Application Note: October 23, 2007 Manufacturing Error on Initial AO-8 Units

To AO-8 purchaser's who bought one of the first units:

Please Perform the Following Rework before Using the AO-8

A Belleville washer was installed under a screw head where it should not be. The washer is marked in the photo below. If you don't have the washer you don't have the problem, and you can ignore this Application Note.



The problem is that the washer prevents the screw from making solid engagement with the flat spot on the motor shaft. The paddle assembly then can then vibrate to the right, causing the paddle to go to its limit when it homes upon the next power up. If the paddle ever goes to the limit it will require return to SBIG to fix, so if you have not yet had this problem you should fix it <u>now</u>. The repair is easy, and can be performed as follows:

- 1) Find an Allen wrench (3/32") that fits the screw.
- 2) Take careful note of how much of the flat part of the shaft is showing. It should be about 0.04 inch (1 millimeter).
- 3) Depress the paddle slightly against the spring and hold it there, taking care to not let the paddle move left-right on the shaft

- 4) Remove the screw with your other hand, take off the washer, replace the screw, and tighten it down. Now you can let go of the paddle.
- 5) Plug the AO-8 into the camera. Power up both (you do not need to establish a link). The AO-8 will home. The paddle window should be parallel to the housing. If it is not, in the left-right direction, then power off the camera, hold the paddle down slightly, loosen the screw and shift the paddle left-right on the shaft slightly. Tighten down the screw and try it again. Repeat until satisfied with the parallelism. It is not super-critical since the mechanism has margin at the limits of its excursion.
- 6) If this all fails, contact Alan Holmes at SBIG (<u>alanh@sbig.com</u>) for instructions on returning the AO-8.