

### Contents

1. Introduction		6. Mechanical Guide	
2. Overview		6.1 Maintenance Schedule	17
		6.2 Wheels	17
3. Assembly		6.2.1 SRAM DualDrive	18
		6.2.2 Rohloff Speed Hub	19
4. Adjusting the Bike for the Rider		6.2.3 Shimano Alfine Hub	20
		6.3 Brakes	21
4.1 Ideal Position System (IPS)	6	6.4 Drivetrain	21
4.1.1 Front Boom	6	6.4.1 Shifting	21
4.1.2 Seat	8	6.4.2 Chain	21
4.1.3 Steering	9	6.4.3 Bottom Bracket	22
4.1.3.1 Under Seat Steering	9	6.5 Suspension and Steering	22
4.1.3.1.1 Sensitivity	10	6.5.1 Headset	22
4.1.3.2 Above Seat Steering	10	6.5.2 Steering	23
4.1.3.3 Open Cockpit	10	6.5.3 Suspension	23
4.2 Tires	11		
4.3 Suspension	11	7. Additional Resources	
5. Using Your Recumbent		8. Warranty	
5.1 Riding Basics	12		
5.1.1 Starts	12		
5.1.2 First Ride	12		

13

13

13

14

15

15

15

16

5.1.3 Braking

5.1.4 Shifting

5.1.5 Riding Downhill

5.1.7 Riding with Cargo

5.1.8 Riding Off-Road

5.2.1 Transportation

5.2.3 Tools and Spares

5.2.2 Storage

5.2 Living with Your Recumbent

5.1.6 Beginning with Recumbents

### 1. Introduction

Dear AZUB rider,

We would like to thank you for choosing our brand from a wide selection on the market. Since the beginning of our bikes' development, we have aimed for your satisfaction. We hope that our product meets your expectations and brings you many pleasant experiences. We recommend that you read the entire user guide, which describes the features of your recumbent and instructs you in the bike's full and safe use and acquaints you or your local bike shop with the necessary maintenance procedures to ensure proper function of the recumbent for the longest period possible. This user guide also explains our warranty program. This should only take about 30 minutes, and it will surely be a useful education in using your recumbent safely and effectively.

We believe that if you are comfortable with the maintenance of the upright bicycle, then you can surely handle recumbent maintenance, but remember that recumbents also have parts that require special treatment and care. Always consider your technical skills, and in case of doubt, contact your local bike shop, your local dealer or AZUB directly. This user guide mainly describes components from non-standard bicycle production, produced by AZUB. Other bicycle components, please use in accordance with the instructions from their manufacturers. These can be obtained from manuals available on the manufacturers' websites.

If this is your first recumbent, then we are welcoming you to the world of very comfortable, fast and slightly eccentric bikes. If you are an experienced recumbent rider, then we trust that your new AZUB recumbent will be a new favorite. We thank you for choosing AZUB and wish you many nice moments on your journeys.

Whether you will be cruising around town, touring around the world, or riding with the club, AZUB's recumbents are proven and ready for whatever adventure you are.

Sincerely,

The AZUB Team

### 2. Overview

First, we want to describe some important parts of AZUB bikes to clarify the descriptions and explanations throughout this manual. Shown below is the AZUB Six with optional under seat steering and rear rack.

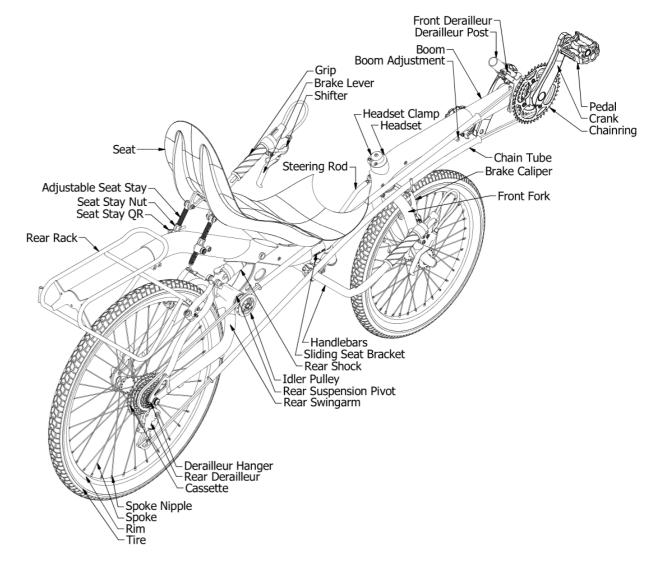


Figure 1 - AZUB Six

Because we build our bikes according to the wishes of each customer, the equipment on every bike varies. In addition to many choices of drivetrain and brake components, we offer a wide range of accessories that extend the functionality of our bikes.

