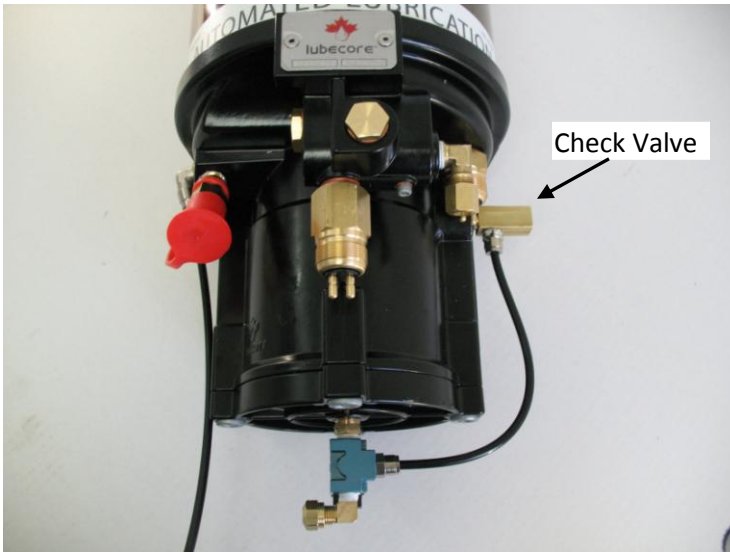




EPO Pump Piston Update - Installation Procedure



When looking at a Lubecore EPO Automated Lubrication System Pump, if any grease is found leaking or blowing out of the check valve located on the right hand side of the pump and/or accompanied by an air space between the red follower plate and the top of the grease in the reservoir, indicates that there is an internal bypass between the grease piston and cylinder bore.

Lubecore International provides a piston update to resolve this issue at no charge to the customer. Part No# - 50.003

Procedure for Installing the Piston Update:

- Disconnect the air supply line to the solenoid on the bottom of the pump. Using a DOT fitting assemble a plug so no air is lost from the air system of the truck you will need the air reserve from the tanks to assist you latter.
- Remove the by-pass air line from the check valve to the solenoid.
- Disconnect the electrical wires from the solenoid, pressure switch and low level if it is present. Tie them out of the way.
- Remove the main grease supply line located beside the check valve.
- Using an 8mm Allen socket to loosen the retaining bolts on the bottom of the pump. (The solenoid does not need to be removed to do this repair). Remove the right, front and rear retaining bolts from the bottom of the pump. Loosen the left retaining bolt till you have approximately a 1/8 – 1/4" gap. You may need to give the bottom plate a rap with a rubber mallet.
- Swing the bottom plate out of the way, while holding your hand under the pump housing to ensure the piston does not drop out.
- Remove the piston assembly and clean out both cylinder bores and spring.
- Inspect for foreign material
- Using your finger or screw driver carefully insert it into the inner cylinder bore. This will cause a little bit of grease to fall out. This will assist you during the new piston installation.
- Remove the new piston assembly from its packaging and lubricate both "O" Ring and lower seal using fresh grease. Install the spring on the piston assembly prior to installation.
- Carefully insert the new piston assembly, ensuring that the smaller piston end enters the inner bore square and the larger air chamber piston sits flush with the bottom of the pump housing.
- Push the piston into the housing it should stay in place by itself





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- Reverse the procedure tightening the end cap bolts to 36ft/lbs and leaving the main grease line off, for now.

Removal of trapped air below the follower plate:

- Use a small screw driver to pry off the reservoir mounting cap and remove the reservoir lid mounting bolt, using a 6mm Allen socket
- Ensure that the reservoir glass does not move by placing your hand on the top of the reservoir glass and applying downward pressure.
- Carefully insert a mini blade screw driver between the reservoir glass and the follower plate making sure that you do not push the screw driver beyond the first follower plate sealing edge. Be mindful not to scratch the reservoir glass or tear the follower plate seal.
- Insert a large Ty-rap into the gap you have created with the screw driver. Remove the screw driver. Push the Ty-rap downward until you have passed the follower plate second sealing edge.
- The follower plate will pull downward allowing the air to escape through the gap you have created using the Ty-rap. In some cases you may have to apply pressure to the top of the follower plate to get it to start moving. **DO NOT STOP APPLYING PRESSURE TO THE TOP OF THE RESEVOIR GLASS OR YOU WILL CAUSE GREASE TO PUSH THROUGH THE BOTTOM "O" RING SEAL OF THE RESEVOIR GLASS.**
- Reinstall reservoir glass lid, while making sure you apply pressure to the lid after it has been installed. Reinsert the reservoir lid brass bushing and cap screw.
- Be careful not to over tighten the cap screw, tighten till snug then **slowly give a 1/4 turn**. Replace reservoir mounting cap.

Pump & System Purge:

- Using the manual cycle button on the MAC solenoid or the RED lever on the back of the Berkert solenoid, cycle the pump 3 times. This will allow any air trapped in the pump to be forced out of the pump through the grease delivery port located on the left hand side of the pump, beside the check valve.
- Once this is done you may reattach the main grease line to the pump.
- Locate the two furthest lubrication manifolds mounted on the vehicle. Generally they may be found at the front right wheel and the rear axles or fifth wheel. You may identify them as being the last manifolds by seeing one main line going to the manifold and an end plug at the other end of the manifold.
- Remove one plug at a time. Manually cycle the pump using the same process used in purging the pump. Cycle the system until you observe a steady stream of grease with no air bubbles present. Reinstall end plug and proceed to the next manifold. Repeat process until the system is entirely purged.

