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# Owner's Manual

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INCREDIBLY POWERFUL

**INDUSTRIAL VACUUM SYSTEMS**

by

**GinSan<sup>®</sup>**  
INDUSTRIES



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# SAVE THESE INSTRUCTIONS

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

### **WARNING:** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY:

Do not use on wet surfaces. - Use only as described in the manual. - Use only manufacturer's options and attachments. - Do not put any objects into openings. - Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow. - Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts. - Do not pick up anything that is burning or smoking such as cigarettes, matches or hot ashes. - Do not use without filters in place. - Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.

### **NOTICE:**

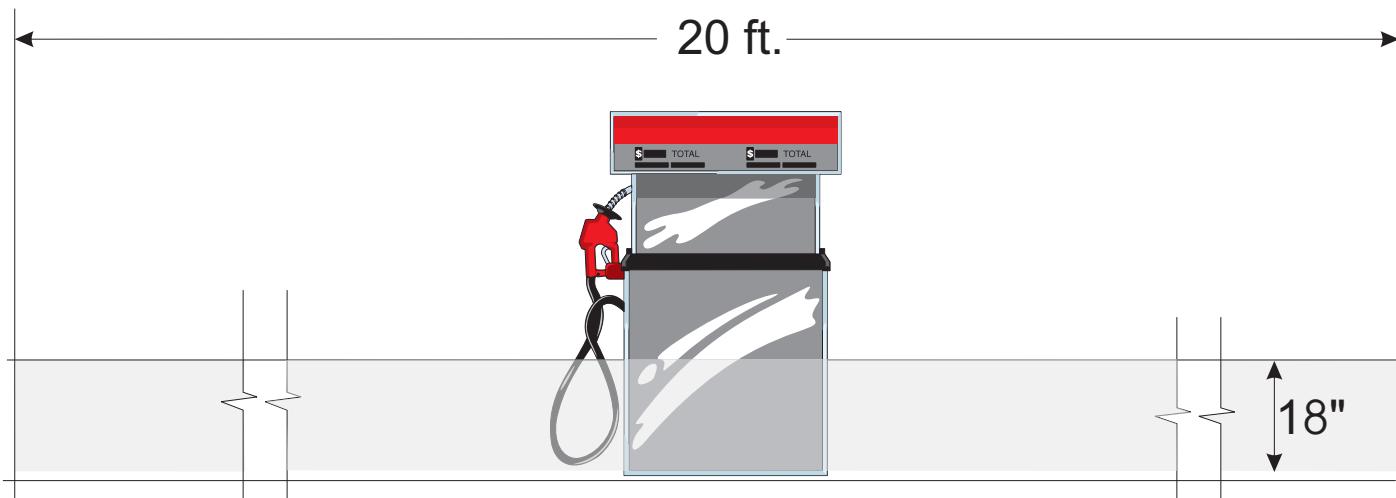
This equipment must be installed in full compliance with all applicable local, regional, and national codes, standards and rules.

### **European Installations:**

Installation of this appliance must incorporate and provide full disconnection of all poles in the event an overvoltage category III condition. Such incorporation to the fixed wiring must be in accordance with the wiring rules.

### **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.



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IVS, a division of GinSan Industries, provides a limited one year warranty on components and pieces of equipment produced by the Company to be free from defects in material and workmanship. Electrical assemblies see Appendix A, have a limited two year warranty on the controller to be free from defects in material and workmanship. This limited warranty does not cover equipment that has been damaged due to misuse, misapplication, modification, altered, neglected, attempted theft, vandalism, connection to improper voltage supply, modification, or such parts that are commonly recognized to be subject to wear in normal usage. Normal use products are, but not limited to, those listed on Appendix B; which are warranted for 90 days. Every component and piece of equipment is packaged to assist in safe handling of the product.

Claims must be submitted in writing within the appropriate coverage period as covered by this warranty, from date of shipment, to the Company's warranty/repair department. If the return is approved an RMA and labeling instructions will be issued and the product can be returned. Returned product without the appropriate RMA and label will be issued to scrap and all warranties/replacements will be considered null and void. A testing fee of \$15.00 will be applied, if the product passes all tests related to the written claim, then the fee will be applied and paid prior to return of the product. If the product fails the test then the fee will not be applied. The Company may charge a 20% restocking fee for returned product and/or an order, which is canceled, and material has already been ordered and/or received to fill such order.

The Company's warranty/repair department will inspect all components, submitted under warranty. Warranty replacement will be based solely on the analysis and confirmation that the product defect was caused by material and/or workmanship. The company reserves the right to change the design of the product without assuming any obligation to modify any product previously manufactured or to replace warranted product other than with redesigned product.

In some cases it is easier for the customer to send a Company purchased product direct to the manufacturer for replacement. In those cases the customer will be notified that their product falls under that process and should work with that manufacturer directly. Appendix C shows the purchased parts that falls under this case.

This warranty covers the product replacement only; charges for damages, freight and/or labor will not be accepted. There are no warranties expressed or implied which extend beyond this Limited Warranty. The loss of use of the product, loss of time, inconvenience, commercial loss, incidental or consequential damages is not covered. The Company 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.

#### **APPENDIX A**

2-Year Warranty Controllers  
Sensortron, Multitron, Touchtron, Timer, Liberator

#### **APPENDIX B**

90-Day Warranty Components  
Pressure Hoses, Swivels, Nozzles, Safety Shut-off Guns, Seals, O-Rings

#### **APPENDIX C**

Purchased Products Products that are Handled Direct with the Manufacturer  
Shop Vac, Bill Acceptors



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**SITE PREPARATION**

Select and prepare a post. Consider: vehicle traffic, ease of access, weather protection and lighting to enhance vacuum performance and income. Consult local code.