### 3. Assembly

If you got your new AZUB recumbent from a local dealer, it should be completely assembled and ready for its first run. The dealer should also help you with the initial setup.

If you got your recumbent directly from AZUB, then you have to unpack and assemble it on your own, but we prepared everything for you to make it as easy as possible. Front boom and chain

lengths are already based on the height specified in your order, so you only need to pull all the parts out of the box and remove the protective packaging. You only have to mount the wheels, seat, and handlebars. After that you have to adjust ideal seat and handlebars position according to next chapter of this user guide.

If you ordered some accessories, they should already be installed on a bike, if their installation wasn't prevented by packaging requirements. You will also find manuals for these accessories attached.

### 4. Adjusting the Bike for the Rider

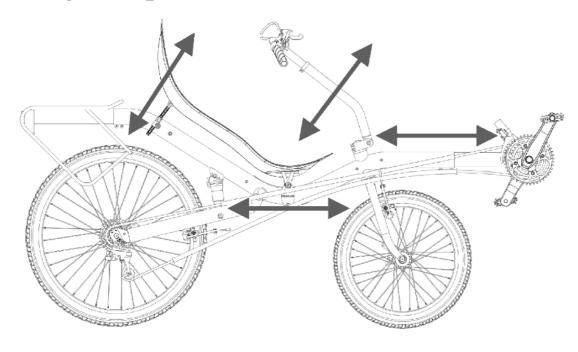


Figure 2 - Ideal Position System

### 4.1 Ideal Position System (IPS)

This system has made AZUB famous since the brand's foundation in 2000. It allows riders to find the right position on their AZUB recumbent through a wide range of adjustable seat positions, through the possibility of adjustment of their steering, and last but not least, through the possibility of setting their ideal frame length.

### 4.1.1 Front Boom

The most appropriate setting of front boom depends on many factors. Front boom position determines both seat position and position of your center of gravity. For the first ride we recommend using the front boom setting from when you received the bike. After few rides you may want to try to adjust your position further.

AZUB bikes' front booms are produced in regular and long versions (for very tall riders). Both lengths are equipped with a 68 mm wide ISO (British) standard bottom bracket and a 28.6 mm (1 1/8") derailleur post. The front boom is fixed in the frame by two bolts. You need a 5 mm Allen key to adjust front boom position. Adjusting front boom insertion is the first step of finding your ideal riding position. It's necessary to ride with at least the minimum boom insertion in the frame as shown in . After you find the right front boom length, visually check horizontality of bottom bracket axle and tighten the two screws alternately until you reach the tightening torque of 8 Nm. You must check chain length after every boom adjustment, because a 10 mm change in boom adjustment, means a 20 mm change in chain length!

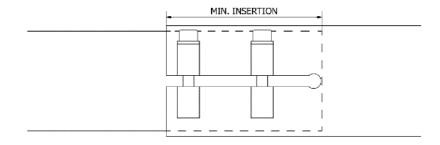


Figure 3 - Minimum boom insertion

### ATTENTION!

The wrong length of chain can impair function of the front and rear derailleurs and also cause premature wear to the rear derailleur and chain.





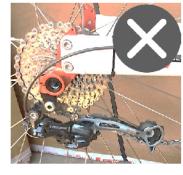


Figure 4 - Setting chain length

After boom length is set, the chain length needs to correct. It's better to have a chain that is slightly too long than too short, because a short chain can damage the rear derailleur and lock the drivetrain. With the chain on the largest chainring and cog, the chain should be long enough to be redirected around the derailleur pulleys, not pass straight through without a significant change in direction. Your component warranties may not be recognized if drivetrain damage occurs from incorrect chain sizing. If you choose to use a shorter chain length than the length

obtained with this method or neglect to adjust the chain length after moving the boom, then you must avoid shifting to gear combinations that would damage the derailleur.

### 4.1.2 Seat

Once you have fixed the position of the front boom, you need to adjust the horizontal seat position. There are two QR on the sliding seat bracket (Figure 5). Upper one holds the seat, lower one secures bracket on the frame. If you want to remove the seat, open the upper QR. If you want to move the sliding seat bracket (adjust horizontal seat position), open the lower QR.

### TIP:

Before moving the seat clamp, clean the frame tube to prevent frame paint damage.

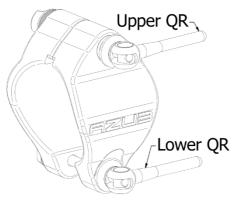


Figure 5 - Sliding seat bracket

The acorn nuts must be on the chain side!

