



VanMoof No 3 - Upgrade to 8-speed gear

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INTRODUCTION

VanMoof's are fantastic-looking bikes but quite heavy and I found the 3-speed gear way too over-gearred for the hills here in Sydney. Converting to an 8-speed suddenly made my bike much more usable.

It's really important you get the correct hub gear (36 spoke, with coaster brake) - I brought the wrong one first so don't make my mistake! Gears last for a long time so I was happy to use a second-hand one.

Spreading the dropout to take the new gear was a concern so I had this done at a bike store and there's no evidence of damage.

TOOLS:

- [Spoke Wrench](#) (1)
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Step 1 — What you'll need



- Shimano SG-C6001-8C Nexus 8. This is the one with the coaster brake.
- Chain ring, gear lever, seals, and clips
- Shimano Grip Shifter Nexus 8-speed SI-C60008
- Gear cable (inner and outer)
- Spokes 36 * 284mm stainless steel spokes

Step 2 — Double check your spoke length



- Measure the inside diameter of your wheel
- Use this calculator <https://leonard.io/edd/>
- Add 2mm. You should get 284mm spokes
- I brought silver Halo spokes from ebay. They are decent quality and have not rusted.

Step 3 — Stretch your frame dropouts



- You need to stretch the rear frame dropouts because the 8-speed hub is wider (135mm) than the 3-speed one (110mm)
- I got my local bike shop to do this because there's a risk for damaging your frame.
- The cost was \$150 AUD

Step 4 — Replace the spokes



- Remove all the old spokes from your wheel
- Spoke the 8 speed gear into the wheel. This is the best guide <https://www.youtube.com/watch?v=miU6mi0K...>
- Tighten all the spokes using a screwdriver. Use the same torque on the screwdriver and check by "plucking" the spokes so they sound the same
- Turn the bike upside down, install the wheel, and true the wheel. I hold a screwdriver against the frame and slowly spin the wheel. When it moves in, I just tighten the opposite spokes

Step 5 — Install back wheel and cable



- Pull the old inner cable out from the front
- Push the new inner cable into the old outer cable
- Pull the old outer gear cable out of the back of the bottom of the frame. LEAVE THE INNER CABLE IN so you can use it as a guide through the frame.
- Push the new outer cable in from the back

Step 6 — Replace the gear twist



- Remove the handlebar grip. I pushed a spoke between the grip and the bar and rolled the spoke to loosen the grip
- Install new gear change
- Replace the handle bar grip. I wiped the handle bar and inside grip with alcohol.

Step 7 — Connect the gear



- Connect the gear cable.
- Use a spoke to rotate the gear change