

Runout (wobble)

26 April, 2021

I just installed (very much with Mary's help) a ceiling mount dust filtration system in my new workshop. There's not a lot to it – basically an enclosed squirrel cage impeller in a big box with filters at the intake end. I cringe to admit I installed it without first conducting bench testing. Turns out a few past buyers of this model have had problems with impeller runout, so I was nervous when I first turned it on. For those who don't recognize the term, runout is what happens when the shaft and turning mass are not properly aligned or bearings are loose or inadequate, or, or, or... The result is nutation, which can lead to early motor bearing failure and even if not, produces an ungawdly racket and can transmit vibration throughout the house, thus annoying the spouse.

Enough tech talk; you can look up these ideas on your own if you like but suffice to say, I breathed a huge sigh of relief when I turned the thing on and ran it through its paces with a soft whoosh and no significant impeller wobble.

Wobble! THAT's the word I was looking for! Gotta add that to the title... There, done.

My issues with wobbly things goes way beyond ceiling blowers. In fact, wobble in many forms and situations is pretty much a daily occurrence for me at age 68.

The wobble that causes me the most inconvenience is a product of my own corpus instabilis. I trip easily over the smallest cracks in the sidewalk. I sometimes sway in non-windy conditions. My shoulders and hips bear the reminders of numerous instances in which my walking body did not proceed in a straight line, thus coming into unplanned contact with wall hangings, bandsaw fences and various other protrusions.

Peak wobbliness is to be found in my hands, which tend to rock and roll at the most inopportune times. Starting a screw can take several tries. Using a sharp chisel is an exercise in careful planning and support. Speaking of which, I NEVER chisel or carve toward myself simply because a badly timed tremor could send the sharp edge flying in the direction of the largest available target which in most venues, is my ample gut.

I've had friends ask why I keep hand braces and bits on hand when a power drill works so much faster. And I explain that's exactly the point. Yes, I have a small drill press for the most exacting work. And I use a cordless drill for most rough and ready work – predrilling for screws or lag bolts, etc. But for those middle ground jobs, like hogging out the waste for a mortise or prepping a draw bore, the brace with an auger bit is perfect. It works more slowly than its amped up progeny, so I can make constant course corrections to overcome my natural tendency to wobble. And it makes less noise than a hand drill, which I appreciate, as do the neighbors.

Wobble is part of my life these days. But it's not so much an obstacle as just one more input to take into account. And frankly, I suspect if the squirrel cage had too much runout I would have just fixed it myself rather than going through the return process. After all, I have a personal interest in not discarding that which wobbles.