

# MAKESHIFT

At Rodriguez Bicycles, we know Rohloff & Interntal Gear Hub equipped bikes. Over the last several years, the MakeShift line of custom Rodriguez bicycles have become a standard of sorts in the industry, and one of our better selling models. We've developed and manufactured specific braze-on fittings, dropouts, and other unique exclusive features (like our stem mounted shifter doohickey) that make our Rohloff, Nexus and Alfine equipped bicycles something special. Our customers find our bikes easier to use and travel with. A lot of Rodriguez Make-Shift customers select the travel upgrade for ease of taking their bike on vacation with them. Just like all Rodriguez bicycles, the MakeShift series is guaranteed to fit comfortably.



Rodriguez Bicycle Company builds the highest quality Internally Geared hub equipped custom bicycles for less money than any other manufacturer in the United States. We have years of Rohloff experience built into every MakeShift we hand-build right here in Seattle. Our bicycles are guaranteed to fit more comfortably and last a lifetime.

## RELIABLE

## FULL BIKE FROM

# \$2,999

	Blue Ridge Nexus 8 \$2,999	Hi-Roller Sport Rohloff 14 \$4,699	Hi-Roller Tour Rohloff 14 \$4,799
Frame	Reynolds 725	Reynolds 725	Reynolds 725
Fork	Alloy 26" touring	Steel Lugged	Steel Tandem grade
Shift Levers	Shimano Nexus 8-spd	Rohloff twist grip 14-spd	Rohloff twist grip 14-spd
Brake Levers	Tektro ATB	Tektro Ergo	Tektro Ergo
Brakes	Tektro Cantilever	Tektro Dual Pivot	Tektro Cantilever
Bottom Bracket	Shimano Sealed Bearing	Shimano Sealed Bearing	Shimano Sealed Bearing
Cranks	Origin 8 Alloy	Origin 8 Alloy	Origin 8 Alloy
Rear Hub	Shimano Nexus 8-spd	Rohloff speedhub 14spd	Rohloff speedhub 14spd
Front Hub	Formula Sealed Bearing	Formula Sealed Bearing	Formula Sealed Bearing
Rims	Weinmann ZAC19 26"	Weinmann 650/700c	Weinmann ZAC19 26"
Spokes	Stainless 14G	Stainless 14G	Stainless 14G
Wheels	Hand-built 3-yr warranty	Hand-built 3-yr warranty	Hand-built 3-yr warranty
Tires	Serfas Drifter 26"x1.5"	Kenda Kontender	Serfas Drifter 26"x1.5"
Handlebar	Kalloy flat or drops	Kalloy Drop or flat	Kalloy Drop or flat
Head Set	FSA 1 1/8"	FSA 1 1/8" sealed	FSA 1 1/8" sealed
Bar tape	ATB grips or black cork	ATB grips or black cork	ATB grips or black cork
Seat post	Alloy 27.2	Alloy 27.2	Alloy 27.2
Seat	WTB Speed V	WTB Speed V	WTB Speed V
Popular Options	Xtra light wheels/tires \$250 Shifter Doohickey \$100 Sealed bearing headset \$60 Roller/Drum brakes \$100 or Generator w/Roller/Drum brakes \$125 Gates Belt drive \$500 Carbon Handlebar \$250 11-sp Alfine rear hub \$700 11-sp Alfine w/Di2 \$1,400 Alfine Generator hub \$90	Carbon Fork \$250 DaVinci Cranks \$325 ----- Spyre Disc Brakes \$350 steel fork only Shifter Doohickey \$100 Gates Belt drive \$500 Carbon Handlebar \$250 Schmidt SONdelux Generator hub \$285 (\$335 for disc model) B&M Luxos Front light \$245	Big Squeeze Brakes \$150 Spyre Disc Brakes \$350 steel fork only Shifter Doohickey \$100 Gates Belt drive \$500 Carbon Handlebar \$250 Schmidt SONdelux Generatot hub \$285 (\$335 for disc model) B&M Luxos Front light \$245

- Frame/Paint Upgrades:**
- Step Through frame \$200
  - Custom Sizing \$200
  - Travel Version \$700
  - Extreme Journey frame/fork \$375
  - Custom Paint \$100 ~ \$600
  - Custom Kickstand Mount \$45
  - Braze-ons for non-standard rack \$25 (requires rack present at time of build)
  - Internally routed rear light wire \$200
  - Internally routed front light wire \$25



Available in Step Through Design \$200 upgrade

Parts specifications subject to change depending on availability

For more information and color photos, visit us on the web!

