



## Masonry Anchors:

Anchors are used for existing construction only. Drill and install suitable masonry anchors to accommodate a 3/8 inch lag screw. Check anchor supplier information for proper drill size. HINT: Use the plywood base as a template for drilling the anchoring pilot holes. See illustration to the left.

## IMPORTANT SAFETY INSTRUCTIONS. READ ALL INSTRUCTIONS BEFORE USING APPLIANCE.

Connect to electrical service. The two (2) motor unit requires a 25 amp breaker and # 12 awg. The three (3) motor unit requires a 30 amp breaker and #10 awg. Check local codes and requirements and refer to “IMPORTANT SAFETY INSTRUCTIONS” sheet in this manual.



CAUTION ELECTRICAL SHOCK HAZARD. DISCONNECT POWER PRIOR TO BEGINNING ANY SERVICE OR INSTALLATION WORK. GET ASSISTANCE IF YOU ARE UNSURE OF THESE PROCEDURES.

Connect to properly grounded 30 amp, 120 VAC 60 Hz power source.

Installation should only be performed by a qualified electrician.

- The electrical power should be stubbed in under the 18” vacuum tank cylinder (refer to installation instructions).
- Maintain approximately 2” of clearance from the edge of the vacuum cylinder. There is 4” of vertical clearance from the mounting surface to the underside of the vacuum.
- Route the power cable through either of the holes in the vacuum tank wall, through the cabinet front to the electrical connection box.
- The cable should be inserted through the grommet at the base of the junction box. Connect the three wires: black (power), white (common), and green (ground) to the corresponding leads found inside the box. Finally, replace both the clear plastic and metal cover.

**\*THIS IS THE ONLY ELECTRICAL CONNECTION NECESSARY.**



Power cable routing through vacuum tank wall to cabinet

\* Electrical power connection to unit **must** be made in this junction box.

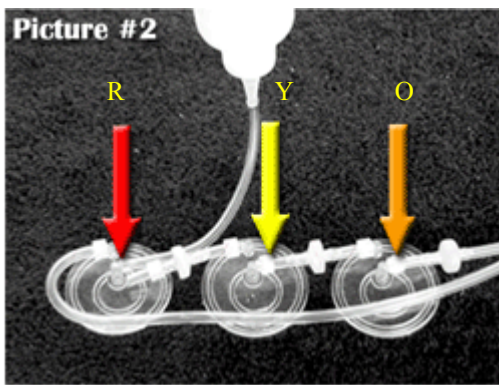
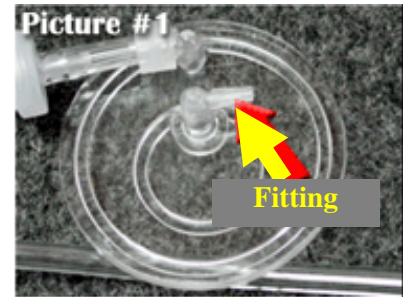
# Visual Display Setup

MODEL  
FV-3

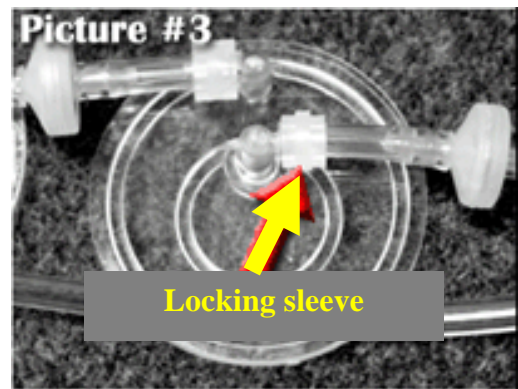
**\*\*Note:** When new FV-3 units are shipped from factory, visual display will be pre-filled. Please use filling instructions below for yearly maintenance.



