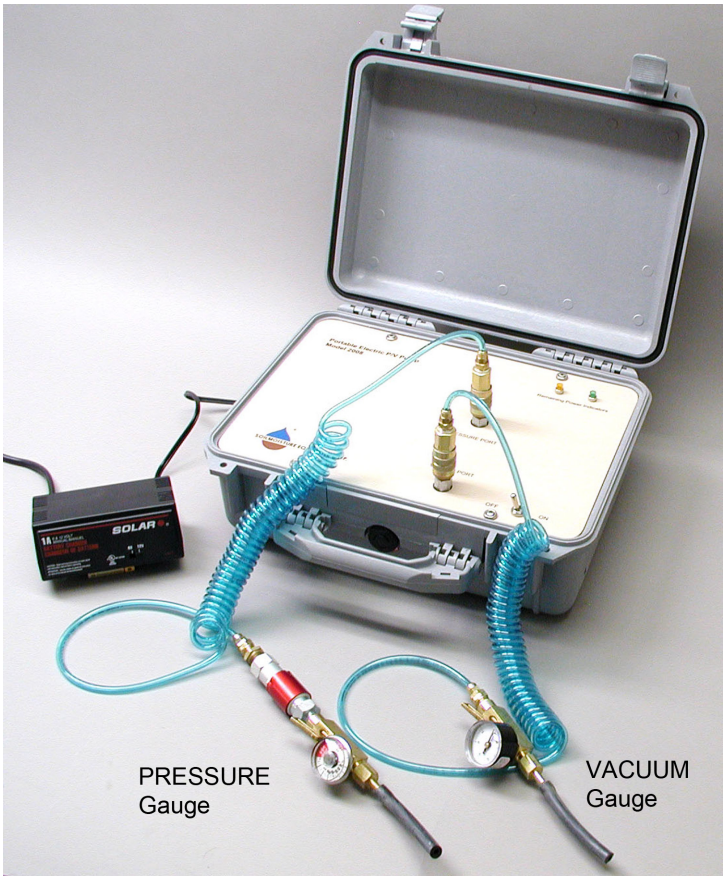
2008 OPERATING INSTRUCTIONS

2008 ELECTRIC PRESSURE/VACUUM PUMP October 2011

Motorized Electric Pressure/Vacuum Pump for easy servicing of Samplers

The 2008 Electric Pressure/Vacuum Pump provides the easiest way to service each location with fast, large volume vacuum capabilities, and in quickly developing the needed "sample" push pressures. A welcome helper for reducing labor in your sampler servicing field work.

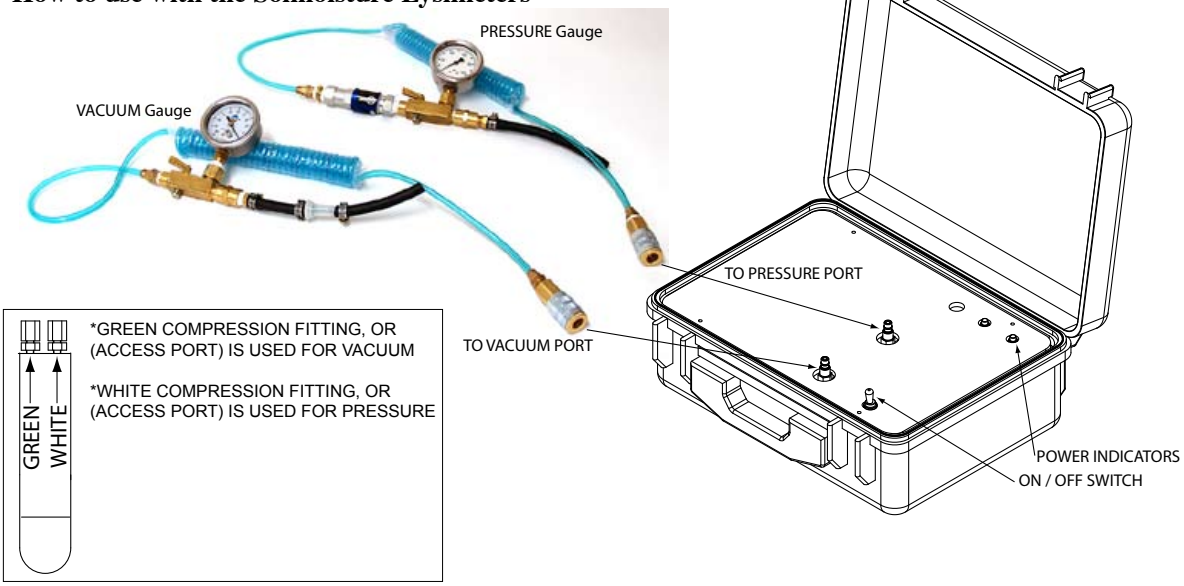
The Electric Pressure Vacuum Pump is battery-operated combination pump, with 2 sealed lead acid batteries for total continuous working time of 5 hrs. With both Pressure (pressure 0-100 psi; with max pressure setting) and Vacuum (0-100 cb) gauges. Comes with a number of features including readout dials for both pressure and vacuum ports, a pressure regulator output limits, and a valve for controlling speed to pressurization or vacuum creation. Quick connects on the pump console and on output connection hose assemblies provided for easy and trouble free connection. Comes complete with inline filter, two “Stretch Coil” hoses each 3ft. long and output assemblage having readout dials and control valves. All this encased in a portable, splash water proof Pelican® Carrying Case. OPTIONAL: 0725K1 Dessicant Pack to keep the motor dry and prolong its use.



