

## ***QUICK LIST TROUBLE SHOOTING BEV MAX 2***

- 1. Check vertical alignment.***
- 2. Check Allen head shoulder screws (behind Y motor).***
- 3. Check all gates for cracks.***
- 4. Check shelf offset setting.***
- 5. Check hook swipe X setting.***
- 6. In position test check belt tension.***
- 7. Using pass /fail tool check X/Y axis distance to gate.***
- 8. Inspect axis rails top and bottom (syrup spills extc.).***
- 9. Check door bundle harness (not pulling on board).***
- 10. Check push nuts on coin return assembly.***
- 11. Check port door function.***
- 12. Check vend sensor.***
- 13. Test in Vend test mode with both doors closed.***
- 14. Check coins and bill usage with both door closed***

**1) To adjust vertical alignment:**



***Check gaps between top of “Y” axis to the wall, and the bottom of the “Y” axis to the wall.***



## *2) To adjust vertical alignment:*



*Loosen the 2 screws below the picker cup and pivot the bottom of the “Y” axis left or right until the bottom gap is the same distance from the wall as the top gap.*

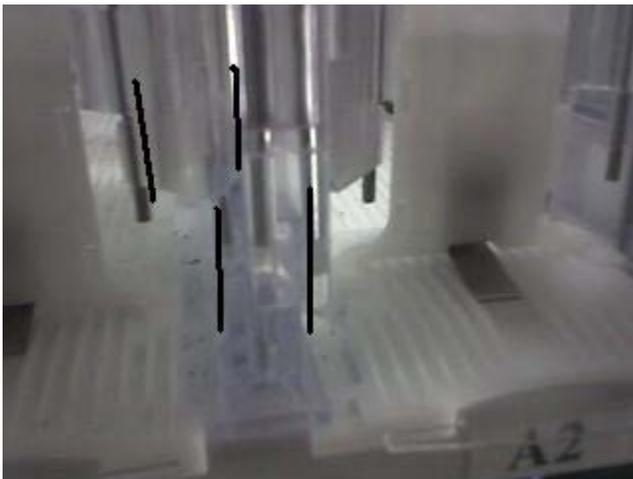
*Check Allen head screws behind the “Y” motor if loose remove, coat threads with loctite and replace.*



### 3) Check gates for cracks:



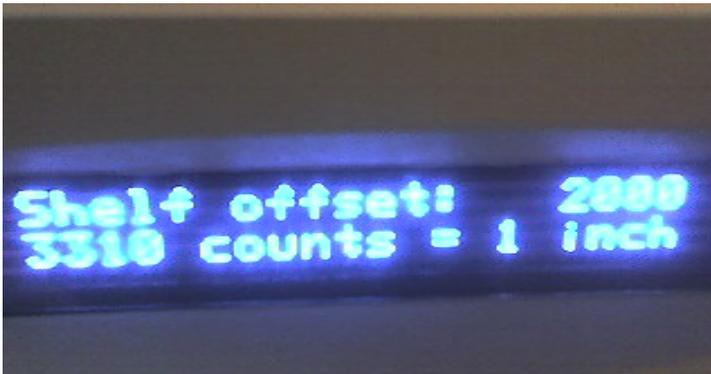
Wiggle the top of the gate and look for cracks.



Example of broken gate.

#### 4) To adjust the shelf offset:

Press the program button *twice* to enter the *test mode*, then press “F” for *Factory Diagnostics*, then “\*” to enter *Factory Diagnostic*, then “8” for “*shelf offset*”.



Type in a higher number to raise the picker and a lower number to drop the picker, The top of the picker should strike the target no higher than 1/16<sup>th</sup> from the top ( do not hit shelf) and no lower than half way down.



Check this adjustment at A1, B3, C5, D7, and E9.  
*Remember Generation 1 machine the default setting is 9200 and Generation 2 machine the default setting is 2500.*

## 5) To adjust hook swipe X:

*Press program button twice to enter the **test mode** then press “F” for **Factory Diagnostics** then “\*” to enter **Factory Diagnostics** then “0” for **Hook swipe X**. Adjust # 93871 **up** to move picker cup **closer to the wall** above the port flap and **down** to move **away from the wall**. Press “\*” to test.*



*Cup should stop the thickness of a quarter from the wall.*



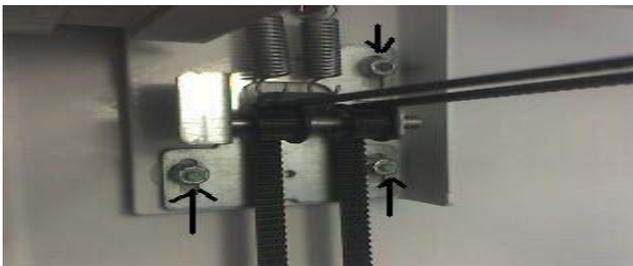
## 6) Check belt tension:

*Press program button twice to enter the test mode, press “F” for **Factory Diagnostics**, press “\*” to enter **Factory Diagnostics** then press “1” to enter “**position test**” also pull the **left door interlock switch** this supplies power to the motors to test.*

*Move the picker cup from **E1** to **E9** several times and listen for belt slippage (ratcheting sound) if present first check white wheels under the picker cup. These wheels ride on the top of the bottom rail if they are sticking or dragging remove and clean as needed.*

*To adjust belt tension:*

***Generation 2** machine, loosen the (3) 11/32 nuts and adjust pulley assembly up 1/8<sup>th</sup> inch at a time, retest.*



*On a **Generation 1** machine loosen the belt clamp and pull the belt thru not more than 2 teeth at a time. Retest.*



## **7) Inspect XY axis:**

***Using the pass / fail tool check the gap between the top of the picker cup and the top of 4 gates A1 , A8 , E1, and E8.***



***In this picture the small end of the pass / fail tool does not fit (failure) the picker cup is too close to the gate.***



***In this picture the small end of the pass / fail tool fits in the gap (pass) no adjustment needed.***

***If the large end of the pass / fail tool fits in the gap the picker cup is mounted too far away from the gates.***

**8) Inspect the bottom rail of the “XY” axis:**  
*Check for syrup spills and check the 2 white wheels that ride on the top of the rail, Clean if necessary.*

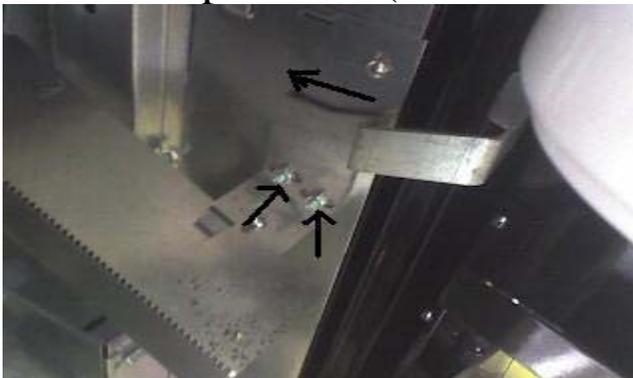


**9) Inspect door bundle harness:**

When the service door is opened all the way the harness should not pull on the control board. If it does remove screw form “P” clamp.



Adjust door stop inward (bottom of the coin return chute).



**10) Check for missing push nuts on coin return assembly:**



**11) Check port door function:**

*Push the **program** button twice to enter the test mode then press **“F”** for **Factory Diagnostics** then **“\*”** to enter **Factory Diagnostics** then **“2”** for **port test** then pull the **left door interrupt switch**.*

***“A”** opens the port door **“B”** closes the port door **“C”** turns on the vend sensor **“D”** turns off the vend sensor **“E”** test the picker cup light and **“F”** test the port door light.*



## **12) Test the Vend Sensor:**

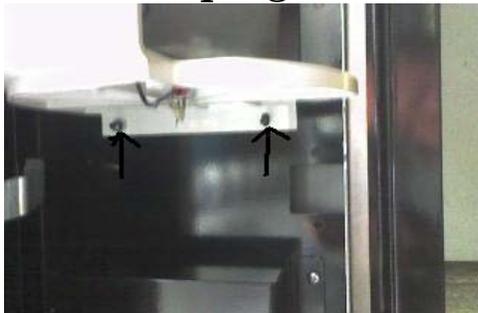
*If the port door fails to open when a product is delivered, suspect the vend sensor, to repair:  
Remove the 2 screws from the back of the port door assembly,*



*Remove side panel,  
Power down, unplug the vend sensor,*



*Remove (2) 11/32<sup>nd</sup> nuts and drop the bottom of the assembly  
so you can clean excessive grease from underneath the vault  
door then plug in sensor and power up.*



### **13) Vend test with both doors closed:**

*Press program button twice to enter the test mode then press "9" to enter test vend then "\*" close both doors and make selection.*

### **14) Test coins and bills with both doors closed.**

#### **Caution:**

*When replacing the program board take extra care with the temp sensor plug (3rd connection up from the lower left corner of the board).*

*Also check the shelf configuration:*

*Press the mode button once for the service mode the "8" for shelf configuration. To determine which shelf configuration is correct:*

*"A" button = "G" conf. Fits 20 oz Pepsi bottle all shelves.*

*"B" button = "M1" conf. Fits 20 oz Sobe bottle on B, C, D&E trays, 20 oz Pepsi is too tall for A tray.*

*"D" button = "D" conf. Fits all products all shelves.*

*"A" and "B" are Generation 1 machines and the shelf offset should be set at or near 9200.*

*"D" is a Generation 2 machine and the shelf offset should be set at or near 2500.*