

SHUTTLE LT FAQ

Which size bike should I purchase?

To ensure the best sizing, we recommend that you visit your local Pivot dealer to get a professional fit and refer to our geometry chart to check your measurements. We can, however, provide a rough guideline to get you started. These recommendations are based on our experience, athlete preference and customer feedback: Small: 5'3" – 5'8"

Medium: 5'7" - 6'0"

Large: 5'10" - 6'2'

X-Large: 6'1" +

We suggest that you pick your Shuttle LT size based on your riding style. The Shuttle LT features trail bike long and low geometry with shorter seat tube measurements per size – this geometry means that most riders can go up or down a size and should base their choice on riding-style, reach and stem length preferences. Be sure to also consult our dropper post fit guide when making your selection. You can always reach out to us on Live Chat for additional guidance.

How do I set up the suspension on my Shuttle LT?

We make it easy to get the best ride out of your Pivot bike with a simple sag indicator already installed on your bike, and this <u>follow-along video</u> featuring our own Bernard Kerr. There is a shock set up guide included in your Shuttle LT's owner's manual as well as a comprehensive suspension setup guide that can also be accessed under the Tech Specs tab.

Can I remove the battery if I need to charge it off the bike?

Although the Shuttle LT battery is designed to be fully integrated into the frame without the need to remove it for charging, it can still be removed in about a minute. We've included simple instructions showing how to remove the battery in your Shuttle LT's owner's manual that can be accessed in the Tech Specs.

How long does it take to recharge the battery?

It can take up to 5 hours to recharge the battery from being completely dead. In our experience, it's hard to completely drain that battery and a battery with some charge tends to charge faster. Even with 1 bar left, charge time usually not more than 3.5 hours.

How many miles can I get out of each battery charge?

There is no single answer to this question—it really depends on how much you are asking of the battery and drive unit during your ride. If you do your entire ride in the most powerful pedal-assist mode (Boost), you'll demand more energy from the battery than if you are operating the bike in less powerful (Trail or Eco) modes. Here's our own experience: In our several years of testing this system, we've found that most of our rides involve shifting between the different modes—Boost winds up providing more power than you want on descents, flats or (unless you are completely bonked) even rolling terrain. Accordingly, when we start our rides with a fully-charged battery showing five energy bars on the display, we can routinely finish a 3 to 4-hour ride



with 1 or 2 energy bars still showing on the display. If you were riding in strictly Trail or Eco mode, you can complete even longer days in the saddle on a single charge. A rider on a technical ride with a fair amount of climbing that switches between Eco, Trail and Boost as the terrain varies can do a 5 hour ride which is quite the adventure for most riders.

How many times can you recharge the battery before you have to replace it?

All rechargeable batteries gradually store less power with each recharge. The Shuttle LT's battery unit is designed to provide 1,000 recharges before it reaches the point at which replacing the battery is advised. At that point, the battery will hold 60% of its capacity vs. when new.

Can you hack the Shimano drive unit and make the Shuttle LT faster than the speed of light?

Generally no. We have heard of hacks that move or remove the top speed limitations or artificially change the wheel size to gain more top speed assist. However, these hacks generally result in a loss of torque and take fun and performance out of the system in the areas and speeds you ride most. If you are already over 20mph, most likely you are flying down hill and don't need more assist. If you climbing up hill and you've gone over 20mph, then congratulations, you are one incredibly fit individual, and you also don't need additional assist. Although it's in our nature to always want a little more, in the long run, it's best to make sure that your Shuttle LT remains the Class 1 eMTB that it was intended to be and can be ridden in more places without a negative impact on trail access. Additionally, leaving your drive unit stock means that your warranty will stay intact. The Shuttle LT was not designed or tested to be run with a setting that is more powerful and/or changes or removes the top speed limits for the battery assist. Changes in the stock system will void the warranty not just of the system but of your entire bike. It is also against the law.

If my drive unit breaks, is my local bike shop going to be able to repair it?

Drive units are completely sealed in order to keep the electronics and mechanical pieces perfectly clean year after year. Like most Shimano components, it has a 2 year warranty. If something mechanical were to fail after that point, the solution would be to contact Shimano for repair or replacement of the drive unit. Firmware related problems may still be solved by a dealer with the Shimano PC connector.

What happens if my drive unit breaks—am I stranded on the trail?

