



All-in-One Bay Wash CAT pump troubleshooting

Issue: The All-in-One Bay Wash CAT pump will sometimes not build pressure, or its operating pressure will fluctuate several hundred psi, and Water discharging out of the discharge hose are all symptoms.

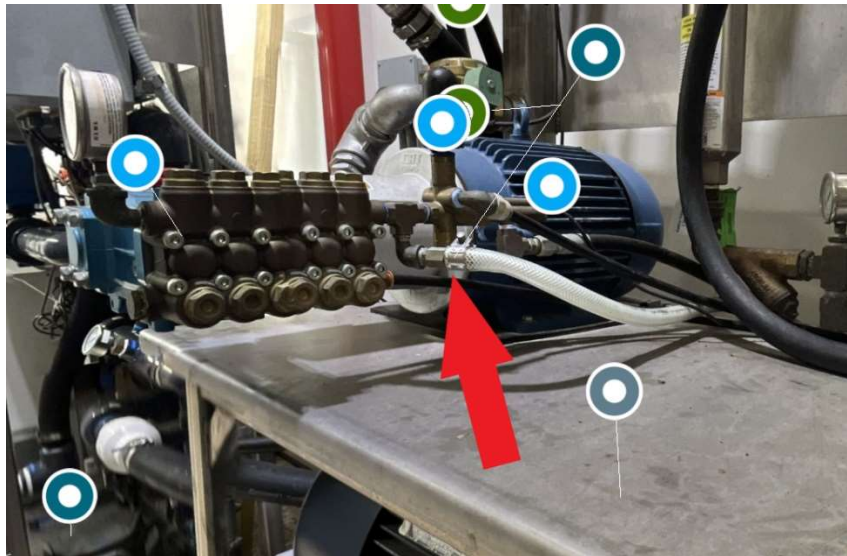
Tools Needed:

- 1/4" Hex Key/Allen Wrench
- Pipe wrench

Pop-off Valve operation: The Pop-Off Valve provides backup protection to the primary regulator valve for pressure relief and pump protection.

Unloader Valve Operation: These pressure-sensitive regulating unloaders hold established system pressure in the discharge line when the trigger gun is closed or solenoid (gate) valve is closed or the nozzle is clogged, thus bypassing all unrequired flow. Squeezing the trigger gun or opening the solenoid (gate) valve will close the bypass and return to established system pressure.

The discharge hose is typically clear with white reinforcements as shown in the picture below. It can sometimes be a black hose.





Troubleshooting steps:

1. Adjusting and or Replacing the Pop-off Valve:
 - a. Place the Bay Wash Pump into manual mode in the GWC HMI.
 - b. Adjust the pop-off valve by Tightening the Pop-off valve all the way in, then a quarter turn at a time loosens it until water comes out then tighten a quarter turn with a 1/4" Hex Key.
 - c. If no water is still discharged, replace the Pop-off valve.
 - i. If the Pop-Off Valve is tightened all the way in, and water is still discharging out of it, replace the Pop-off valve.
2. Adjusting the Unloader Valve:
 - a. Place the Bay Wash Pump into manual mode in the GWC HMI.
 - b. Start the system with the unloader backed off to the lowest pressure setting (counterclockwise direction).
 - c. Squeeze the trigger and read the pressure on the gauge at the pump. Note: Do not read the pressure at the gun or nozzle.
 - d. If more pressure is desired, release the trigger, and turn the adjusting handle one-quarter turn in a clockwise direction.
 - e. Squeeze the trigger and read the pressure.
 - f. Repeat this process until desired system pressure is attained.
 - g. Once the desired system pressure is reached, stop turning the adjusting handle.
 - h. If this makes no change, replace the Unloader Valve.
3. With the Bay Wash pump running and the Bay Wash gun spraying water
 - a. Adjust the Unloader valve clockwise to increase the water pressure to a desired setpoint.
 - i. If water is coming out of the Pop-off valve during this, adjust the pop-off valve.
 - b. Slowly turn the pop-off valve adjusting the screw counterclockwise until a small amount of water is dripping from it.
 - i. Adjust the Pop-Off valve a half turn until the water stops dripping. No more than 3 half turns should be needed,
 - ii. Fire the Bay wash Gun in rapid succession to check for any leaks.
 - iii. The Pop-off valve is now set to 200 to 300 psi over the Bay Wash pump's operating pressure.



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Parts that might be Needed:

- P-SE-PG-228 - 3/8" FEMALE BRASS PRESSURE SENSITIVE REGULATING UNLOADER
- P-WAT-2446 - 1/4" MALE NPT BRASS POP-OFF VALVE

If the issue persists, please contact Equipment Support at 616-795-4892 or Support@TommyCarWash.com