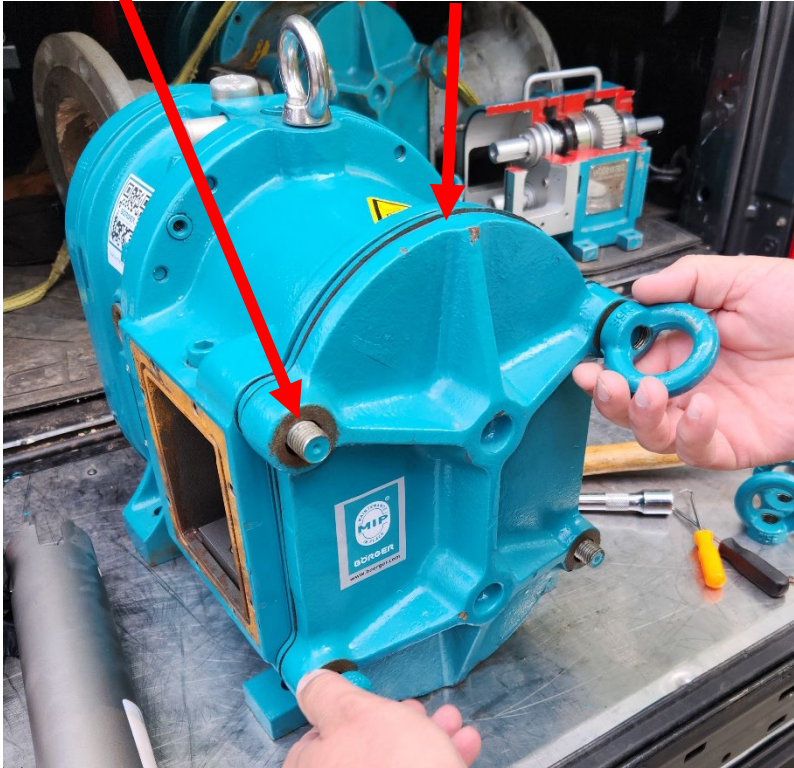
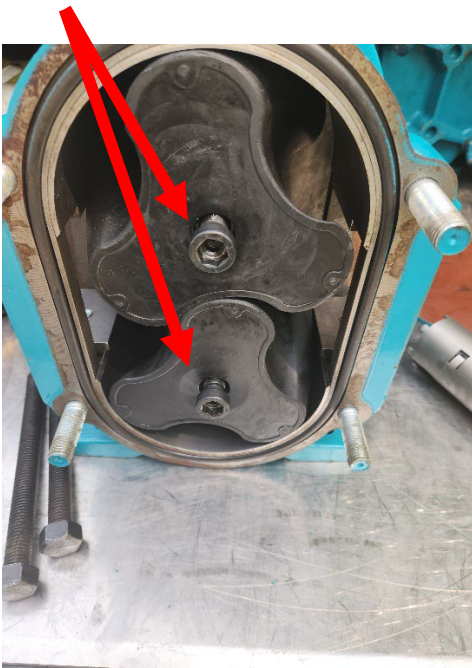


WWOA – Boerger Competition Pump

- 1. Remove 4 eye bolts; Remove Cover and Front Wear Plate**



- 2. Remove lobe center bolts**

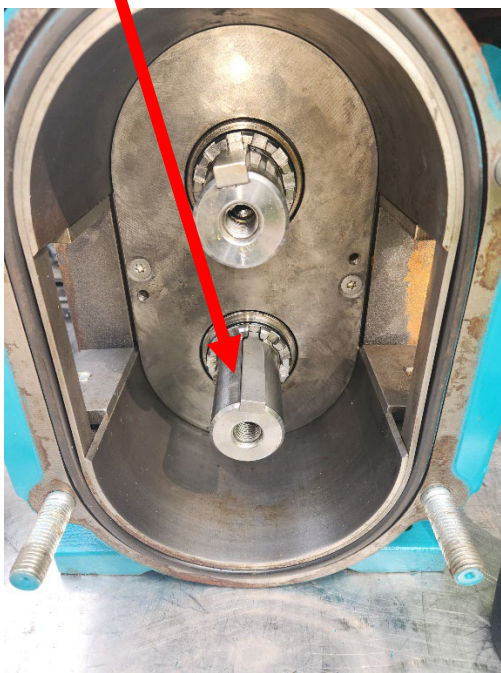


3. Remove lobes:

- a. Insert two (2) threaded rods, hand tighten; Use pullers to “step” off the rotors in a pair.



