

HELIX

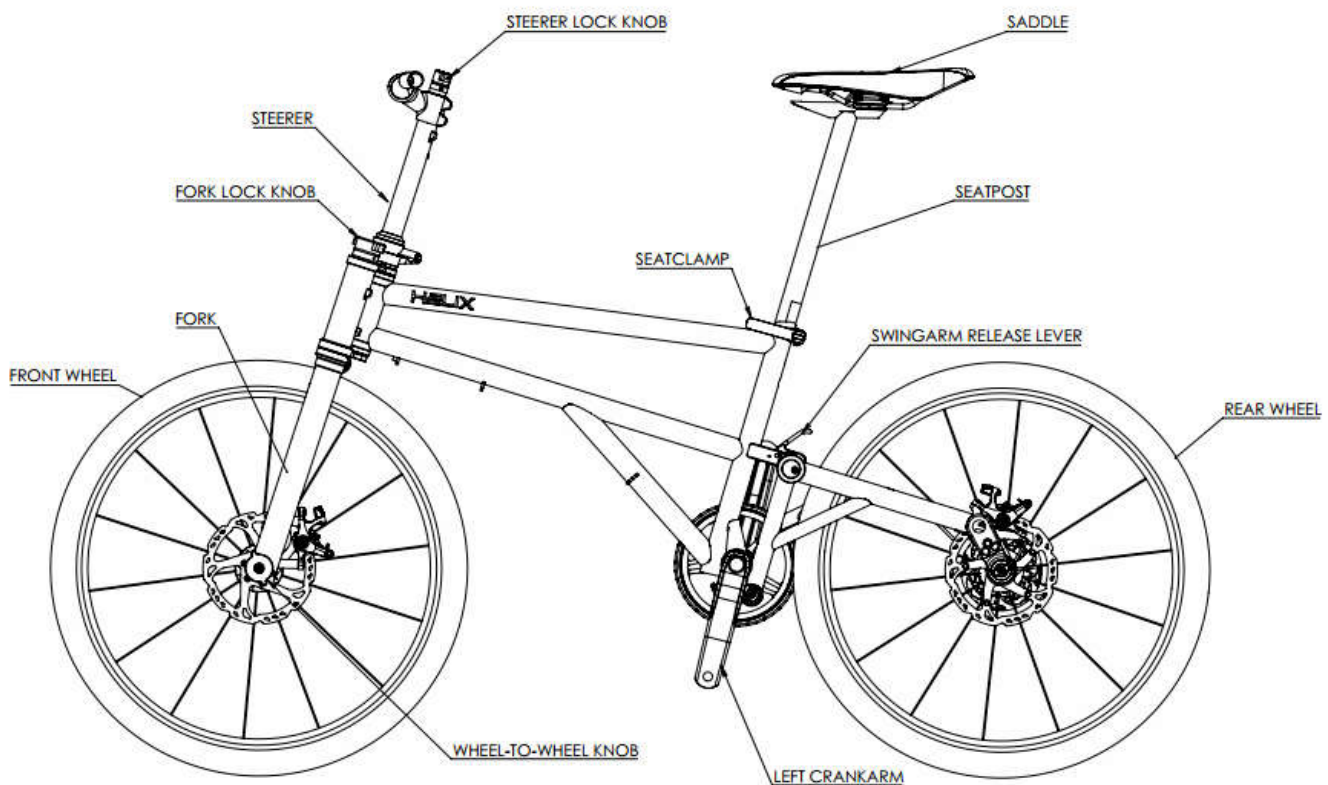
INTRODUCTION

Before using your Helix, please read this manual thoroughly. While this manual is intended as a guide, it is not a comprehensive guide to cycling or bicycle maintenance.

If you carry out any adjustments or maintenance work yourself, please read the relevant sections of this manual first as it is quite easy to get things wrong and to impair the folding process or damage your bike. This manual contains some tips and advice for using your Helix but if you are ever unsure of how to maintain your bike, visit a reputable bicycle store with a licensed bicycle mechanic for expert advice.

All Helix bikes are tuned at the factory, however some adjustment may be required after shipping. We recommend having your bike inspected serviced by a licensed bicycle mechanic regularly.