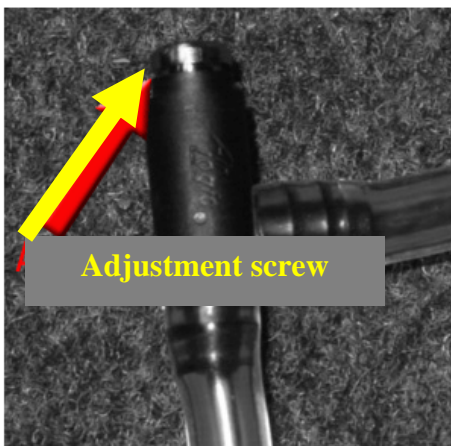
Fluid should be filled SLOWLY through the center fitting only (shown by arrow in Picture #1).



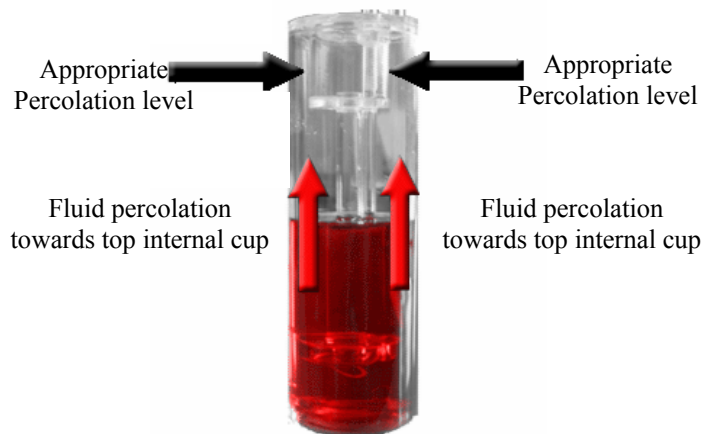
Starting from the door hinge side, fill tube with orange fluid, yellow in the middle, then red in the remaining tube (as shown in Picture #2).



After filling, CAREFULLY place tubing on fitting. Turn locking sleeve while sliding toward barb to tighten poly tube (shown in Picture #3).



Regulate air by adjusting needle valve on output side of visual pump tubing.



Adjust percolation of fluid accordingly. Make sure fluid percolates midway up the top internal cup. Avoid allowing fluid to percolate to the top of the internal cup.

- This machine employs a dual-mode timer, which features a built-in L.E.D. digital display assembly.
- The dual mode of the timer is like two (2) timers running simultaneously. They communicate with each other to inform the other of the monetary credit remaining and each switch between the two (2) timers results in a recomputation of time to allow the exact amount of time deserved by the customer.
- Each mode of the dual-mode timer is programmable for COINS TO START and CYCLE TIME. They are pre-programmed from the factory as follows, unless specified by customer:
  - **Timer A:** \$0.75 (3 coins) to start for forty (40) seconds of fragrance.
  - **Timer B:** \$0.75 (3 coins) to start for four (4) minutes of vacuum.
- The display feature of these timers is of the scrolling message type and includes three (3) different programmable messages which are pre-programmed at the factory as follows:
  - **Welcome Message:** WELCOME TO OUR FRAGRANCE VACUUM.
  - **Sales Message:** FLIP SWITCH TO FRAGRANCE AT ANY TIME.
  - **Exit Message:** TRY ANOTHER FRAGRANCE NEXT TIME.
- To change the factory program from what is listed above, it is necessary to purchase (or borrow) a Model VAC-999 programmer (next page).