4. Remove one (1) shaft key. If key is not present in shaft, check the center of the lobe bore.



5. Insert Multitool. Turn counterclockwise until the bushing is loose.



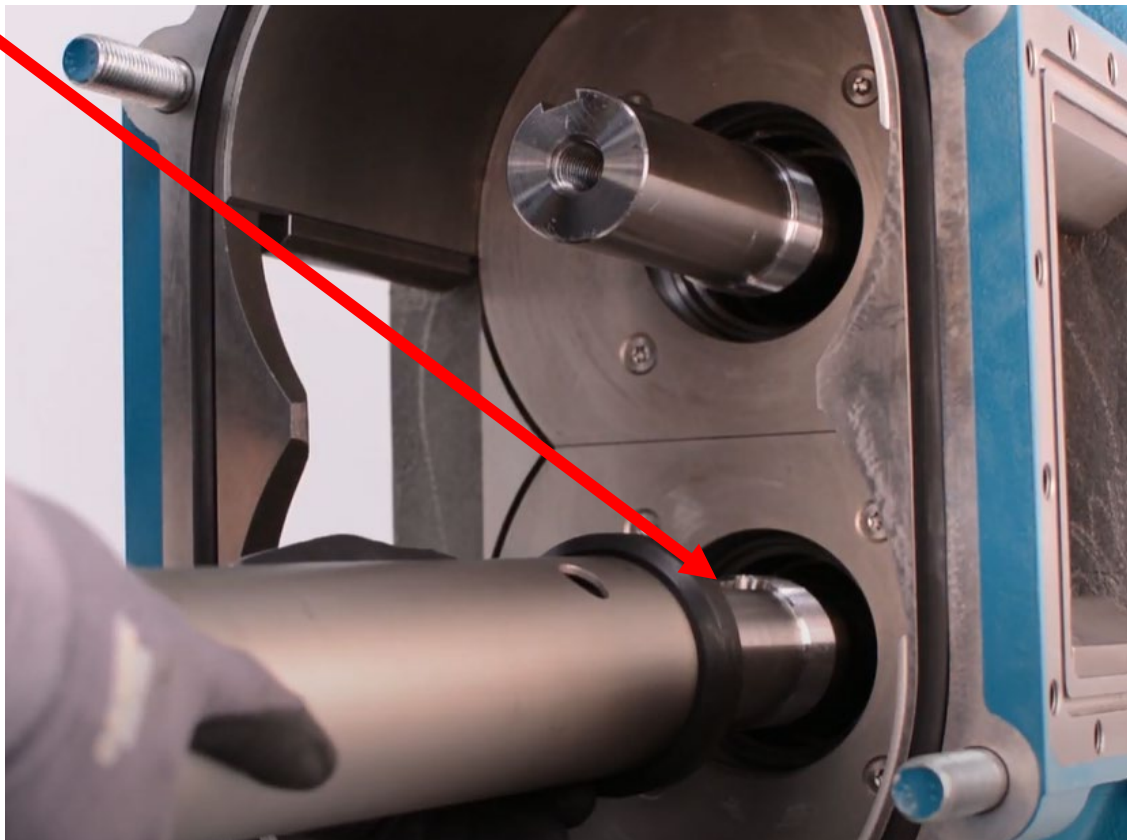
6. Remove front bushing and two seal faces. Clean and Inspect and show judge (one seal set only).



7. Reassemble seals. Utilizing the multitool;

Load one (1) seal face & o-ring into rotating bushing.

Load one (1) seal face & o-ring into the pump.