COMPONENT NAMES



UNPACKING

Unpack and check for any damage that may have occurred during shipping. Pay close attention to the derailleur/chain tensioner hanger to see if it has been bent and also check that the fork lock knob rotates freely.

If you see any damage or are unsure, do not ride the bike and inform us by email at hello@helix.ca immediately.

Inspect and tune your Helix before riding it the first time. If you are unsure of what is required to thoroughly inspect your bike, have a licensed bicycle mechanic inspect it before you ride it.

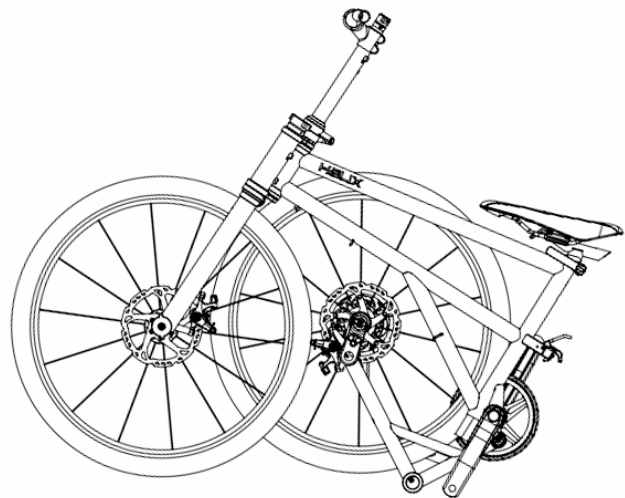
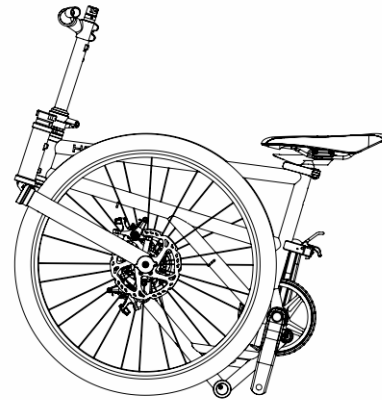
UNFOLDING

STEERER

- Unfold the handlebar into the upright position.
- Push the handlebar lock knob down and while pushing down, turn the knob clockwise until you hear the designated number of clicks indicated on the knob. A strong force of approximately 4Nm is required to achieve the desired locking.

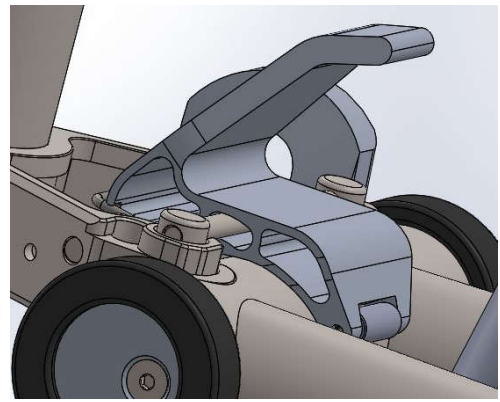
FORK

- Make sure the left side crankarm is not blocking the front wheel. If it is blocking, rotate it backwards out of the way.
- Turn the wheel-to-wheel connector knob clockwise to release the lock.
- Unfold/rotate the front fork to the open position.
- Push down on the fork lock knob and while pushing down, turn the knob clockwise until you hear the designated number of clicks indicated on the knob. A strong force of approximately 4Nm is required to achieve the desired locking.

