

Pickle 3 Champion

TS- My Machine Has Top/ Bottom Over-current Server Motor Error. TS- My Machine Has Top/ Bottom Feedback Server Motor Error.

Action	Picture
 The more common statements regarding over-current bottom server and top server errors are the following: "My server wheels don't spin." "There is an error message and it does not move." "I tried to run a drill and it gave me a server error message." This indicates one of the following: A ball jam keeping the wheels from spinning (See Ball Jam Stap 1) 	Over-Current Error Message Display.
 One of the server wheels is loose. (See Install Guide for Server Wheels, Step 2.) There is debris (e.g. dirt, ball fuzz etc.) in machine blocking the sensors. (See Tips for Cleaning Machine, Step 3.) Might Be Missing A Magnet (See Checking the Magnets, step 4.) Possible Cut Vein Sensor Harness Wires (See Checking Vein Sensor Harness Wires, step 5.) Possible bad Top or Bottom server motor (See Checking Server Motors, step 6.) <u>APPLIES TO INTERNAL BATTERY MACHINES ONLY</u> 	
To Remove Ball Jam Step 1.) (NOTE: *Please perform this in an open area as ball(s) will be shooting out of the machine!) 1. With the machine on, tilt the machine back 35 degrees and wait for machine wheels to spin.	(Machine tilted back 35 degrees)

2. 3. 4.	Once machine wheels are spinning carefully put machine back down on all 4 feet. (Do not observe machine wheels spinning only listen for low humming noise coming from front of machine as balls will shoot out of the machine). Once balls have shot out of the machine, turn the machine off. Remove the red case by unscrewing the 6 phillips-head screws located along the bottom	(Machine released back on all 4 feet.)
5.	of the red case. (2-front, 2-rear, one on each side) Gently lift off of machine being careful not to disconnect any wires.	
6. 7. If This do e	With the case removed, be sure to check around any and ALL crevasses where a ball could fall. (Be sure to check below the bottom server wheel, as sometimes a ball can get stuck and keep the elevation from moving to its lowest point and put excess stress on the motor.) If there are no more balls inside of the unit, then try turning it on again, if the issue remains, continue onto the next steps. es not solve error message proceed to Step 2.	Case Screws (Front & Rear)
Step 2.) 1.	Checking For Loose Server Wheels. Locate the Set Screw use a 1/8" Allen Wrench to tighten the set screw (Clockwise) 1/16"'s distance from the motor shaft.	
2.	Make sure both server wheels are line up with each other and are not rubbing against the motor shaft.	(Server wheel with 1/8" Allen Wrench in set screw.)
If This doe	es not solve error message proceed to step 3.	

	(Server wheel 1/16" from motor shaft.)
Cleaning Debris From The Machine Step 3.)	
 Using a vacuum with hose extension, move around the chassis rim removing all the ball fuzz and debris. BE SURE NOT TO VACUUM UP ANY WIRES! Once all debris is cleaned out of the machine, put the case on and tighten all 6 case screws. Turn on machine to check and see if error message appears or not. 	
If the error message appears, continue on to the next step.	
Checking the Server Wheel MagnetsStep 4.)1. The server wheels have 4 magnets located in the middle section of the wheel, equal distance from each other. If a magnet is the wrong direction, or if the magnet is missing this can cause an error. Using the tip of a screw driver or allen, touch the 4 locations on the Top and Bottom server wheels. All 8 magnets (4 for the top and 4 for the bottom wheel) should have the same polarity and attract the screw driver or allen.	Server Wheel showing all magnets.
Checking the Top and Bottom Snap-in Sensors Step 1.) Unscrew the set screw attached to the server wheels, and pull them off.	Server Wheel Set Screw



Step 2.) With the server wheels removed you now have access to the Top and Bottom snap in sensors. Carefully push and pull on the 3 red, green, and black wires to ensure the snap in sensors are securely in place. Check the make sure the snap in sensor wires are not cut or torn. If one of the snap in sensors comes out, simply push it back in place until it clicks.



Top and Bottom Server Motor Snap-in Sensor Wires (marked in red)



Server Wheel Set Screw



Top and Bottom Server Motor Snap-in Sensor Wires

(marked in red) **Step 3.)** Put the server wheels back on the server motor shaft Attach the new server wheel 1/16" from the server motor. It is important that the wheel hub does not touch the server motor and that both server wheels are aligned directly over each other. Tighten the set screw to the flat of the server motor shaft. Make sure the bottom and top server wheels are flush, and aligned with the ball chute. **Checking Vein Harness** (Wire Harness) Step 5.) 1. Check the small multicolored wires coming out of the Vein Harness Assembly. Check to see if any of these wires are cut or smashed. (Vein Harness wires unplugged.) (Vein Harness wires plugged-in) (Vein Harness with disconnected terminal *pictured above.*) *(Follow quick-connect instructions and diagrams below to make sure all wires are connected to the correct harness plugs.) Diagram A.) Bottom Serve Motor connection red, black and white. 2. Disconnect the Snap In sensor, and reconnect it one at a time. Make sure the labels match up. 3. Diagram A.) Bottom Server Motor wire (red, black, and white).



Diagram B.) Top Server Motor wire (red, black, and brown).



Diagram C.) Elevation Home wire (red, black, and green).



4. Unscrew the control panel, and check the Vien Sensor Harness connection (marked as J10) on the circuit board. Disconnect this by pinching on the two longer sides, and pulling up. Blow it out and then reconnect it.



Diagram B.) Top Server Motor connection red, black, and brown.



Diagram C.) Elevation Home connection red, black, and green.



Vein Sensor Harness circuit board connection location (J10).



Checking the Server Motors

NOTE: *This ONLY applies to machines with an Internal Battery.*

Step 6.)

- 1. With the control panel unscrewed, and the red case placed back over the machine (no need to tighten all 6 screws in yet), find the Top and Bottom server motor wires. *The Top and Bottom server motor wires are a pair of red and black wires side by side with a blue connection tab. They are located to the left of the 3 white rectangular tabs that say (feed, sweep, and elevation).*
- 2. If the error message is a 'Feedback' or 'over-current' Top server motor, or Bottom server motor, you will want to remove the Top server motor, or Bottom server motor wires (red and black) labeled as such on the edge of the circuit board. Disconnect these wires, and then proceed to disconnect the battery terminal wires (the 2 red wires on the positive, and the black wire on the negative terminal on the battery).



Top Server Motor (marked in Pink)



Bottom Server Motor (marked in Orange).



Battery Terminals (grand series).



Battery Terminals (grand series).

3. Connect (or make contact) the red Top Server (or bottom server wires depending on if the error message indicated the Top server or bottom server motor), Red to the red terminal (positive) and black to the black terminal (negative). If the motor does not spin, then the server motor is the culprit, and needs to be replaced.







Top Server Motor (marked in Pink).



Bottom Server Motor (marked in Orange).



