

READ THIS FIRST

BOOSTER PUMP PRIMING START UP INSTRUCTIONS

!WARNING!

PUMP MUST BE PRIMED BEFORE OPERATION.

1. FLUSH

Make sure water supply to pump is turned on. Open ball valve and direct toward a drain or container to remove the majority of the air from the pump until a steady stream of water is flowing (approx. 1 min). Then close the ball valve.

2. CHECK ROTATION

Open Aqua-Lab™ Motor Starter Box (MSB) and ensure 3 phase disconnect is on. (**Note:** Door will not open with disconnect on. Use a 1/4" wrench or crescent wrench to turn it back on after opening door.) (MSB with blue and black Eaton disconnect can be opened without shutting off by depressing button under switch handle. Press small button with screw driver to bypass disconnect (Image 1).

!WARNING! - ELECTRIC SHOCK HAZARD. HIGH VOLTAGE PRESENT INSIDE MOTOR STARTER BOX - USE CAUTION. Start the pump momentarily by depressing the center of the contractor (image 2). **!WARNING! RUNNING THE PUMP BACKWARD WILL CAUSE CATASTROPHIC SYSTEM FAILURE! ENSURE THAT PUMP ROTATION IS CORRECT (image 3)** as indicated by the arrow on the casting of the pump and that 200 psi can be reached.

- If pump cannot regulate to 200 psi, remove pump motor cover and look at shaft to confirm correct rotation.
- Verify pump inlet pressure remains positive when running.

3. CLOSE CABINET

Turn on 3 phase disconnect, if high temp switch is present, push to start (Image 4).

4. PURGE BYPASS

Start the pump and slowly open ball valve until it is wide open. Allow to run for 60 seconds to flush lines and then close valve.

5. CONNECT

Connect the pump outlet line to the Hydra-Cannon Manifold and open ball valve.

6. DOUBLE CHECK

Confirm that the pump can obtain 200 psi while firing solenoids and that the pump housing (stainless steel tube) is cool to the touch after a minute in operation.

- If housing is hot or noisy, pump did not prime correctly.
- If pump does not prime, repeat steps 3-5.
- If not at 200 psi and the pump is correctly rotating you may need to adjust the bypass regulator to obtain 200 psi (Image 5).

Verify pump prime 24 hours after operation to ensure prime held. Pay close attention to the temperature of the pump shaft, the whole stainless steel area (Image 6) should be the same temperature. If it starts getting hotter than the supply water or greater than 137°, then it is likely that the pump did not prime correctly which **WILL CAUSE DAMAGE TO PUMPS**. The motor housing (painted portion) will be hot during operation.