- While message is scrolling (power on), plug in the VAC-999 controller (see illustration at right) and press “Edit” key to enter into the programming mode. The jack is located on the lower side of the display timer to the right of the timer housing. See illustration at the right.
- The timer will display “Total Coins”. This is the amount of coin pulses the timer has received since the last time that the “Total Coins” was zeroed. To zero, press the “Delete” key. To save, press the “Save” key. The unit will now display “Saved”.
- After the timer has saved “Total Coins”, the display will now go to “Coins to Start”. This controls the vend price for the fragrance function. Use the “▲” or “▼” key to change the amount of “Coins to Start”. Press the “Save” key to save your input. The display will confirm this by displaying “Saved”.
- The timer now displays “Coins to Start B”. Follow the same procedure as Step 3 to set the vacuum operation of the unit.
- The timer now displays “Cycle Time”. To change this time by 10 second intervals, press the “◀” key. Then press the “▲” or “▼” key to change the time. To change the time by one second intervals, press the “▶” key. Then press the “▲” or “▼” key to change the time. To save the “Cycle Time”, press the “Save” key. The timer will confirm this by displaying “Saved”.
- The timer now displays “Cycle Time B”. Follow the same procedure as Step 5 to set the vacuum operation of the unit.
- The timer now asks about “Bonus Time” programming. Press the “N” (No) key, thereby leaving the bonus time as is recommended by the factory.
- The timer will now prompt for “Last Coin Beep?”. Change reply from “10 seconds” to “1 minute” or vice versa by pressing the “▲” or “▼” key. To save the desired “Last Coin Beep?” presses the “Save” key.
- The “Welcome Message” will now appear with the first character located in the center of the board. If the first character is a blank, use your “▲” or “▼” key. You have 36 places to put characters. A blank space counts as a character. To change characters, press the “▲” or “▼” key. To move the message left one space, press the “◀” key. To move the message right one space, press the “▶” key. To insert a character, press the “Insert” key. To delete a character, press the “Delete” key. To save message, press “Save” key.
- The “Sales Message” appears next. It also has 36-character capability. Follow the same procedure as Step 8 to program message. The first character in the Sales Message will connect to the end of the “Welcome Message”.
- The “Exit Message” appears next. It also has 36-character capability. Follow the same procedure as Step 8 to program message. NOTE: The “Welcome Message” and “Sales Message” scroll on the timer all the time. The “Exit Message” scrolls three times following the “Extra Time” interval.
- Disconnect the VAC-999. Programming is now complete.



**\*Programming can be terminated at any point in this procedure by pressing the timer reset button in the machine.**

It is important that the products are loaded properly to correlate to the fragrance choice switch on the front of the cabinet.

## To Load Fragrances:

When the fragrance selector switch is in the Up position, the fragrance from the LEFT bottle will be dispensed (position 1). Placed in the MIDDLE position (2), the fragrance will be dispensed from line 2 and in the DOWN position (3), from line 3. (See page 16 for fragrance valve positioning). Simply fill both ½ gallon containers (already in your machine) fragrance and place a full gallon of your third fragrance choice on the bottom jug shelf. Vend each fragrance two (2) times each to prime fragrance lines. The amount of fragrance dispensed is preset at the factory.

While refilling the ½ gallon containers: Keep pick-ups & weights wrapped in paper towel or clean rags. **DO NOT THROW THEM DOWN IN THE BOTTOM OF THE CABINET!!** Precautionary cleanliness here will save you the trouble & expense of replacing the atomizer in the handle.

## To Test:

Deposit proper amount of coins. Spray each fragrance. Flip the switch to vacuum. Time will recalculate as indicated on pricing sticker.

