

## **Electrostatic Woes With Digital Scales??**

**Do you have a digital scale that will not hold a tare zero, or perhaps will not settle down to a consistent reading for the gemstone you are trying to weight? Are you so tired of dealing with a "squirrely" digit scale you feel like throwing it out, and buying a different brand or model? If so, perhaps your problem is electrostatic surface charges rather than a bad scale. It is certainly an electrostatic charge problem if you have ever observed your scale show a slight reading difference as you approach but don't touch anything with your tweezers or fingers.**

**The problem with most economical digital scales is that the case is plastic, and there is no way for a static charge to drain off, or to become electrical charge neutral amongst the various components of the scale. The problem is typically very bad with a brand new scale, and sometimes the problem seems to become less severe with use and handling. Frequent contact with your hands causes trace amounts of salts in your body oil and fingerprints to coat the case, and other components of the scale, which helps drain off or balance the electrostatic charge.**

**There is a faster and better way to fix this problem. A quick trip to the laundry room may turn-up a product called "Bounce" or some other similar brand name. These are sheets of a fibrous mesh that are treated with a waxy or soapy substance that has a slight, but significant electrical conductivity. When placed with clothes in a dryer, the substance is transferred to the clothes, and eliminates static charge and static cling. So, what is good for clothes should be good for the scale. I just gently rub the mesh sheet all over the case of the scale, its pan, the platen, the dust cover, and anything else that I can get to without a screwdriver. You need to be very gentle when touching anything that puts a pressure on the internal pressure cell. It is possible to overload it to the point of damage. Try to keep contact pressure with the load cell to within scale weight limits, and you should have no problem. If you notice the scale seems**

**to be a bit waxy to the touch afterwards, just wipe it down with a clean dry Kleenex, using the same pressure precautions as above.**

**This treatment worked on three different scales that I have; a Nexus PC50, a PACT 50 gram range, and a RCBS 70 Gram range. All three are now static free. The Nexus was so "squirrely" that even with the draft cover down a gemstone weight would walk up and down several points as I watched, and it would not keep a tare zero through a single weighing operation. If I placed my hand within one inch of the platen the indicated weight would change several points. It is now fully functional without a static charge problem. If you have a troublesome scale I hope this works for you.**

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