# Table of Contents

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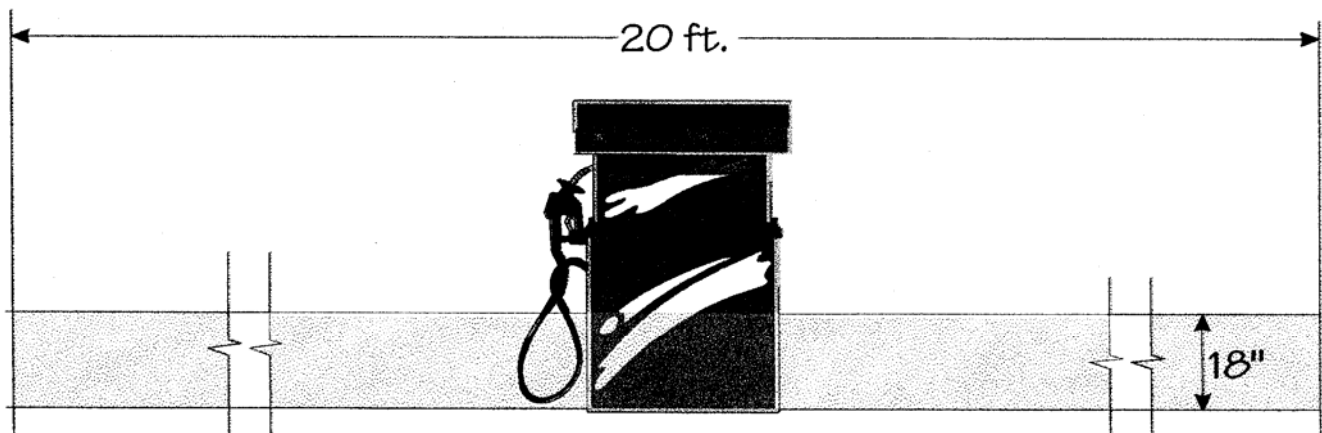
*FILL OUT YOUR WARRANTY CARD AND RETURN TO THE FACTORY TO REGISTER YOUR COMBO VAC.

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 Fragramatics 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 Fragramatics for return under the terms of this *Limited Warranty* must be shipped prepaid, in the original shipping container or equivalent to Fragramatics or to a local service center as authorized and determined by Fragramatics. The purchaser assumes the risk of loss or damage in transit. (Please refer to your owner's manual or contact Fragramatics 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 FRAGRA*MATICS.

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 Fragramatics. 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 HEREOF 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.
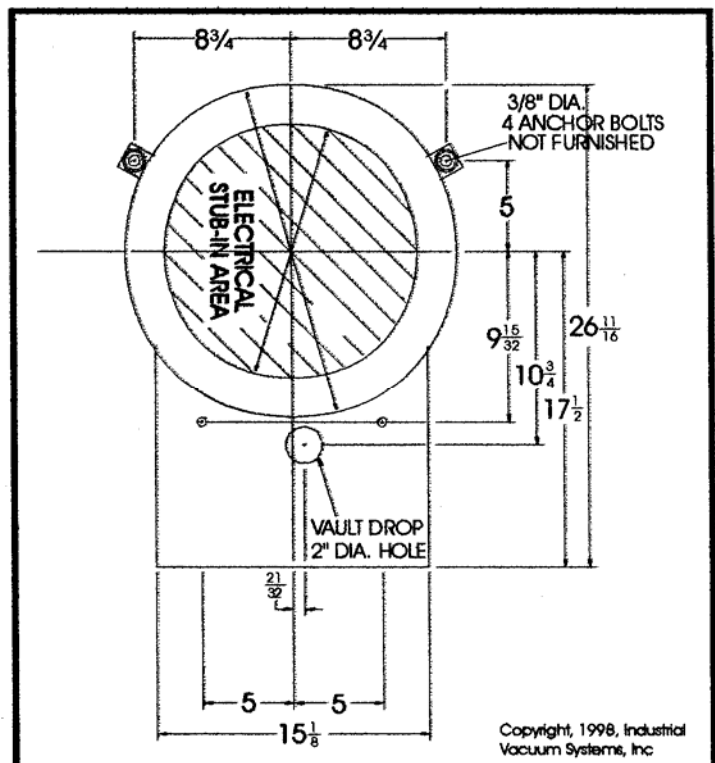
Proper Placement