Note: 20" base height above surrounding surface provides minimum protection against typical vehicle bumper damage.

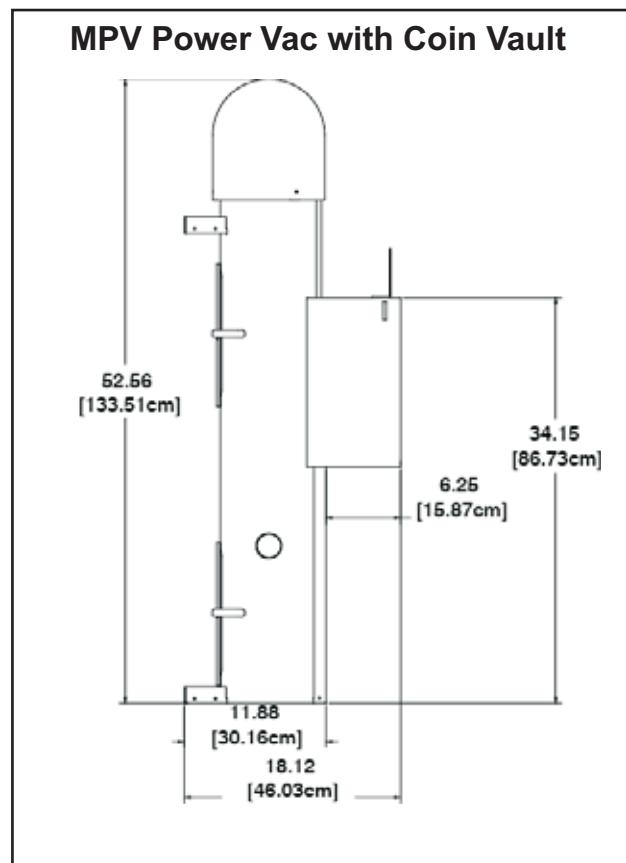
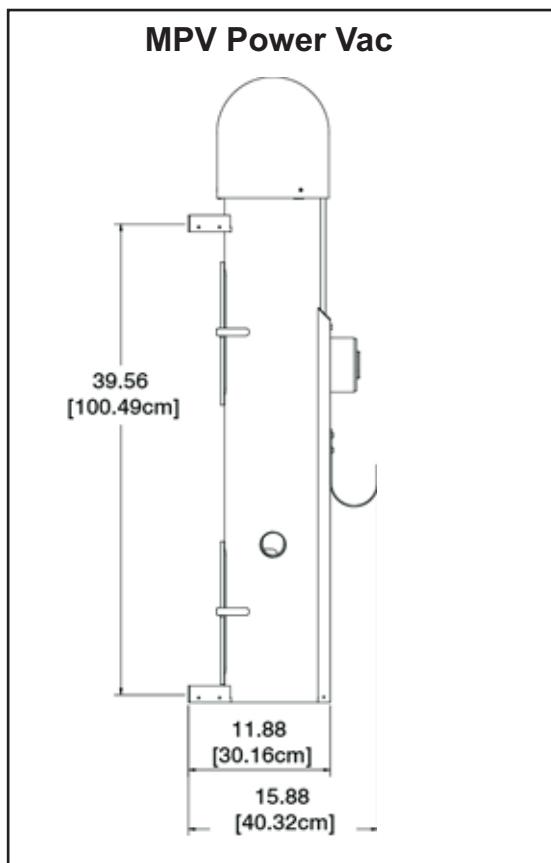
Installation must be in full conformance with all applicable local, state, and federal codes.



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

**1** Determine the best orientation for each vacuum. Consider the traffic flow through the vacuum and detailing area, best visibility of graphics, best sequencing of extra services. Your distributor is the best source for help.

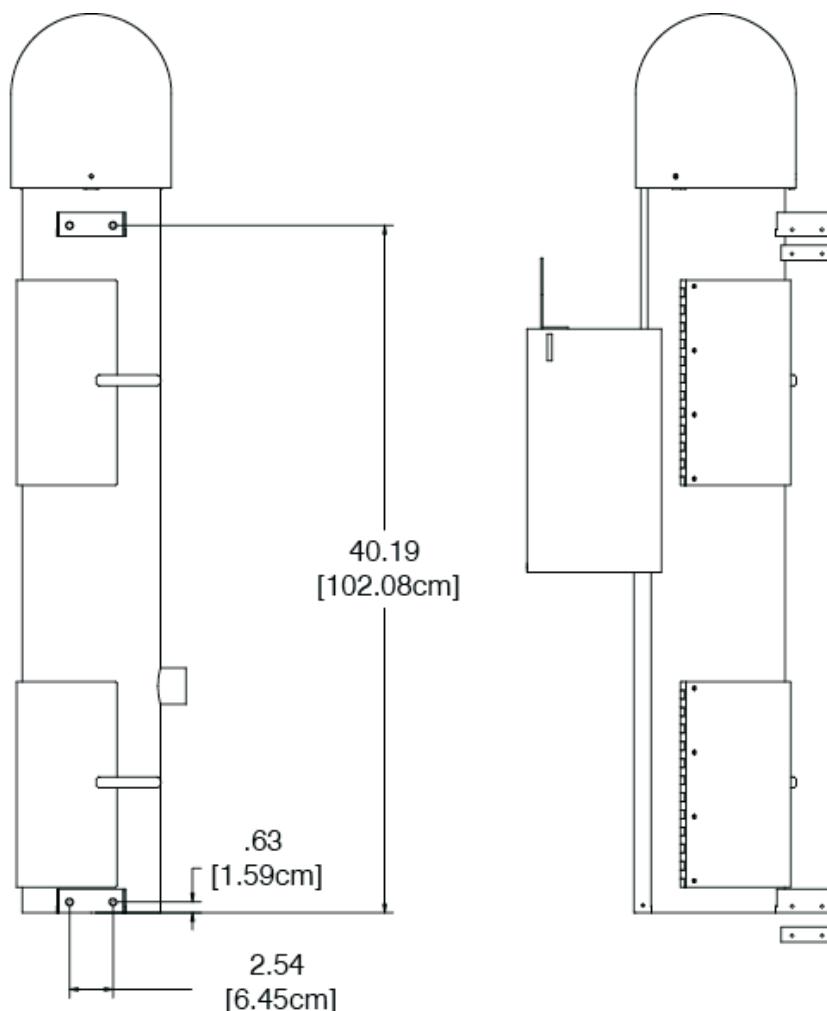
**2** Make sure that vacuums will be easily accessible for customer use and servicing. Customers should have easy access to the coin acceptor area and be able to reach the hose and replace the hose after use.