## CAUTION:

**USE ONLY FRAGRA\*MATICS GREEN LABEL FRAGRANCES TO GUARANTEE CUSTOMER SATISFACTION, AND TO LIMIT LIABILITY.**



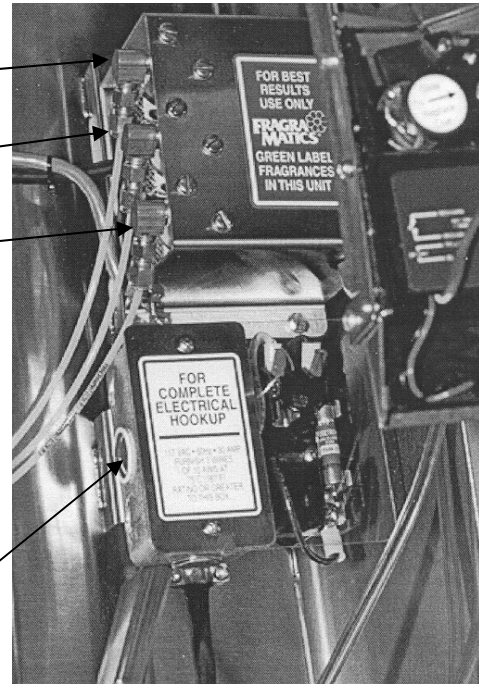


## Fragrance Valve Positioning on Selector Switch

**Top Selection (Position 1)**

**Middle Selection (Position 2)**

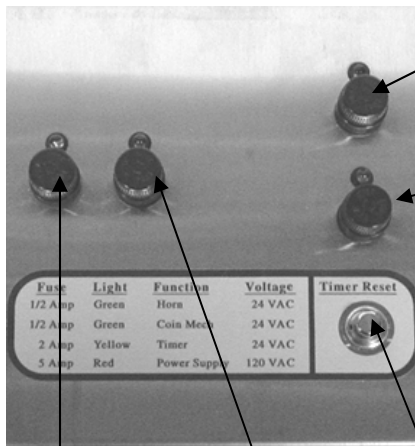
**Bottom Selection (Position 3)**



- **CAUTION:**

The red light on the handy-box indicates that power is being supplied to the dispenser. Power to the dispenser must be turned off at breaker box when attempting any electrical maintenance.

Handy Box Red Light



**A**

**B**

**E**

**C**

**D**

**(A)** 24 Volt Fuse (Green Light)

This is an ABC-1/2 snap-in fuse. It fuses power to the Coin Mech. Use exact replacement.

**(B)** 24 Volt Fuse (Green Light)

This is an ABC-1/2 snap-in fuse. It fuses power to the Vacuum Horn. Use exact replacement.

**(C)** 24 Volt Fuse (Yellow Light)

This is an ABC-2 ceramic snap-in fuse. It fuses power to the Timer. Use exact replacement.

**(D)** 120 Volt Fuse (Red Light)

This is an ABC-5 ceramic snap-in fuse. It fuses the primary "Power In" to the transformer and to the air compressor. Use exact replacement.

**(E)** Reset Button

While unit is running, this button may be used to end the "Test Cycle", (these quarters or tokens will not be counted.) The reset button may also be used to restore timer display operation following thunder storm activity.

## General Maintenance:

- Keep the outer appearance of the unit looking good by using a glass cleaner to clean the front door decal and lexan faceplate in front of visual display.
- Apply a stainless steel polish to the cabinet to maintain the appearance.
- Take care not to use abrasive cleaners or rags for these applications to avoid scratching the surfaces.  
**\*DO NOT USE STEEL WOOL OR OTHER FERROUS BRUSHES TO CLEAN STAINLESS STEEL SURFACES.**
- The visual display fluid should be maintained at approximately 60% of cylinder height.
- The visual pumps should be replaced as necessary in order to assure that all cylinders are operating properly.
- Add fluid as needed and readjust pumps (Do Not Overfill).
- Check motor brushes for wear and replace as necessary.
- If three (3) motor vacuum, order a special nozzle.
- Inspect gaskets and replace with factory replacements.

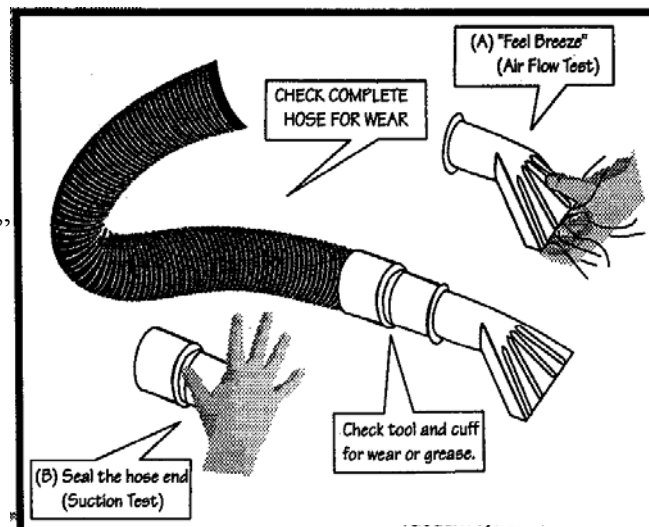
**IMPORTANT! ONE TAMPER PROOF WRENCH IS INCLUDED WITH YOUR UNIT. THIS IS USED FOR REMOVAL OF DOME. SAVE FOR FUTURE USE!**

## Daily/Weekly Maintenance:



- Remove dirt & debris from vacuum. HINT: Consider ordering a debris catcher (VAC-067) from your distributor to simplify this process.
- Empty & shake bags weekly.
- Exchange bags and wash bi-monthly.
- Check hand tools, as suction will be impaired if vacuum nozzle wears excessively.
- Always make sure vacuum doors are closed.