To adjust the horizontal seat position, you may sit with an outstretched leg and your heel on the pedal in farthest position (Figure 6). This setting is the most important. A short setting can cause pain in the knees. A long setting can cause problems with the ligaments behind your knees. Use the QR adjustment to find the best set up during your first runs.

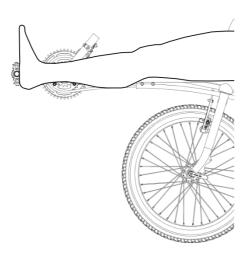


Figure 6 - Finding horizontal seat position

Seat angle can be adjusted with the seat stays. A more lying position gives you better aerodynamics, while a more upright position is better for hill climbing and more comfortable for your neck.

Continuously adjustable seat stays allow for precision seat angle adjustment. After loosening the QR, it's possible to move with stays in their clamps and adjust the stay adjustment nuts or completely remove the seat with stays. The QR and clamps stay mounted in the frame. After seat position is adjusted, the

QR must be tightened to prevent the stays from slipping.

We recommend that you appropriately position the seat stays based on your individual settings, as shown in Figure 7. This position most effectively supports the seat. To achieve this position, there are two different mounts on the frame, and the seat stay clamps can be flipped resulting in four possible positions shown in Figure 7.

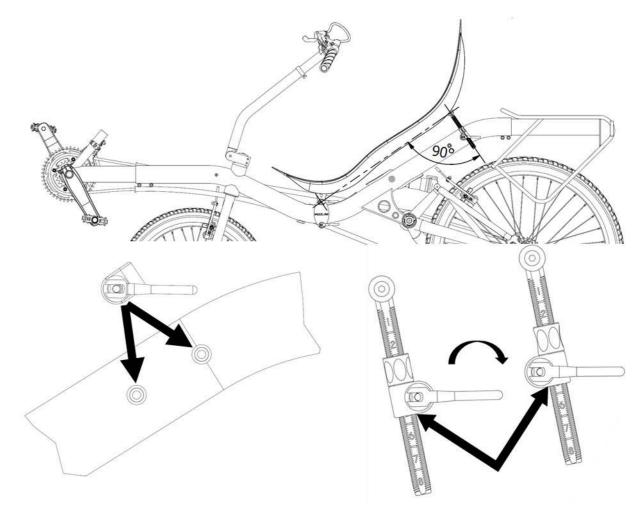


Figure 7 - Ideal seat stay position (top) and possible seat stay positions (bottom)

### 4.1.3 Steering

The last adjustment is the handlebars. The three types of steering on available on AZUB bikes can be adjusted as shown below.

### 4.1.3.1 Under Seat Steering

Find the most comfortable position and see if you are able to reach handlebars with both hands when the wheels are turned completely. You can also adjust the brake levers' positions as on a typical bicycle. To adjust the handlebars, loosen the four bolts on the handlebar adjustment, move the handlebars, retighten the four bolts alternately.

### 4.1.3.1.1 Sensitivity

Typically you won't need to change the steering sensitivity. Most of our customers leave the sensitivity in the stock setting. Only very experienced recumbent riders change the sensitivity for special occasions or special reasons. You can adjust the sensitivity by changing the position of the steering rod on the plate which you can see on the picture. If you move the rod away from the frame then the steering reacts faster. If you move the rod closer to the frame, then the steering will be slightly more stable which is perfect for speedy riding in the country.

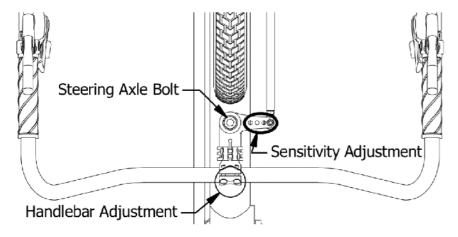


Figure 8 - USS from underneath

### 4.1.3.2 Above Seat Steering

You can change the distance between the bars and your body by adjusting the bolt in the lower part of the stem. If you unscrew it, the bars move away from you. If you tighten it, then the bars move closer.

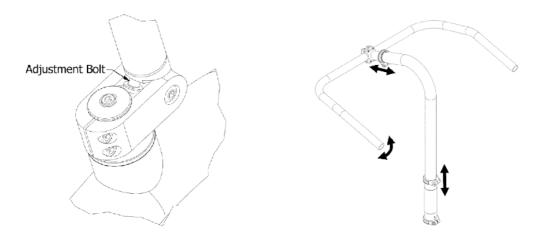


Figure 10 - Above seat steering adjustment

Figure 9 - Open cockpit adjustments

### 4.1.3.3 Open Cockpit

Our open cockpit steering has 3 degrees of freedom, so you can find your ideal position.