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3 After securing the MPV to the post, install the bolt head security covers with the provided pop rivets.



7/16" Mounting Hole Locations

After tightening mounting bolts  
Install the 2 bolt covers with  
the 4 included pop rivets

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

Connect to electrical service. A suitable connection must be made in the supply junction box (which can be located on the bottom of the vac).

Refer to the data label on the outside of the vacuum for electrical rating.

Customer is responsible for compliance with all applicable codes and ordinances.

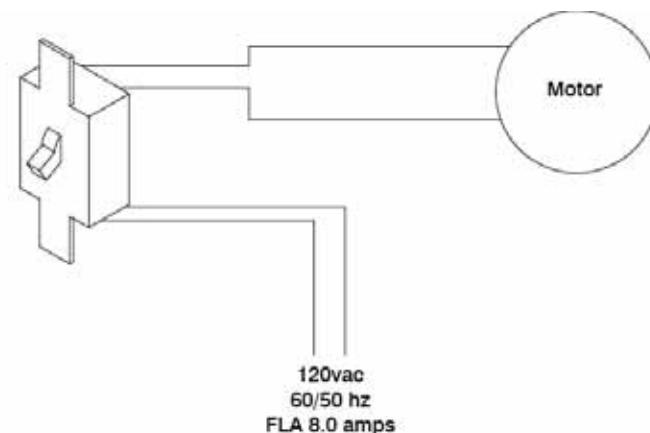
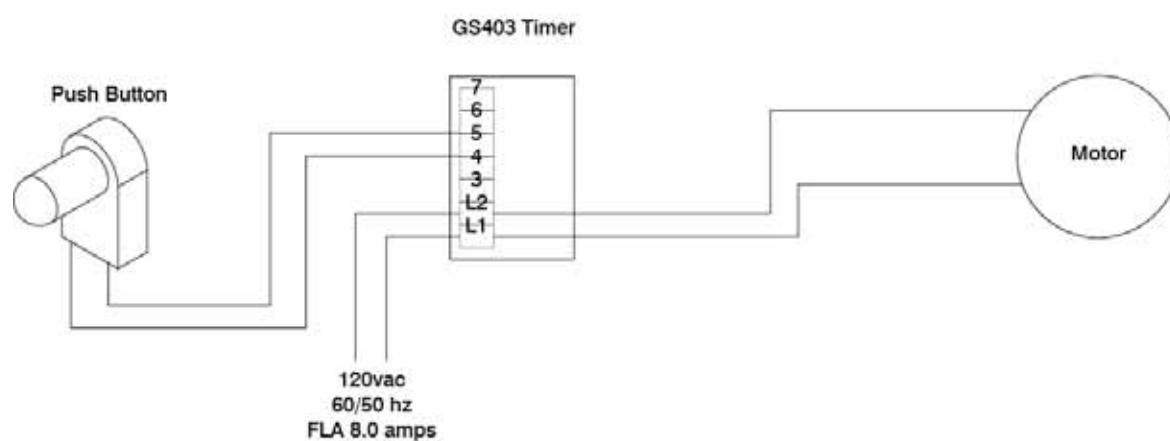
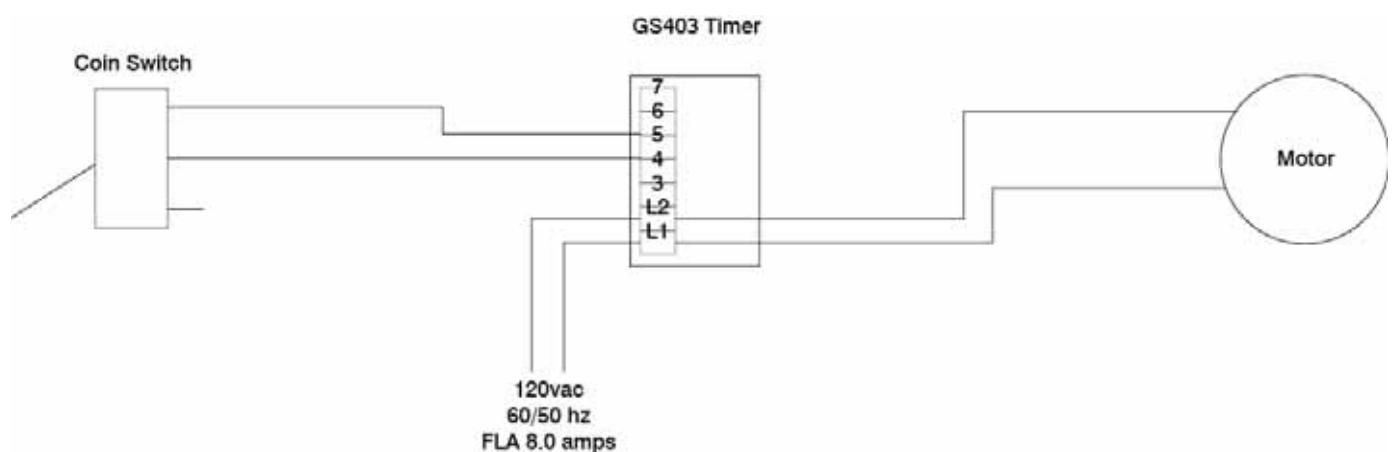
The Vacuum should be connected to a dedicated service.

