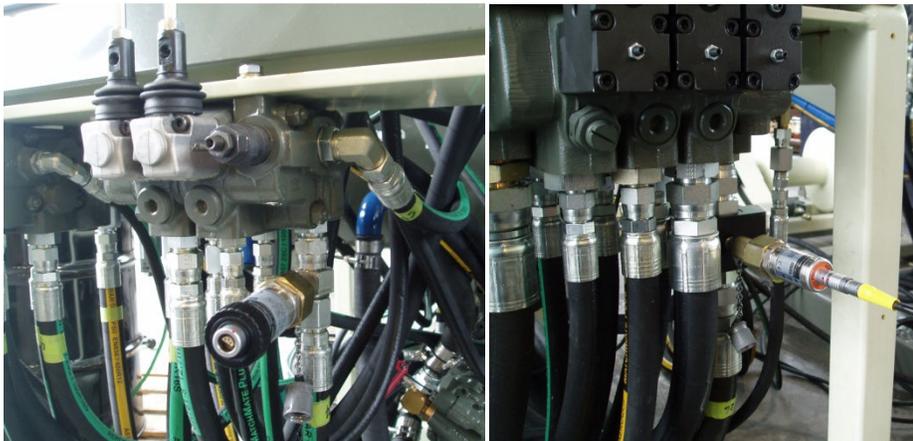


A5 Drill Run up and testing

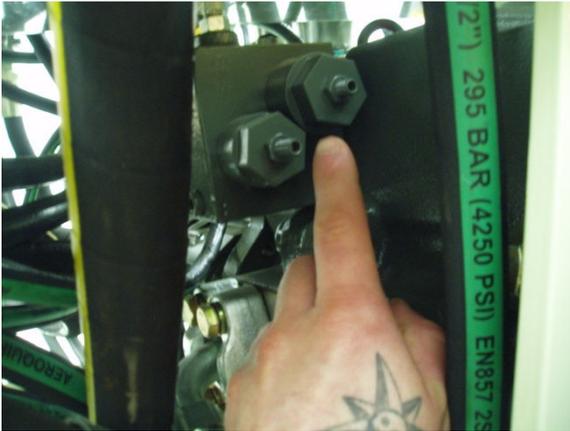
1. Ensure all the following are **primed** (*pumps primed via the case drain*):
 - a. Kawi pump
 - b. 2 Eaton pumps (*middle and end pumps*)
 - c. Rotary pump (Parker V14) on B-20 head
 - d. Fill hydraulic tank to the top (*Add slip stick additive*)
 - e. B20 head full of 80/90 to fill port under the hose line manifold
 - f. Ensure engine oil & anti freeze are filled up
 - g. Connect fuel lines & prime injector pump
2. Connect two gauge inlets for pressure test procedures:



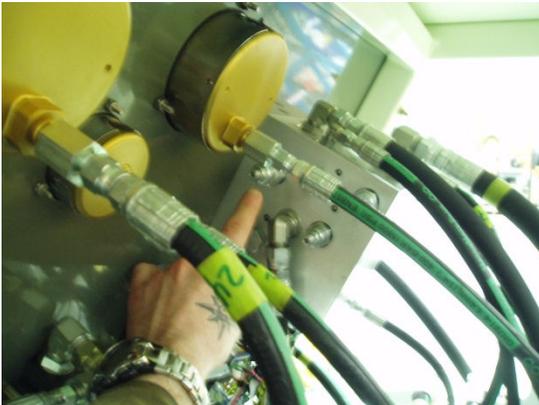
3. Connect battery, start engine and idle while looking for loose connections and leaks
4. Activate drill functions @ low RPM to ensure proper hydraulic line routing
5. Set detent position on water pump lever (*one way operation*) and rotation (*detent forward reduced backwards operation*)



6. Adjust two set screws on Kawi pump:



- a. Bottom (*smaller outboard screw*) **Load Sense** screw to .392" ~.400" **around 620psi with engine @ idle.**
 - b. Top (*larger inboard screw*) **P-Comp** set screw to .297
7. Adjust foot clamp/chuck pressure level by setting the #2A screw (*stamped on aluminum block*) to 1350psi on the foot-clamp gauge.

