

## **Gen 1 – Round HEPA filter?**

Another small project nearing completion. This is a <\$20 cooling system for the Shopsmith headstock. In my case, that is a PowerPro and you may have read that there are reports of overheating issues especially if run at top speed for any length of time. Also, sawdust is an issue with the powerPro - you do not want a layer of sawdust sitting on the circuit board! My solution is a cheap HEPA filter and a 12v computer fan, hanging from the way tubes (or under the headstock, ideally) and blowing air in via the inspection port of the headstock. As you can see, I have a round electrical junction box, which is a very close fit to the inspection port.

The goal is both cooling and creating positive air pressure inside the headstock. If you have filtered air and positive pressure, dust-laden air can only escape the headstock; it cannot enter. So this HEPA filter will make sure no more sawdust will get into the headstock - EVER. Additionally, it should cool it significantly. Once I have it set up I will run some temperature tests and see just how well it performs.

Oh, and yes, the hose will be MUCH shorter 😊 Should only be 12-18 inches long. This is all made out of spare parts I had lying around, apart from the filter and the fan.





## Gen 2 – Only change is HEPA filter?