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.
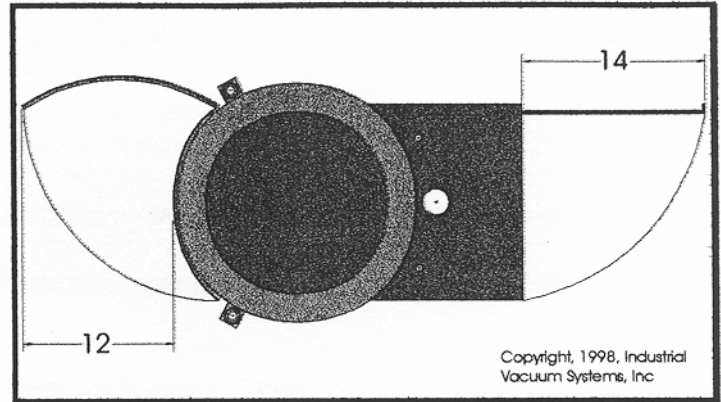
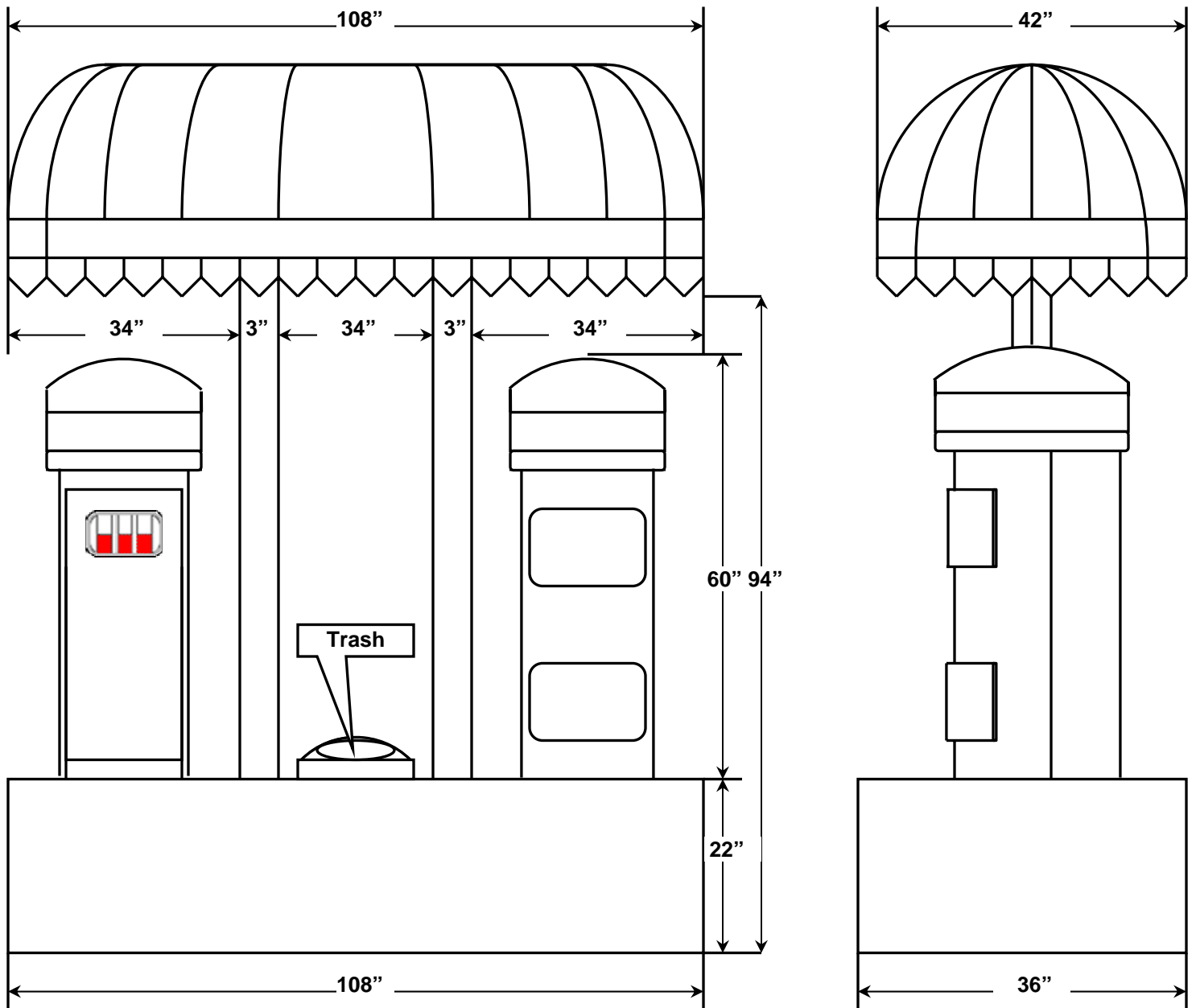

Copyright, 1998, Industrial Vacuum Systems, Inc

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.

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Vacuum Island Layout

108"

42"

34"   3"   34"   3"   34"

60" 94"

Trash

22"

108"

36"

Typical Layout – Brick or Concrete

Island Base Layout

Stub Electrical Service
#10 Wire 30 Amp – 3 Motors
Or
#12 Wire 25 Amp – 2 Motors

½" 13 N.C. THD "J" Bolt

2" Hole in Base Plate
For Electrical – Typical
Both Poles

4"

3"

3"

6"

36"

16"

35 ½"

37"

35 ½"

16"

108"

1½"   1½"

FRAGRA MATICS
MFG. CO., INC.