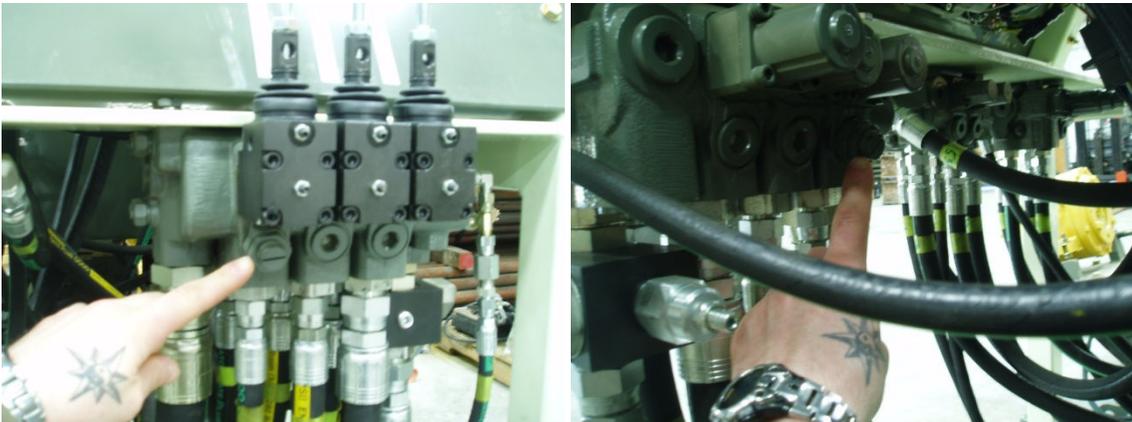


8. Adjusting fine feed with the engine @ 2200RPM:
- a. Wind out set screw on "two lever valve bank" relief
 - b. Set last pump on three pump assembly to 3400psi by winding set screw in while watching the hand held gauge



- c. Adjust relief (*for spike relief*) set screw to 3300psi,
- d. Turn pump back down to read 3000psi for proper operating pressure

9. Adjust wire line “work port relief” to 3000psi on both front and rear set screws



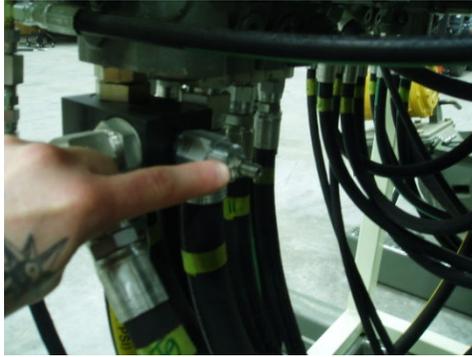
- Do this once operating temperature is up, hold lever forward, then backwards at 2200RPM.

10. Adjust float set screw (labelled float) 2A so head floats up slowly (feed frame at 80°)

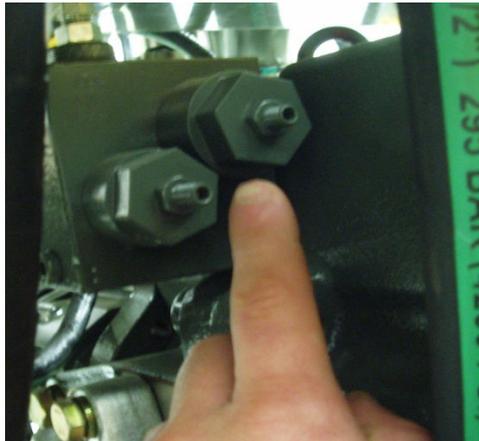


11. Spike relief adjustments must be made to the 3 lever valve bank:

- a. Unwind main relief cartridge 3~4 turns



- b. Unwind **P-Comp** set screw, then set to 5500psi by bottom out feed ram and watching rot gauge while adjusting set screw back in.



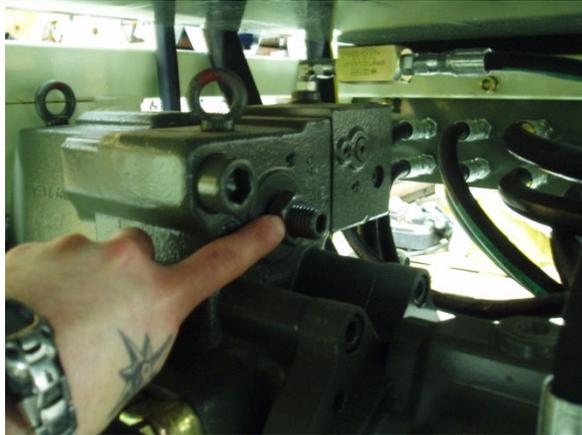
- c. Adjust main relief cartridge (located on the black block) to 5000 psi



- d. Adjust **P-Comp** set screw back down to 4500psi, proper operating pressure

12. Adjusting chuck RPM:

- a. Adjust swash "sun dial" for max RPM (*all the way in*)
- b. Set up a tach to read Chuck RPM (*reflect decal and hand held tach*)
- c. Adjust set screw on top front of kawii pump 0.3125" ~ .290" to start



- d. Chuck RPM should be set between 1580~1620RPM (*max redline is 1666RMP for 100% duty cycle*). This reading has to be with the engine RPM @2200, adjustments to achieve settings on the pump must be made with rotation lever in neutral position to mitigate hydraulic pressure on set screw

13. Read swash line going to head by tapping into the #4 line between power pak manifold and head this should read 145 ~ 343 psi.