



### **Servicing an Autohelm 4000 / ST4000 Wheel Assembly**

1. Remove your lever by cutting it in half along the shaft - carefully. You can use a Dremel to do this. Pull out the remaining roll pin.
2. Split the unit in half by prying gently with a wide blade screwdriver near the 7 roller wheels. It will pop in half.
3. Check to make sure you have all 7 roller wheels and that one hasn't broken off sometime ([i3DGear.com](http://i3DGear.com) sells the rollers as well as a broken stem repair kit). Missing one roller wheel will make the unit run rough, stick and grab.
4. Spray the entire inside and outside with WD-40 and clean it with a rag - especially on the running surface of the belt inside (this is important for proper functioning). It will also make it look nice and new on the outside! Make sure you wipe all the WD-40 off.
5. Clean the belt the same way.
6. Unscrew the eccentric holding plate - it's about 6 Phillips screws.
7. Pull out the eccentric shaft (that the lever was on). Remove the running wheel and clean and polish it inside and out with WD-40. Use some steel wool on the inside brass surface. Rub in the direction of rotation, not across the brass surface.
8. Do the same with the eccentric adjustment wheel across from it.
9. Put it all back together. Just snap the wheel together, making sure the belt's not in the way. It feels like it's going to break, but that's how you do it.
10. It should all spin easily now - should freewheel very easily.
11. Put on a new lever (also available from [i3DGear.com](http://i3DGear.com)).
12. Before you actuate the lever with full force, loosen the eccentric adjustment cam - it's behind the little plastic plug opposite the drive motor from the lever shaft. Just use a pair of needle nose pliers or something to stick the tips into the adjustment and loosen it off. Best to start the adjustment process with it as loose as possible.
13. Actuate the lever. Check how much friction you have in trying to rotate the wheel. You shouldn't be able to slip the belt. If you can, then tighten the eccentric adjustment a little. Do this until you have enough friction, but not so much that it requires excessive force on the lever.
14. It's actually best to just leave that little adjustment cam plug off - it's a bad design and simply allows salt water to get trapped behind it and corrode the eccentric. This way, any rain storm or hosing down you do will regularly clean it out.