### 4.2 Tires

You can try higher pressures for less rolling resistance or lower pressures for a more comfortable ride. Never inflate the tires more than the maximum pressure stated on the tire sidewalls.

### 4.3 Suspension

Azub recumbents feature an adjustable rear suspension. Suspension settings depends on rider and luggage weight and also on your riding preferences. For the most comfortable ride, we recommend adjusting the shock to 50% sag, for a more sporty feeling use 30% sag.

How to set suspension sag:

- 1. Air shocks typically have an O-ring on the shock body or fork upper tube, but if there is no O-ring, you can use a zip tie temporarily. Before sitting on and loading your trike, slide the O-ring or zip tie against the scraper lip of the air sleeve. Be sure to turn off ProPedal or lockout on the shock, as applicable.
- 2. Without bouncing, sit on your bike. Assume a normal riding position for at least 30 seconds to let the suspension fully settle. The O-ring or zip tie will be moved to the equilibrium point on the shock body, as the suspension settles under your weight.
- 3. With a coil spring shock, have a friend measure the compressed length of the shock.

$$\frac{\textit{UncompressedLength} - \textit{CompressedLength}}{\textit{TravelLength}} \cdot 100\% = \textit{sag}$$

- 4. This step is critical for getting an accurate sag measurement. Dismount your bike without bouncing or pushing downward to avoid displacing the O-ring or zip tie farther.
- 5. Measure the distance between the scraper lip and the O-ring or zip tie, and divide that by the total active travel of your shock or fork to get the sag percentage.

With the coil spring shock, you can adjust sag by changing spring preload. With an air shock, you can adjust sag by changing pressure. With air shocks you are also able to adjust rebound. Try different rebound settings to find one that fits you best. Air shocks also offer a lock-out option. Use this only on smooth uphill surfaces. Don't forget to unlock the shock before riding downhill or before riding rough roads. Riding rough roads with the shock locked can damage the shock.

### 5. Using Your Recumbent

Always try to be visible for other road users. We recommend mounting a flag to your recumbent. The rear rack has a tube for mounting a flag. With typical bikes and recumbents, visibility is a concern, because you can be hidden and other drivers can not always see you. Drive defensively.

### First ride

### **Before Every Ride Check:**

- Brakes
- Steering Tightness
- Quick Releases
- · Tire pressure

### 5.1 Riding Basics

Before the riding for the first time, sit on the bike, get comfortable and try to walk with the bike to feel how it works, then try going down a small hill. Balance the bike by turning the handlebars and turn by leaning and steering. What's important is feeling comfortable and relaxed. Don't clench the handlebars.

### **5.1.1 Starts**

The hardest skill for beginners to master is starting, especially uphill. Before starting, shift to a low gear, then start pedaling with your dominant leg at 10 or 11 o'clock on the pedals and your other foot on the ground. Some riders find that using clipless pedals helps with starting because they can pedal

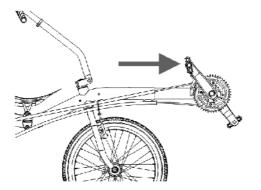


Figure 11 - Starting position

several strokes with one foot while the other provides stability. Remember, balancing is always easier at higher speeds, so try to start quickly. Be patient; it will take time and practice to start without any trouble.

### 5.1.2 First Ride

We strongly recommend that you take your first ride out of traffic. Don't hurry. It will take some time to get familiar with your new recumbent. Plan your first trip carefully because you will probably have some problems with long distances or steep hills.

### TIP:

Do not pull on the handlebars when pedaling, instead focus on pushing back into the seat. Relax and sit back into the seat. Don't crouch forward.

Try to get familiar with recumbent handling before riding in to the traffic, and read this guide completely to understand recumbent riding techniques and tips.

### 5.1.3 Braking

The left lever operates the front brake and the right lever the rear brake. Use both brakes proportionally to stop in the shortest distance. Practice braking a few times out of traffic. Be careful of skidding the tires. Think of your brakes as dimmer switches; apply them gradually, not abruptly.

Brake calipers and rotors will heat up when they are used. Do not touch them while riding or immediately after riding.

### 5.1.4 Shifting

It's a good habit with every type of a bicycle to shift to a low gear before stopping. You can then pull away easily when you start again. While riding it's recommended to keep your pedaling cadence between 80-100 rpm. Try to look forward and shift before hills to avoid changing gears under pressure.

Standard shifting systems can only shift when the bike is being pedaled, but hub gear systems can be shifted while stopped, pedaling, or coasting.

Azub recumbents can be equipped with many different gearing systems. For further information, read the manuals from their manufacturers.

