

motivate

get going

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The Motivate Bicycle





The Motivate Bike: Custom made for everyone

The Designer

Ben Serotta has been designing and building racing bicycles for more than 40 years. First represented in the 1976 Olympics, Serotta bicycles bore witness to America's rise as a modern cycling power. Contracted by US powerhouse teams 7-Eleven (1984-1988) and Coors Light (1991-1994), along with numerous smaller national and international programs, Serotta became the dominant US builder of high performance racing bicycles which have been raced to National, European, and World Championship titles in road, time-trial, track, mountain, and triathlon events.

Serotta's experience with designing and manufacturing custom bicycles has provided a strong background for the re-imagining of a bike share bicycle of unprecedented quality and reliability.

The Design Process

The design team met with lead mechanics from all of Motivate's cities to identify the pain points they found with current bike share bicycles. Collectively these mechanics have made hundreds of thousands of repairs to bike share bikes. They shared this experience with Serotta and his team, helping to identify deficiencies in the existing design, parts that frequently malfunctioned, components that could be simplified, and other ways to improve rider experience while reducing operating challenges. This unprecedented collaboration between two highly developed knowledge bases resulted in the ultimate bike share bike.

Motivate has reimagined the bike share vehicle, identifying pain points of previous designs and leveraging Ben's expertise. The product of this ground-up approach is a sturdier, more intuitive, and tenacious design that allows ease of use for the rider and reduced maintenance costs for the operator.

The Features

Motivate's design objective was to create a low maintenance bike that provides the best rider experience possible. The bike exceeds all U.S and European safety standards, and has undergone rigorous testing to assure the best possible rider experience.

Upgrades in this model include a sturdier headset and the world's most durable urban tires and wheels. This model's front/rear lights are frame integrated and powered by the hub dynamo. The saddle has been replaced with an all-season saddle that boasts an inclement weather-friendly design. The bike is equipped with an anti-theft seat post, molded fender and wheel covers, and a fall-proof double-kickstand. Handgrips were created from a more comfortable and durable compound. The chain is anti-corrosive and has greater longevity. The crank, bottom bracket, and pedals provide a longer service life. The frame has retained its original geometry in order to provide comfort to riders of all sizes. However, designers reconfigured some elements of the frame's design to provide better access to the maintenance team.

Most importantly, the bike is designed to be compatible with existing bike share systems. With seamless integration between existing smart-dock technologies, Motivate has created a better bike share experience that is backward compatible.

Production Process and Timeline

For the bike share industry, a lack of part supply and nimble production of bicycles has been a persistent issue. Ordering parts through a vendor often meant substantial lead times and occasionally operators were unable to obtain important components. By designing and building this bicycle, Motivate has taken control over part procurement and has created reliable independent supply chains to ensure partners never lack spare parts. Additionally, Motivate cultivated an experienced supply chain management team to do inventory planning and strategic sourcing to reduce cost and improve service.

The first fleet of Motivate's custom bicycles will be available Summer of 2015, following an aggressive yet intensive production process, which occurred in five main stages: data collection, design, development, testing, and manufacturing.

Future Developments

By taking control of bike design and production, Motivate is able to build new features which will benefit all clients. As new exciting developments take hold, like GPS or E-Bikes, Motivate will be at the forefront of these industry evolutions. The Motivate bike will be complemented by software investments that Motivate is making, like the new Citi Bike mobile app. Rather than GPS integration into each bike, operators can take advantage of smart-phones to record trip data. Motivate is also exploring integration with electric assist bikes, which is bike share's next frontier.

Citi Bike Expansion

The Motivate bicycle will be used for the recently announced Citi Bike expansion, doubling the system from 6,000 bikes to 12,000. Any new won projects will also utilize the Motivate bicycle. See below for branded examples of the new Citi Bike:



Motivate Bicycle Specifications

Testing Standards	Tested to meet or exceed all CPSC, EN and ISO Standards for safety and durability
Overall Parts Selection	Where possible, all components have been upgraded over the industry norm to German and Scandinavian durability and corrosive standards, the highest in the industry. Bolts that require high torque, highest strength are not stainless steel, which is lower strength than other high strength steels. In those applications the bolts have industrial coatings (German automotive specification) to protect from corrosion.
Frame	Step-through aluminum monotube frame construction, all cable routing is fully protected
Fork	True Triple-Clamp aluminum construction for strength and durability
Headset	FSA 1.5" with stainless steel bearings
Cables	All Cables are Stainless Steel, pre-stretched for minimal maintenance. Cable routing is engineered for minimum length and straightest path for precise braking and shifting
Lights	Front and Rear Lights exceed standard requirements. Front light is composed of one steady high beam center light visible at 2KM, with two flashing lights. Rear light is built into rear mudguard. All electronic cables and connectors are nautical grade.
Kickstand and stabilizer	Unique high strength "double" kickstand for and spring stabilizer for solid stability while parked out of dock
Drivetrain	Sturmey Archer (Scandinavian Spec) 3 speed transmission with improved gearing selection and durability Sturmey Archer (Scandinavian Spec) 5 speed transmission with improved gearing selection and durability available on request (at additional cost) FSA Crank Set with upgraded bottom bracket bearing unit
Brakes	Sturmey Archer Drum brakes for improved braking performance
Wheels & Tires	SA hubs are assembled with Heavy Duty 19MM rims and 13 gauge stainless steel spokes, hand tightened for true performance Tires are either Kenda Special Order Extra Heavy tread or Schwalbe Marathon Plus
Mudguards	Full one piece, rattle-proof, full coverage mudguard; reinforced front mudguard from high strength plastic
Handlebar & Stem	Aluminum 4-piece reinforced 31.8 custom handlebar; custom stem. Both are hidden under high strength plastic covers to protect cabling
Saddle & Seatpost	Velo saddle has improved covering to reducing cracking from temperature swings and a cutout in the middle to improve comfort and moisture (rain, snow) drainage Seatpost will accommodate all sizes and incorporates anti-theft engineering
Front Rack	Has 6 bungee cord hooks for improved luggage adaptability, stability