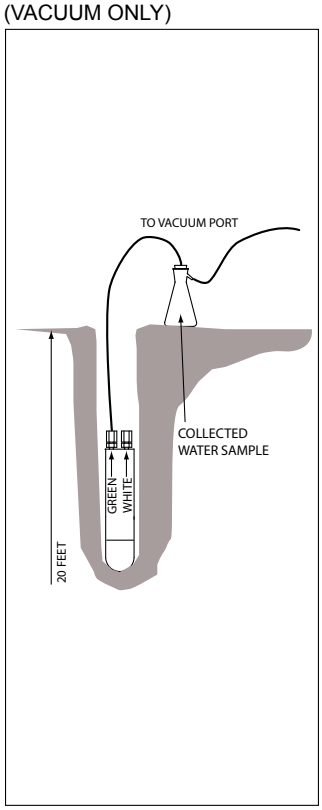
SOILMOISTURE EQUIPMENT CORP.
P.O. Box 30025, Santa Barbara, CA 93105 U.S.A.
Telephone 805-964-3525 - Fax No. 805-683-2189
Email: sales@soilmoisture.com - Website: http://www.soilmoisture.com

SOILMOISTURE®

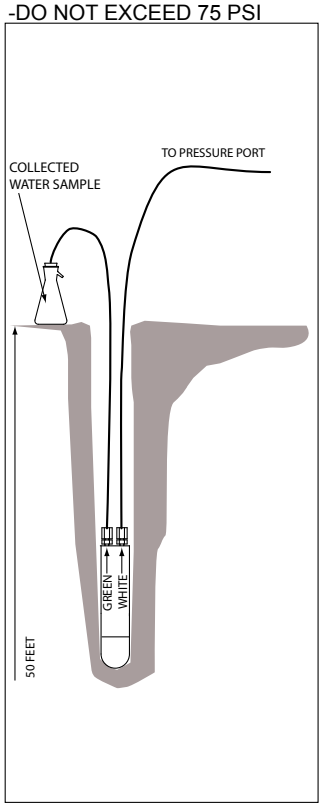
How to use with the Soimoisture Lysimeters



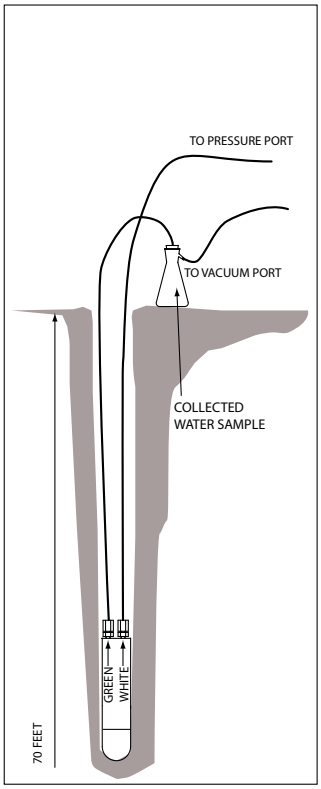
AT 20 FEET OR LESS
(VACUUM ONLY)