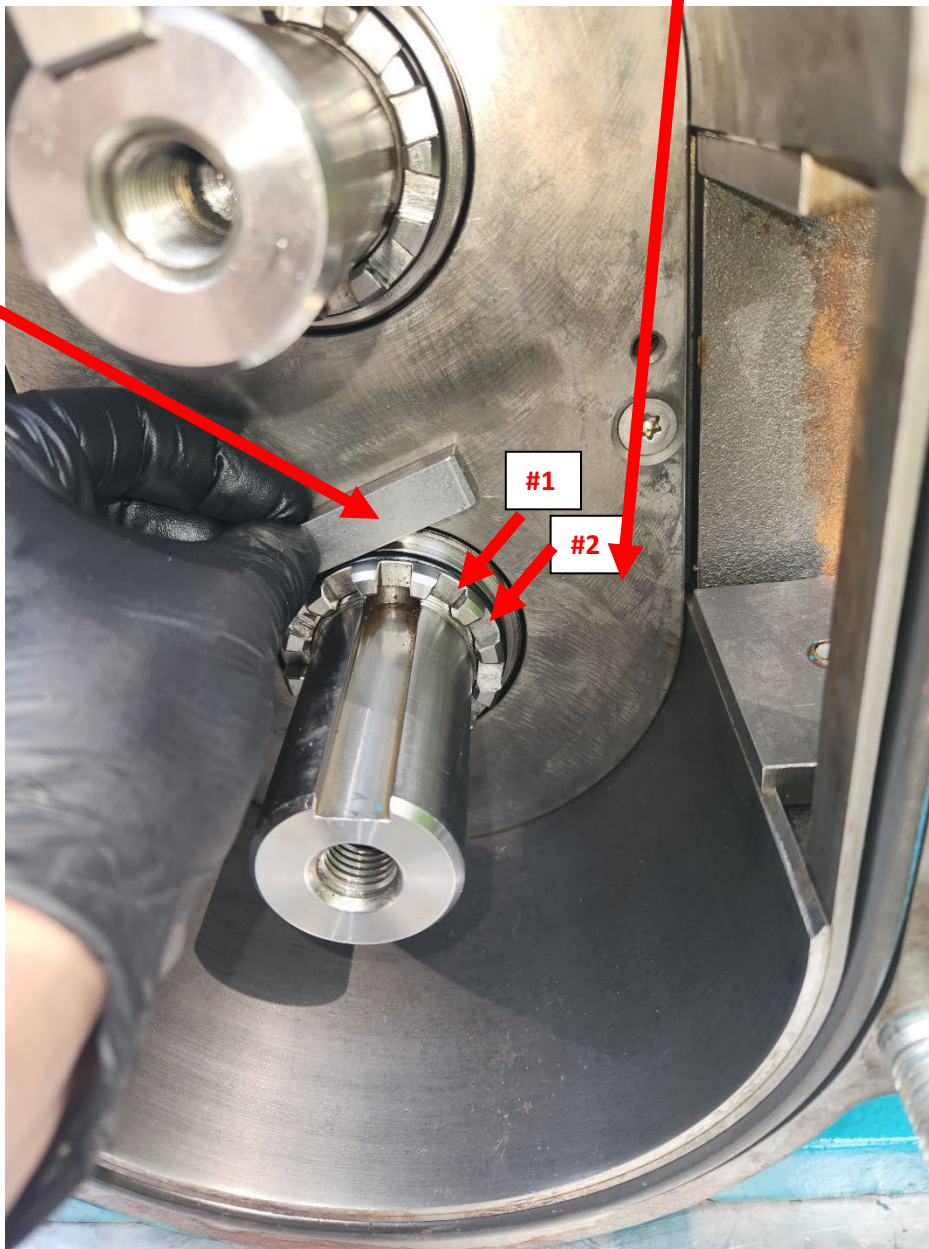


8. Set Mechanical seals.

Turn the rotating bushing clockwise until the shoulder of the bushing is flat with the rear wear plate. You will use the key previously removed to check for parallel between the bushing shoulder and rear wear plate.