Check local codes and requirements.

Refer to the **IMPORTANT SAFETY INSTRUCTIONS** on page 2.

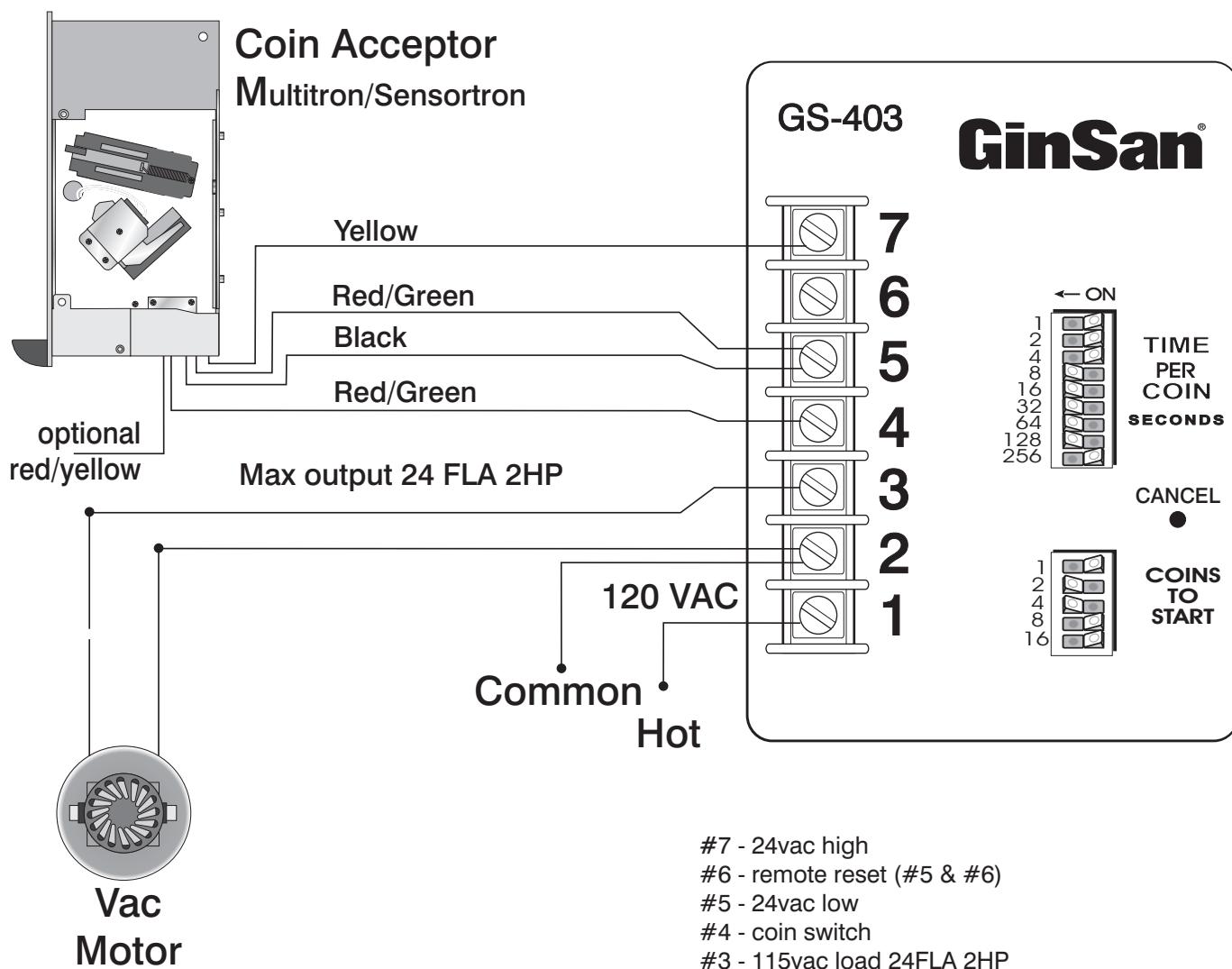


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**MPV Power Vac****< OR >****MPV Power Vac with Coin Vault**

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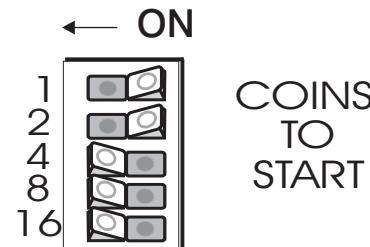
### GS-403 Timer Wiring Hook-Up



#### Setting the COIN to START Switch

The Coins to Start is determined by adding the total number of switches in the "On" position.

**Example:  $1+2 = 3$  coins to start**



### Starting the Timer

Jump a wire between terminals #4 and #5. A count will register in the timer for every jump, which is the same as putting coins in the coin acceptor

### If Timer Fails to Start

Disconnect the switch wire on terminal #5 and repeat starting procedure.

### If timer starts at this point, the trouble may be...

1. A bad coin switch or acceptor.
2. Broken wire or bad connection.
3. Wires shorted between terminals #4 and #5 or shorted between #5 and #6.

### Timer Starts on One Less Coin than Setting

Coin switch wired wrong (should be wired to normally open terminal & common terminal).

### Setting the *TIME PER COIN* Switch

Determine amount of coins to start the timer.