In the unlikely event of a drive unit malfunction, your Shuttle LT is still absolutely ride-worthy. We designed the Shuttle LT to be a great mountain bike—even with the pedal assist disengaged. Thanks to the DW Link design, the bike pedals efficiently. It's a bit like riding a Firebird. True, the Shuttle LT weighs more than its non-motorized siblings, and you'll feel that with the drive unit turned off (there's no getting around physics), but it's still fun to ride even with the drive unit turned off.

What kind of maintenance do I have to do on the drive unit and how often?

Beyond occasional firmware updates, there is no maintenance required on the drive unit. The clean environment that keeps the electronics happy also keeps the gears and bearings running smoothly for years. The chainring is easily removable so that it can be replaced after regular drive train wear.

What hub/wheel spacing does the Shuttle LT use?

The Shuttle LT uses a 157mm rear hub spacing in a configuration called Super Boost Plus 157. Super Boost Plus 157 builds on the idea of wider flange spacing pioneered by Boost 148. Super Boost Plus spreads the flanges even wider (up to 14mm wider then a 142mm hub) and increases wheel stiffness substantially (Approximately 30% stiffer than boost), which is a huge benefit on e-bike wheels.



What is the Q factor of the Shimano cranks on the EP8 drive unit used on the Shuttle LT?

The EP8 cranks used on the Shuttle LT have a 175mm q-factor which is similar to a standard XT or Race Face trail bike crank on an analog bike.

How much does it weigh?

The Shuttle LT Team XTR bike weighs 49.8 lbs. (22.5 kg.) Pivot bicycles are among the lightest available, but the weight is only one of many factors that make a great bicycle. Other aspects such as frame stiffness, strength, durability, and ride quality are just as important as weight to our engineers when designing the Shuttle LT. Instead of comparing grams, we suggest you visit your local Pivot dealer and see our attention to detail, smart, high-value spec, and class-leading features, but most of all the incredible performance of the new Shuttle LT. Bring a scale if you'd like, but take just one demo ride and you'll feel why the Shuttle LT is the most well-rounded, highest performing long-travel e-bike on the market and, yes, it is among the lightest as well.

What size seatpost does the Shuttle LT use?

31.6mm

What size seat clamp does the Shuttle LT use?

The Shuttle LT frame uses a 36.4mm seatpost clamp, some manufacturers call it a 36.5mm.

What is the seat tube insertion depth on the Shuttle LT?

S – 245mm M – 270mm L – 310mm XL – 348mm *Please check seat post measurements carefully before installing the post.

What dropper post length should I use on my Shuttle LT?

The Shuttle LT Features a low stand-over height and short seat tubes to allow the use of longer travel dropper posts and/or more flexibility for a wider range of rider sizes.

There are some limitations that each dropper post can accommodate for each frame size based on individual rider's saddle height. Use the Dropper Fit Guide (found under Tech Specs) to determine if the included dropper post will work correctly for the size bike that you are considering.

What kind of rear derailleur hanger does the Shuttle LT use?

The Shuttle LT uses the new Universal Derailleur Hanger (UDH) standard developed by SRAM. This derailleur hanger is compatible with all derailleurs on the market – not just SRAM. We spec this hanger because it has some clever derailleur saving features and is more likely to be found at any shop and is also available in our webstore.



What rear axle does the Shuttle LT use?

The Shuttle LT uses an axle for 157mm rear spacing designed for the new Universal Derailleur Hanger (UDH) standard. The rear axle supplied with the frame is a Pivot specific design using a 12mm X 1.0mm thread pitch. SRAM also makes compatible 157mm UDH axles. Pivot 157mm UDH compatible axles can be found in our webstore.

What headset do I need for the Shuttle LT?

The Shuttle LT uses a ZS (zero stack) 44mm top and (zero stack) 56mm bottom.

What chainring sizes can I use on the Shuttle LT?

The Shuttle LT is optimized around a 34t chainring. It can fit up to a 38t chainring, but we recommend using a 34t chainring for the best performance from the DW-Link suspension, drive unit, and drivetrain. The smallest size you can use is a 34t.

Does the Shuttle LT come with the eMTB specific Fox fork?

The Fox forks available on the Shuttle LT builds have eMTB specific tunes, but still use standard fork architecture. This differs from Fox's much heavier eMTB specific chassis for class 3 e-bikes.

How wide of a tire can I run on the Shuttle LT?

The Shuttle LT can run 29" wheels with MAXXIS tires up to 2.5" wide. For other tires in the market, most will fit up to these dimensions. If you decide to change the tires or wheels that we have on our builds, we suggest you check the fit with your chosen rim and tire combination to make sure it has proper clearance.

What Rotors will fit on the Shuttle LT?