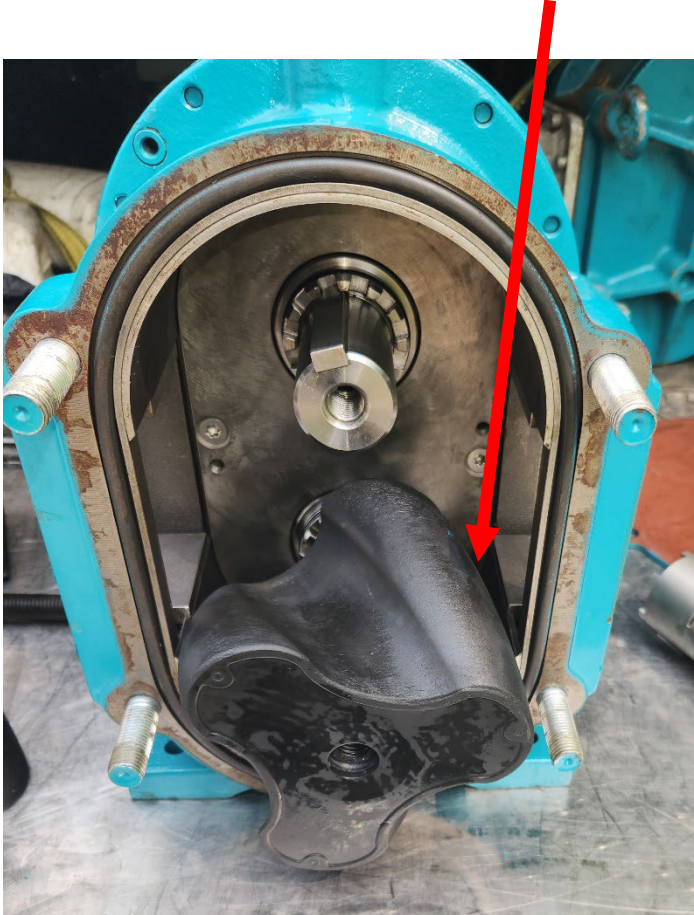
Once flush, relieve tension on seal by turning the bushing 2 notches counterclockwise

Install key into shaft slot.



