Gates CARBON DRIVE™

TECHNICAL BULLETIN

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Sliding Vertical Dropouts vs. Eccentric Bottom Brackets

To properly install a belt drive, proper tension and alignment are needed. There are multiple ways to achieve this, but the two most common methods employed are the sliding vertical dropout and the eccentric bottom bracket (EBB). Gates does not recommend the use of standard horizontal dropouts. Below is a list of the basic pros and cons comparing sliders to EBBs. Attention to design and implementation can reduce or eliminate the issues for both designs, making either choice desirable.

Sliding Vertical Dropouts

Pros:
Allows angular adjustment of the rear wheel.

Ability to integrate the break in the frame with the dropout.

Can allow for more adjustment range, providing more gearing options.

Cons:
Parallel adjustment of drive requires additional steps or parts.

Possible brake setup issues with cantilever or linear pull brakes.

Wheelbase can change due to gearing choices.

Vertical Dropouts with EBB

Pros:
Usually considered to be the lower cost solution.

Side to side adjustment within the BB shell to fine tune belt line.

Wheelbase doesn't change with gearing change.

Cons:
Noise (creaking), or EBB slip are possible.

No ability for angular adjustment of the drive.

A separate frame break is still required.

Usually fewer drive options due to limited adjustment/throw of the EBB.