[www.rodcycle.com](http://www.rodcycle.com)

# MAKESHIFT

## What is a Rohloff?

Rohloff is a German company that has designed and built the Rohloff Speedhub for several years now. The design is like a really high tech version of your old 3-speed hub. 14 gears are housed inside the rear hub. The reason for the design is to eliminate the use of derailleurs on your bike.

### "Do I want Rohloff?"

Over the last several years, we've built a number of bikes using this hub, and the customers like them. Most of these customers have come in asking for a Rohloff equipped bike, and had already studied and made that decision before talking with us.

The reasons that these people chose the Rohloff hub include ease of shifting, lower maintenance, and perceived 'ease of use'. The reason I use the word perceived is because a Rohloff bicycle frame can be designed in such a way as to make changing the rear tire much more difficult.

The Rohloff hub presents some specific design challenges when building the frame to keep things 'user friendly'. A lot of Rohloff equipped bikes have a 'make shift' style engineering to address these challenges. The crew here at R+E Cycles has developed some techniques that distinguish our Rodriguez Rohloff bikes from the other brands, and make our bikes not only look better, but work much better as well.

R+E Cycles 'ease of use' engineering for Rohloff equipped bikes:

Chain adjustment - We use a Bushnell Eccentric bottom bracket (ebb) for chain adjustment on our Rohloff bicycles. This makes it much, much easier to remove and install the rear wheel, as well as adjust the chain tension when needed. Using the Bushnell ebb also ensures that the bike is equipped with the lightest and most accepted ebb available. This is the same mechanism we use to adjust the timing chain on our tandems, as well as a recommended product by Rohloff themselves. (Read more about the Bushnell ebb at [www.bushnelltandems.com](http://www.bushnelltandems.com))

Dropouts and braze-ons - The Rohloff hub requires special rear dropouts (where the rear wheel bolts on) and cable braze-ons specifically designed for the hub. At R+E Cycles, we machine our own design of Rohloff dropouts and cable braze-ons that allow for much easier removal and reinstallation of the rear wheel.

We even have people with other brands of Rohloff equipped bicycles bring their bike in to have our braze-ons installed. We've seen a lot of Rohloff equipped bicycles that don't take these concerns into their designs. If not properly thought out, a Rohloff rear hub can make removing the rear wheel a big chore, and may even require you to adjust your shifting every time after reinstalling the wheel. At R+E Cycles, we are always designing for comfort as well as reliability and ease of use. This adds to the short term cost of the bicycle, but the first time you have a flat tire, it pays for itself.

## Pros and Cons of a Rohloff Speedhub

### Pros:

- No fuss: The sealed gearbox ensures reliability and durability even under the toughest conditions. The even increments of 13.6% from gear to gear make it possible to always ride at the peak performance. There is no overlap in the gear range, so all 14 gears are usable. In a traditional 27 speed set-up, you've only got about 14 usable gears anyway.

### Cons:

- Cost: Many people assume that the price will be lower than traditional set-up because there are fewer components to buy. Actually, the price of the hub added to the additional amount of customization required on the frame makes the total price higher than a derailleur set-up. Look at it like a Swiss watch.

- Versatility: Since the gear ratio is pre-set, you cannot change the range of gearing between high and low. You can change the front chain ring or rear cog but it will affect the whole range. In short, if you want a 'lower' low gear, then all your gears have to be lower and visa versa.

- Noise: Some of the gears can be a little bit 'rumbly' or 'noisy'. Not really bad, but if you are kind of 'obsessive' about such things, and you've already resigned yourself to the noise of a derailleur set-up, you should try one out before investing in it.