The Shuttle LT is designed for a 203mm rear rotor. A 203mm rotor is the only size rotor that can be used on the rear. On the front, we spec the Shuttle LT with a 223mm front rotor and an adaptor to convert from 180mm post mount to a 223mm post mount. The fork can also accept a 203mm rotor with the proper adaptor or a 180mm rotor with no adaptor.

What headset do I need for the Shuttle LT?

The Shuttle LT uses a ZS (zero stack) 44mm top and (zero stack) 56mm bottom.

What travel fork can I use on my Shuttle LT?

The Shuttle LT was designed for a 170mm fork. The maximum travel length that can be used on the Shuttle LT is 180mm travel.



Can I use a dual crown fork on the Shuttle LT?

No. Although the Shuttle LT is a longer travel bike capable descending the steepest and roughest trails, it is only designed for use with single crown forks.

What is the fork offset on the Shuttle LT?

44mm

What is the eye-to-eye shock length and stroke length on the Shuttle LT?

The Shuttle LT's metric shock has a trunnion style upper mount, 205mm eye-to-eye length, and 65mm stroke.

If I want to run a different brand of shock on my Shuttle LT, what else do I need to know?

The Shuttle LT shock features a trunnion style upper mount and uses M8 through bolt hardware on the bottom mount. Shock spacer dimensions are 30mm wide on the bottom mount. We typically run medium valving on the compression side (depending on rider weight) and medium rebound damping.

How do volume spacers effect the suspension feel?

Larger volume spacers will resist bottoming, allow the bike to ride higher in the stroke and generally make the bike feel more "poppy". If a rider is not getting full stroke or they feel that the bike is riding too high in its stroke, even with sag set properly, then they should go to a smaller volume spacer.

What volume spacers are used in the Shuttle shock builds?

The Shuttle LT Float X shock uses a .3 cu in volume spacer. The Shuttle LT's Float X will fit volume spacers from none up to 0.8 cu in with 0.1cu inch increments. The Float X uses a primary volume spacer that comes in 0.2cu inch increments like normal, and you can also "piggyback" a small 0.1cu in spacer to make smaller adjustments. The shock can handle larger spacers for a more progressive feel or smaller spacers for a more linear feel. For a more linear feel, using between 0.1-0.2 cu in volume spacers can be installed. For a more progressive feel, using between 0.4-0.8 cu in volume spacer can be installed. 0.8 cu in is the maximum amount of volume spacers for this shock. Please see the chart below for spacer P/N's.

P/N	Description
233-00-521	Volume Spacer: Float X 0.10in^3 Plastic, Mint
233-00-522	Volume Spacer: Float X 0.20in^3 Plastic, Tennis Ball



233-00-524	Volume Spacer: Float X 0.40in^3 Plastic, Teal
233-00-526	Volume Spacer: Float X 0.60in^3 Plastic, Salmon
233-00-528	Volume Spacer: Float X 0.80in^3 Plastic, Fuchsia

What volume spacers are used in the Shuttle fork build options?

The FOX 38 x 170 mm fork comes stock with 3 volume spacers and can handle a maximum of 5 spacers.

P/N	Description
234-44-189	Volume Spacer, FLOAT 38, 10cc Yellow

Can I put a coil-over shock on my Shuttle LT?

Yes, the Shuttle LT features a rising-rate design that functions well with coil-over shocks. We recommend and spec Fox DHX2 for their best in class performance, reliability, and adjustability.

Please check all clearances prior to using any shock other than those spec'd or specifically recommended by Pivot. Your Shuttle LT will not be covered under warranty if damage occurs due to shock incompatibility.

What is the "flip chip" on the Shuttle LT and when would I want to use it?

The flip chip is a simple way to adjust the Shuttle LT's geometry for different trail conditions. The chip comes set up in the low BB setting. This is perfect for riding fast, technical and steep terrain. However, if your preference is for a little more crank clearance and slightly quicker handling for tighter terrain with more climbing and/or roots and rocks, you may prefer the high BB setting. The high BB setting will raise the bottom bracket and steepen the head angle by .5° degree giving the bike faster turn in.







How do I use the flip-chip system?

The Shuttle LT's flip chip geometry adjustment system is super easy to use. Simply loosen using a 6mm hex wrench (these are reverse, so you need to turn the wrench to the right to loosen). Partially back out the bolts – there is no need to completely remove the bolts. Then pull the chips out and rotate them to your desired position, tighten the bolts to 35 Nm and enjoy your bike's new handling and feel. Please see the geometry chart for the numbers associated with the different settings.

