

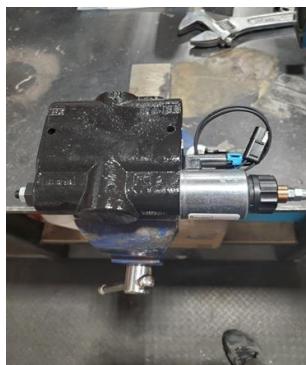
## Maxflow VRC II Hydraulics

Symptom	Correction
Pump Turns for 4 seconds and then doesn't move	<ul style="list-style-type: none"> <li>- Hydraulic lines reversed flow direction. Flip hydraulic lines in the remotes. Do Not just try in reverse detent as some tractors have remote issues running backwards.</li> <li>- There is a hydraulic back check in the system to prevent the pump from running backwards of flow direction.</li> </ul>
Pump does not turn at all	<ul style="list-style-type: none"> <li>- Make sure remotes are plugged in and flow is being delivered to the hydraulic block</li> <li>- Check couplers between the front and the back of the applicator to make sure flow is being delivered to the hydraulic block.</li> <li>- Always use pin style couplers instead of ball style couplers.</li> <li>- Refer to Fast Valve or PWM Troubleshooting</li> <li>- If Fast Valve or PWM are good bypass Electronics (see Page 27)</li> </ul>
Hydraulic oil seeping out of the Blackmer coupler	<ul style="list-style-type: none"> <li>- Remove Eaton hydraulic motor from coupler <math>\frac{3}{4}</math>" wrench</li> <li>- Is there hydraulic oil inside the coupler? If yes reseal the Eaton hydraulic motor with Part# HYP 60540-000</li> </ul>
Pump runs for 20 to 60 seconds and then stops	<ul style="list-style-type: none"> <li>- Make sure remote on the tractor is in continuous flow like when attached to an air cart.</li> </ul>
Pump does not turn, Fast Valve works, Hydraulic oil being diverted through block.	<ul style="list-style-type: none"> <li>- Unbolt Eaton Hydraulic motor from the white coupler. Verify the motor is turning and there are no leaks. If Eaton hydraulic motor turns go to next step.</li> <li>- Verify the keyway is still in orbit motor if so go to next step.</li> <li>- Unbolt the shaft guard on opposite side. With a small pipe wrench see if Blackmer pump turns. If it does not go to next step</li> <li>- Blackmer pump doesn't turn with a larger pipe wrench see if you can break the pump free</li> <li>- If pump will not break free rebuild or replace pump. See operators manual for pump rebuilding. If pump is under warranty do not touch it and call Maxquip Saskatoon and a trained Blackmer Tech will let you know what to do. (If pump is not under warranty you may do whatever you like to it.)</li> </ul>
Rates bouncing issues	<ul style="list-style-type: none"> <li>- Verify enough hydraulic oil is being supplied to the pump</li> <li>- Verify above to make sure you have a constant oil supply and pressure, if there is an issue in the hydraulics, for they will make rate jump around.</li> <li>- Verify we are not over supplying oil to the assembly, if over supplying oil every time the valve makes minor changes to much could be being sent.</li> <li>- CNH Tractors 25-30% flow, JD Tractors 3-3.5 on dial.</li> </ul>

# How to Bypass Electronics for Hydraulic System



- Remove electric motor from hydraulic block.
- 7/16" wrench
- Use large screwdriver to turn stem clockwise
- Pump should turn if not reverse the hydraulic lines, if not replace pioneer couplers



- Remove acorn nut on the solenoid side. 7/16" wrench
- Use small screwdriver to turn stem clockwise in. If you bottom out screw go to next step
- Pump should turn if not reverse the hydraulic lines, if not replace pioneer couplers
- When pump spins, slowly turn the screw out until the pump stops turning.
- Tighten the lock nut to the solenoid and replace the acorn nut.

## Priming Issues on Maxflow VRC II

Symptom	Correction
Constant priming issue	<ul style="list-style-type: none"><li>- Verify proper plumbing on the nurse tank.</li><li>- If a twin wagon, verify that one of the excess flows has not popped</li><li>- Verify the intake strainer is not plugged and causing vapor to form.</li><li>- Verify the needle valve or Electric valve is open to allow bypass to run.</li><li>- If assembly has electric valve on bypass unplug to see if it is causing issue.</li><li>- Diaphragm can be weak(pillowed) or have a pin hole in it. If assembly is older than 4 years replace the diaphragm.</li><li>- Verify Diaphragm plates are not slightly bent from impacting the housing if the diaphragm was weak.</li><li>- Verify we accept the rate controller on the kit. So far only the JD RC2000 has been blacklisted</li></ul>
Electric Valve Kit	<ul style="list-style-type: none"><li>- Verify the valve is open when manifold on/offs are closed.</li><li>- Refer to Page 24 for on/off troubleshooting, but remember this valve is plugged into the "Master" so signal wire comes back from all the manifold on/offs. One of them must be opened to have this on/off to open.</li></ul>