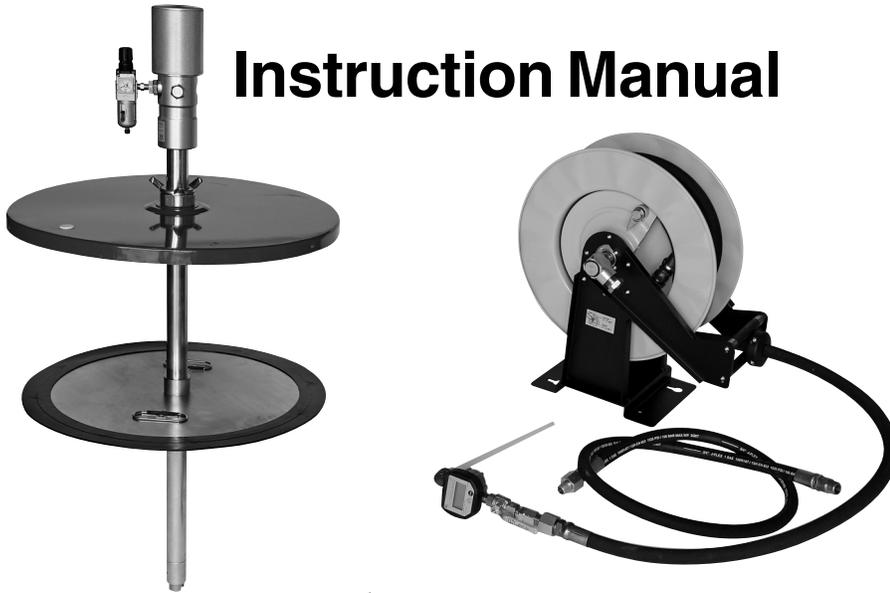


LIQUIDYNAMICS SPRINKLER LUBE® DELIVERY SYSTEM

Instruction Manual



Liquidynamics Sprinkler Lube Delivery Systems are supplied as complete systems and include a 5:1 ratio pneumatic pump, drum cover, follower plate, air filter/regulator, discharge hose, or hose reel, lubricant control handle with electronic digital meter and all necessary connecting hardware.

For 400 lb. Drum Applications:

P/N 21094-S20 Pump System w/20' Hose
P/N 21094-S21 Pump System w/25' Hose Reel

For 120 lb. Keg Applications:

P/N 21073-S20 Pump System w/20' Hose
P/N 21073-S21 Pump System w/25' Hose Reel

The above Sprinkler Lube Delivery Systems are specifically designed to safely and effectively transfer Sprinkler Lube from either 120 lb. kegs or 400 lb. drums to your Sprinkler System gear box. These systems are capable of moving Sprinkler Lube at temperatures down to 20° F due to the use of a 5:1 ratio pump and high quality follower plate to prevent pump cavitation.

These Sprinkler Lube Delivery Pumps typically operate in the pressure range of 60-120 PSI. Actual operating pressure is determined by the type of lubricant to be pumped, lubricant temperature, pumping distance, plumbing size, plumbing restrictions and desired flow rate.

CAUTION

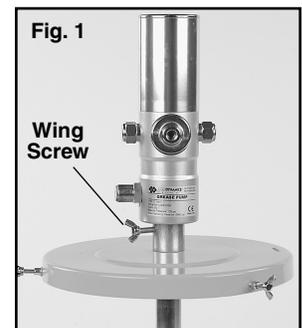
Operating air pressure in excess of 120 PSI may cause pump damage and/or reduce pump life.

Installation

These air operated pumps are supplied complete and ready to use. Accessories such as hose, control handle, cover and follower plate have been supplied as a complete kit.

Note: Use an appropriately rated thread sealant such as Loctite 545 to ensure a leak free connection. Allow thread sealant to cure a minimum of 6 hours prior to pressurizing system.

- a. Slide the cover onto the pump shaft as shown in fig. 1, secure cover onto pump shaft with the wing screw provided.



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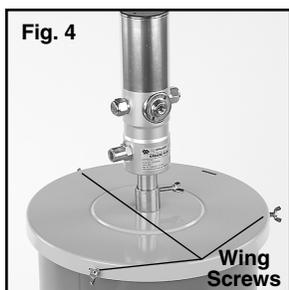
b. Push the follower plate evenly into the drum far enough to contact the lubricant surface, as viewed through the center opening of the follower plate, fig. 2.



c. Insert pump and cover assembly through the center follower plate hole, fig. 3, and secure the cover to drum with the three wing screws provided at the outside edge of cover, fig. 4.



d. Loosen the wing nut securing the pump to the cover and allow the pump to slide to the bottom of drum, fig. 4, raise pump off the bottom slightly and tighten wing nut securing pump in position.



e. Attach any air inlet hoses/fittings and discharge hoses, fittings and accessories as required for your system, fig. 5.



If drum has a plastic liner, raise the pump a minimum of approximately 1" off the bottom to prevent the liner from being sucked into the pump.

Operation Notes

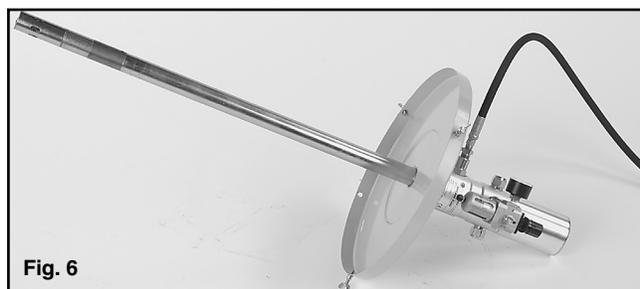
- a. Pump priming
Liquidynamics pumps have been primed and tested at the factory and therefore do not require any special priming during normal installations. To ensure that the newly installed system starts properly, take care to start the pump at a lower than normal air pressure and then slowly increase air pressure until the system is filled with lubricant and stops. This procedure will ensure that the pump does not operate too quickly causing it to cavitate as it is initially filling the system with lubricant.



When changing drums, care should be taken to not place the pump on any surface that may cause ingestion of foreign particles which could contaminate the lubricant and possibly damage pump seals or piston rod.

b. Changing Empty Drums

1. Loosen the three wing nuts on the drum cover and remove the pump and cover as an assembly and place on a work table or floor, fig. 6, with the pump head down so as not to contaminate the pump suction shaft.



2. Remove the follower plate from the empty drum by pulling up on the handle provided for this purpose, fig. 7.
3. Follow installation instructions found on page 1.



Disconnect air supply when the system is left unattended to prevent lubricant spill in case of line leak or break.

Maintenance



These pumps can generate up to 600 PSI of pressure and therefore constitute an injection hazard. Prior to each use take care to inspect all hoses and fittings to ensure there are no leaks, frayed or damaged hoses. Replace any hoses or fittings that are leaking or show signs of wear.

- a. On a day to day basis these pumps are maintenance free. For your future reference regarding replacement of components, please refer to the appropriate exploded parts diagram.
- b. Please contact Liquidynamics at 800 894 3572, or your local distributor for repair components and kits.