- Check hose for signs of wear, replace if excessive.
- Test vacuum suction and airflow.
- Suction Test: Place hand tightly over cuff – feel for “pull”
- Air Test: Hold cupped hand near hose inlet – feel for “breeze”.





## Symptom:

## Problem:

## Correction:

Poor performance:

Poor suction.

Test by placing hand over end – feel for “pull”. With hose end sealed, use plastic bag or sheet to test for leaks at door opening. (Move sheet lightly past suspected areas plastic will “stick” at leaks.) **MAKE SURE VACUUM DOORS ARE SEALED.**

Poor airflow.

Check for overfilled debris area or hose clog. Clean filters. Check motors to be sure that both are working.

Vending Problems:

Coin jams.

Check for “overfilled” coin box. Check for clearance of coin box (remove obstructions). Check magnet for Canadian (magnetic) coins.

Red light not lit on side of power make-up box.

Either no power to vacuum island or vacuum island power not entering unit.

Check Breaker in control room. Check Connections at distribution point at vacuum island.

Red light is lit but, visual is not active and fluorescent lights (3) are not lighted

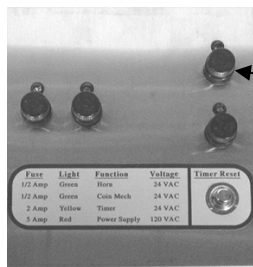
Main Fuse



Test fuse or replace fuse. (A voltmeter connected across fuse reading voltage, proves that the fuse is bad.)

Visual working and fluorescent lights lit, but timer not lit and coin mechanism not accepting.

24 volt Fuse



Test fuse or replace fuse.

Unit accepts coins but timer fails to give credit.

Call Fragra\*Matics at 1-800-643-1574, and ask for technical support.

## Symptom:

Unit works on fragrance but not on vacuum.

## Problem:

Vacuum motors not powered or both are inoperative.



Solid State Relay

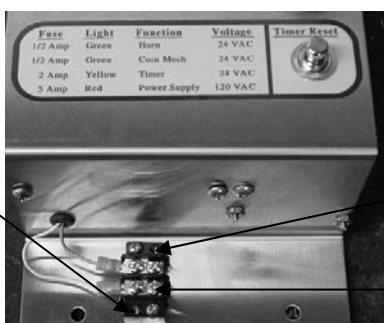
## Correction:

Remove dome. With unit in cycle and in vacuum mode, check for appx. 26 VAC between green and violet wires on solid state relay. If present: 1. Replace solid state relay motor fuses. 2. Replace Vacuum motors.

If vacuum motors continues to run when switch is moved to fragrance position - - Replace Solid State Relay.

Unit won't spray:

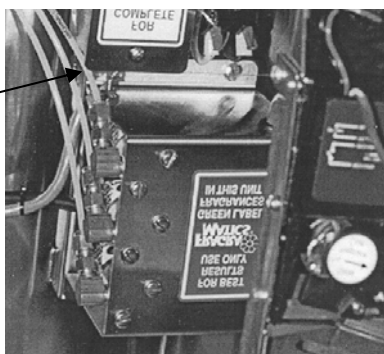
No air at nozzle in handle.



C

A

B



Cap Nut

1. Check fragrance levels. Check the three (3) screens in gallon containers to eliminate dirt or foreign materials.
2. Follow the two black wires entering the cabinet from the hose. They terminate at terminal block "C", (See illustration to the left). Jump 24 volt terminals (A & B) at the same time – if air discharges from the gun while activated, - - *Replace handle switch.*
3. With the unit running, place fragrance selector switch in top position. Open front door; remove cap nut (7/16") on the #1 fragrance line. Put fragrance line directly into a fragrance bottle and see if unit sprays. If it sprays fragrance, the problem is either the solenoid valve or the pick-up tube. If it does not spray, the problem is either the atomizer or air supply.