24"
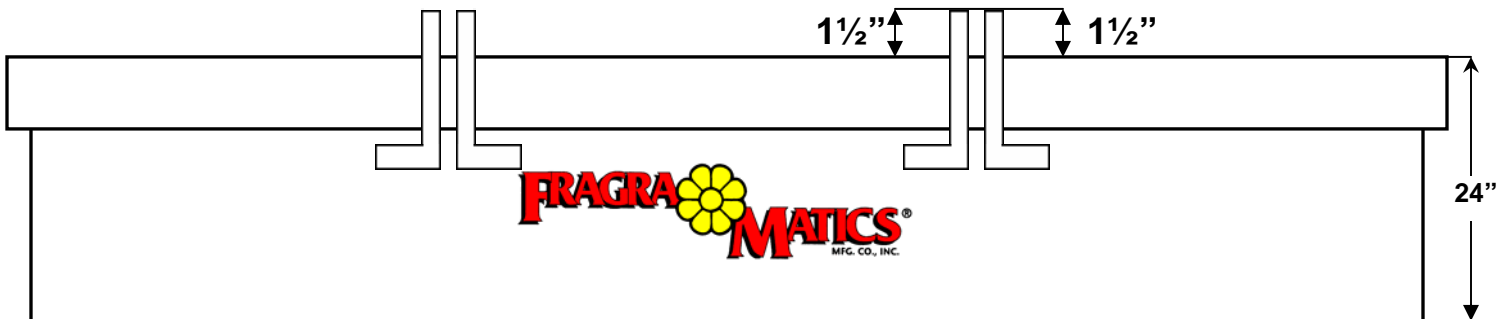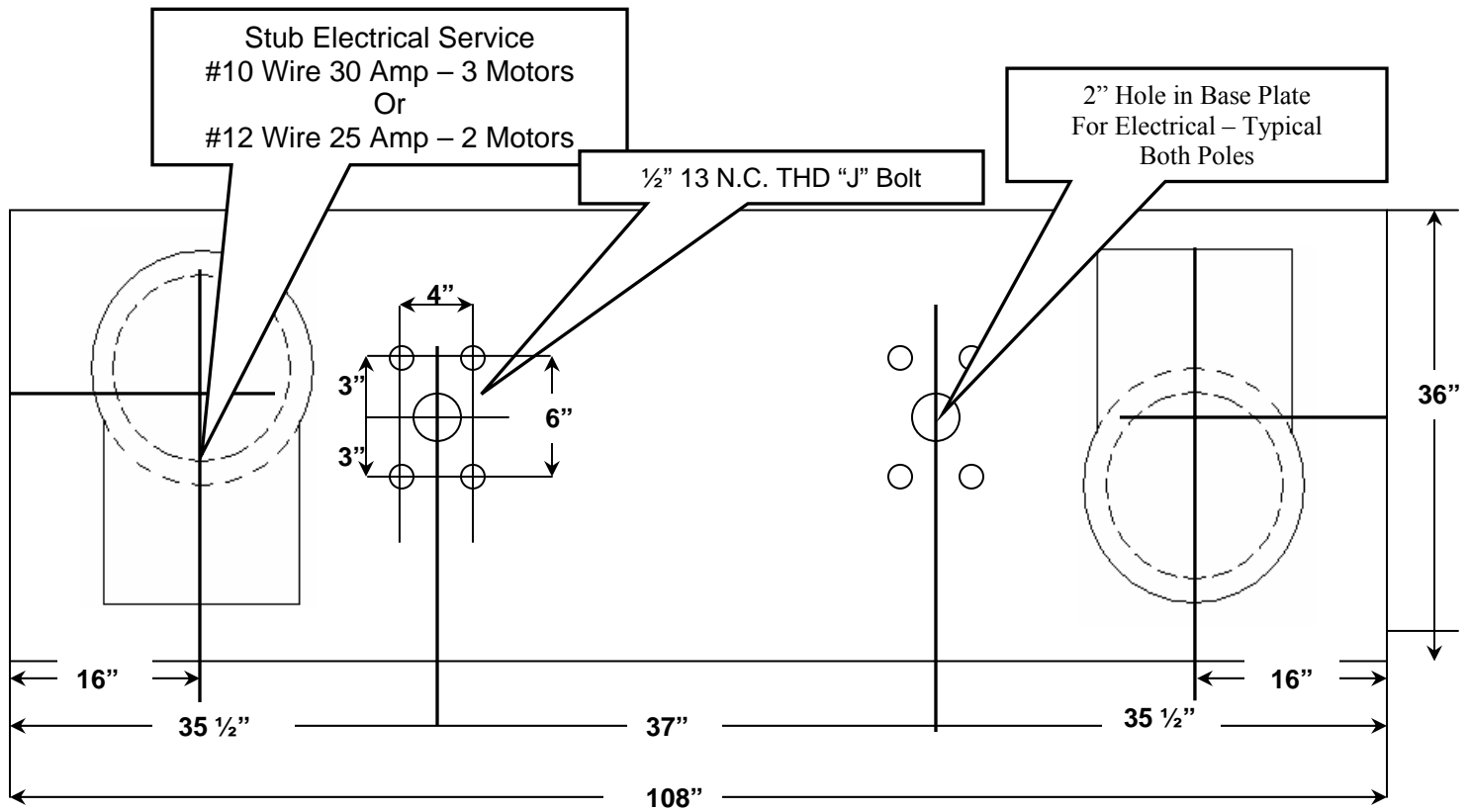
Typical Footprint – Brick or Concrete

Typical Layout – Stainless Steel

Pole Location & Layout

6 X 5 POLE

7.000

5.000

CLEAR 1/2" DIA. BOLT TYP.