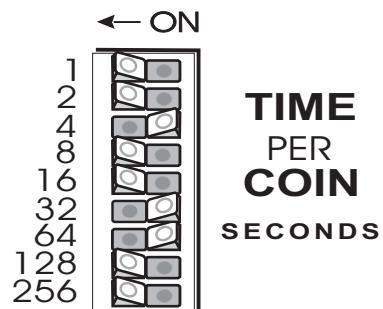
**Example:** 3 coins to start

Convert time desired to seconds.

**Example:** 5 min. = 300 seconds

Divide the total time (seconds) by the coins to start the timer.

**Example:**  $300 \text{ sec.} / 3 = 100 \text{ seconds per coin}$



The *Time per Coin* is determined by adding the total seconds of the switches in the "On" position. If for instance, the desired time is 100 seconds, switch on the number of switches needed to add up to 100 seconds.

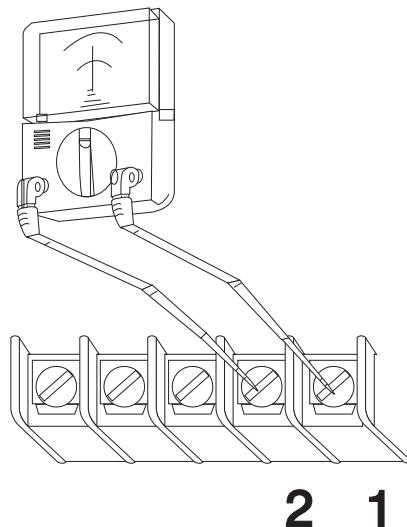
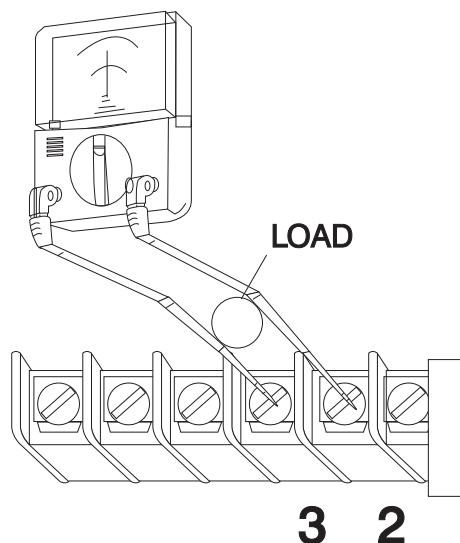
**Example:**  $100 \text{ sec.} = 64 + 32 + 4$

**Example:**  $100 \text{ sec.} = 64 + 32 + 4$



### Checking Power Out to Motors

A load of no less than .5 amps has to be hooked across terminals #2 and #3, to indicate time turning on. Without a load on the timer, it may not turn on or shut off. A volt meter across terminals #2 and #3 will indicate timer turning on and read output voltage. Check amp draw of motors using a clamp-on type amp meter.



### Checking Power to Timer

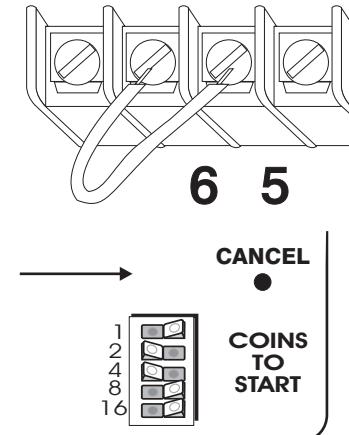
Using a volt meter across terminals 1 and 2 will indicate incoming voltage.

2

1

### Stopping the Timer

Use a jumper wire and touch across terminals #5 and #6. Or Press the Cancel button.



### If Timer will Not Stop

All time switches are in the off position.

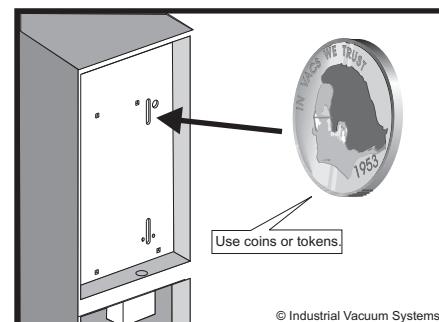
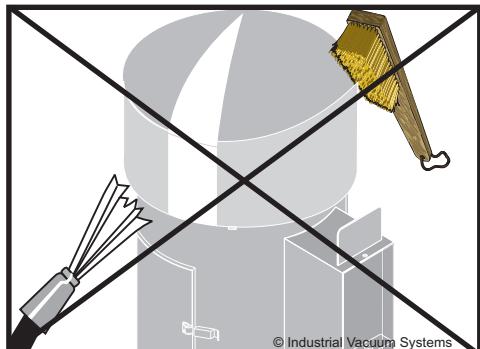


SYMPTOM:	PROBLEM:	CORRECTION:
Won't Start:	No power at unit Test at "line" connection point on timer terminal.	Check electrical supply- fuses, breakers, etc. Make sure that breaker is not in a "tripped" position. Check for loose connections at service panel and at vacuum connection to service.
	Improper Voltage.	Use volt meter to determine that voltage is correct. Check at circuit breaker for correct voltage. ( one vacuum per circuit.)
	No power at Motors.	Use volt meter or circuit tester to determine that power is available at timer. Bypass coin switch (use jumper wire) to start timer cycle..
Erratic start:	Coin mechanism not generating accurate "pulse" to timer.	Check coin switch trip wire for free travel. Check initial position of trip wire. Check coin switch wires for correct connection. (See 'Timer Set-up section of this manual for details.)
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.
Poor Performance:	Poor Suction:	Test by placing hand over hose 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.)
	Poor Airflow:	Test for airflow ( see "maintenance" section). An old golf ball or similar sized stone makes a great testing device. Problem is usually overfilled debris area or hose clog. Clean filters, check motors to be sure that both are working.
Other Problems:	How to get additional technical help.	Call IVS at 1-800-446-7267, and ask for technical service. Please have serial number of the vacuum ready. Serial plate is located at the base of the tank near the hose & electrical channel.