### 5.1.5 Riding Downhill

Use caution on downhill rides. It is not unusual to reach speeds of over 70 km/h on steep descents. You will find that you can go faster with much more confidence once you become acclimated to the way the machine handles. Because there is less air resistance in the recumbent position, you will go faster than an upright bike.

### 5.1.6 Beginning with Recumbents

Most people new to recumbents go through three periods:

1st period – Passion: You can easily ride around the house and a few kilometers without any hills. You feel that the recumbent is a very good bike, and you wonder, "How could I ride a regular bike so long?"

2nd period – Deep Depression: Your first trip with some hills and some more kilometers will completely change your mind. You will have problems pedaling half of your standard distance and the pain in your legs will be terrible, but you have to train!

## Living with

3rd period – Trained: Now you are definitely a recumbent rider. You can easily cycle long distances. Hills are no problem for you, and you again feel that recumbents are very good, fast and comfortable bikes with many advantages and some disadvantages.

So what is the problem?

It's simple. When riding recumbents you use some other muscles than on an upright bike, and these muscles are not trained. It's the same as starting a new sport. You have to train, that's it. Also you have to get used to a new style of pedaling and a new bike. That means that if you would like to go for a long trip soon after buying your first recumbent, then we recommend that you use your upright bike and try your recumbent for long distance after some time and training.

Also you have to notice, that you cannot use your body weight when pedaling, so you must have well trained legs, but on the other hand, your legs will be trained much sooner and will be stronger.

### **5.1.7 Riding with Cargo**

With the rack and bag options that we offer, you can comfortably carry a significant load on your recumbent. Remember to allow for longer stopping distances with cargo and slower cornering. Be careful because the center of gravity with load is much higher and maneuvering is more difficult. There are some rules for riding with load and they are the same for upright bikes:

- Avoid fast and tight turns, bumps, or other potentially dangerous situations.
- Keep your heavy cargo as low, forward, and centered as possible.
- Take care on dusty roads and on bad surfaces because it is much easier to fall down.
- Be careful on steep hills so you don't fall backwards. With the load on the rear rack, the center of gravity goes up and also backwards.
- When possible, use recumbent bags to lower the center of gravity.
- Don't forget to enjoy long trips with your recumbent!

### ATTENTION!

Azub bikes and their carriers are not suitable for carrying a child seat. This can be very dangerous for the child because the high position of the seat can cause instability. We recommend using a trailer for children and heavy loads. It will be much safer and more comfortable for passengers.

### 5.1.8 Riding Off-Road

Riding technical trails is only for very experienced recumbent riders, and it requires a lot of practice. Riding rough terrain or in the snow is at the top of the "recumbent art," and we would like to show you how to start.

Most cyclists and some recumbent riders think that it is impossible to ride recumbents on rough terrain. Some even think that dirt and gravel roads are not good for recumbents, but this is not true. With some wide tires, you can go almost anywhere.

When rolling over bumps, move your body forward and let the bike move under you. Hold the bars firmly and push into the pedals. If you are not prepared for bumps, then you can be catapulted from the recumbent.

Be cautious when climbing hills. You can flip backwards if the hill is too steep. On the other hand, riding downhill is much easier and safer.

Riding technical trails requires significant experience and skill. Always ride within your limits.

### **5.2 Living with Your Recumbent**

Unfortunately not all life with your new recumbent will be spent in the driver's seat, so this section of the manual goes over some other aspects of owning your new recumbent.

### **5.2.1 Transportation**

When you want to transport your recumbent by car remove the seat. With the seat removed, the recumbent will be lower and can be transported inside many types of cars. We also recommend that you remove the seat if you transport the recumbent on the roof of your car, and please remove any parts that could come loose during transport.

### 5.2.2 Storage

Before storing your recumbent for more than a few months, we recommend that you clean and dry the bike and ensure that the cables, chain, and any pivots are lubricated to prevent corrosion

## Take care

and seizure. Bicycles should be stored in a clean, dry place to best preserve them for your next ride. Shift to the small sprocket and chainring to relax the derailleur system. Ensure that the tires are full as sitting on flat tires can damage the tires. Any bike not properly stored can emerge in much worse condition than bikes ridden many kilometers in that time.

### **5.2.3 Tools and Spares**

At Azub, we take pride in our customers around the world travelling great distances on our bikes and trikes. This section lists some of the tools we recommend you carry for long trips. Your needs may be different, and this list provides a starting point for your spares and toolkit based on what we carry on expeditions. Remember to plan ahead and be knowledgeable about the challenges you may face on your adventure.