6.000

10.000

8.000

3.000

9.000

CENTER OF CANOPY

19.000

38.000
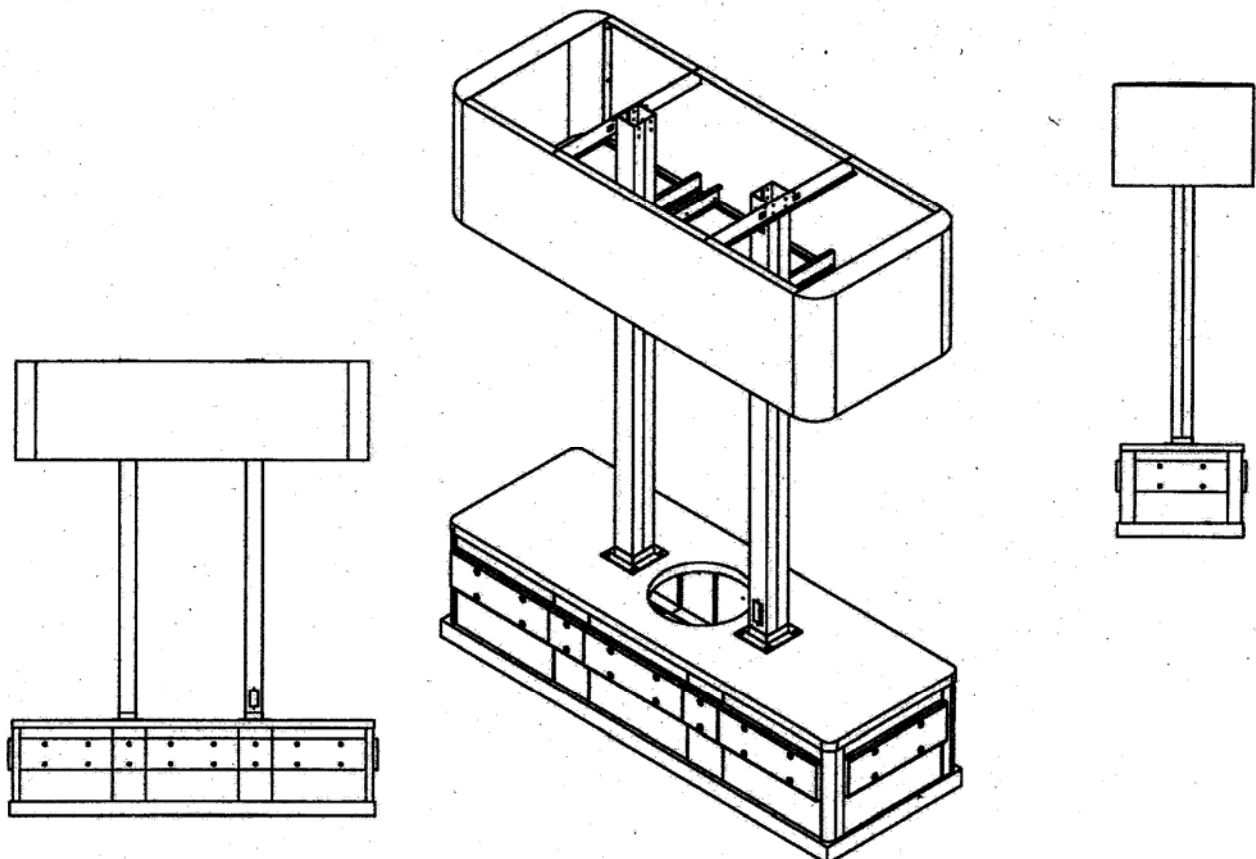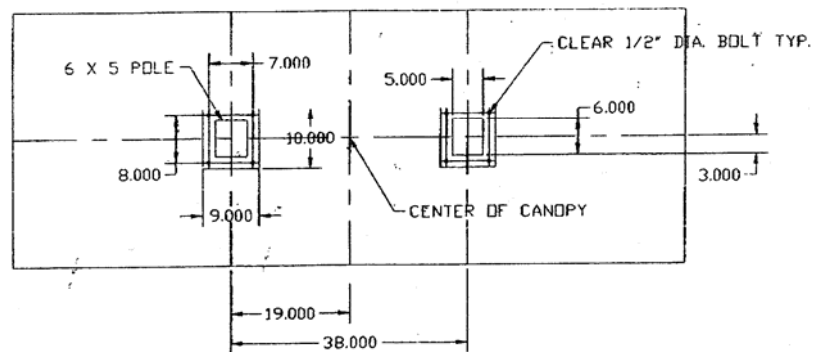
Typical Footprint – Stainless Steel

Electrical Stub In
Area: 12" by 14"
Typical

39.145

37.000

24.010

10.000

12.000 — 12.000

110.000

111.185

36.5

12.000 — 14.000

38.000
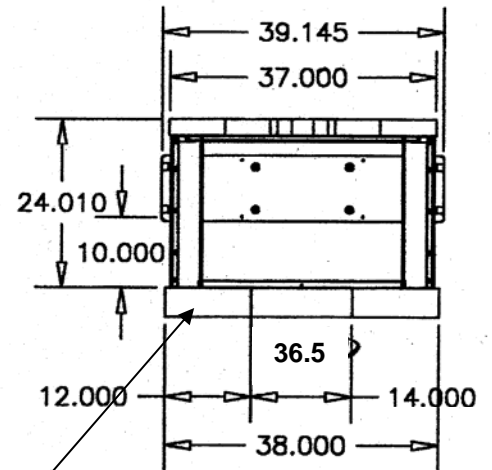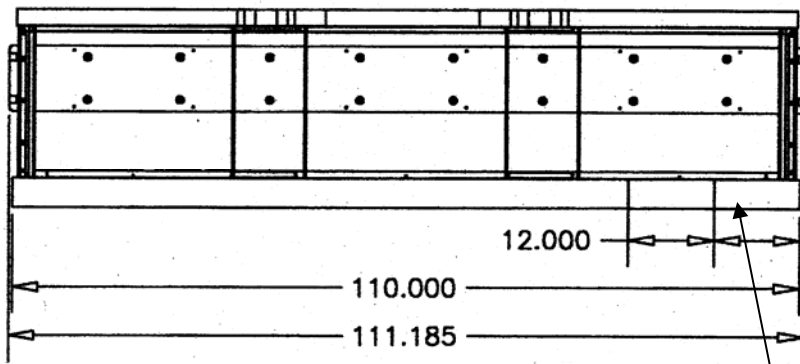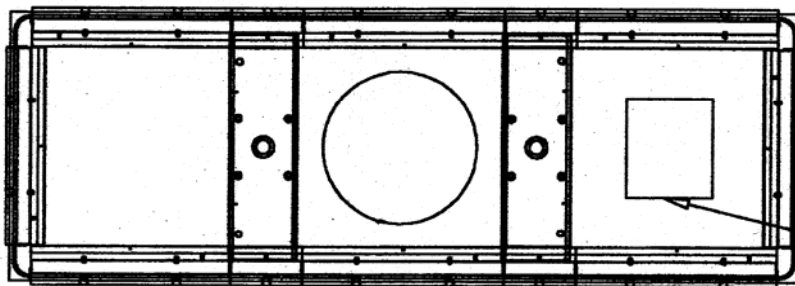
* Note: Customer to install six (6) inches of level
concrete, 38" x 110" per island