9. Reinstall lobes

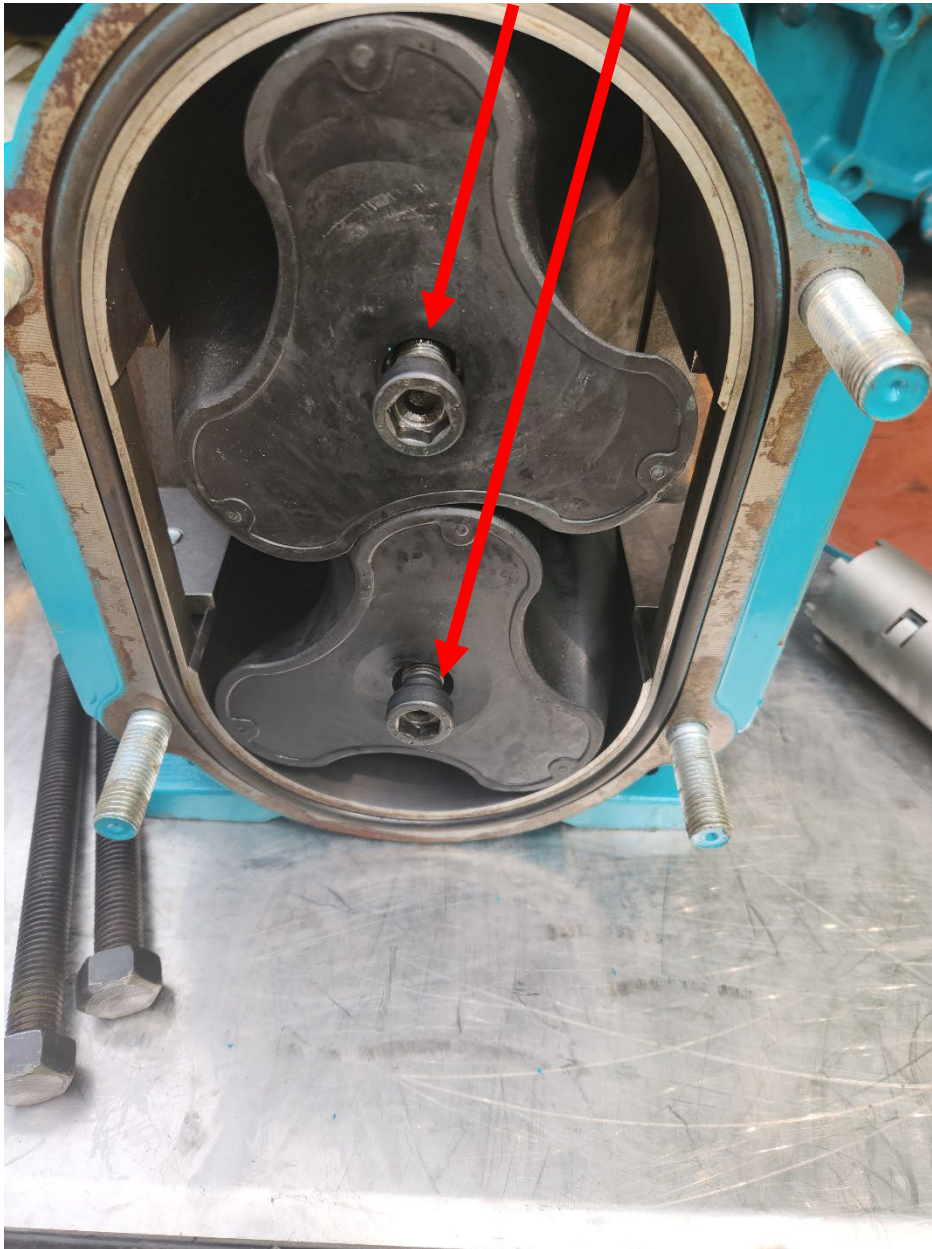
Start with Bottom lobe. Place lobe partially on the shaft. Once bottom lobe is partially installed, install the top lobe. Note, you may need to slightly rotate the bottom lobe to get the top lobe keyed onto the shaft without interference.



- 10. Once both lobes are engaged with the shaft keys, use a rubber mallet. “Step” lobes onto shaft by alternating hammer blows from top to bottom.**



