# <mark>1007</mark>terrain

# **FAQs Metropolitan**

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# **1.** Why does the Metropolitan use a Gates Carbon Drive<sup>®</sup> belt drive?

The Metropolitan is designed as an urban and commuting bike. The Gates Carbon Drive® belt has certain qualities which make it ideally suited for that purpose.

# 2. What are the advantages and disadvantages of Gates Carbon Drive® belt?

Like any technical product, the Gates Carbon Drive® belt has some advantages and disadvantages. It is important for anyone considering what the personal preferences are.

Advantages:

- No more dirty clothing due to chain oil or grease
- Dirt insensitive, even in rain, snow and dirt
- Belt itself does not need any maintenance
- Lower weight
- Increased durability

Disadvantages:

- Sensitive in terms of bending, buckling and twisting
- "Abuse" of the Gates Carbon Drive® belt is not necessarily visible from the outside
- No repair possibility of single "chain links"
- The belt line has to be more precise than a chain line

# 3. Will the Gates Carbon Drive<sup>®</sup> belt replace bicycle chains?

No, at least not at tout terrain. However we think the belt drive is a valuable addition to existing transmissions to choose from. You can compare it to the Rohloff hub, which is also an addition to traditional derailleur systems. As mentioned in point 2 everybody needs to prioritize the bike's intended application and opt for a system.

### 4. What is the tout terrain VBA System and how do I adjust the belt line?

The tout terrain VBA (Variable-Belt-Adjustment) system easily allows the user to set the proper belt line and tension when readjusting the system. The VBA system is patent pending and in our view an outstanding advantage with various benefits for the user compared to other belt drive bike designs. The belt line can be simply adjusted by sliding the eccentric bottom bracket in the BB shell.

### 5. Does the Gates Carbon Drive® belt stretch over time?

Technically speaking, the Gates Carbon Drive® belt does not stretch. In fact the belt tension can degrade over time due to wear on the sprockets. For the user this is perceived as a stretching or lengthening of the belt. By readjusting the belt tension this can be corrected. However, the sprockets and belt need to be replaced, if the systems wear limit is reached.

### 6. How do I adjust the correct belt tension?

Ideally belt tensioning is done using a special belt adjustment gage provided by Gates. If not available, you can adjust the belt tension by pressing / lifting the belt. The Gates Carbon Drive® belt should be moved up/downwards in the center of the drive train using a force of around 20N-45N (2kg-4,5kg) and should be able to move around 10 mm in the each direction. Please also see the Gates Carbon Drive® belt owners manual for more detailed instructions.

### 7. What is the lifetime of a Gates Carbon Drive® belt?

Unfortunately there is no general answer to this question, because this strongly depends on the conditions the belt is used in. Under laboratory conditions the lifetime reaches about 20,000km. In typical everyday usage this can be as much as 10,000-15,000km. In general the more extreme the conditions are, the greater the wear - very similar to the chain. However very likely a belt's lifetime is more than a chain's lifetime, also assuming the chain is very well maintained.

# 8. Does the Gates Carbon Drive® belt require special handling?

Yes. Gates Carbon Drive® belts must neither be bent nor folded contrary to its actual form. For permanent use it is VERY IMPORTANT to follow the guidelines from the user manual. You can find the manual to download on our website and also on the belt manufacturer's website.

# 9. Does the Gates Carbon Drive® belt require special maintenance?



No. Nevertheless, cleaning off dirt and sand with water should regularly be done. This increases the lifespan of the Gates Carbon Drive® belt. The Gates Carbon Drive® belt is chemically resistant. Contact with detergent should cause no damage. However, it is recommended to use neutral detergent and not to put the Gates Carbon Drive® belt into detergent for a longer period of time.

### 10. Can a Gates Carbon Drive® belt tear apart?

Yes. A Gates Carbon Drive® belt can break like a chain. However this is a rare defect and happens only if the belt has been mishandled (also see point 8.). During our intensive testing this hasn't occurred, but be aware that this can happen if the belt is mishandled.

#### **11.** Can a Gates Carbon Drive® belt slip over the sprocket?

A Gates Carbon Drive® belt can slip if the specified belt tension is not correct. Checking the belt tension approximately every 6 months will avoid this problem.

#### 12. Is the Metropolitan frame specially made for the use with a belt?

Yes. The Gates Carbon Drive® belt is an endless belt, which cannot be opened like a chain. The frame has a split dropout to insert the belt.

#### 13. Can the Metropolitan also be equipped with a chain?

Yes. The Metropolitan can be easily converted to chain drive (with internal gear hub).

#### 14. What type of transmission is available for the Metropolitan?

8-speed or 14-speed internal gear hub

#### 15. Why does the Metropolitan a built in rack?

The rack of the Metropolitan has been integrated into the frame design, to save weight by eliminating a great number of moveable parts and to increases its stiffness. Also the integrated rack increases reliability, with no screws to break or threads to tear.

#### 16. Is the rack removable?

No, the rack is firmly welded to the frame.

#### 17. Is the rack more robust than a bolt-on rack?

Yes, the rack of the Metropolitan with its oversized tubes and its fixed frame connections is more stable than a conventional rack. Especially when used with panniers the integration of the rack shows its full stiffness benefits.

#### **18. What is the TUBUS Racktime<sup>®</sup> system?**

The TUBUS Racktime<sup>®</sup> system is a quick release system for numerous accessories (baskets, bags) which can quickly and easily be mounted on the rack. Various accessories are available through the aftermarket.

### **19.** Is the integrated rack lighter than others?

Yes. The Metropolitan with the integrated rack weighs approximately 3100g. You'll often find our competitors in this weight area but without a rack. A separate rack can weigh over 700g, which would then be additional weight. Compared to robust aluminum frames there are still weight savings of up to 300g possible with additional increased reliability.

# 23. Is there anything special about luggage position on the integrated rack?

Compared to a standard rack the rack's top position is lowered by around 4 cm. This results in a more favorable center of gravity, as well as in a more favorable load distribution on the rear wheel. Additionally, the rear tube of the rack has been moved further to the back to achieve a better support of the pannier.

#### 20. What is an Ergo-Stop handlebar-stop?

The Ergo-Stop handlebar stop prevents the handlebars from turning more than 180°. So in case of an accident or if the bicycle falls over, the Ergo-Stop avoids dents and scratches in the top tube. The Ergo-Stop handlebar stop also allows cables and brake hoses to be cut to the optimal length. While saving weight this also avoids that the front light gets damaged by a cable or hose when the handlebar tips over.

### 21. Do I need to pay special attention when changing the wheel or the tire?

No. To change tires, or remove the rear wheel, the initial Gates Carbon Drive® belt tension does not need to be released. However, it is important to ensure that the belt is not bent and treated in accordance with the instructions manual mentioned in point 8.