J - Bolts inserted in plywood shipping base. Remove plywood after concrete base sets.
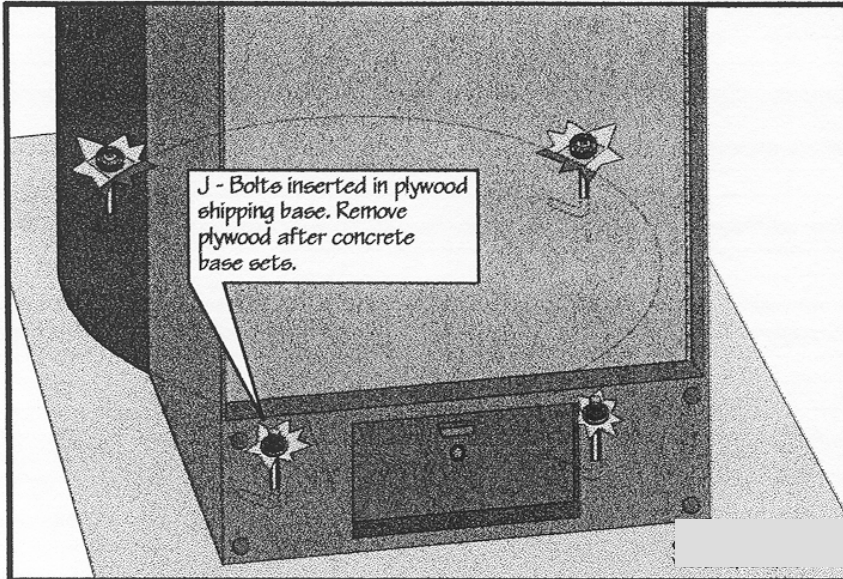
Using "J" Bolts:

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.
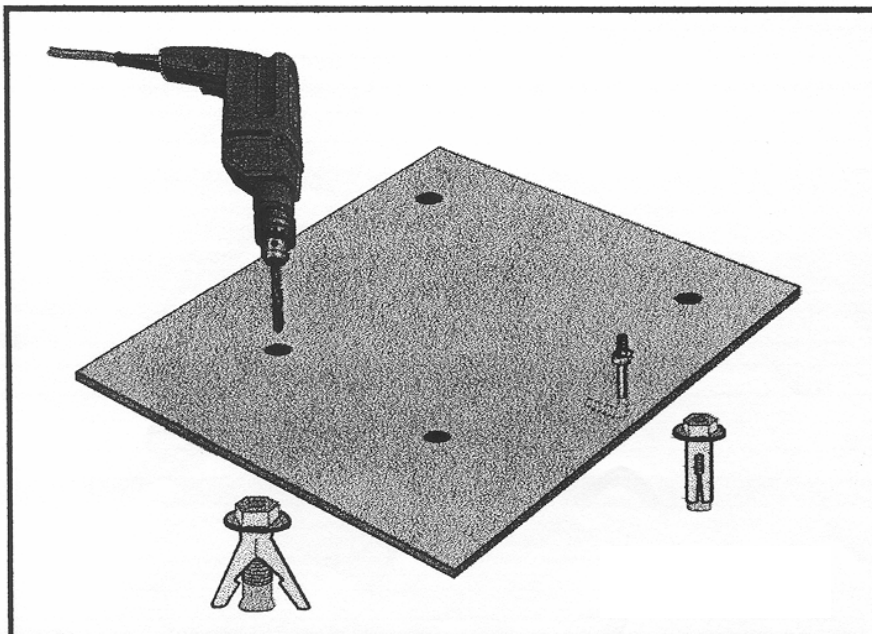
Masonry Anchors:

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.

Electrical Requirements

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.

DANGER

ELECTRICAL HAZARD DISCONNECT POWER

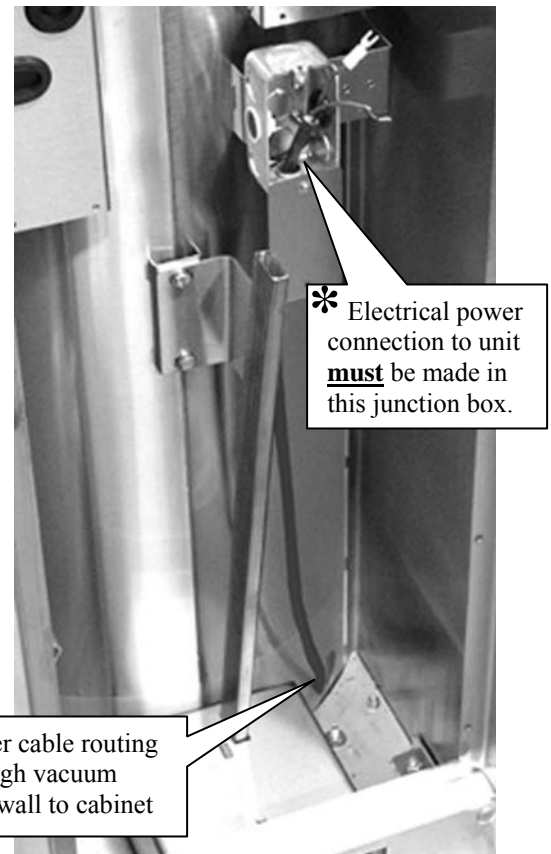**CAUTION ELECTRICAL SHOCK HAZARD. DISCONNECT POWER PRIOR TO BEGINNING ANY SERVICE OR INSTALLATION WORK. GET ASSISTANCE IF YOU ARE UNSURE OF THESE PROCEDURES.**

