VertiGate Troubleshooting

When you arrive to the gate site take note of gate position.
Is it stuck open, closed, or in the middle?

Before resetting the board - make note that the green power light is blinking.
Press the MENU button until you get to the TEST MENU.
Note the error Message on the display. If there is more than one error, the display will scroll through them.

Check all fuses and Battery Voltage before continuing.

- **Battery Volts above 12 volts while running**
- **25amp Fuse Protects Drive Circuit**
- **7.5amp Fuse Protects Circuit Board**

If using a solar panel to charge the battery, always disconnect the solar panel before disconnecting the battery. The solar panel can spike voltage to a level beyond the capacity of the components.

Gate Stuck Open:

Tach Error
Generally caused by limit adjustment and gate jammed open.
Pickets will all be smashed together.
Pushing reset should put the gate back in operation.
Allow gate to run down and adjust open limit until you have ½" – ¾" between the pickets.

If reset does not get gate in motion, you may have to direct drive the motor to get the gate running again. Call VertiGate for assistance in how to manually drive the motor

LO BATT –

When a low battery condition exists, the gate control board is designed to fail safe. The gate will remain in the open position until it has charged to the required volts to close.
Check battery volts in the test menu by hitting parameter once and they will be shown on the display.
Hit test. Watching the display, see real time, what the voltage is doing. Any dips below 12v will cause issues or intermittent problems.
Replace battery and or charger if needed. We recommend a 12v deep cycle\marine or RV type battery. If space is limited (5' Gates) 12v lawn tractor\golf cart battery is acceptable.

IR BEAM BLOCKED –

On IR unit, Check that power light is on.
Check signal strength. When blocked – no bars.
Check that IR unit and reflector are aligned.
Look for obstructions of the IR beam to the reflector.
Look for water on the reflector and shadows blocking or interfering with the beam.

UL325 ERROR –

This is a current limit error which generally is caused by limit adjustment or some type of obstruction in the gate path. If the gate

does not try to move at all after being reset, the gate likely is jammed open and will have to be manually driven down.
Please call VertiGate for assistance in how to manually drive the motor.

Other possibilities could be broken spring, bad actuator, obstruction in gate path, gate has been struck and has damaged the motor. It can also be caused by the set point of the friction and mass settings. Standard setpoint for these settings: Friction 5.0 Mass 3.0.

OPEN LED ON – Gate is receiving a hold open input from an external device that is wired into the open input. (Entry System, Computer System). Unplug the J4 connector, if the light goes out and gate operates normally the input is coming from the external device. If the light stays on after being unplugged the control board has an issue.

Gate Stuck Closed:

TACH ERROR – Normally caused by the gate closing too far because of limit adjustment. In this case direct driving the gate open may be needed to get the gate back in motion.
An undercharged battery can show as a tach error.
Call VertiGate if assistance is needed in manually driving the gate to the center position.
This can also be caused by a misalignment between the catch post and the barrier. Once gate is running again be sure gate is not slamming into the side of the catch saddles.

LO BATT – Although the control board is designed to fail safe on a low battery condition, sometimes the gate makes it all the way closed and does not have the volts to open the gate. Use the manual release on the upper rail to open gate.
This can also show up as a Tach error. Check battery volts, replace battery and or charger.

UL 325 ERROR – The gate could be all the way down in the saddles or if hit so hard and reversed it could be just above the saddles. May need limit adjustment or barrier is not aligned correctly to land in the catch saddles.

Gate Moving Then an Error:

TACH ERROR – Gate runs full speed for 2 -3 seconds and stops. Most of the time this is a tachometer board sensing issue. Check wiring at J10 to be sure none of the wires are touching. Check control board for any visible damage on the front and back. If tach wires happen to be spliced (not recommended) the splice could be bad. Could be a bad tachometer board in the actuator (most likely) or a control board issue if there is visible damage to the control board. Could be difficult to decipher which part is bad in this scenario unless an extra board or actuator is present to test.

UL 325/CURRENT LIMIT ERROR – Gate runs open to about the ½ way point of travel and stops. Gate normally is too heavy and is exceeding its amp draw limit. Look for correct balance of the gate, the gate should hold itself neutral half to two-thirds of the way open. If the

gate is balanced, check friction and mass setting and adjust if need be. Factory default settings are as follows: FRICTION 5.0 MASS 3.0 ILIM DELAY 2.0.

GATE BOUNCING ON THE WAY DOWN – If the gate is bouncing on the way down, this generally is because the gate is too heavy. Check balance of the gate, the gate should hold itself half to two-thirds of the way open. If the gate falls, it is too heavy and spring adjustment or replacement should be done first before moving on to any other issues. If the gate is close to balancing, you may also switch some aluminum pickets that are closer to the operator side for steel pickets that are closer to the catch post side.

GATE BOUNCING ON THE WAY OPEN – The gate bouncing on the way open generally means the gate is light or there is too much spring. Check balance of the gate, the gate should hold itself half to two-thirds of the way open. If the gate pulls itself open from the bottom, then there is too much spring and the springs need to be adjusted. If the gate is close in weight, you can switch a couple of steel pickets closer to the operator with aluminum pickets that are closer to the catch post.

BLOWING 25AMP FUSE – This fuse protects the drive circuit of the board, if you are blowing 25 amp fuses the gate is hitting some type of obstruction. If it is blowing on the open side check open limit. If it is blowing on the close side check your close limit and make sure the gate is landing gently in the catch post. If the fuse blows on power up or when given an input, then the drive circuit on the control board has likely been damaged.

BLOWING 7.5AMP FUSE -

The 7.5-amp fuse protects the board from surges of power. If the 7.5amp fuse blows on power up, then something is wrong with the board. If the 7.5amp fuse blows occasionally, look for power surge sources, battery charger, wiring shorts etc.