### **Tools**

- Multitool including:
  - Chain tool
  - Tire levers
  - Spoke wrenches
  - Assorted hex keys and wrenches
- · Cassette lockring tool
- Zip ties
- Duct tape

### **Spares**

- 1 tire for each tire size
- 2 inner tubes for each size
- 3 spokes for each size
- Derailleur hanger
- Brake pads
- Brake and derailleur cable
- Chain, about 20 cm
- · Nuts and bolts

### 6. Mechanical Guide

This section shows how to adjust, assemble, and maintain various components of your recumbent. Before your first ride, we strongly recommend that you read the manufacturers' instructions related to all the components which are used on your bike, especially the brakes and shifters.

It is common that some components need adjusted after a few hundred or thousand kilometers. If you are not an experienced mechanic, then it is often better to go to your favorite bike shop and have the bike serviced there. There should not be any issues if the bike shop is not associated with recumbents because most of the components are the same as on the typical bikes.

### 6.1 Maintenance Schedule

After 200 km or one month it is necessary to have your new bike serviced where all components will be adjusted as necessary, the spokes tightened, and the rest of the bike inspected.

Hereunder you can find a table of the inspections, adjustments and repairs which we recommend that you make a part of using of your new recumbent. Depending on your use and environment, your recumbent may require service more or less often than suggested here. This is typical of all bicycles, and this chart provides a starting point for maintenance. Some of the setting or checking you will be able to do on your own, but some is better handled by your local bike shop.

### **Scheduled Maintenance/Inspections**

### Every week or 200 km Every month or 1000 km

- Check tire pressure
- Inspect the chain for cleanliness and lubrication
- Check the headset
- Clean suspension stanchions

- Wash and dry the bike
- Check the chain for wear

Clean and lube the

- chain
- Inspect the brake pads for wear
  - Inspect the tires for wear or damage
  - Check wheel trueness and spoke tightness
  - Check that all bolts are tight

### **Every 6 months**

- True the wheels
- Clean and lubricate cables
  Adjust derailleurs/shifting
- Inspect and lubricate the headset
- Check bottom bracket
- Lubricate pedals (if applicable)
- Clean, lubricate, and adjust suspension

### 6.2 Wheels

Always check that the quick releases are tight when reinstalling wheels. Most wheels on our bikes are equipped with sealed bearings (Novatec, SON hub dynamo) which are maintenance-free. The SRAM DualDrive, Rohloff, and Shimano Alfine hubs require different procedures to remove and install as detailed in this section. For additional information, consult the manufacturers' manuals.

Spokes must be tight, and it is common that after the first 100 km they need to be retightened. After tightening, check if the wheel is true. If not, then it needs to be trued which should only be done by an experienced mechanic.

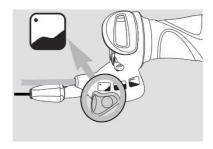
### Shifting

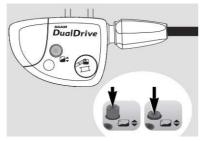
Azub recumbents come with Schwalbe tires which we have successfully tested through many expeditions. We recommend Schwalbe balloon tires which can provide a very comfortable ride in combination with low rolling resistance. When changing tires or tubes note the proper range of tire pressure and the "drive" direction on the sidewalls of the tires.

### 6.2.1 SRAM DualDrive

How to remove the rear wheel with the SRAM DualDrive system:

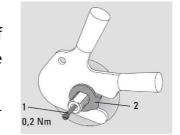
- Place thumb shift lever in hill riding mode.
- Push the black button on the clickbox down and pull the clickbox off the axle.
- Loosen the axle nuts and remove the wheel





How to install the rear wheel with the SRAM DualDrive system:

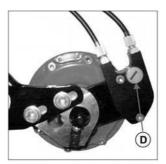
- Install the wheel in frame dropouts.
- Place retaining washers (2) on both sides of the axle – the serrations must bear against the dropout.



- Tighten the axle nuts. Tightening torque 30 –
  40 Nm (266 350 in. lbs.).
- Push the Clickbox to the stop on the hub axle.
  The thumb shift lever must be positioned in the hill riding mode and Clickbox button must be pushed down.
- Bring Clickbox button back to initial setting by pushing it up from underneath.

### 6.2.2 Rohloff Speed Hub

How to remove the rear wheel with the Rohloff Speed Hub:

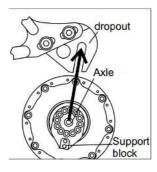






- 1. Separating the gear mechanism from the wheel involves removing the cable box. The cable box sits over a hexagonal peg which joins it to the external transfer box. The wheel should be removed in gear #14 to make remounting the wheel easier. Loosen knurled head screw D and remove cable box E.
- 2. Open the quick release lever.
- 3. Loosen the chain tensioner mounting bolt then pull the tensioner backwards while removing the wheel.