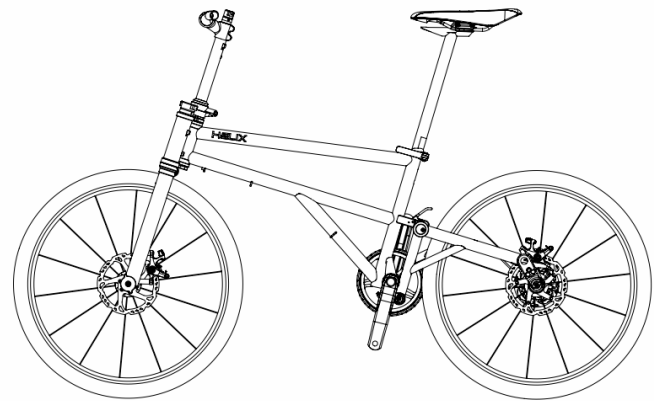
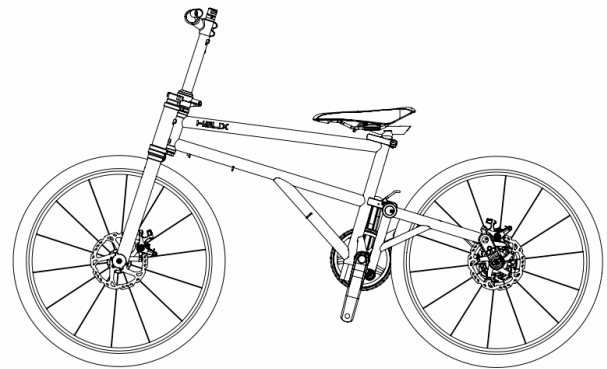


SWINGARM

- Lift the rear of the bike using the back of the saddle as a handle/lifting point. The swingarm will swing out and the rear tire may require a push from your leg to reach the open position. Push down firmly on the saddle to ensure that the locking pins in the swingarm latch have engaged. Correct locking will have the swingarm release handle in the locked position.



The swingarm release lever in the locked position. The release lever is down and follows the curve of the mating swingarm tube.

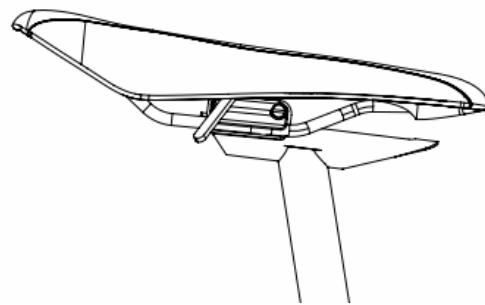


SEATPOST

- Unclamp the quick release lever and raise the saddle to the desired riding height. Tighten the quick release lever; it should be touching the frame in its closed position. The saddle should be pointing straight ahead.

SLIDING THE SEATPOST

- Unclamp the sliding seatpost release lever from under the saddle and move the saddle all the way back until it stops. Firmly tighten the lever; it should be touching the rear rails of the saddle.



Saddle lever in the locked position.

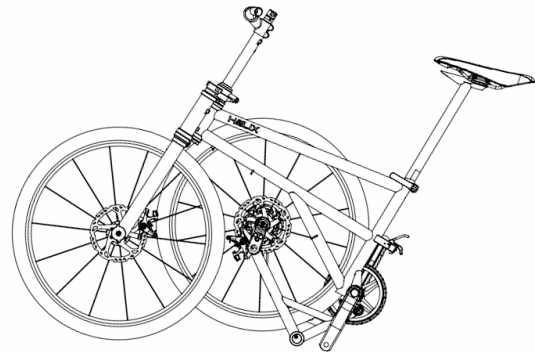
PEDALS

- Push the pedals into their slot and check that the release pin/handle is engaged

FOLDING

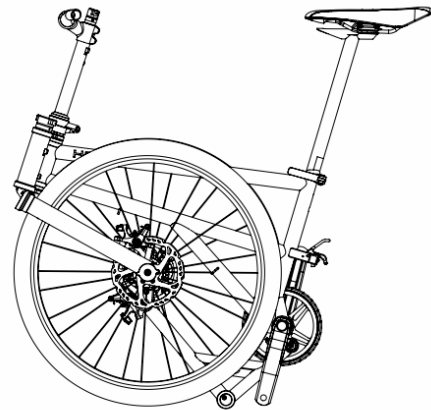
SWINGARM

- Release the swingarm lock by lifting the release lever and lift the bike until the swingarm is folded.