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.**

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

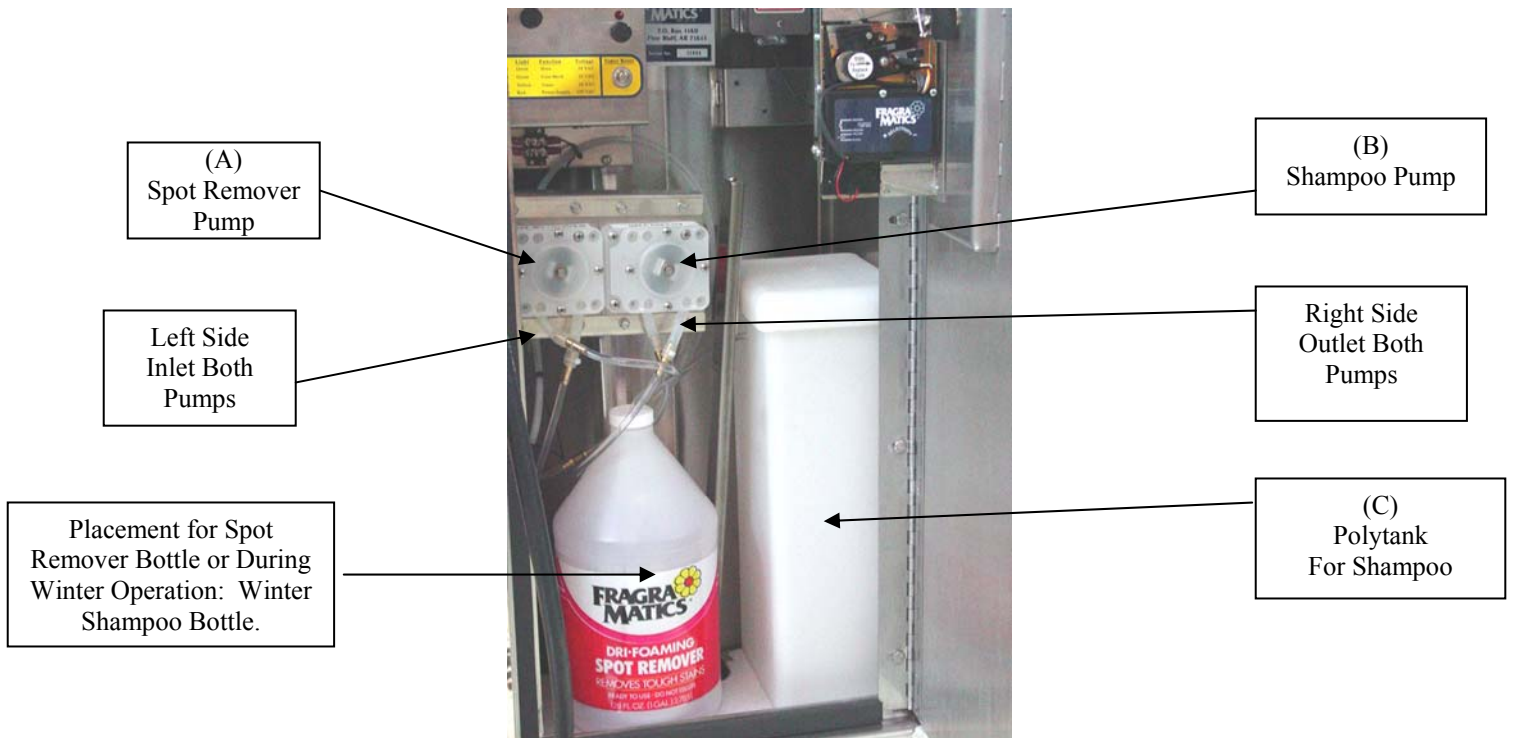Power cable routing through vacuum tank wall to cabinet

- 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 one and a half minutes (1 ½) of shampoo or spot remover.

  - **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 TURBO CARPET-CARE VACUUM.

  - **Sales Message:** SWITCH TO SPOT AT ANY TIME.

  - **Exit Message:** TRY SPOT REMOVER THEN VAC SPOT AWAY.

- 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 at the rear of the display timer at top center. 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 shampoo 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?" press 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 9 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 9 to program message. NOTE: The "Welcome Message" and "Sales Message" scroll on the timer all the time. The "Exit Message" scrolls three times after the timer has timed out.

- 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.

(A) Spot Remover Pump

(B) Shampoo Pump

Left Side Inlet Both Pumps

Right Side Outlet Both Pumps

Placement for Spot Remover Bottle or During Winter Operation: Winter Shampoo Bottle.

(C) Polytank For Shampoo

1. Place shampoo products into dispenser assuring that pick-up tube and weight extend to the bottom of the container. Place one gallon <u>undiluted</u> Spot Remover under Spot Remover pump (A). Place Summer Shampoo into polytank (C) by Shampoo pump (B). Check label of shampoo, since shampoo is available in both ready to use formula and a concentrated formula that you must dilute (5:1) with water. Polytank can be filled without removal from vacuum. Capacity appx. 1.8 gallons.

2. Prime dispenser to fill the hose and tubing. This may require up to two vend cycles. <u>The toggle switch on the wand must be switched on during the priming cycle to activate fluid pump and air valve.</u> Operate dispenser until a constant flow is observed. Dispenser is now ready for normal operation. Using proper Fragra*Matics Summer Shampoo, the dispenser will produce 5 gallons of foam in one minute and 45 seconds.

3. **FOR WINTER OPERATION:** When temperatures drop to 32 degrees, remove Summer Shampoo and Spot Remover from unit and purge both lines. Place Fragra*Matics Winter Shampoo under the Spot Remover pump and place both pick up tubes (both shampoo and spot remover) into product.

4. If dispenser is allowed to run empty of shampoo during normal operation, repeat step 2 to return dispenser to operation.

CAUTION: USE ONLY FRAGRA*MATICS CARPET PRODUCTS TO INSURE PROPER OPERATION OF EQUIPMENT AND LIMIT YOUR LIABILITY.

- **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
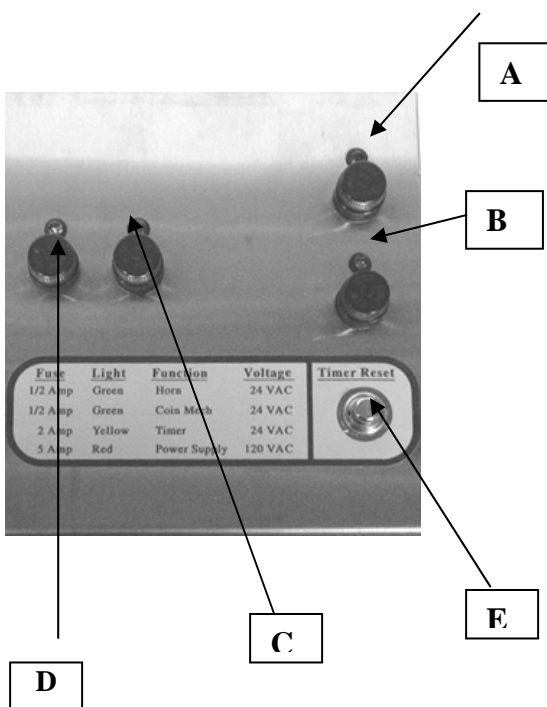
(A) 24 Volt Fuse (Yellow Light)

