

The Kogswell Porteur/Randonneur Frameset

The best all-rounder **ever**



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This is not a racing bike. Because you don't have a support car. And it isn't a mountain bike. But it can do **everything** else brilliantly. You can commute on it. You can use it as a light or loaded tourist. It handles anything that even remotely looks like a road. And it does it all with comfort, safety, speed and fun.

We didn't design it. We copied it. It's based on a French newspaper delivery bike. Porteurs, the men and women who shuttled papers, flew through the streets of Paris on bikes like these. Joel Metz, bike messenger extraordinaire, brought them to our attention. And Jan Heine supplied us with the details of the geometry. Jan also pointed out that if we made three different forks, of varying geometry, the bike could be tuned for different uses like randonneuring, demanding long distance events.

Things you need to know about the P/R

The P/R frameset is a bit odd for a couple of reasons. For one it uses a tire size that's out of the ordinary. The '650B' tires were an integral part of the French design and so we kept them. They're perfect for the mission of this bike. They roll very nicely and they soak up pavement irregularities with glee. Owners report that they make a sport of looking for bad pavement. Aside from

comfort, 650B tires also have a real safety advantage. In low-light situations, on unfamiliar streets, you'll float over potholes and storm drains and never know it.

Another feature of the P/R that's odd is the fork. There are **three**. You chose one depending on which tires you plan to use and where you plan to carry a load, on the front or on the rear. If you want to know more about the forks, please read the test in the section beyond. Your dealer can help you pick the fork that's right for you.

Details

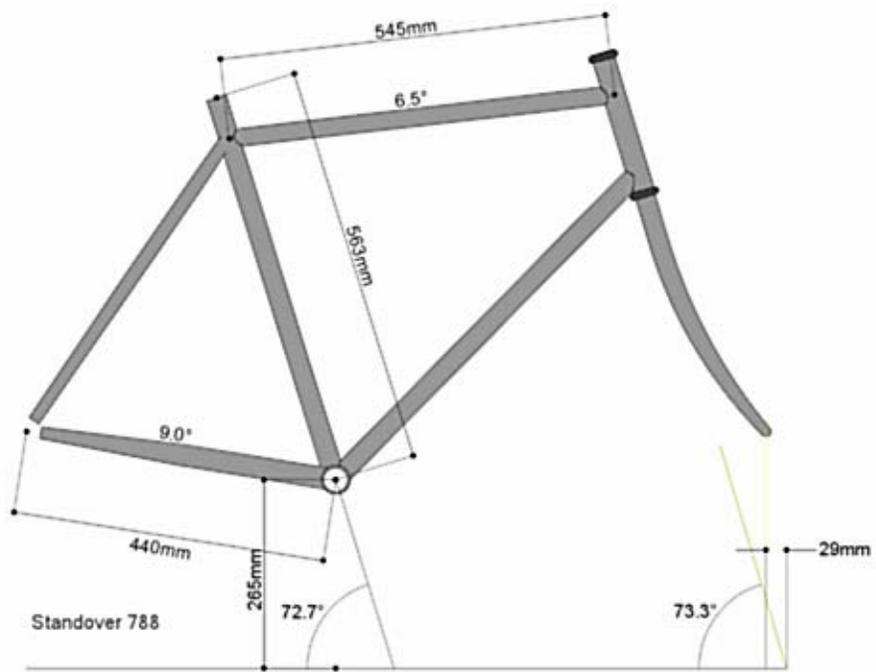
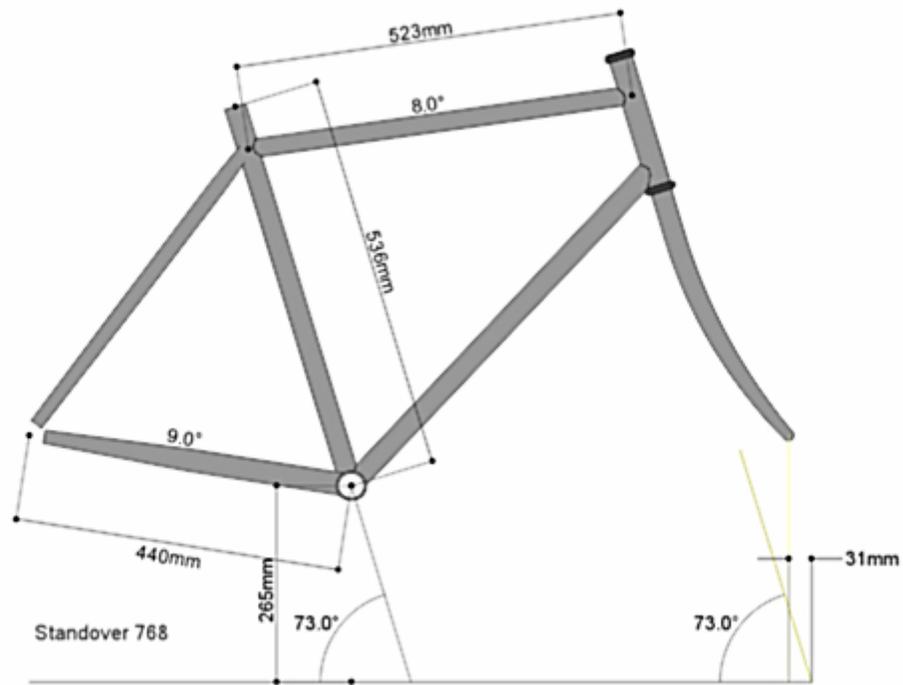
Price: \$540 which includes frame & fork, painted fenders, headset and seatpost

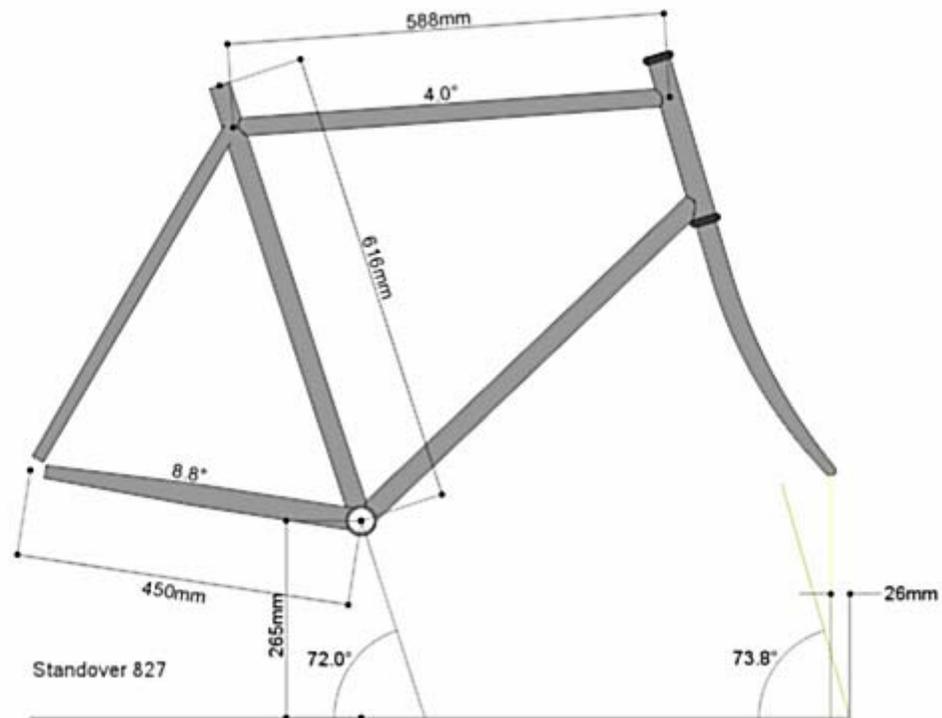
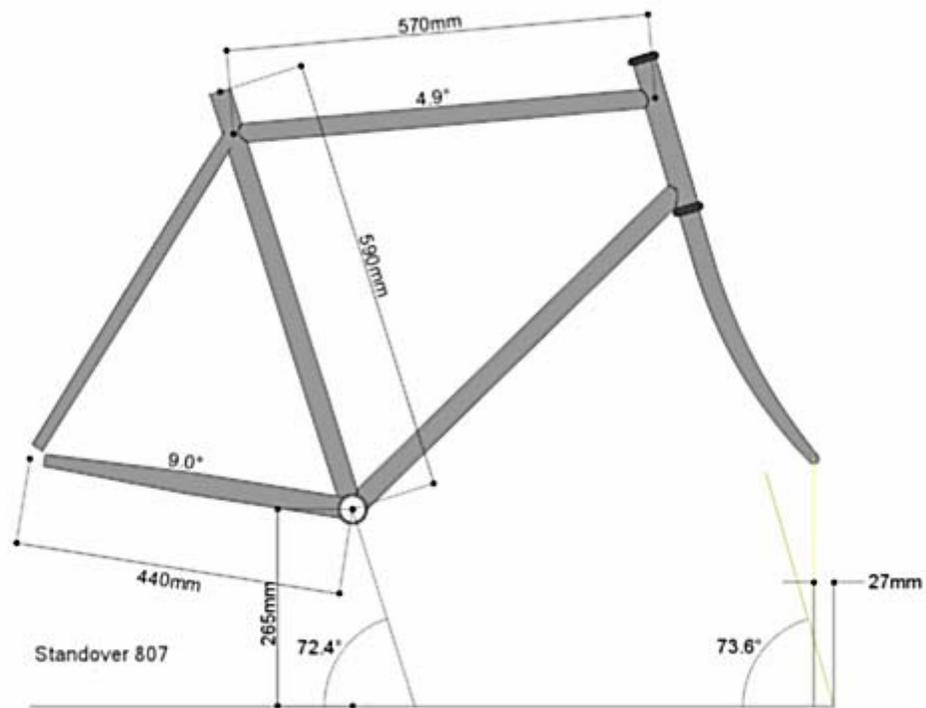
Features

tubing	ECO brand double butted chrome-moly steel
constuction	TIG welded frame, brazed fork w/ cast crown
finish	powder coating
color	kustard yellow /w dark grey decals
braze-ons	pump pegs, 3 water bottles, rear racks bosses, lower rider mounts on fork
fender mounts	threaded bosses under the brake bridge and fork crown

Build Dimensions

seat post	27.2mm
seat post clamp	29.8mm
BB	68mm, English
front derailleur	28.6mm, clamp-on, bottom pull
fork	1 1/8" threadless Ahead
rear spacing	135mm
brakes	standard cantilever posts for cantis or V-brakes
cabling	D/T shifter bosses







Test Report: Kogswell 650B Prototypes

Seattle, 2/7/2006

Specifications:

Bikes: 25 mm trail, 40 mm trail, 50 mm

Tires used: Mitsuboshi Trimline 650B x 38 mm (36 mm actual) (25 and 40 mm bikes),
Panaracer Col de la Vie 650B x 38 mm (36 mm actual) (50 mm bike)

Test Distance: Ca. 80 km (50 miles) each individually; ca. 32 km (20 miles) "shared" ride (see below)

Wheel flop factors: $f = 7.0, 11.2$ and 14.0 mm, respectively

Test Report:

After building the bikes with as similar components as possible, each of us rode "our" bike for a week. Then we set out with all three bikes for a test ride during which we swapped bicycles numerous times. We picked a challenging course to test the bikes at low, moderate and high speeds, including a fast, curvy descent with lots of fallen tree branches and leaves on the road. We repeated this descent three times, so each rider got to ride each bike, back-to-back, on the same descent. To test how the bikes behave loaded, we strapped two 1 l water bottles to the front rack (except the 50 mm trail bike, which carried them in a handlebar bag mounted ca. 15cm/6" above the front wheel),¹ a total weight (including racks/bag) of 2.9 kg (6.4 lbs.). Then we tested the bikes with only one water bottle each, unloaded and with a rear load in Carradice saddle bags. Furthermore, Mark tested the 40 mm trail bike with Grand Bois 650B x 32 mm tires and 3.8 bar (55 psi) pressure. Here are the results:

25 mm trail bike

This bike works great with a heavy load on the front. The ability to ride no-hands is not at all affected by the load. We even put a 6 kg (13.2 lbs.) load in the bag, with no ill effects. At slow speeds, this bike is very stable, at high speeds, it is very nimble. Without a load, the steering feels very light at low speeds – light enough to feel odd to riders accustomed to bikes with more trail. However, this disappears at higher speeds (above 20 km/h/12.5 mph). The bike does not fall into a turn, but will go exactly where the rider points it. The bike never was unstable. With only a (heavy) rear load, the bike is unpleasant to ride out of the saddle.

¹ Carrying the weight on the 50 mm trail bike in a higher position probably exaggerated its handling traits with a front-end load

This geometry is excellent for riders who always will carry a front load. Thanks to its great stability at low and moderate speeds, the bike takes up very little space in traffic. Looking over one's shoulder or shifting weight otherwise does not make this bike veer off course. The 25 mm trail bike is especially suited for city and long distance riding, as well as inexperienced riders. It is well-suited to carrying heavy loads. While we did not test this, experience with similar geometries has shown that narrower tires at higher pressures would result in an unstable bike. Therefore, this bike should not be ridden with narrower and/or higher pressure tires.

40 mm trail bike

Compared to the 25 mm bike, this bike feels less stable at lower speeds, and riding no-hands is not as easy, especially with a heavy load on the front. At moderate to high speeds, the differences between the two bikes (25 and 40 mm) disappear. Without a load, it does not exhibit the overly light steering of the 25 mm trail bike. Narrower 650B x 32 mm tires appeared to improve the handling of this bike slightly. This geometry is a great all-round geometry. It allows riders to use different tire sizes. Unloaded, it rides as well as loaded. However, it is not as stable at lower speeds, especially when shifting weight or looking over one's shoulder. It takes up more space in traffic. If you are not sure whether you prefer a handlebar bag or a saddlebag, and if you intend to use narrower tires, pick this geometry.

50 mm trail bike

With a full front load, this bike is a bit more difficult to ride than the others at low speeds (up to 16 km/h/10mph). At higher speeds, the bike becomes very pleasant to ride. Without a load, it feels less nimble than the others. Adjusting one's line in mid-corner requires more input, but still is possible. Increasing the load to 4 kg (9 lbs), together with the high load placement, leads to a significant deterioration of the stability at low and moderate speeds.

The handling with this geometry feels closest to most sport touring and road bikes sold in the U.S., yet it is more stable at lower speeds. This geometry also may be useful for riders who are not confident in their bike handling skills. Once you pick a line, this bike will follow that line and resist changes a bit. This geometry also is more suitable to carrying a large load on the rear without a front load. It is ill-suited to carrying very heavy loads on the front.

Conclusion

The three bikes felt very different. The biggest difference was between the 40 mm and the 50 mm trail bikes, whereas the 25 mm and 40 mm trail bikes felt more similar. The differences were most noticeable at slow and moderate speeds (below 20 km/h/12.5 mph) and with a front load. At higher speeds, especially without a load, the bikes felt more similar than we expected. Also, the differences faded the longer we rode each bike. Immediately after switching bikes, the different inputs required often were quite startling, especially when riding no hands. On the 50 mm trail bike, we failed to make large enough corrections and veered off course easily. On the 25 mm bike, especially when coming from the 50 mm bike, our corrections were so large they sent the bike veering the other way. After a few km of re-familiarization, riding no-hands became much easier.

All bikes worked great under all conditions tested, with two exceptions: Riding out of the saddle, the 25 mm trail bike was less than optimal with only a large rear load, and the 50 mm trail bike did not work well with a heavy load at the front. One should remember that a back-to-back test like this one highlights subtle differences in handling. Each of these geometries would work well for most riders, especially once it becomes familiar after a few weeks of riding. With that in mind, I recommend the following geometries:

30 mm trail:

Increase trail of 25 mm bike to 30 mm to make the steering a little less light unloaded. This bike is recommended for:

- *City riding as intended in the original design brief:*

wide tires required, front load, but will ride fine empty

easy to place, takes up little room in traffic – will be easy to ride for novice rider

fat tires will help deal with surface irregularities (potholes)

- *Heavy loads: Delivery bike applications*

- *Ultra-long distance riding (randonneur)*

- *Needs to be sold with caveat:*

*Cannot handle narrow tires (narrower than 36 mm)
and/or high pressures (max. 3.8 bar/55 psi)*

40 mm trail:

- *All-round riding for riders who want this as a “sport” bike - preserves most of the handling of the 30 mm trail geometry, but less compromised with narrower tires and/or no front load*

- *Event riding: Centuries, B&B touring, sag-supported tours*

- *Cyclocross?*

- *Can handle all currently available 650B tires at recommended pressures*

50 mm trail

- *Riders who want to try 650B but like the feel of classic 700C sport touring bikes*

- *Riders who insist on carrying load only on the rear*

- *Narrow, high-pressure tires that may become available in the future*



The Porteurs

In the middle of the 20th Century, newspapers in Paris were published twice a day and timely delivery was essential.

Rather than rely on trucks, the publishers used a small army of cyclists to get the job done. Like today's bicycle couriers, these men and women took advantage of the bicycle's natural speed and agility. If you've spent time riding in an urban environment, you understand that.

The bicycles of the Porteurs had to be fast, comfortable and reliable. The rigors of daily use demanded it. The custom bike builders in Paris and their production counterparts in St. Etienne all had porteur models in their catalogs. Graceful utility was not uncommon.

Discovering this bit of bicycling history was a revelation to us. We thought we had seen everything. But these bikes made us rethink everything that had come before.

The scene above is the start of a porteur race, a kind of Parisian alley cat.