



Vacuum Accumulator System



Model 1389

WARNING:

Do NOT operate this unit without reading manual!



IMPORTANT !

Read before installation!



When using PVC pipe or any static enhancing material for exhaust piping, take care to safeguard against arcing from static electricity. Arcing may ignite oil vapors when present.



The built in anti-suckback valve is *NOT* positive action. It is not designed to be used as a system check valve. Do not depend on the anti-suckback valve to prevent pump oil from migrating thru the inlet into the system when the pump is shut down.



Do *NOT* fill or add oil thru the exhaust or inlet ports. Severe pump damage can result!



When changing the pump oil and filters it may be necessary to flush the pump to remove any buildup of degraded oil from the pump. Reduced oil flow can cause extreme over-heating and mechanical damage to the pump.

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General Installation Tips

- Install the unit on a flat level surface so that it is evenly supported on all feet/wheels. Be sure and leave 12' to 18" access around the pump to allow proper cooling. Allow sufficient access to the oil sight glass for easy oil inspection. Leave access to the exhaust port for easy filter changes.
- When using an extension cord , be sure to use a cord with a wire gage of at least 10. Long cords and cords with insufficient wire size will result in a voltage drop. This can lead to pre mature pump/motor failure!
- When connecting vacuum, be certain and use piping that is at least the size of the inlet connections. Smaller lines will result in reduced pump capacity.
- The unit is shipped with the pump filled with the pump manufacturers recommended oil. Level should reach 1/2 to 3/4 up the site glass. **Verify the oil level thru the oil site glass before operation!** Replacement oil can be purchased thru NEMI. When ordering, specify P/N 1487.
- The oil **MUST** be changed after the *first 100 hours* of initial operation! After that, it is recommended the oil be changed every (3) to (4) months or 500-750 hours of operation. Dusty, hot or other adverse operating conditions will affect oil life. Check oil for contamination weekly by draining a small amount and inspecting.

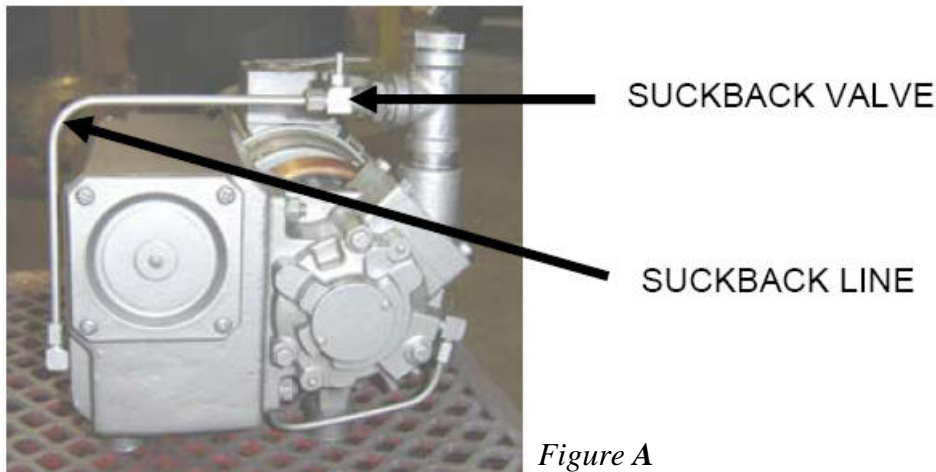
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Basic Operation & Maintenance

Pump Oil Suckback System

The vacuum pump on this unit is equipped with an oil suckback line to return coalesced oil back to the pump module. The suckback valve is used to adjust the level of vacuum the pump will maintain while allowing for accumulated oil to be returned back to the pump. See figure **A**.



Ensure the pump oil suckback valve is always open to allow accumulated oil to flow back to the pump cylinder. At minimum, 1/2 turn should be used and more if required. To set, open the valve until the vacuum level drops to your desired vacuum level.



Basic Operation & Maintenance Cont'd

Startup

- Verify there is sufficient oil in the pump via the oil site glass.
- As with any machine, it is best to warm up the pump on this unit before use. In moist working conditions such as flood coolant, it is **STRONGLY RECOMMENDED** the pump be warmed up to operating temperature before use and allowed to **run 20-30 minutes after use** before shutting down. This will help remove any moisture that may have accumulated in the pump mechanism.

Coolant Traps

- This unit is equipped with a 3 stage coolant filter system. This system is designed to keep moisture such as coolant and other foreign matter from entering/damaging the pump. Each filter holds (1) US gallon. See page 6 for information on emptying filters.

Periodic Maintenance

- Check the oil level and color **DAILY** via the site glass.
- Change oil every 3 months or 600 hours of operation.
- Change exhaust filters after 3000 hours of operation.
- Replace Vanes and Gaskets every 6500 hours of operation.
- Replace bearings and seals every 10,000 hours of operation.



It is important to remember that oil life may vary under different operating conditions. Always check and change the oil at scheduled intervals.



Emptying the Coolant Filters

The coolant trap containers must be emptied when full to keep coolant from entering the system and potentially damaging the pump. This procedure is explained below.

1. Using the supplied wrench, turn the top valve from "FILTER" to "BYPASS". See figure Z.
2. Relieve the vacuum pressure in the chamber by depressing the pressure release button. See figure Y.
3. Once the pressure is released, using the supplied wrench loosen and remove the chamber retaining nut, then remove and empty the chamber. Reverse steps for installation.



Figure Z



Figure Y



Figure X