Dyson engineers labor toward hair-free turbine solution (w/ Video)

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Credit: Dyson

(Phys.org)—At such an innovation rich time of telepresence, 3-D printing, advanced cryptography, advanced medical imaging, and robotics, you need to wonder why in all this time we never got a break with someone somewhere coming up with a hair-clog solution for vacuum cleaners. Better late than never. Dyson has a tool that avoids the problem of having to scrape off and cut away at hair around the brush bars. Called the Dyson Tangle-Free Turbine the problem solver is listed at $69.99 and is promoted as a tool to reduce hair entanglements that occur during vacuum cleaning.

The designers took a second look at traditional brushes at the bottom of vacuums. They noticed the way the tools too easily ball up fibers on carpets and upholstery. They wanted something other than a single spinning cylinder. Instead of a horizontal spinning brush, Dyson's accessory uses a more vertical axis of movement. The device features two flexible counter-rotating heads with built-in brushes that prevent hair-clogging and send hair into the vacuum bin. These two counter-rotating discs spin like floor buffers, and that is key to the solution. Also, the designers noted how brush bars of conventional turbine tools are rigid and lose contact with uneven surfaces. The brushes on the new Dyson tool are flexible and can bend to maintain contact across uneven surfaces. The design is such that the brushes reach to the front and side of the tool, drawing in hair and dirt from all directions.

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The simple answer to hair clogs in vacuum cleaning process, evidently, is not so simple, at least when it comes to the Dyson brand of engineering with a difference.

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According to reports, the tool debut is a result of more than 50 engineers, 187 prototypes, and four years of work.