How to install the rear wheel with the Rohloff Speed Hub:



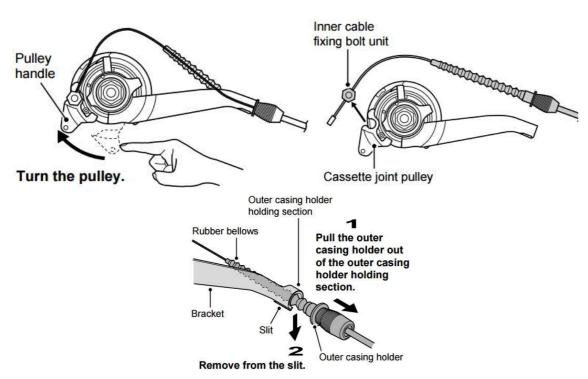




- 1. Place the wheel into the dropouts as shown, taking care that the chain is on the sprocket properly. Remember to pull the chain tensioner back to insert the wheel.
- 2. To remount the cable box, place the twist shifter in gear #14 then place the cable box over the hexagonal peg I, so that the two locating pegs H sit into the two holes in the back of the cable box. Turn the twist shifter back and forth around gear #14 until the cable box falls into place over the hexagonal peg.
- 3. Tighten up the knurled head screw.

### 6.2.3 Shimano Alfine Hub

How to remove the rear wheel with the Shimano Alfine Hub:

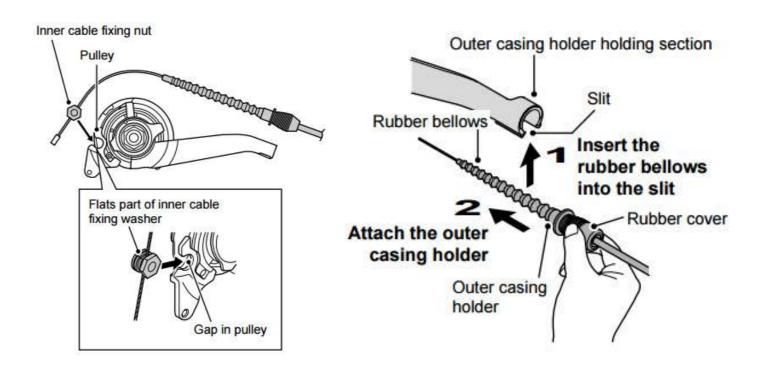


To remove the rear wheel with the Alfine Di2 electronic shifting system, use the Shimano TL-EW02 Di2 E-Tube Plug Tool to remove and attach the electronic cable to the hub.

- 1. Shift to the highest gear to release the tension on the shifting cable.
- 2. Push the lever of the pulley clockwise.
- 3. At the hub, pull the cable housing out of the cable stop.
- 4. Remove the inner cable fixing bolt from the joint pulley.
- 5. Loosen the axle and remove the wheel.

How to install the rear wheel with the Alfine Hub:

- 1. Reinstall the wheel in the dropouts, ensuring that the lock washers are in the dropout and the axle nuts are torqued to.
- 2. Bring the cable around to the pulley, hold it so that the inner cable fixing nut is facing to the outside (toward the frame end), and then slide the flat part of the inner cable fixing washer into the gap in the pulley.
- 3. Attach the inner cable to the pulley as shown in the illustration, pass the part of the inner cable which has the rubber bellows attached through the slit in the cassette joint bracket, and then insert the outer casing holder securely into the outer casing holder holding section. Be careful not to damage the rubber bellows.



### 6.3 Brakes

Before each ride check that your brakes function properly. If you find any problem, then it should be repaired immediately. Brakes are critical to the safety of your bike, so they must be in proper condition any time you are using your bike. Brake pads wear from use and must be changed according to the brake manufacturer's instructions. After storage or shipping, hydraulic brakes may need to be "pumped up." To do this, squeeze the brake levers several times until the brakes do not feel spongy.

### 6.4 Drivetrain

### 6.4.1 Shifting

We offer several different shifting systems. Many AZUB recumbents come with Shimano Alivio (24 speeds) or Shimano Deore (27 speeds) components, but you can also have the SRAM DualDrive system, the 11 speed Shimano Alfine hub, or the 14 speed Rohloff hub. Service manuals for all shifting systems can be found on their manufacturers' websites.

It is common that after the first 100 km the shifting and brake cables stretch and need to be readjusted. Your local bike shop should be able to make all the necessary adjustments.

We recommend that you to keep all cables clean and occasionally oil them to ensure that the shifting and braking systems function properly.

### 6.4.2 Chain

The chain has to survive high stresses. Because of this, you should maintain the chain and check it for wear. Because when the chain is worn out, it damages the chainrings, cassette and derailleur.