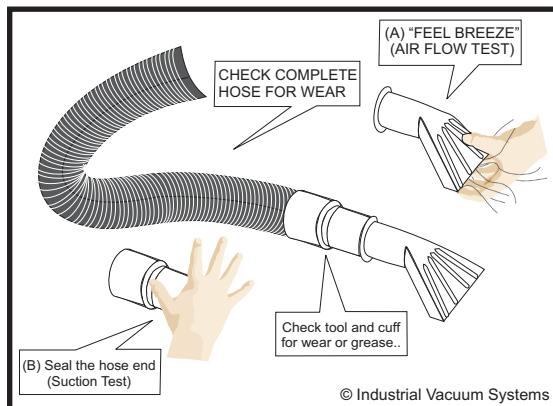
## SCHEDULED

Maintenance requirements are dependent on usage. It is best to time routine maintenance prior to peak usage periods and schedule service intervals according to business levels.



**1** Inspect Vacuum Exterior. Clean equipment invites usage. Rinse with plain (preferably softened) Water as necessary. (Be careful not to spray water upward under the dome - to-tank vent areas). **DO NOT USE STEEL WOOL OR OTHER FERROUS BRUSHES TO CLEAN STAINLESS STEEL SURFACES.**

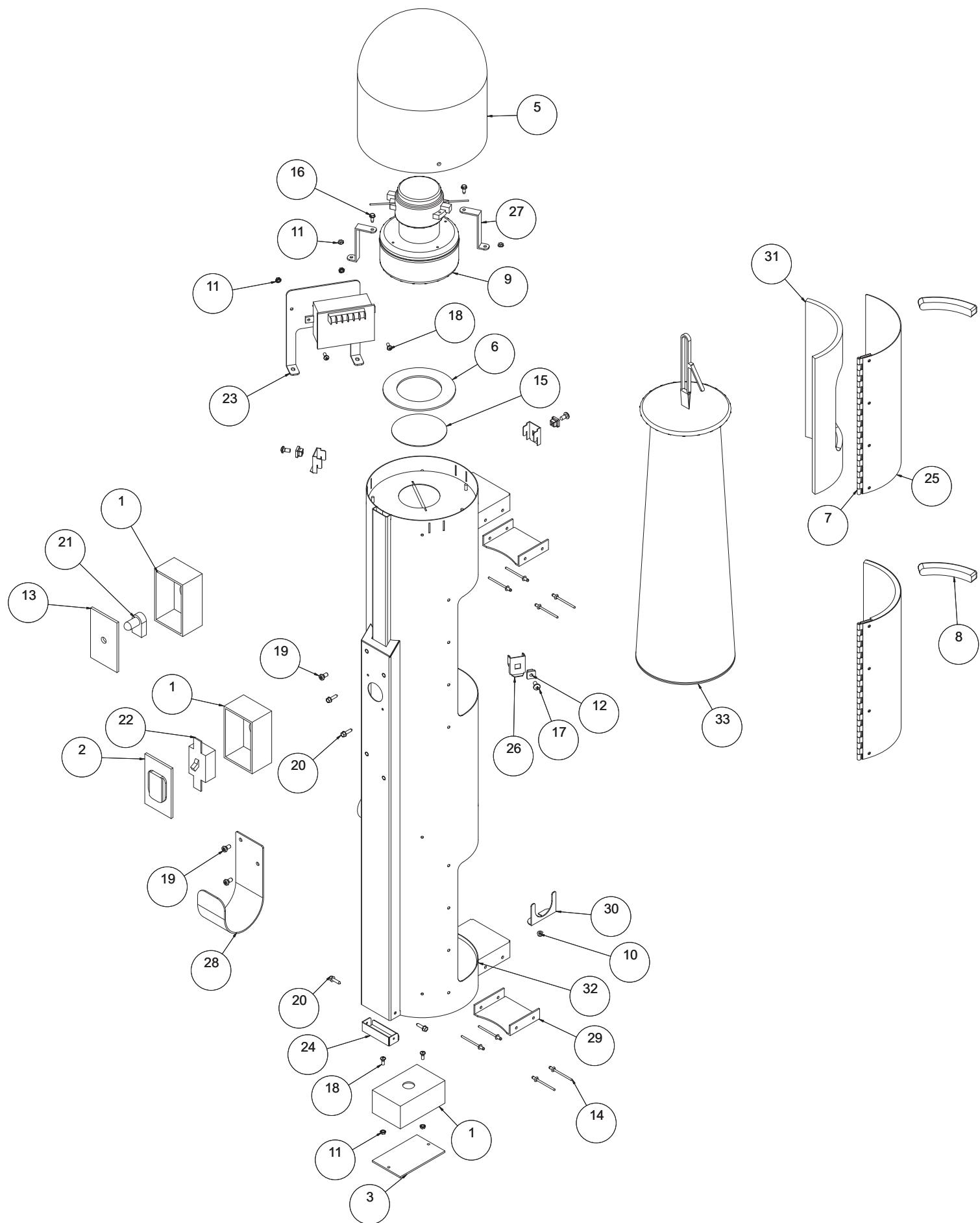
**2** Check "Vending Systems" (coin acceptor and timer). Start with coins or tokens as required. See illustration above



**3** Check hose for signs of wear, replace if excessive. Test vacuum suction and airflow. Suction test: place hand tightly over cuff- feel for "pull". Airflow test: Hold cupped hand near hose inlet - feel for "breeze".