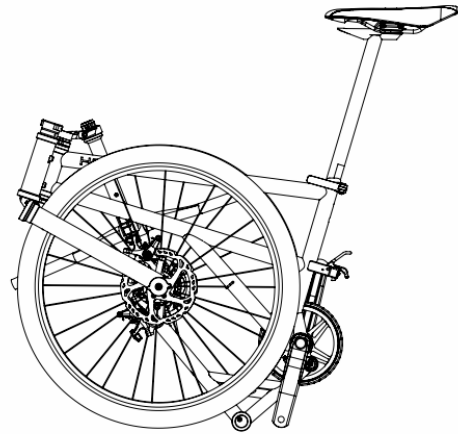
FORK

- Release the secondary safety by pushing down on the release button. While pushing down, rotate the fork lock knob counter-clockwise until the knob springs up to the unlocked position.
- Make sure the left side crankarm is not blocking the front wheel. If it is blocking, rotate it backwards out of the way.
- Rotate the front fork to the folded position.
- Turn the wheel-to-wheel connector knob clockwise and push the front wheel inwards towards the rear wheel. You may need to help the wheels engage by squeezing the tires together.
- Release the wheel-to-wheel connector knob and it will rotate into the locked position. If it doesn't rotate, then turn it to assist it.



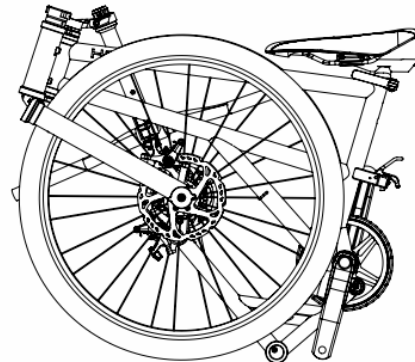
STEERER

- Release the secondary safety by pushing down on the release button. While pushing down, rotate the steerer lock knob counter-clockwise until the knob springs up to the unlocked position.
- Fold the handlebar into the folded position.



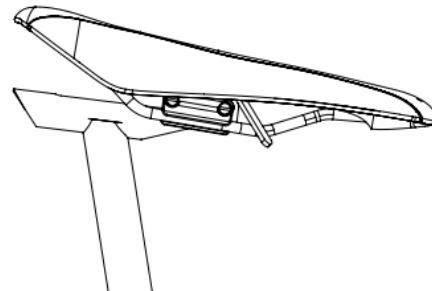
SEATPOST

- Unclamp the quick release lever and lower the saddle to just slightly above the lowest possible point so as not to clamp the weld and tighten the quick release lever. The saddle should be pointing straight ahead.



SLIDING THE SEATPOST

- Unclamp the sliding seatpost release lever from under the saddle and move the saddle all the way forward until it stops. Firmly tighten the lever; it should be touching the front rails of the saddle.



Saddle lever in the unlocked position. You must return the lever to the locked position before handling the folded bike.

PEDALS

- Lift the pin/handle to release the pedal lock and remove the pedals.

ROLLING WHEN FOLDED

Helix was designed to be rolled on it's front wheel when folded using the saddle as a handle (Helix cannot roll on it's rear wheel). To roll properly, the left side crank must not be blocking the front wheel. If the crank is blocking the front wheel, rotate it out of the way. It is possible that the crank can move when rolling the bike. If this happens, in certain positions it can act as a brake. Take precaution so that the bike doesn't come to an abrupt stop.

Take care when rolling your Helix. Only roll it on smooth surfaces. Do not roll it down stairs or on bumpy terrain as you may damage your bike.

CARRYING & ROLLING

- Owners are responsible for assessing the way they use the bike at all times and should ensure that they take due care of their safety and welfare when riding, moving or carrying their bike.
- Helix Labs Inc. accept no responsibility for any injury caused when lifting and handling a folded bike.
- A Helix bike weighs between 9 and 12kg, depending on the equipment fitted.
- Luggage fitted to the front head tube mount can weigh up to 10kg.
- Owners must take due consideration of the weight of their bike and any luggage they plan to lift or carry and balance this against their particular physical capabilities; the circumstances i.e. route, under-foot conditions etc, must also be considered before each lift and/or carry of the bike and luggage.
- Owners should always remove luggage from their folded bike so they do not attempt to lift or carry the combined weight of the bike and luggage.
- