

Lubecore Communication

Subject: Infield Repair of Loose MLP/Spyder Pump Motor Mounting Bolts

LCI recently discovered a possible issue pertaining to the torque settings on the three bolts that hold the motor assembly to the MLP/Spyder pump body, this issue may result in a leaking pump and possible damage to the pump elements if not rectified. This LCC (Lube Core Communication) will guide you through an infield repair of the MLP/Spyder Pump.

This repair should be able to be carried out while the MLP/Spyder pump is still mounted on the equipment in question.

(NOTE: When you are looking directly at the pump, verify whether there is a serial number plate mounted on the left hand side of the green pump bracket. If there is ***no serial tag*** please contact the Lubecore International Warranty Administrator for directions on how to proceed)

You will need a cam clamp similar to this,



5mm x 7.5mm Ball End Allen Key wrench or socket



You will also require:

1. Inch pound torque wrench
2. Brake cleaner
3. shop rags
4. 12mm wrench
5. 14mm Deep socket



Firmly grasp the lid of the pump and turn either clockwise or counter clockwise depending on pump mounting location and/or space afforded to move freely.



Position the cam clamp directly under the corner of the lid and activate the lever so that the cam bar causes pressure between the lid and the green bracket. Consistent pressure will cause the lid to pop off the pump.



Note: Do not use anything other than a cam clamp to perform this function, otherwise you will crack the reservoir or lid

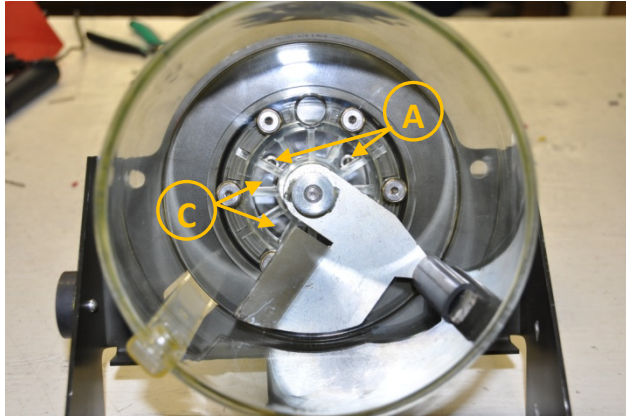


Clean out any grease that remains in the reservoir until you can see the bottom of the reservoir. Turn the stir arm clockwise (it's LH thread) and it should break loose and unthread. No tools are required to perform this.

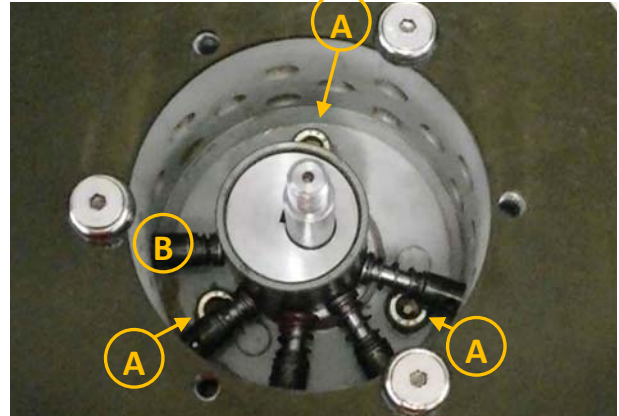




Once the grease has been removed, this is the view you will have of the inside of the MLP/Spyder pump



This is a view of the inside of the pump when the reservoir is removed, **DO NOT REMOVE THE RESERVOIR**



(**A**) Represent the bolts that you need to tighten to 7.5 in/lbs. As you can see from the picture to the right you may have to remove a number of piston elements (**B**) from the pump so you can get access to the motor mounting bolts located at the bottom of the pump. When removing these piston elements ensure they are kept in a clean location to prevent contamination which could cause premature failure of the piston element, pump or lubrication point. Slots (**C**) located at the bottom of the reservoir will allow you access to the bolts, so you will not have to remove the reservoir from the pump body or mounting bracket to properly torque the bolts.

Prior to removing the piston elements, use the 12mm wrench to release the compression nut on the lines leading to the piston element. Label these lines so you can identify which line goes to which piston element.

To remove the piston element slide the 14mm 12 point deep socket all the way in, until the socket is either touching the pump housing or is on the piston element body, dependant on the length of the socket. Remove piston element and store in a safe, clean location until reassembly.

Insert the 5mm x 7.5mm Ball End Allen Key wrench or socket through the appropriate slot, located at the bottom of the reservoir. Lightly snug up all the bolts by hand prior to using the in/lb torque wrench. Carefully torque the motor mounting bolts to 7.5 in/lbs

When reinserting the piston elements into the pump body ensure that all springs and piston tips are present and assembled. The springs should be holding the piston tips to the body of the element and the whole unit should be inserted as a single piece. If the springs are not holding the piston tips to the body a new piston element will be required.

Reverse the procedure for re-assembly



Torque bolts to 7.5 in/lbs



Once you have tightened up the motor mounting bolts, position the lid on top of the pump making sure that the groove in the lid matches up with the ridge of the reservoir. When you are sure that the pump lid and reservoir ridge are in line with each other. Give the lid a quick rap. The lid will then snap down onto the reservoir. Fill pump using the fill connector **(DO NOT FILL THE PUMP FROM THE TOP)** Test the pump.