



**Tools needed: 11/16" Wrench, 5/8" Wrench, Pliers, Screwdriver and Air Compressor**

1. If you have a pulley drive or an enclosed pump, remove the cover.
2. For pulley drives, now is a good time to check the belt. Look to see if there are any visual cracks or fraying (this may be obvious by the black belt particles in the pump enclosure).  
Note: On the old belt there is a letter followed by a couple of numbers and this is the distinguishing nomenclature needed for a new replacement belt. Once this step has been completed replace the lid and re-install the screws making sure they are snug.
3. Remove the blue filter housing from the black lid and remove any excess water that may still be in the housing, then install a new filter and align the housing with the black lid threads and hand tighten the blue housing. At this point you may want to wipe down the pump and clean away any plant debris that may have collected during the winter months.
4. On the bottom of the pump head there is a black drain nut (about the size of a silver dollar). Slide a small narrow plastic container under that nut and remove the nut carefully, because the old oil will drain from this nut once it starts to unscrew. Let the old oil drain for a few minutes then clean the drain nut and surrounding area with a rag and re-install the nut. On the top of the pump head there is a yellow or red fill cap. Remove this cap and install a new **30W NON-DETERGENT OIL**. Fill the oil to the middle of the sight glass located on the end of the pump head. This sight glass will have a RED DOT in the middle. Caution here as this can be slow to read on the sight glass, so please DO NOT OVERFILL.
5. Turn the water source to the open position (ball valve, hose bib, backflow screw or other) checking to see if there are any leaks to the pump.
6. Reattach the smaller high pressure (3/8" diameter Black or Brown) hose and tighten brass nut (CAREFUL TO NOT OVER TIGHTEN, BUT MAKE SURE IT'S SNUG).
7. If nozzles were left in the system at shut down service skip to step 11.
8. If plugs were installed at shut down service, remove them and install nozzles then skip to step 11.
9. If the nozzles were removed during the shutdown service, turn on the pump and let water flow from the first several nozzle housings. Let it run for 30-60 seconds or until you see water flowing from the first several nozzle risers.
10. Turn off the pump and install the cleaned nozzles in the first few risers/housings where water was flowing. Then turn the pump back on and repeat the process until all nozzles have been installed.
11. Check to make sure all nozzles are working properly and if not now is the time to replace those nozzles with new nozzles.