




SPE-DEX[®] Automated Extractor Systems.
Assembly of the Dual Diaphragm Oil-Free Vacuum Pump
SPE-DEX[®] Bleed Valve Assembly P/N 50-2482

The Bleed Valve Assembly is provided to control the level of vacuum applied to the Extractor. This Tech Tip provides instructions on installing the Bleed Valve Assembly on the Horizon Technology Vacuum pump.

Horizon Technology offers a dual diaphragm oil-free vacuum pump for several advantages over other vacuum pumps. The most noticeable advantage is seen when using 90-mm SPE Disks. The dual diaphragm pump is capable of maintaining adequate vacuum levels under the increased draw from a 90-mm disk in an air dry step. This translates to a minimal drop in vacuum levels when several extractors are running simultaneously. The SPE disk is allowed to dry more thoroughly, yielding less water in the final extract, and therefore a better extraction. Unlike the rotary vane vacuum pumps, the dual diaphragm pump is not susceptible to seizing from the condensation of water and solvent vapors from the extraction.

NOTE:	Please follow the instructions below when installing the dual diaphragm oil-free vacuum pump. Call Horizon Technology if additional technical assistance is needed.	
TOOLS:	<ul style="list-style-type: none"> • 9/16 inch Open end Wrench • 3/4 inch Open end Wrench 	
1.	Remove the orange plugs located on the intake side of the pump	
2.	Thread the copper tube end of the Bleed Valve assembly into the elbow fitting on the vacuum pump and tighten. The Elbow fitting is provided installed on the Horizon Technology vacuum pump.	
3.	Thread the Bleed Valve into the elbow fitting on the pump and tighten.	
NOTE:	The bleed valve is used to adjust the vacuum level to the extractor.	
4.	Connect the Vacuum gauge to the Brass Elbow. The vacuum gauge is provided with the Horizon Technology vacuum pump.	

NOTE:	If you are installing a Horizon Technology vacuum pump then you will also need to install the pump discharge fittings.
1.	Remove the two (2) Orange Plugs located on the discharge side of the vacuum pump.
2.	Thread the brass plug to one discharge side.
3.	Install the compression fitting to the other discharge connection.
4.	Connect the tubing from the water recovery bottle to the pump using the compression fitting with the pump.
NOTE:	Refer to the installation chapter of the User's Manual for installation to the water recovery bottle of the Extractor System
1.	Set the pump vacuum level at 25" Hg (vacuum gauge reading) using the bleed valve to increase or decrease the level.

Replacement parts available from Horizon Technology Inc.

50-2480-01	Dual Diaphragm Oil-Free Vacuum Pump: 31 bar vacuum & 5.52-6.46 m3/h Included with the pump: a small bag containing (1) Brass plug, (1) brass compression fitting with PTFE tape, vacuum tubing, and vacuum gauge.	
50-2482	SPE-DEX Bleed Valve Assembly Includes; (1) Bleed valve, (1) Plastic Luer elbow (1) Brass Reducer (1) Brass Tee (1) copper tube	