Can I run the Shuttle LT as a mullet?

It is possible if you really want to set it up with mixed wheels. You will need to buy a super boost 157mm x 27.5" rear wheel. The mixed wheel setup will slacken the Shuttle LT headtube angle and drop the bottom bracket height so you will want to run the flip chip in the "high" position to maintain proper geometry. If running a 27.5" rear wheel, we suggest running a 2.6" rear tire.

Can I mount a chainguide on my Shuttle LT?

The Shuttle LT includes an upper chainguide. It does not have ISCG tabs so after market chainguides will not fit on the Shuttle LT.

What is the Shuttle LT's rider weight limit?

330lbs (149kg) for the rider plus any payload or accessory such as a hydration pack. Also, note that maximum air pressure for the Shuttle LT's Fox Float X shock is 350 PSI – within the range needed to achieve proper sag settings up to the bike's weight limit.

What are the torque specs?



A detailed PDF of the torque specs can be found under the "Tech Specs" tab.

What are the specs of the EP8 system on the Shuttle LT?

The Drive unit provides 85Nm of Torque with a continuous power rating of 250 watts and a maximum power of 500 watts. The Shuttle LT features a 756 W/h battery. The drive unit weighs 5.73 lbs (2.6kg) and the battery weighs 8.59 lbs (3.9 kg).

Can I adjust the assist levels of the Shuttle LT?

Yes, you can easily customize your system to better fit your local trails or your range preferences. This can easily be done using the E-Tube app on your smartphone. (We can add a link or QR code here). However, through our own testing of the system we have loaded our own presets for the parameters for each of the assist modes to give you what we find to be the best balance for the system.

Are the components of the EP8 System waterproof?

All components and parts of the EP8 system are protected against the ingress of moisture and dust according to IP54. This means that the system is protected from water splashing from any angle but is not rated for high pressure spray or immersion.

Does the Shuttle LT have a throttle?

No, the Shuttle LT doesn't have a throttle. Instead, it's a Class 1 pedal-assist style e-bike. In other words, the Shuttle LT's 250-watt electric drive unit assists your own pedaling effort. You can choose between three different pedal-assisting power modes while riding (Eco, Trail, and Boost) and you can change from one to the other by using a thumb shifter that's a lot like a typical gear shifter.

How fast can I go on the Shuttle LT?

The Shuttle LT's motor no longer assists once the rider reaches 20 miles per hour (25 kph in EU specification) at that point, it's like you're riding a regular mountain bike. As with any mountain bike, your downhill speed is a function of your riding skill, trail conditions and the design of the trail system you happen to be riding.

What does "Class 1 e-bike" mean?

There are currently three classes of e-bikes: Class 1, Class 2 and Class 3.

Class 1 e-bikes, like the Shuttle LT, do not feature throttles. Instead, Class 1 e-bikes are equipped with a battery and a drive unit that assists your own pedaling effort. That system only assists when you are pedaling. In



addition, the system stops assisting the moment the bike reaches a speed of 20 miles per hour in the United States and 25 KM/H in Europe.

Class 2 e-bikes feature a throttle—in other words, Class 2 e-bikes can provide a power boost even when you aren't pedaling. It's a very different machine.

Class 3 e-bikes look and function similarly to Class 1—the difference is that the drive unit on a Class 3 e-bikes disengages once the bike hits 28 miles per hour.

Can I ride the Shuttle LT on every trail already open to mountain bikes?

Your ability to ride a Class 1 e-bikes on trails that are closed to motorized traffic, vary from state to state and, in some cases, county to county. The number of non-motorized trails open to the Shuttle LT and other Class 1 e-bikes, however, is growing as land managers learn more about the different types of e-bikes.

Class 1 e-bikes, like the Shuttle LT, are permitted on all trails already open to motor vehicles, such as motorcycles.

How can you tell which trails are open and which are closed to e-bikes?

You have a few options. If after consulting the resources below, you are still unsure whether a trail you'd like to ride is open to a Class 1 e-bikes like the Shuttle LT, try to contact the land manager in question.

Get the Free Trailforks App

Trailforks is your guide to more than 160,000 trails around the world. This free app includes a search function highlighting e-bike trails. On the map settings panel, where you see land ownership, swipe the panel to the left to reveal more options. You'll find the e-bike filter there. Get Trailforks at: <u>https://www.trailforks.com/</u>

<u>PeopleforBikes</u> is an advocacy group that has developed a directory of more than 42,000 miles of eMTB-legal riding in America.