AT 50 FEET OR LESS
(PRESSURE ONLY)
-DO NOT EXCEED 75 PSI



AT 70 FEET OR LESS
(VACUUM AND PRESSSURE)
HOSE FROM



NOTE: AS WITH ALL ELECTRICAL OR BATTERY-OPERATED EQUIPMENT, THE 2008 ELECTRIC PRESSURE/VACUUM PUMP SHOULD NEVER BE LEFT UNATTENDED WHILE IN USE.

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SOILMOISTURE ®

SPECIFICATIONS:
Dimensions:18.5" (47 cm) x 14.5" (36.5 cm) x 7" (17.8 cm)
Weight: 20 lbs. (9 Kgs)
12 VCD (110-220 Charger)
With both Pressure and Vacuum Gauges
Gauge Resolution: Pressure: +/- 2 psi; Vacuum +/- 1.5 cb

FAQS:

1. *What is the Range and Regulation of suction?*
   There is no exact control on suction, but there is an ON/OFF valve which can be adjusted to on, off, or in-between. At full on, it will quickly go to 90 cb which will not hurt anything. You can then shut off the valve from the pump and bleed down to the value you wish (from 60 cb to -90 cb). The gauge is beyond the valve so you will know what is in the lysimeter. You can also toggle the switch to keep the value close to where you want to (toggle + adjust on / off to an in-between setting allows for rough regulation).

   There is also a pressure side; the relief valve has been set at 50-65 psi. Do not over pressurize a lysimeter or you risk severely damaging the cup. Start with the pressure ON/OFF valve near off and use the minimum pressure to retrieve a sample (progress slowly) or use vacuum to retrieve a sample. For deep samples attach the pressure to P/V and the vacuum to sample with the collection flask looped in the middle. The cup will only see the difference in pressure and not the full pressure. Be dexterous with both the toggle switch and the on/off valve to get the maximum control.

2. *How do I protect the pump from moisture and understand what moisture it can tolerate in the suction line?*
   We highly recommend for both sampling and charging that something like the 1900K3 be used as a water trap or a collection flask in line to protect the motor. Even better would be to run an In-Line Vacuum Dessicant(0725K1) after the flask on the vacuum side to keep the motor dry. The drier the motor the longer the life.

3. *What is the battery life and what is the care?*
   The 2 batteries are sealed lead acid 24 amp hour batteries. Do not overcharge. The pump is NOT designed for continuous use.

4. *What features/service may be accomplished if one removes the cover?*
   Access to the batteries and repair of the unit.

5. *What maintenance is required?*
   Little maintenance is required:
   * Do NOT leave running unattended.
   * Do NOT let run for long continuous periods of time.
   * Do NOT allow the motor to overheat.
   * Keep the motor dry.

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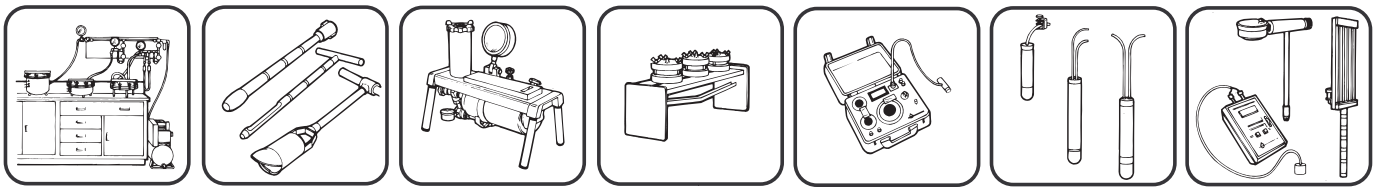
With dealers throughout the world,
you have the convenience of purchase and assurance
of after-sales service.



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