

**TROUBLESHOOTING TIPS FOR WATTSUN AZ100 & AZ200 TRACKERS MANUFACTURED AFTER JAN 1997**

PROBLEM	SOLUTION
For problems arising during initial installation	<ul style="list-style-type: none"> <li>• Check for appropriate dip switch settings in accordance with installation parameters</li> </ul>
Tracker stopped moving	<ul style="list-style-type: none"> <li>• Test for voltage at controller input.</li> <li>• Test for blown 5 Amp fuse in controller.</li> <li>• Test for voltage at controller azimuth output (green &amp; white wires).</li> </ul>
No voltage at controller input	<ul style="list-style-type: none"> <li>• Check for loose wire connection.</li> <li>• Check for blown supplemental fuse if one is installed.</li> </ul>
Fuse blown in controller	<ul style="list-style-type: none"> <li>• Check for tracker binding on service loop or obstruction.</li> <li>• Replace 5 amp fuse and test.</li> <li>• Check for continuity to ground from azimuth and elevation wire terminals (Green, White, Red &amp; Black) They should read no continuity.</li> <li>• Replace main electronic board.</li> </ul>
No output at green and white azimuth wires	<ul style="list-style-type: none"> <li>• Remove green and white wires from motor terminal strip and test voltage when disconnected. No voltage = replace control box</li> </ul>
Voltage at green and white azimuth output wires when disconnected from motor	<ul style="list-style-type: none"> <li>• Test azimuth motor. Apply DC (12-24 vdc) voltage to terminals 1 &amp; 2 on motor. (CONTROLLER WHITE AND GREEN WIRES MUST BE DISCONNECTED FROM MOTOR) Damage will result if controller output wires are connected to a voltage source. If motor runs check current draw. Current draw maximum on AZ motor is 750 ma.</li> </ul>
Tracker tracks for a moment and then stops for the rest of the day	<ul style="list-style-type: none"> <li>• Internal self-resetting fuse is blown. Disconnect power to the controller to reset the fuse. Test tracker using internal dip switches.</li> <li>• Measure current draw of Azimuth Motor (should not exceed 750 ma)</li> <li>• Check for tracker binding on service loop or obstruction.</li> </ul>
Tracker tracked normally in all directions but stopped at East or West limit position.	<ul style="list-style-type: none"> <li>• Tracker limit switch cams set too far and tracker hit welded stops. - Reset limit switches and re-cycle input power.</li> <li>• Check for sticky limit switch.</li> </ul>
Tracker "ran by" limit switch beyond normal East or West limit position and stopped at the welded stop.	<ul style="list-style-type: none"> <li>• Test for short to ground in motor. Check continuity between each Azimuth motor power terminal and ground on the pole.</li> <li>• Replace motor.</li> </ul>
Tracker does not stay on track in direct sunlight; wanders in one direction during cloudy conditions - operates with dip switches.	<ul style="list-style-type: none"> <li>• Replace optical sensor</li> </ul>
Tracker does not return East at night (Battery powered only)	<ul style="list-style-type: none"> <li>• Check for power input at night</li> <li>• Illumination on sensor at night</li> <li>• Replace optical sensor</li> </ul>
Tracker returns East in late morning early afternoon ( PV powered only)	<ul style="list-style-type: none"> <li>• Tracker moving too far to the West.</li> <li>• Check for true South orientation of drive and make sure West limit stops tracker 10 degree before due West.</li> <li>• Replace optical sensor</li> </ul>
Tracker oscillates E/W or N/S	<ul style="list-style-type: none"> <li>• Water in optical sensor chassis</li> <li>• Water in controller chassis</li> </ul>

# Troubleshooting Azimuth Trackers V#3 Controller