LED timer blank after electrical activity (Thunderstorm)

Press reset button for a minimum of two (2) seconds.

Other problems:

How to get additional technical help.

Call Fragra\*Matics at 1-877-788-2886, and ask for technical support. Please have serial number of the vacuum ready. The serial number plate is located at the base of the cabinet near the vacuum hose or inside on the nameplate.

**Part Number****Description**

VAC-001	Decaled Vacuum Dome
VAC-002	Vacuum Hose 2" x 15'
VAC-003	Tamper Proof Wrench (Dome)
VAC-004	Dome Bolt (5 Required)
VAC-007	Small L.E.D. Timer
VAC-009	Vacuum Motor
VAC-011	Vacuum Bag (4 Required)
VAC-012	Coin Acceptor – Single Coin
VAC-015	FV-3/SVSR Coin Box Only
VAC-022	Coin Chute
VAC-023	Lock Block Plate
VAC-025	Vacuum Nozzle
VAC-026	ABC 5 Amp Chair Fuse
VAC-027	ABC 10 Amp Vacuum Motor Fuse
VAC-032	Vacuum Door Gasket
VAC-033	Vacuum Horn
VAC-040	Dome Decals (Set of 4)
VAC-041	Door Decal
VAC-042	Tank Decals (Set of 2)
VAC-043	FV3 Atomizer
VAC-044	Motor Brushes (Set of 2)
VAC-049	FV3 Hose & Handle Assembly
VAC-051	Vacuum Cuff
VAC-053	FV3 Hose Assembly Only
VAC-054	FV3 Handle W/ Push Button
VAC-058	FNM 30 Fuse (3 Motor)
VAC-060	FNM 25 Fuse (2 Motor)
VAC-063	FV3 Tubings W/ Wire
VAC-066	Diverter Valve
VAC-067	Debris Catcher
VAC-071	Vacuum Hose Hanger W/ Hardware
VAC-072	Jug Shelf
VAC-086	FV3 Visual Display
VAC-087	FV3 Visual Fluid –Set
VAC-091	Abus Lock
VAC-092	Switchguard
VAC-093	½ Gallon Jug
VAC-097	Fluorescent Bulb-Cabinet

