

Section Valves Won't Open and other things

1. Is it all the valves or just the even numbered or odd numbered sections? On the 3463 section harness, power and ground for the even and odd come from different pins.
2. Be sure the section harnesses are plugged in correctly. On many setups, there is a connector for Sections 1-6 and a connector for Sections 7-12.
3. On the 3-pin WP Tower section connector, there should be a **constant 12v** between pins A & B (Red-12v and Black-ground). If this power is not present, check the voltage while grounding to the frame. If there is no voltage, go back to the next connector and check for voltage there. Some rate control harnesses may have a fuse on the high current power. Check for that. On Deere controllers, go to Diagnostics > Readings > System Voltages > Valve Power should be 12-13 volts. The high current power comes through heavy red and black wires, often to a 2-pin Molex connector. Check that connection and check the voltage there. That power ultimately comes from the battery, through a fuse, through the 9-pin ISO connector on the back of the tractor. Trace back to the battery if needed.
4. On the 3-pin WP Tower section connector, there should be 12v between **signal (Pin C) and ground** (Pin B - black) when the valve should be on. Depending on the controller, the signal may show from 0 to 6 volts when OFF. If there is no signal, go back to the next connector and check there. If there is no signal, check the display setup. Does the controller think the section is ON? Turn off Section Control or Task Control or put the sections on Manual Control (Sentinel). When testing with Ag Leader, turn off Auto Swath.
5. If you have 12v constant power and 12v signal, but the valve doesn't open, swap connectors or valves that are close.
6. Remove the actuator from the valve. Test to see if the actuator works. Turn the valve with a wrench to be sure it is free and will turn. Be sure to keep the proper orientation when putting the actuator back. It's possible to get the actuator and valve 180° out of sync, so the valve will actually be closed when the actuator says it is open.

If the valve stays ON (the light stays green) it may be a bad actuator or it may be a mismatch between the actuator board and the controller. Some actuators have a yellow band and some have a black band. See this bulletin: <https://support.surepointag.com/documents/1911>.

The KZ TX-2 is a 3-way valve. If product will not flow when valve is ON, either move the outlet hose to the other port, or remove actuator and rotate valve ball 180°, and replace actuator.



Wiring Connector:

3-pin WP

Pin A—Red, 12 Volts +
Pin B—Black, Ground -
Pin C—Various, Signal
12V=ON ; 0-6V=OFF