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

(B) 120 Volt Fuse (Red Light)

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

(C) 24 Volt Fuse (Green Light)

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

(D) 24 Volt Fuse (Green Light)

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

Fuse	Light	Function	Voltage	Timer Reset
1/2 Amp	Green	Horn	24 VAC	
1/2 Amp	Green	Coin Mech	24 VAC	
2 Amp	Yellow	Timer	24 VAC	
5 Amp	Red	Power Supply	120 VAC	

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.

- Check motor brushes for wear and replace as necessary.

- If three (3) motor vacuum, order a special nozzle.

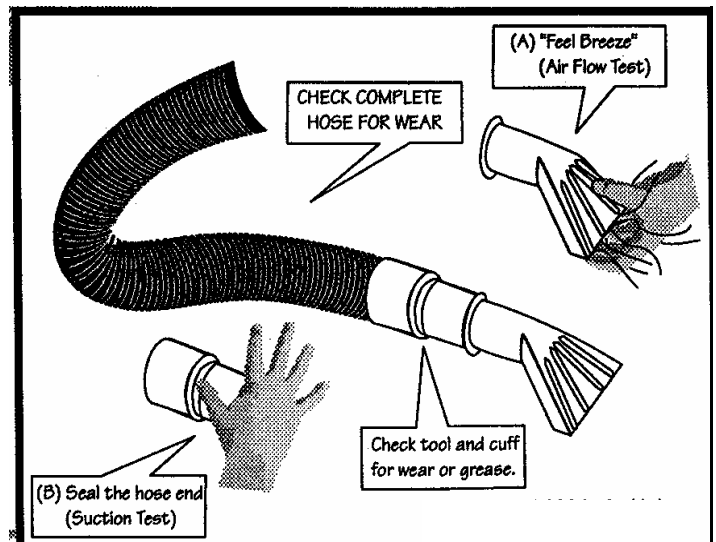- Inspect gaskets and replace with factory replacements.

> **IMPORTANT! ONE TAMPER PROOF WRENCH IS INCLUDED WITH YOUR UNIT (LOCATED ABOVE THE COIN MECHANISM). 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".

(A) "Feel Breeze"
(Air Flow Test)

CHECK COMPLETE
HOSE FOR WEAR

Check tool and cuff
for wear or grease.

(B) Seal the hose end
(Suction Test)

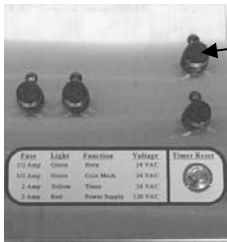| Symptom:	Problem:	Correction:
Poor performance:	Poor suction.	Test by placing hand over end – feel for "pull". With hose end sealed, use plastic bag or sheet to test for leaks at door opening. (Move sheet lightly past suspected areas, plastic will "stick" at leaks.) **MAKE SURE VACUUM DOORS ARE SEALED.**
	Poor airflow.	Check for overfilled debris area or hose clog. Clean filters. Check wire mesh at base of vacuum motor for blockage. Check motors to be sure that both are working.
Vending Problems:	Coin jams.	Check for "overfilled" coin box. Check for clearance of coin path to coin box (remove obstructions). Check "cradle" area of coin mechanism for severely bent coins. 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 power distribution point at vacuum island.
Red light is lit but, fluorescent lights (3) are not lighted	Main Fuse Main Fuse	Test fuse or replace fuse. (A voltmeter connected across fuse reading voltage, proves that the fuse is bad.)
Fluorescent lights lit, but timer not lit and coin mechanism not accepting.	24 volt Fuse 24v Fuse	Test fuse or replace fuse.

Symptom:	**Problem:**	**Correction:**
Unit accepts coins but timer fails to give credit.		Call Fragra*Matics at 1-800-643-1547, and ask for customer service.

|		
Unit works on shampoo but not on vacuum.	Vacuum motors not powered or both are inoperative.	Remove dome. With unit in cycle and in vacuum mode, check for appx. 26 VAC between pin #3 and pin #4 on solid state relay. If present: 1. Replace solid state relay and motor fuses. 2. Replace Vacuum motors.

Solid State Relay

If vacuum continues to run when switch is moved to shampoo or spot remover mode- - Replace solid state relay

Unit won't foam:	No air at brush in handle. And pumps don't run (turn).	Follow the two black wires entering the cabinet from the hose. They terminate at terminal block "C". Jump (24V) terminals "A" & "B" at the same time. If air discharges from the brush while activated and foams. Replace brush toggle switch.

A
B
C
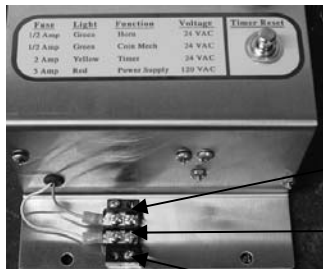
Unit won't foam.	Air at brush. Pump runs.	Check chemical levels and clean strainers. Remove Pump tube fittings (see ill. page 14) run unit and measure the output of product. The pump should produce appx. 1 ½ to 2 ounces per minute, if it does – problem is in hose & handle. If less than amount above- order new pump tube and roller.
	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 1-800-643-1574, and ask for customer service. Please have serial number of the vacuum ready. Serial number plate is located at the base of the cabinet near the vacuum hose or inside on 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-009	Vacuum Motor
VAC-011	Vacuum Bag (4 Required)
VAC-012	Vacuum 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-037	Polytank for SVSR
VAC-044	Motor Brushes (Set of 2)
VAC-048	Large LED Timer
VAC-051	Vacuum Cuff
VAC-056	SVSR Pick-up Tubing Complete
VAC-058	FNM 30 Fuse (3 Motor)
VAC-060	FNM 25 Fuse (2 Motor)
VAC-066	Diverter Valve
VAC-067	Debris Catcher-Poly
VAC-071	Vacuum Hose Hanger W/ Hardware
VAC-072	Jug Shelf
VAC-073	L.E.D. Light Segment
VAC-074	SVSR Toggle Switch
VAC-075	SVSR Wand w/ Toggle Switch
VAC-076	Brush w/ Gasket
VAC-077	SVSR Hose & Brush Assy. Complete
VAC-078	SVSR Wand & Brush Complete
VAC-079	SVSR Foam Generator
VAC-080	SVSR Hose Assembly Only
VAC-081	Spot Remover Pump Tube
VAC-082	Shampoo Pump Tube
VAC-083	SVSR Tubings W/ Wire

