



## TECHNICAL BULLETIN

# 12V DIAPHRAGM RV PUMPS



### Fine Tuning Your Fresh Water Pump

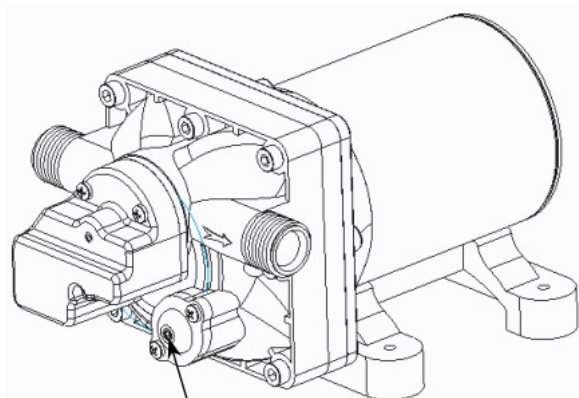
In most instances, an RV/Fresh Water Pump will need to be tuned at install. If you install your pump and you find that it keeps running, do not panic. Just like tuning your TV channels, your pump needs to be tuned to your system. To fine tune your pump, the bypass pressure needs to be adjusted. Voltage and plumbing variations affect the setting, and the pump needs to be "tuned" to its installation. Meaning each setup might treat the pump differently – this is the same for any other RV pump.



### Internal Bypass Operation

The 3055R (11 LPM) and 5055R (18 LPM) pumps are equipped with an internal bypass feature. By allowing some fluid to circulate inside the pump, the pumps can operate at low output flow without on/off cycling caused by pressure switch activation.

The bypass pressure is calibrated and set at the factory during assembly. However, voltage and plumbing differences in individual installations may require an adjustment. If the pump will not turn off when all plumbing fixtures are closed, locate the internal bypass adjustment screw on the front of the pump and rotate clockwise until the pump shuts off. (A 2mm hex key is required.)



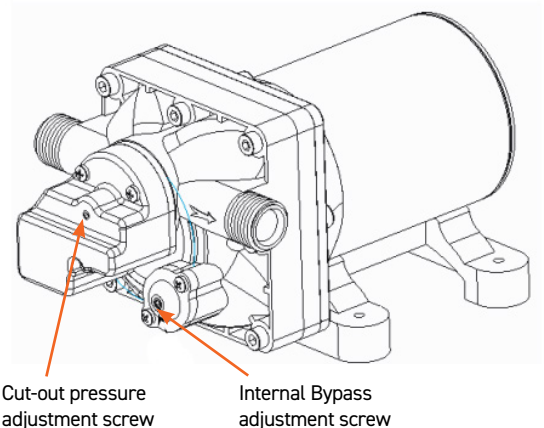
Internal bypass adjustment screw

## Steps for setting the cut-out & internal bypass pressure on 11.4 lpm and 18 lpm RV pumps.

1. Connect the plumbing ports to a water tank.
2. A ball valve and pressure gauge are required in the outlet plumbing line.
3. Turn pump on.
4. To set the internal bypass pressure at 60psi:
  - Slowly close outlet ball valve until completely shut. If pump turns off, rotate cut-out pressure adjustment screw clockwise until pump is running continuously.
  - With continuously running pump, adjust internal bypass adjustment screw (clockwise to increase pressure, counterclockwise to decrease pressure) until pressure on gauge is 60psi. If the pump starts to cycle on/off while increasing internal bypass pressure, repeat step 4.a.i before continuing to adjust the internal bypass screw.
  - Once the pump is running continuously at 60psi, continue to step 5.

### 5. To set the cut-out pressure at 55psi:

- Slightly open the outlet ball valve and adjust it until the pump is operating at 55psi.
- Slowly rotate the cut-out pressure adjustment screw counterclockwise until the switch first activates and turns the pump off. The pump pressure switch may cycle rapidly depending on outlet conditions.
- To confirm the pressure switch setting: open the outlet ball valve, then slowly close it to increase pressure. The pump should start to cycle on/off as the pressure approaches 55psi, then turn completely off when the outlet valve is closed.



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