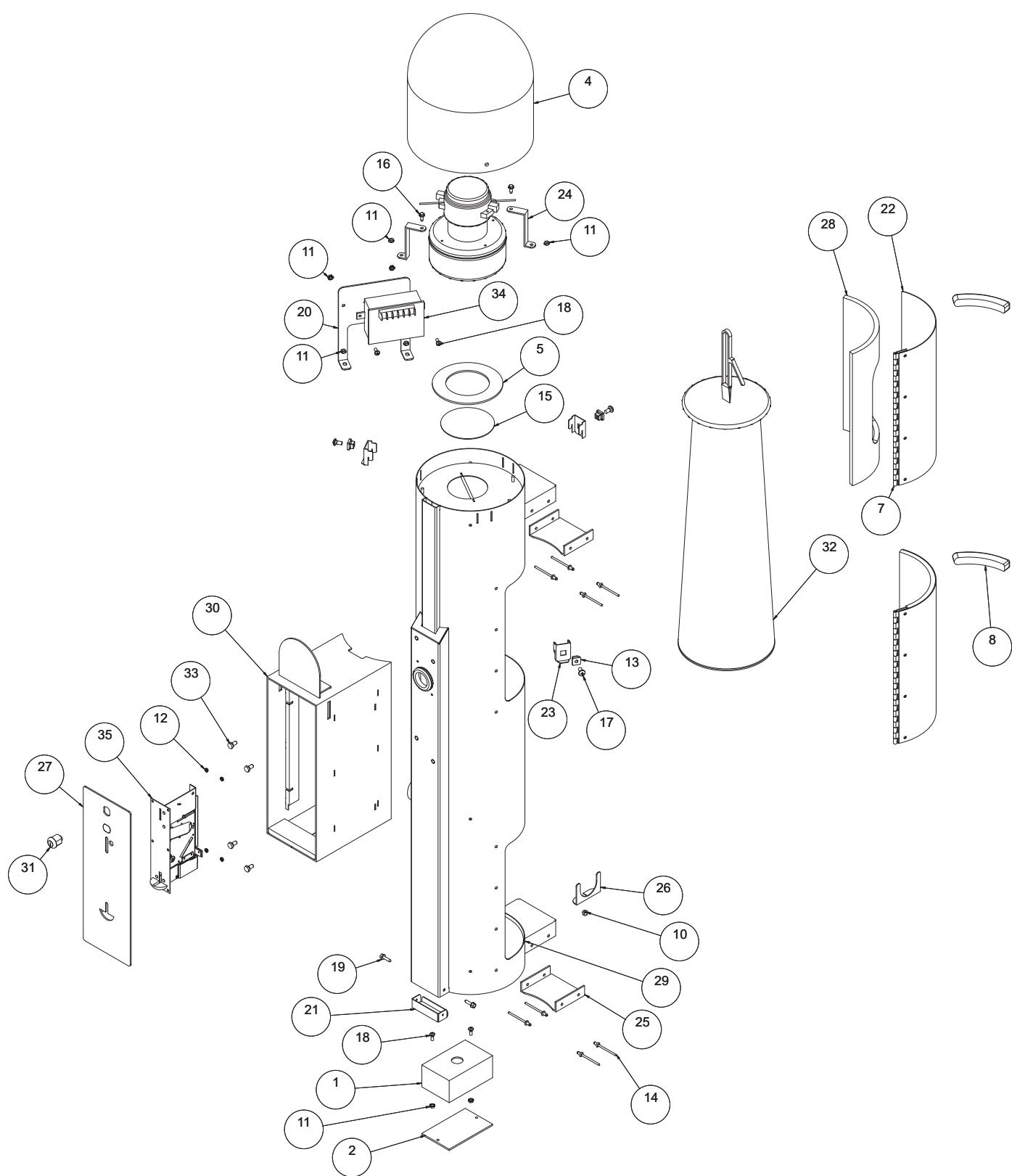


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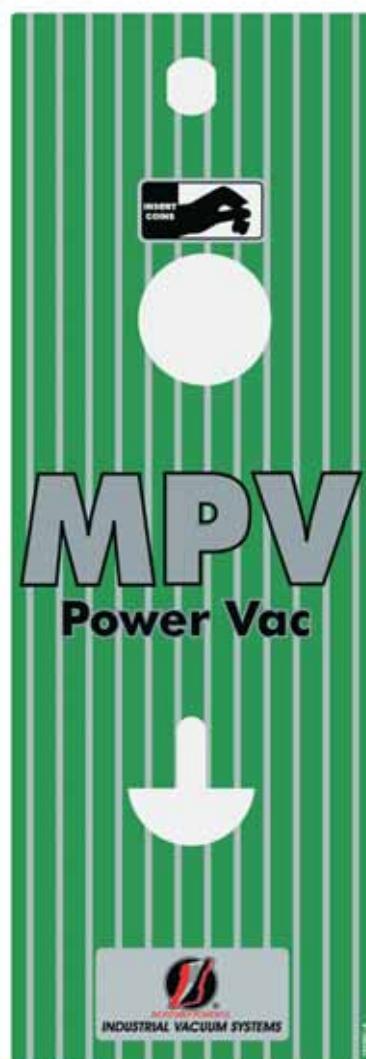
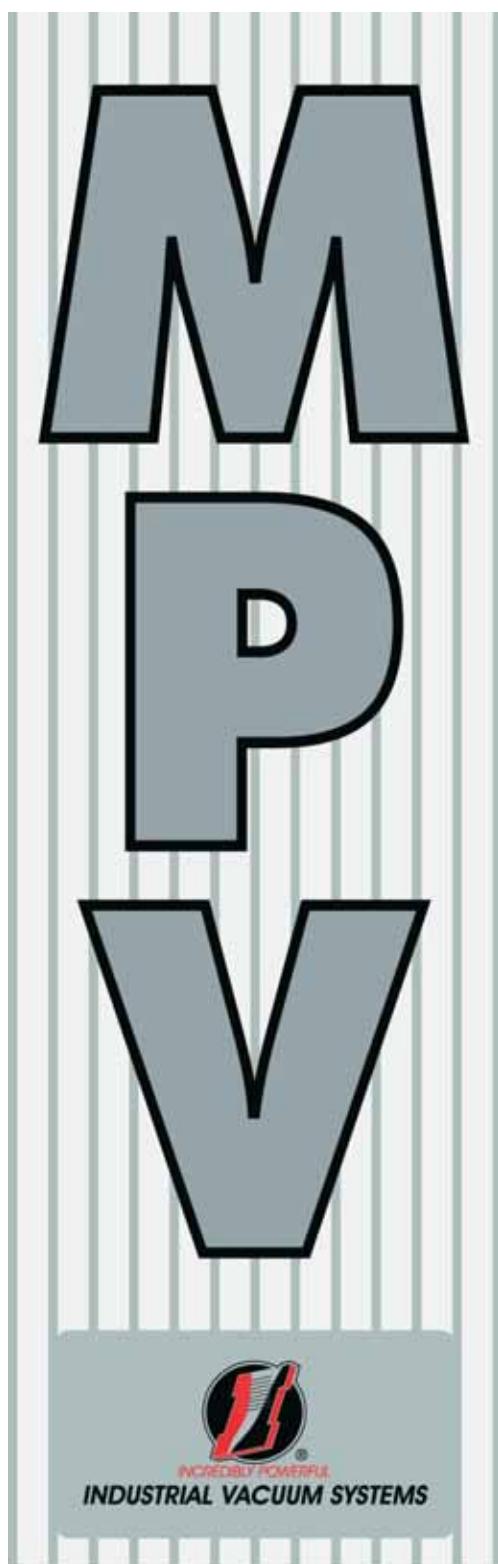
34	1	77403 GS403
33	1	5029020 FILTER BAG
32	1	169600B MV TANK WMT
31	2	163300 MV DIRT DOOR GASKET
30	1	161008 MV HOSE RETAINER
29	2	161007A MV BOLT COVER
28	1	161006A MV NV HOSE HANGER
27	2	161005A MV MOTOR MOUNT
26	3	161004A MV DOME CLIP
25	2	161003 MV DIRT DOOR
24	1	161002A MV CHASE CAP
23	1	161001A MV TIMER MOUNT
22	1	107703 ON OFF SWITCH
21	1	106944 PB SWITCH
20	4	106944 10-16X.75 SS TEK SCREW
19	3	106930 1/4-20X1/2 SS HEX HEAD HEAD
18	4	106904 10-24X1/2 SS PAN HEAD PHILIPS MS
17	3	106903 1/4-20X1/2 PAN HEAD PHILIPS MS SS
16	2	106900 #10X1/2 SLOTTED HEX HEAD W/ WASHER TYPE BT ZP
15	1	106800 MOTOR SCREEN
14	8	106502 POP RIVET
13	1	105863 PB SWITCH PLATE
12	3	105343 SQ PLASTIC SNAP NUT
11	8	105309 #10 KEPS NUT
10	1	105300 10-24 SS NYLOCK HEX NUT
9	1	105114 STD MTR
8	2	1047060 LATCH
7	2	103802 DOOR HINGE
6	1	103301 MTR GASKET
5	1	102515 MV DOME
4	1	101823 CABLE TIE 11.5"
3	1	100903 ELECT BOX COVER
2	1	100902 ON OFF SWITCH BOX COVER
1	1	100901 ELECT BOX





35	1	COIN ACCEPTER
34	1	77403 GS403