# Community

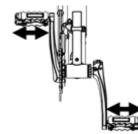
We recommend that you lubricate the chain periodically. How often you lubricate the chain depends on what lube you use, where you ride, if the chain is exposed to water, and how far you ride. Some riders clean and lube their chains biweekly while others only lubricate their chain every season. If your chain is noisy, then it likely needs cleaned and lubricated. When lubricating the chain you have to clean the chain before lubricating it, and after the lubricant has soaked into the rollers, wipe the chain side plates dry. Any oil on the outside of the chain only attracts dirt and does not help lubricate the chain.

Use a chain wear gauge to check the wear on your chain. If the chain is worn out, then change it immediately. Recumbent chains are about 2.5 times the length of the standard chain length sold for typical bicycles.

Chain tubes protect your legs and trousers from the oil and dirt on the chain. When your chain tubes are worn out, contact Azub to purchase replacements.

### 6.4.3 Bottom Bracket

All Azub recumbents are equipped with sealed cartridge bottom brackets which are maintenance-free. You can check the BB by shaking the pedals like you see on the picture. If you feel any play, then the bottom bracket should be changed.



### 6.5 Suspension and Steering

### 6.5.1 Headset

Azub uses standard semi-integrated 28.6 mm (1 1/8") headsets. The easiest way to check if everything is alright is to hold the brakes and try to rock the bike back and forth. If you feel and see some play between the fork and frame, then the headset needs tightened.

When tightening the threadless headsets, first, you have to loosen the stem or collar for USS. Second, tighten the screw on the top of the steerer until the play is resolved but not so tight as to bind the fork. Retighten the collar, and you're done!



Figure 12 - Headset adjustment (Collar will vary by steering system.)

### 6.5.2 Steering

If you feel some play in the USS handle bars it can be caused by a loose steering axle. If you need to tighten it, then remove the seat and tighten the axle with a 6 mm Allen key.

### 6.5.3 Suspension

If applicable, keep front fork stanchions clean and lubricated for maximum longevity.

The rear suspension pivot is equipped with sealed bearings which require no maintenance. We recommend checking the tightness of the pivot bolt every month. The bearings need changed about every 10000 km. Please contact Azub for replacement specifications.

Keep your shock clean for maximum longevity. Most rear shocks require special skills to repair or service. Consult their service manuals for proper maintenance. We recommend that you have the suspension checked every 6 months.

### 7. Additional Resources

There are recumbent communities and resources such as <a href="www.bentrideronline.com">www.bentrideronline.com</a> and <a href="www.bentriders">www.bentrideronline.com</a> and <a href="www.recumbents.com">www.recumbents.com</a> which host free forums for recumbent riders. These provide a great way to connect with the recumbent community.

### 8. Warranty

The Azub Bike standard warranty for the original owner of our product is 2 years for frame, steering and seat components. If the customer completes and submits the included registration form to Azub Bike, this warranty is extended to 5 years. This warranty covers that the frame, steering and seat are free of defective materials and workmanship. This warranty is valid only with the original paint and without any modifications.

The warranty for components follows the laws of the country/state where you purchased the bike.

The warranty is not valid in the case of damage through normal wear and tear, or irregular use of the bike or components (includes damage from crashes, jumping and other activities for which AZUB recumbents were not designed), inadequate care and maintenance, overloading through excess weight, incorrect assembly, modifications to the recumbent, or failure to follow instructions in this user guide. Warranty is offered to the original owner only, and is not transferable.

Some types of damage can point to abuse. Azub Bike reserves the right not to recognize a warranty if the failure or damage wasn't caused by material or manufacturing defect, and the decision to honor the warranty is at the sole discretion of Azub Bike. The owner shall be responsible for all shipping costs connected with the repair or replacement of warranted parts. In the case of recognition of warranty, Azub Bike will normally consider compensation for reasonable shipping costs associated with warranty claims. If you have a warranty claim, contact your dealer or us! We are proud of our products and our good name, and we will do our best to help you to solve your problems with our products.

Liability waiver: Taking part in any activity can result in injury or death. The rider is assuming the risk for any injury and property damage that may result from using our product. Azub Bike shall in no event be liable for incidental or consequential losses, damages or expenses in connection with its products.

You are also responsible for meeting all legal requirements of country, state, and locality where you are riding your recumbent. The important areas you need to consider are lights, reflectors, and helmet use. You can ask your local bike dealer for information about legal requirements in your area.





AZUE BIKE s.r.o. Nivnicka 422 | 688 01 Uherský Brod | Czech www.azub.eu | info@azub.eu

Proudly made in the heart of Europe.





### Follow our way









