

**START-UP/ NEW INSTALLTION/ WARRANTY/ ANNUAL TESTING FORM (Rev. 09/05)  
HEALY VP1000 VACUUM PUMP**

Date \_\_\_\_\_

**BOTH SIDES OF THIS TEST FORM MUST BE COMPLETED FOR NEW INSTALLATIONS**

- **Start-up / New installations** – complete **SIDE A** and sections **3, 4, 5** and **6** of **SIDE B**. Submit Forms to Healy Systems.
- **Warranty Service or Annual Testing** – complete contact information, dispenser make, vacuum pump serial # and the tests in sections **1** and **2** on **SIDE A** and conduct the appropriate tests specified on **SIDE B**. Submit Forms to Healy Systems.

SERVICE COMPANY NAME \_\_\_\_\_ TELEPHONE \_\_\_\_\_

SERVICE TECHNICIAN \_\_\_\_\_ HEALY TECH CERT # \_\_\_\_\_

STATION ADDRESS \_\_\_\_\_ CITY \_\_\_\_\_ STATE \_\_\_\_\_

**DISPENSER MAKE:** \_\_\_\_\_ **VACUUM PUMP SERIAL #:** \_\_\_\_\_

## SIDE A

DISPENSER EQUIPMENT CHECKLIST – Parts A-1 and A-2	YES	NO*
<b>A-1</b> Is all the installed dispenser hanging hardware listed in Exhibit 1 of Executive Order VR-201 or VR-202?		
<b>A-2</b> Proper installation of the VP1000 requires the test port and ball valve on the inlet side of the vacuum pump. Are the test port and ball valve installed correctly?		
<b>*If the answer to either A-1 or A-2 is NO, the Healy Warranty is Void.</b>		

### A-3

- THE FOLLOWING TEST WILL PERFORM A POSITIVE PRESSURE LEAK CHECK OF THE VACUUM PUMP, DISPENSER VAPOR PIPING, HANGING HARDWARE AND ALL NOZZLES ON BOTH SIDES OF THE DISPENSER.
- THE VP1000 OUTLET IS NOT CONNECTED TO UNDERGROUND PIPING DURING THIS TEST.

**CAUTION: REGULATE GASEOUS NITROGEN TO 2.5 PSI (~70" WC) MAXIMUM BEFORE TESTING**

1. Install a 0-100 inch water column gauge (" wc) at the VP1000 test port.
2. Use the water column gage positive (high) pressure port.
3. Gaseous nitrogen gas can now be connected to the outlet (exhaust) port of the VP1000.
4. Test pressure **cannot** exceed 70" wc.
5. **Slowly** introduce the gaseous nitrogen to a pressure between 60 – 70" wc.
6. After reaching the pressure range, close the valve supplying the gaseous nitrogen.
7. Record the initial pressure reading on the gauge - observe and record the final pressure reading after 60 seconds.
8. Leaks must be repaired when the pressure falls more than 4" wc in 60 seconds.
9. Retest until all leaks have been repaired.
10. Record test results in Section A-4.

<b>A-4</b>  <b>PRESSURE TEST</b> <b>2.5 PSI (~70"wc) Maximum</b>	Initial Pressure test reading ("wc)	Pressure test reading after 60 seconds ("wc)
	_____	_____

