Alternative Drafting Procedures & Techniques

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"Burp" Drafting Procedures:

- 1. Position the rig appropriately at the drafting source
- 2. Engage the pump according to manufacturer's recommendations
- 3. Exit cab, and open the tank to pump valve FULLY
- 4. Open the tank fill valve FULLY
 - Apparatus with tank fill lines 2" or greater should be careful about opening all the way. Fully open may recirculate more water than the tank to pump line can provide, and cavitate the pump
- 5. If the rig is equipped with a pressure governor, ensure it is in RPM mode
- 6. Begin collecting and assembling the necessary hard sleeves and strainer(s)
- 7. Ensure that all connections are air tight
- 8. Throttle up to 150 PSI
- 9. With the tank to pump and tank fill FULLY open, slowly begin opening the intake valve
- 10. Open the intake slowly until the master discharge gauge begins to fluctuate. This indicates that air is entering the pump and it is being "burped" through the tank fill line
- 11. When the master discharge gauge begins fluctuating, STOP opening the intake valve until it levels out to the original pressure. "Let the pump do the work"
- 12. When the master discharge gauge levels back out, open the intake a little more until the fluctuation occurs again.
- 13. Continue with and repeat steps 9 12 until the intake valve is FULLY OPEN
- 14. Once the intake valve is FULLY OPEN, slowly begin to CLOSE the tank to pump valve
- 15. With the tank to pump CLOSED, you can now CLOSE the tank fill valve
- 16. You are now drafting from your outside source

Front Intake "Burp Drafting" Procedures:

- 1. If the decision is made to utilize a front intake initially, follow steps 1-7 from the previous section
- 2. Throttle up to 150 PSI
- 3. With the tank to pump and tank fill FULLY open, slowly begin opening the front intake valve
- 4. Depending on the rig, you may FULLY open the front intake valve with NO fluctuation in the master discharge reading. THIS DOES NOT MEAN YOU HAVE YOUR PRIME
- 5. If the front intake valve is FULLY opened, *slowly* begin CLOSING the tank to pump valve until the master discharge gauge begins to fluctuate
- 6. Once the master discharge gauge fluctuates, STOP closing the tank to pump valve until the master discharge gauge levels out
- 7. Repeat steps 5 & 6 until the tank to pump valve is FULLY CLOSED and the front intake valve is FULLY OPEN
- 8. Slowly close the tank fill valve
- 9. You are now drafting from your outside source

Note: the same procedures outlined for front intakes can be utilized with rear intakes

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Pressurized Priming Procedures:

- 1. Position the rig appropriately at the drafting source
- 2. Engage the pump according to manufacturer's recommendations
- 3. Exit cab, and open the tank to pump valve FULLY and recirculate water
- 4. Gather the necessary equipment including a strainer with a jet siphon attachment, and make the appropriate connections
- 5. Connect a length of 1 ³/₄" hose to the jet siphon attachment on the strainer and place the strainer in the water
- 6. Connect the hard sleeve to the pump intake and the female end of the 1 3/4" hose to a pump discharge
- 7. Ensure the pressure governor (if equipped) is in the RPM Mode and close the tank fill line
- 8. Charge the discharge with the 1 3/4" line connected to it, and throttle up to at least 150 PSI
- 9. BLEED THE AIR! Options include:
 - Utilization of the bleeder valve on the intake
 - If no bleeder is present:
 - a. When connecting the hard sleeve to the pump intake, tighten just until the connection is hand tight against the gasket
 - b. Loosen the connection a quarter of a turn
 - c. Once the 1 3/4" line is charged, air will escape around the loose gasket
 - d. Once water is seen coming around the connection, tighten the connection until no water can be seen leaking
- 10. Once all the air is expelled from the hard sleeve, fully open the intake
- 11. Close the tank-to-pump valve
- 12. Close the discharge feeding the 1 3/4" line
- 13. Refill the booster tank
- 14. Supply water to the scene

TurboDraft Operational Steps:

- 1. Position the apparatus near the water source and gather the necessary equipment
- 2. Engage pump & recirculate water
- 3. Make hose connections:
 - a. 5" supply to the pump intake
 - b. 2 ½" line from the pump discharge
- 4. Place the device into the water
- 5. Close everything except the tank-to-pump valve
- 6. Open the discharge with the 2 ½" connected
- 7. Throttle up to 175 225 PSI (critically important to maintain this pump pressure on the discharge!)
- 8. Open the air bleeder on the intake
- 9. Once all the air is bled from the line, close the bleeder and open the intake
- 10. Close the tank-to-pump valve
- 11. Refill the booster tank
- 12. Supply water

Steps for Cleaning Out a Clogged TurboDraft:

- 1. Identify that the device is clogged
- 2. Open the tank-to-pump valve fully
- 3. Shut down flow to whatever discharges are being supplied
- 4. Close the intake the is being supplied by the TurboDraft
- 5. Tank water is now being pumped to the device, up the 5", and building pressure against the closed intake valve. The build-up of pressure causes the water to flow out the top of the TurboDraft strainer grate. This will clear any debris that is stuck in the strainer
- 6. Watch the surface of the water for turbulent bubbles coming from the device, which indicate the device is cleared out of any debris

- 7. Re-open the intake
- 8. Close the tank-to-pump
- 9. Refill the booster tank
- 10. Reestablish flow to the discharges that need to be supplied

