

I agree that you will do better with watch cleaning solutions \*in the machine\* once you get to that stage. Your question was about hand-cleaning, though. For initial stages of learning it's a fantastic way to learn the basics, and it danged sure doesn't take anything exotic or expensive. There isn't a real risk of ruining a watch as long as you don't physically abuse it. If you do "ruin" one, hang onto it so you can fix it in a few years. That's really rewarding. I learned to work on watches by buying a whole herd (10? 12?) of Bulova 5AD ladies' watches. I "ruined" three of the earliest ones by horribly mangling the hairsprings before I learned how to properly remove a balance assembly. My daughter has all three of them in her rotation now because I fixed them once I learned how to work on hairsprings.

The amount of exposure to the solvents needed is pretty minimal, so I'm not going to comment on potential-long-term-intense-overdosage-if-you're-a-rat-and-live-in-California-maybe-perhaps carcinogens. I'll tell you what works, and you can decide from there. Just don't drink or snort the stuff or soak in it for hours. Use common sense, in other words. You can choose whether you use gloves and respirators and Tyvek suits and all that folderol. I use my bare hands with anything I talk about here. No, I won't discuss the ohmygawd what-ifs - this stuff is benign for our purposes. Denatured alcohol can dry your skin a bit and it stings like the devil if you get it in a cut. That's about the biggest really-truly actual-factual "danger" posed by these things if you keep your head ou - er - use common sense. Don't try to light it on fire. Don't drop a lit match or cigarette in it. Don't use it near an arc welder or a charcoal grill or a gas stove or an acetylene torch. Jeez, just \*think\*. (Is that enough of a disclaimer?)

Coleman fuel (or lighter fluid) works quite well as the primary cleaning solvent. (All the high-cost cleaning solutions are fancy-schmancy tightly-controlled versions of the same stuff in Coleman fuel with a little soap.) Take the watch apart, put the parts in a jar (or can or bowl or butter tub or whatever else you have handy), cover the parts with Coleman fuel, put the lid on, and let them soak. Putting a lid on isn't critical, but it keeps things from splashing around. The whole movement (as in not the dial or hands or plastic parts if there are any) can go in. (The movement can even go in before you take it apart as a pre-clean. That can sometimes be a real blessing for getting gross stuff off!) Swish it around every once in a while. Not hard enough to bang things around, just enough to move fresh solvent around the parts that have grunge loosening. At room temperature give it maybe a half hour total? That's probably gross overkill for most watches, but it won't hurt. Then take the parts out and see which ones actually need a brushing. The vast majority won't. If you use a sharpened toothpick (or other such item, let's not start a Holy War over the specific species and shape of wood) to peg out the pivot holes before you start, then peg them again with a toothpick dipped in solvent and swish

them again, you'll get them pretty well spotless. Repeated trips through a solvent bath (with fresh solvent) may be needed for things that are completely gross, but it'll get clean eventually. If you want to go with multiple trips through the solvent as a regular course of action it won't hurt things, but it's usually not really necessary.

Follow that up with a fairly quick swish in denatured alcohol. Don't leave the pallet fork or balance wheel in the alcohol - just a dip and swish. Leaving the fork and balance in alcohol runs the risk of melting the shellac holding the jewels in place. A dip and swish will be harmless to them, though. The other parts can take as long or as quick as you want. The alcohol will do a good job of rinsing things and it only takes a few seconds to do its job. Other than shellac-mounted things the alcohol won't hurt anything, so there's no hurry.

As you take things out of the alcohol it's a good idea to dry them somewhat quickly in warm moving air just to get them thoroughly dry and avoid condensation. I usually do the alcohol dip in the bathroom and have a hair dryer ready, set to medium heat and a fan speed that won't blow the parts across the room. If it's not too hot for your hand it's not going to hurt any part. A paper towel is a good carrying sling for things once they're finished.

I use a soft toothbrush for hand-cleaning things that need a brush. Stiff bristles don't get into nooks and crannies as well. For stuff that's super-stuck, just scrape-scrub it with a toothpick.

A tea infuser ball, especially a mesh one, works really-really well as a container for the parts. Put whatever will fit into the ball, drop the whole thing into the solvent, let the solvent drain out when you remove the ball, drop it in the alcohol, let the alcohol drain out when you remove the ball, and blow the hair dryer through the ball at all angles. That saves the hassle of wrangling individual itty-bitty parts.

I hope this stimulates some thoughts.

Glen