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## SIDE B

<p><i>Warranty Service</i></p> <p>Complete Troubleshooting Sections <b>B-1</b> and <b>B-2</b></p>	<p><i>Start-up/ New Installations/ Annual Testing</i></p> <p>Complete Sections <b>B-3</b> through <b>B-6</b></p>			
<b>B-1</b>	<p><b>Control Module Fault Light</b> <b>(Circle one)</b></p> <table style="width:100%; border:none;"> <tr> <td style="width:33%; text-align:center;"><b>Flashing (LED)</b></td> <td style="width:33%; text-align:center;"><b>Steady (LED)</b></td> </tr> </table> <ol style="list-style-type: none"> <li>All fault conditions require removal and cleaning or replacement of the rotor and vanes located inside the vacuum pumps round front cover assembly. Use the <b>VP1000 ROTOR &amp; VANE SERVICE &amp; REPLACEMENT GUIDE</b> in the applicable dispenser retrofit manual of the ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System not Including ISD.</li> <li>Clean all surfaces including vanes, rotor, rotor housing and cover assembly.</li> <li>Manually spin and inspect the motor shaft for bearing wear before re-installing the rotor kit.</li> <li>Replace motor when bearings or shaft are damaged or worn.</li> <li>Check O-ring seal before replacing rotor cover assembly.</li> </ol>	<b>Flashing (LED)</b>	<b>Steady (LED)</b>	
<b>Flashing (LED)</b>	<b>Steady (LED)</b>			
<b>B-2</b>	<p>Re-Assemble / Reset Vacuum Pump and Module. (Power must be removed from both the vacuum pump and the <b>module for 20 seconds to reset the system</b>) using the power reset switch on the MC100 module.</p>			
<b>B-3</b>	<ol style="list-style-type: none"> <li>Install 0-100 inch water column (“wc”) vacuum gauge at the VP1000 test port.</li> <li>With the dispenser authorized and ready to dispense fuel (VP1000 running), record the vacuum reading.</li> <li>With the VP1000 still running, close the ball valve at the pump inlet.</li> <li>Record the initial vacuum reading on the gauge – observe and record the final vacuum reading after 60 seconds.</li> <li>Open the ball valve at pump inlet.</li> <li>Leaks must be repaired when the pressure reading falls more than 4” wc in 60 seconds.</li> <li>Retest until all leaks have been repaired.</li> <li>Record data in Section B-4.</li> </ol> <p><b>Note: If the initial vacuum reading is less than 60” wc, it could indicate a problem with the VP1000. Remove the dispenser from service. Use the troubleshooting section of the manual to investigate problem or contact the Healy Technical Help Desk at (603) 882-2472 for assistance.</b></p>			
<b>B-4</b>	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:35%; text-align:center; vertical-align:top;"> <p>VACUUM TEST</p> <p>Using VP1000 as vacuum source</p> </td> <td style="width:30%; text-align:center; vertical-align:top;"> <p>Initial Vacuum test reading (“wc”)</p> <p>_____</p> </td> <td style="width:35%; text-align:center; vertical-align:top;"> <p>Vacuum test reading after 60 sec. (“wc”)</p> <p>_____</p> </td> </tr> </table>	<p>VACUUM TEST</p> <p>Using VP1000 as vacuum source</p>	<p>Initial Vacuum test reading (“wc”)</p> <p>_____</p>	<p>Vacuum test reading after 60 sec. (“wc”)</p> <p>_____</p>
<p>VACUUM TEST</p> <p>Using VP1000 as vacuum source</p>	<p>Initial Vacuum test reading (“wc”)</p> <p>_____</p>	<p>Vacuum test reading after 60 sec. (“wc”)</p> <p>_____</p>		
<b>B-5</b>	<p>With one side of the dispenser authorized (VP1000 running) and the ball valve at the pump inlet open, dispense in handheld position a minimum of 0.5 gallons of fuel into a vehicle or test tank. Record the vacuum level while dispensing. Repeat test for the other side of the dispenser.</p> <ol style="list-style-type: none"> <li>Side “A” Dispensing Vacuum _____” wc</li> <li>Side “B” Dispensing Vacuum _____” wc</li> </ol> <p><b>Note: If the dispensing vacuum is less than 60” wc, remove the dispenser from service. See the troubleshooting section of the manual or contact Healy Technical Help Desk at (603) 882-2472 for assistance.</b></p>			
<b>B-6</b>	<p>Test the VP1000 Vacuum Pump for normal operation. Use the step 6 procedure titled, “Testing the VP1000 Vacuum Pump for normal operation using the following test procedure:” in Section 1.1 (Weekly Inspection and Testing) of the Healy Systems Scheduled Maintenance document in the ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System not Including ISD. This is to verify that the pump recognizes when both sides of the dispenser are activated for fueling.</p> <p>Does the VP1000 Vacuum Pump change speeds (audible) when both sides are activated for fueling? Yes No</p> <p>If the answer is no, <b>use the troubleshooting section of the manual to investigate problem or contact the Healy Technical Help Desk at (603) 882-2472 for assistance.</b></p>			

Repairs - Comments

**To Obtain Returned Materials Authorization number (RMA#) Call (603) 882-2472  
Forms can be faxed to Healy Systems Customer Service at (603) 882-5189**