

/ THE VEHICLES

John Miller & Doug Waters ~ *special to Charged*

Images by David Massarik/ML1 Media

X-clusive. That's what the assignment read. "X-clusive test of unique electric vehicle." A new Tesla? A prototype BMW? Not quite. Our test ride for the last 4 weeks was the X-treme X-cursion XB-310Li folding electric mountain bike. Apparently, they like their X's at X-treme Scooters. And it is unique. But it's no Tesla.

Our matte black test vehicle arrived in a large box via a shipping service from the US distributor in Washington state--the bike itself is manufactured in China. It required a minor amount of assembly, which was significant because the included owner's manual was somewhat incorrect as to what needed to be attached and what was already attached. It also read with the typical lost-in-translation clarity. Tools were included and within a few hours the bike was rolling. Charge time for the lithium

approximately 19 miles, but speed dropped significantly, to as little as 11 mph for the last 3 miles.

One advantage not in the specs: it doesn't even look like an electric bike. The 300 watt motor is buried in the rear hub. The Lithium Ion 24 volt battery is removable and sits unobtrusively behind the bike seat. This bike also uses a standard looking Shimano Tourney 7 speed gear system, "for smooth and reliable gear shifts" --we found that not to be the case, even after repeated adjustments. The key feature of this bike is its ability to fold in half and store indoors or in a cars trunk. It's still rather bulky when folded, but it's far more compact than a solid frame bike,

electric or otherwise.

The manufacturer does not recommend riding the bike in heavy rain or

X-treme e-bike user group revealed two owners that used their X-cursion bike in wet conditions and experienced electrical failures within 12 months. We added a plastic liner inside



the battery case and controller to give a small degree of water resistance. We also chose to customize our bike, adding a gel seat cover, handlebar end grips, a GPS mount, a cell phone mount, an action-cam mount and a trip computer. One item that we replaced was the rear 'suspension'. Rather oddly, from the time the bike was introduced to the time our order was filled, the rear suspension was 'downgraded' by the manufacturer from a coil-spring shock, to a rubber strut, and finally, to the solid metal bar that came with ours. We easily sourced a new, original type coil-spring shock off eBay for under \$10.



We also added a vast amount of reflective tape and LED tail lights and side lights.

After 280 moderate test miles, a number of bits had to be re-attached or re-tightened. Some parts also needed slight modification or relocation (notably the battery pack and the rear cargo rack) to prevent interference while pedaling.

While this bike is 'entry level', it's definitely not for a novice. The difference between going to an e-bike store and wheeling out with a fully assembled, tested, turn-key e-bike and ordering one online that 'needs some assembly' is immense in this case. After being sorted out over the course of the first week of testing, it rides and handles reasonably well for a heavy bike. The bike's electric operation using the twist throttle is



battery pack was 4.25 hours.

While the quality of the parts and materials seemed to be quite good, the overall engineering -- how the bits fit together (and stayed together) was disappointing. The performance specifications provided by X-treme are somewhat ambitious. With a brand new battery, on a full charge, riding on a completely flat paved surface, 20 mph was briefly achieved and the 20 mile range reached. Once the battery was 'broken in' (after 4 recharges), the Li pack, as expected, lost a small amount of capacity. With a 135 pound test rider, top speed, without pedal assistance, was 18.5 mph. Range slightly reduced to

or storing it outside. Research on our part revealed no water resistant materials in or around the battery case, the motor controller, or the hub motor. An informal survey of an



straightforward. The pedal-assist mode is a bit unnerving for the inexperienced. The pedal-assist activates the motor after the rider has begun pedaling and can feel....extreme.

Newer e-bikes offer 36 volt batteries and higher output motors - promising faster speeds and greater range. For an entry level bike, (and the mechanically adept) the X-treme X-Cursion XB-310Li is an X-cellent value. **C**

By the Numbers:

X-treme X-Cursion XB-310Li

Top Speed: 20 Mph
Range: 20 Miles
Motor Wattage: 300 Watts
Motor Type: Brushless Rear Hub Motor
Battery Type: 24 Volt, 8 ah LiFePO4 Lithium Ion Battery
Wheel Size: 26 inch
Tires: 26" x 1.95" Kenda Mountain Bike Tires
Gears: 7 Speed Shimano Tourney Gears & Shifter
Throttle Type: 1. Hand Grip Twist Throttle
2. Pedal Assist System
Frame Size: 18 inch Frame
Frame Type: Aluminum Alloy
Colors: Red, Black, or Silver
Brakes: Front & Rear Mechanical Disc Brakes
Suspension: RST Capa® T7 Front Hydraulic Forks
Rear Rack: Included, With a luggage clip
Accessories: Smart Battery Charger; Front LED Handle-Bar Headlight; Tool kit, Users Manual
Bike Weight: 52 pounds with the Battery
Battery Weight: 10.2 pounds
Max Rider Weight: 350 pounds
Bike Measurements: Wheel to Wheel 72";
Width 25"; To Bars 37"; Seat
Height: 37 3/4" to 45 3/4"
Country of Origin: China
Assembly on Delivery: 95% Assembled* on Delivery.
Warranty: 180 Days (6 Months) from X-treme. 1 Year; Warranty on the battery; Lifetime Frame Warranty & Lifetime Tech Supt
MSRP: \$899

*- 95% figure is an estimate provided by the manufacturer