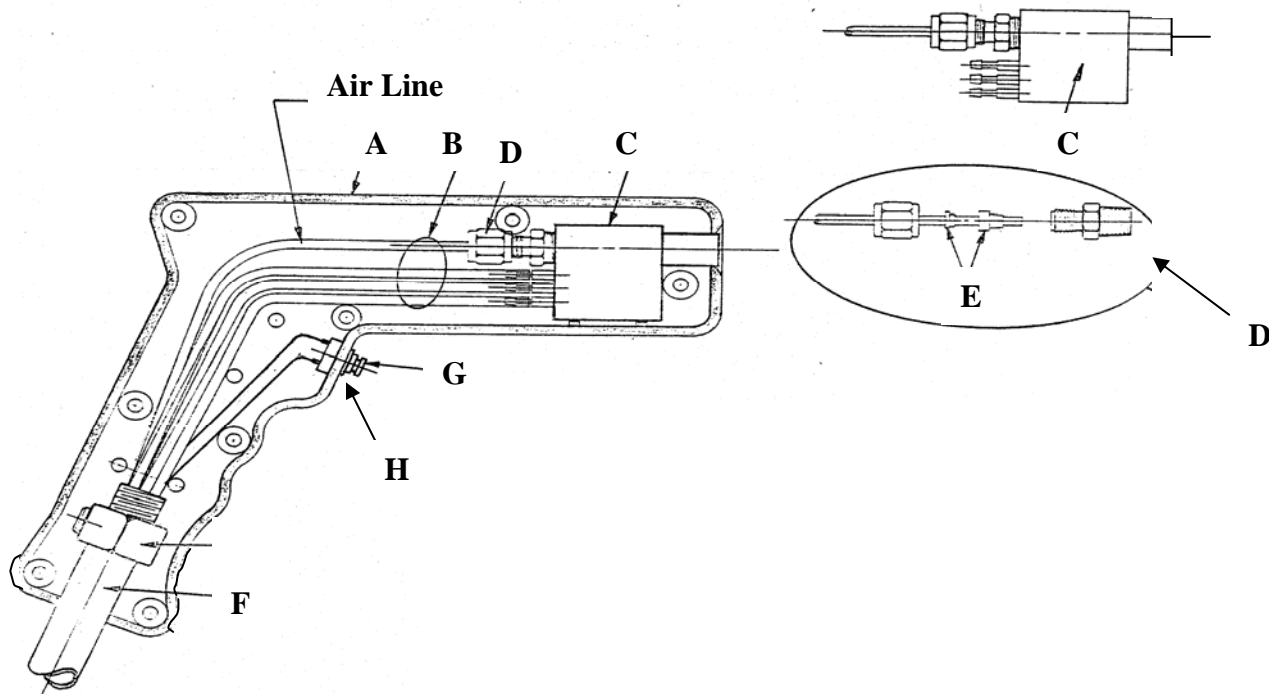
<b>Part Number</b>	<b>Description</b>
VAC-100	FV3 Wand Holder
VAC-106	FV3 Pick Up Tubes (Set of 3)
VAC-109	FV3 Handle Only
VAC-110	Push Button Only
VAC-116	Compression Fitting
VAC-117	Ferrules (Set of 2)
VAC-121	Vacuum Door Latch – Latchless Style
VAC-122	Vacuum Door W/ Gasket – Latchless Style
VAC-153	FV-3 Switch Assembly – M
VAC-169	SS-11 50C Solid State Relay
VAC-171	FV-3 Main Power Unit –L.E.D.
VAC-231	Circular Light & Bracket (dome)
VAC-235	Circular Bulb
VAC-999	L.E.D. Controller
DOR-004	Visual Pump
DOR-006	Visual Pump Tube
DOR-033	Visual Cylinder
DOR-040	Van Lock
DOR-041	Van Key

## Fragrances

Baby Powder	Leather	Raspberry
Black Cherry	Lemon Lime	Sandalwood
Bubble Gum	Mulberry	Spearmint
Cinnamon	Musk	Spice Lite
Citrus	New Car	Spring Floral
Fresh-N-Clean	Orange Blast	Strawberry
Georgia Peach	Pacific Breeze	Sweet Pea
Honeysuckle	Pina Colada	Tropical Fruit
Jasmine	Pine Mist	Vanilla
Juniper Breeze	Plumeria	Wild Cherry

\*\* Use only Fragramatics Green Label Fragrances to guarantee customer satisfaction, and limit liability.

## Hose & Handle Assembly Complete – VAC-049



	<u>Item</u>	<u>Quan.</u>	<u>Part No.</u>	<u>Description</u>
AA	AA	1	VAC-049	Hose & Handle Assembly Complete
	A	1	VAC-109	Handle Only
	B	1	VAC-063	FV-3 Tubings with Wire & Ferrules
	C	1	VAC-043	FV-3 Atomizer includes "D"
	D	1	VAC-116	Compression Fitting
	E	1	VAC-117	Set of Ferrules
	F	1	VAC-053	Hose Assembly – 13 Ft.-Incl. Item "B"
	G	1	VAC-110	Push Button Switch
	H	1	VAC-092	Switchguard



### LED Light Indicators

- Constant Green – Standby Mode
- Flashing Red – Alarm Set
- Fast Flashing Red & Green – Alarm Activated

### Alarm Board

#### Hidden Reset Button

Located behind left corner of board, press for a few seconds to reset Alarm if not using keyfob.

#### Battery Power Indicator Light

GREEN – indicates that battery is charged  
RED – indicates battery is being charged



### Keyfob

Idle Mode (Button 1) indicates that Alarm is ON but disengaged.

Set Mode (Button 2) indicates Alarm in Alert state.

Reset (Button 3) puts Alarm in Idle Mode when it went off.

### Battery

Shipped in separate box  
Molex Plug for easy installation