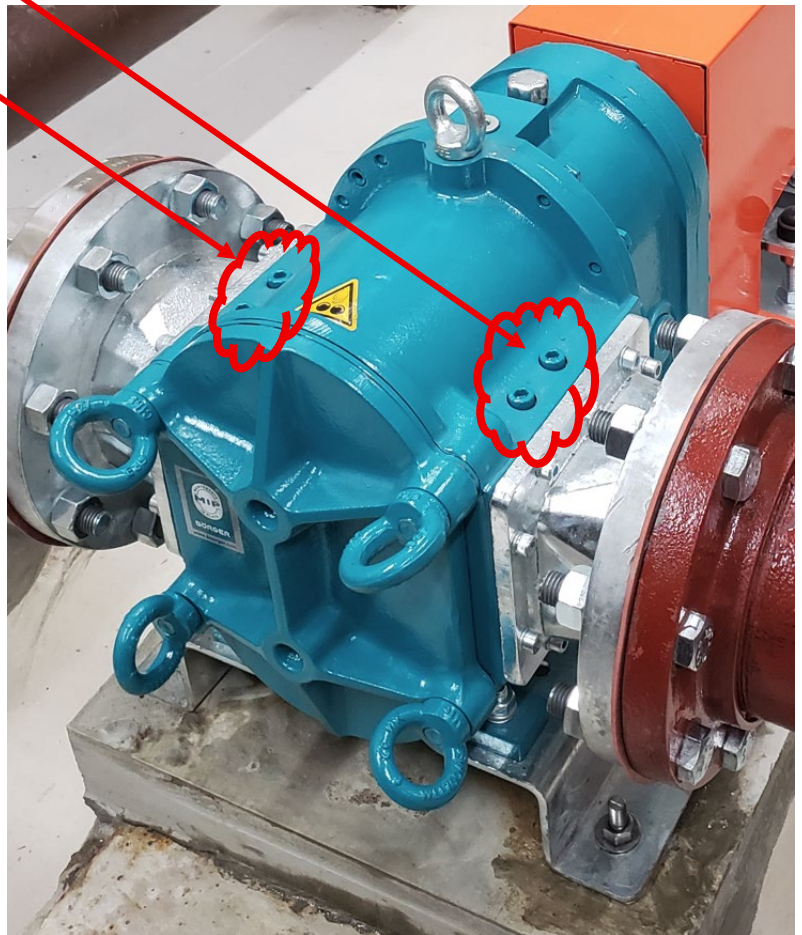
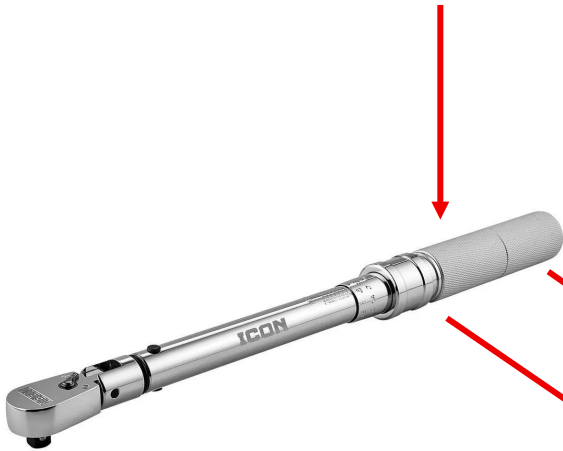
11. Once lobes are fully seated in pump case, tighten center bolts.



12. Rotate pump with hand tool to make sure there is no binding.

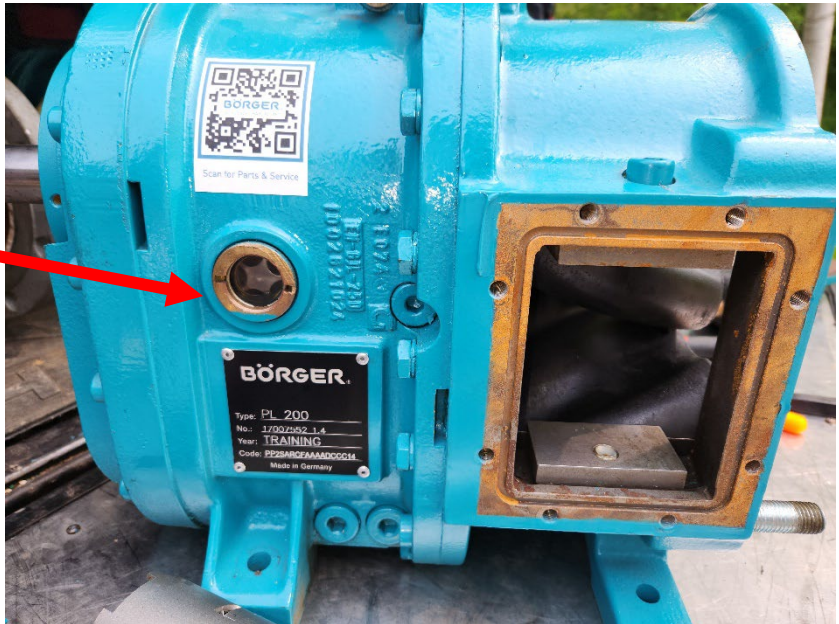


13. Torque UPPER radial wear liner bolts only.
a. Torque Setting = 37 ft.lbs



14. "Verbalize" oil Levels.

Main gearbox = ½ full on sight glass



Mechanical Seal Oil: Remove hex head plug on top of pump. Shine flashlight down the port. Verify that oil is above the top shaft.

Approximate mechanical seal oil level