33	4	51056 .250-20X.5 SS HEX BOLT
32	1	5029020 FILTER BAG
31	1	23100 METER PANEL LOCK
30	1	169601B MV VAULT WMT
29	1	169600B MV TANK WMT
28	2	163300 MV DIRT DOOR GASKET
27	1	161009A MV METER PNL
26	1	161008 MV HOSE RETAINER
25	2	161007A MV BOLT COVER
24	2	161005A MV MOTOR MOUNT
23	3	161004A MV DOME CLIP
22	2	161003 MV DIRT DOOR
21	1	161002A MV CHASE CAP
20	1	161001A MV TIMER MOUNT
19	2	106944 10-16X.75 SS TEK SCREW
18	4	106904 10-24X1/2 SS PAN HEAD PHILIPS MS
17	3	106903 1/4-20X1/2 PAN HEAD PHILIPS MS SS
16	2	106900 #10X1/2 SLOTTED HEX HEAD W/ WASHER TYPE BT ZP
15	1	106800 MOTOR SCREEN
14	8	106502 POP RIVET
13	3	105343 SQ PLASTIC SNAP NUT
12	4	105314 #6 KEPS NUT
11	8	105309 #10 KEPS NUT
10	1	105300 10-24 SS NYLOCK HEX NUT
9	1	105114 STD MTR
8	2	1047060 LATCH
7	2	103802 DOOR HINGE
6	1	103503 1-25 ID GROMMET
5	1	103301 MTR GASKET
4	1	102515 MV DOME
3	1	101823 CABLE TIE 11.5"
2	1	100903 ELECT BOX COVER
1	1	100901 ELECT BOX





1623G1-A - Green Meter Panel Overlay

1623B1-A - Blue Meter Panel Overlay

1623R1-A - Red Meter Panel Overlay

162300 - MPV Tank Decal  
Translucent decal with silver and  
black graphics



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