Part Number	Description
VAC-091	Abus Lock (coin box)
VAC-098	Peristaltic Pump – Shampoo
VAC-099	Peristaltic Pump – Spot Remover
VAC-101	SVSR Brush Holder
VAC-103	SVSR Instruction Plate
VAC-113	Foam Generator Barbs (Set of 3)
VAC-116	Compression Fitting
VAC-117	Ferrules (Set of 2)
VAC-121	Vacuum Door Latch & Hasp – Latchless Style
VAC-122	Vacuum Door W/ Gasket – Latchless Style
VAC-144	SVSR Selector Switch – M
VAC-149	Latchless Latch
VAC-150	Latchless Hasp
VAC-169	SS-11 C 5 Solid State Relay
VAC-172	SVSR Main Power Unit – L.E.D.
VAC-216	SVSR Dome Decals (4)
VAC-217	SVSR Door Decal
VAC-218	SVSR Tank Decals (2)
VAC-231	Circular Light & Bracket (dome)
VAC-233	Bracket only for Circular Light
VAC-235	Circular Bulb (dome)
VAC-243	Medeco Lock (D-1 units)
VAC-244	Medeco Key (D-1 units)
VAC-999	L.E.D. Controller
DOR-040	Van Lock
DOR-041	Van Key

Products

SHP-001	Winter Shampoo (Ready to Use)
SHP-002	Summer Concentrate Shampoo (Dilute 5:1)
SHP-003	Summer Shampoo (Ready to Use)
SHP-004	Spot Remover

Hose & Brush Assembly Complete – VAC-077
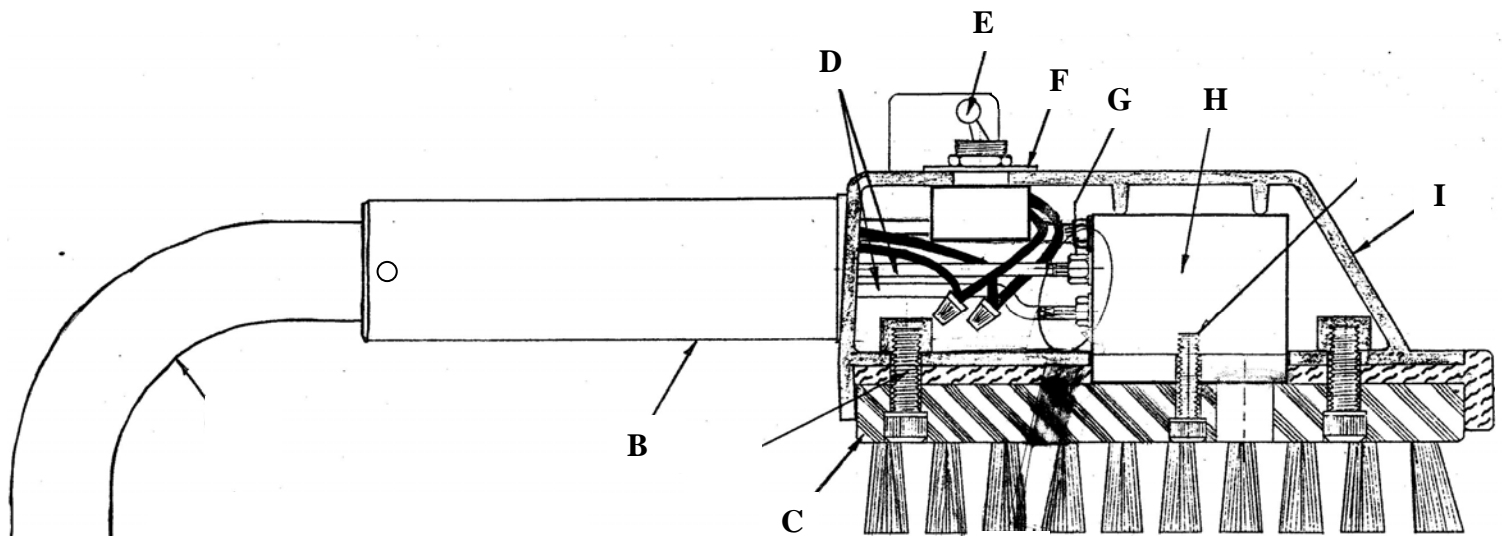
Item	Quan.	Part No.	Description
AA	1	VAC-077	Hose & Brush Assembly Complete
A	1	VAC-080	Hose Assembly – 15 Ft.
B	1	VAC-108	Handle with screws
C	1	VAC-076	Brush with Gasket
D	1	VAC-083	Airline and Tubing Set with Wire
E	1	VAC-074	Toggle Switch, On-Off
F	1	CCD-046	On-Off Legend Plate
G	1	VAC-113	Hose Barb Set (3), (2 Product) (1 Air)
H	1	VAC-079	Foam Generator
I	1	VAC-075	Wand with Toggle Switch "H"

Burglar Alarm (optional, D-1 models only)

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