

Heli-Max™ 1SQ Trouble Shooting and Repair Tech Sheet:

The Heli Max™ 1SQ is very strong for its weight. It takes quite a bit of abuse but can from time to time get “tweaked” and will need to be checked over to keep it in top flying condition.



The Heli-Max™ 1SQ is very easy to work on and repair. Only simple tools like the included Phillips screwdriver (or any Number 1 Phillips screwdriver) and an additional hobby knife are needed to keep it in top flying shape.



The most common questions are:

My 1SQ pulls in one direction, why does it do that?

One of my motors does not spin free like the others, why is this?

Both of these conditions are typically the result of an impact to a hard surface. What can happen is, one or more of the propellers or motors can “jam” as a result of the impact. Below we list the way to check and adjust for this as well as how to replace the motor arm if needed.

Let's start by checking each of the propellers.

1: With the 1SQ on your work bench give each of the propellers a spin. They should all spin freely and rotate 3 to 4 revolutions. NOTE: It's a good idea to check this after each hard crash! If you find one (or more) propellers that do not spin freely, here are the steps to help determine what might be causing this.



2: Push up on the bottom of the motor to make sure the motor is fully seated upward in the mount. In the event of a crash the motor can shift downward in the mount, pinching the propeller against the motor mount.



3: The propeller can slide down the shaft pinching the propeller against the motor can. After following step two it's best to check the clearance of the parts. We have found that the best distance between the prop and the motor mount is about 1mm, or the width of a hobby blade. You can use your hobby knife to pry the blade away from the motor mount if needed.



4: Remove the little red rubber cap from the bottom of the motor. You can pry the cap off with your fingernail or hobby knife. Using your included screwdriver, insert it into the hole and lightly push. When done remember to replace the rubber cap! In some cases the impact can be severe enough to shift the motor end bell. This step helps re-seat the part.



5: Re-spin the prop as you did in the beginning. It should spin freely. It's also a good idea to check to see if you might have bent a motor shaft; having said this, the propeller should spin straight and true.

NOTE: If one motor does not spin as freely as the others, go ahead and give a quick test fly. Although this is not going to give you the very best performance it might get you flying. Just remember, the motor should not be tight or bound up or you WILL damage your Quadcopter.

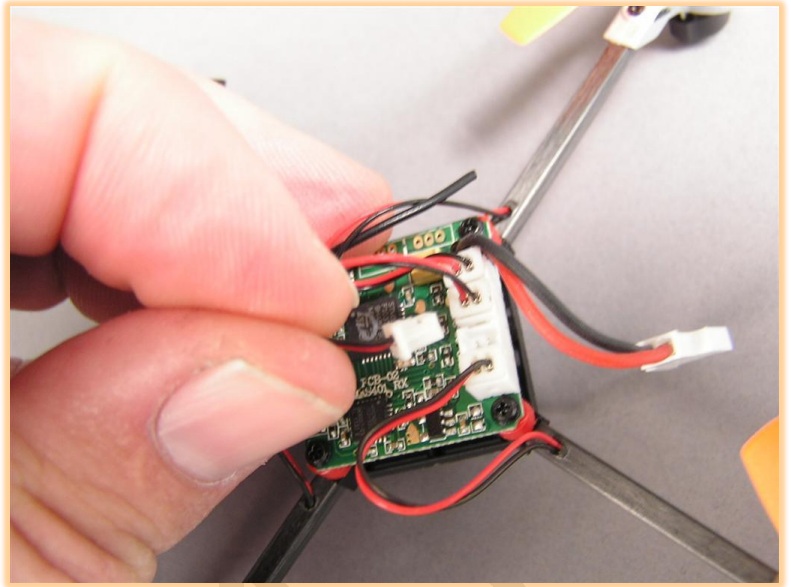
To replace the motor arm:

If you find your propeller still does not spin freely you might want to replace the part. Here is a quick and simple guide on how to do this.

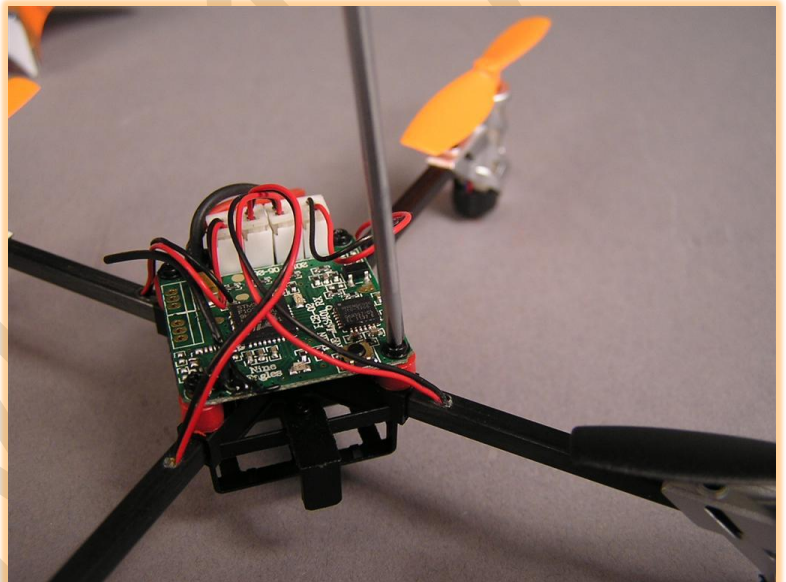
1: Start by removing the body. Simply pry up on one corner to release it, then do the same with the other three corners.



2: Un-plug the connector to the motor arm you wish to change.



3: Using your Phillips screwdriver loosen, but do not remove, the screw located on the top of the control board. You only need to turn it out about three turns or so to free up the arm.



4: Grasp the arm and pull it from the main chassis.

Install the new arm and re-tighten the screw. **DO NOT OVER TIGHTEN.** Plug in the power wire to the motor and replace the body.

Happy flying from the Heli-Max™ team!

