



Neato Botvac D series Belt gear drive



Voyager

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Summary

This drive gear replacement for the Neato Botvac D7 is bolstered to ensure it is strong enough to withstand the forces...

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Update: I've added a version that includes grease channels to help retain more grease.

This drive gear replacement for the Neato Botvac D7 is bolstered to ensure it is strong enough to withstand the forces the beaterbrush gives it.

The official replacement part is an absurd \$50 for a piece of plastic.

You will need to pack it with grease before installation. I used high temperature automotive wheel bearing grease, but any non-aerosol grease should work fine.

You need to use at least 5 walls so that the part is solid where it needs to be.

For materials I have confirmed PETG and Nylon work. PLA will deform at the temperature this part reaches. ABS might also work but the model may need to be scaled to account for any shrinkage that will occur and I have not tested it.

I recommend annealing the part with a hairdryer or heat-gun after printing to ensure it is as strong as possible.

I have been using this replacement for two months running twice a day so far with no problems (PETG).

Update: I have printed another gear now that my carbon fiber nylon has arrived. It works perfectly following the same steps as before and I have been running them long term in two different Botvacs.

If your Neato doesn't start after installing this replacement part due to it being too tight, try spinning the brush by hand for a minute or two to loosen it enough that it can start on it's own. You can also spin the brush by hand when starting the Neato for the first time to overcome static friction (afterward this fixes the tightness issue).

Note: You will most likely need a T10 security Torx screwdriver to disassemble the Neato Botvac to replace this part.

Model files



d7-belt-gear-with-grease-channels.stl

[Find source .stl files on Thingiverse.com](#)

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