

OMNICHECK 360 DETECTION SYSTEM TROUBLE SHOOTING MANUAL



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REVISION HISTORY

REV.	DATE	AUTHOR	APPROVED BY	DESCRIPTION
1.0	Jan 12 2020	Adam Szekely	Adam Szekely	Document Creation

INTRODUCTION

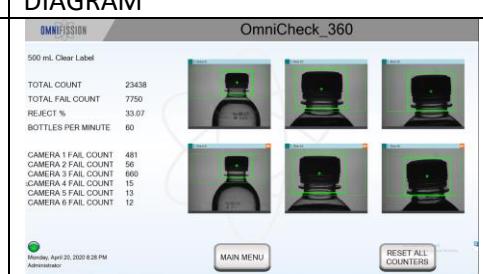
This manual is used to figure out the most likely causes of system malfunction. It is assumed that the following pre inspection has been conducted.

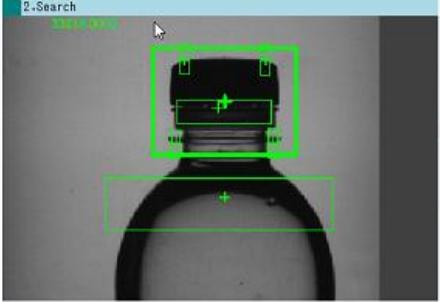
1. Trigger system is operational and triggering on the bottle cap
2. Lights cameras and system is operational
3. Protective panel inside the tunnel has been cleaned once a day with
4. Rejector is operational air to the rejector is sufficient.

Trouble shooting is broken down into 3 sections

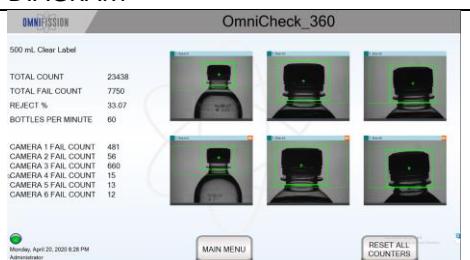
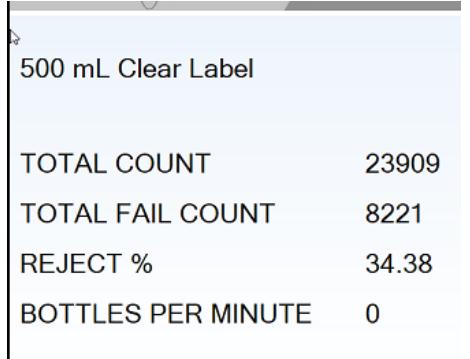
1. False reject the system is rejecting good bottles
2. False accept the system is not rejecting bad bottles
3. Servo system malfunction

REJECTING ON INSPECTION (FALSE REJECT)

STEP	DESCRIPTION	DIAGRAM												
1	<p>Verify that it is a legitimate false reject by examining the dashboard screen last reject and the bottle. Ensure you have the SAT fail limits for all inspections. i.e. high cap must be 3mm above the nominal correctly torqued cap.</p>	 												
2	<p>Identify which camera is rejecting this bad bottle. NOTE: Camera 1 inspects for cap and fill Camera 2 inspects for cap only Camera 3 inspects for cap only Camera 4 inspects for label only Camera 5 inspects for label only Camera 6 inspects for label only Camera 7 inspects for color only.</p>	<table border="1"> <tbody> <tr> <td>CAMERA 1 FAIL COUNT</td> <td>481</td> </tr> <tr> <td>CAMERA 2 FAIL COUNT</td> <td>59</td> </tr> <tr> <td>CAMERA 3 FAIL COUNT</td> <td>660</td> </tr> <tr> <td>CAMERA 4 FAIL COUNT</td> <td>15</td> </tr> <tr> <td>CAMERA 5 FAIL COUNT</td> <td>13</td> </tr> <tr> <td>CAMERA 6 FAIL COUNT</td> <td>12</td> </tr> </tbody> </table>	CAMERA 1 FAIL COUNT	481	CAMERA 2 FAIL COUNT	59	CAMERA 3 FAIL COUNT	660	CAMERA 4 FAIL COUNT	15	CAMERA 5 FAIL COUNT	13	CAMERA 6 FAIL COUNT	12
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STEP	DESCRIPTION	DIAGRAM						
3	Navigate to the respective camera and place the bad bottle through the inspection. Compare the calculated value with the threshold. Adjust the threshold, as necessary. The highlighted Yellow is the value seen by the camera should be in the middle of the min and max.	<p>LEFT CAP HEIGHT MIN LEFT CAP HEIGHT MAX LEFT CAP HEIGHT RIGHT CAP HEIGHT MIN RIGHT CAP HEIGHT MAX RIGHT CAP HEIGHT</p> <table border="1"> <tr><td>137</td></tr> <tr><td>110</td></tr> <tr><td>165</td></tr> <tr><td>138</td></tr> <tr><td>110</td></tr> <tr><td>165</td></tr> </table>	137	110	165	138	110	165
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4	Ensure the position of the inspection window is correct. If not adjust the positions as required to find the correct edge / shape. NOTE when adjusting inspection zones, it is possible that the system will reject everything, disable rejection for the camera you are adjusting. Then do not forget to enable rejection after adjustments complete.							
5	Observe production and verify operation	N/A						

NO REJECTION OR INSPECTION

STEP	DESCRIPTION	DIAGRAM
1	<p>Verify that it is a legitimate bad product by examining the dashboard screen last reject and the bottle.</p> <p>Ensure you have the SAT fail limits for all inspections. i.e. high cap must be 3mm above the nominal correctly torqued cap.</p>	
2	Ensure that you see an increase in throughput values on the dashboard screen if not the system is not triggering, or the encoder is failed	
3	If the system sees the bad bottle but the rejector does not active, ensure that rejection is enabled for that camera yellow shaded button needs to be red.	
4	If the rejector is enabled in the software, ensure the Air regulator is on and rejector is functioning properly	

SERVO FAILURE OR MANUAL SERVO MOVEMENT

Use this procedure when the servo cannot be moved automatically, or a servo motor / drive failure occurred, and replacement part is not in stock.

STEP	DESCRIPTION	DIAGRAM
1	Place the system into manual mode by unplugging the power to the servo drive. See the unplugged power cable in the picture	
2	Using your finger rotate the shaft until the camera bracket aligns with the mark left by the installer during installation.	
3	On every recipe change or power up / down the failed servo messages must be accepted by clicking OK on the screen	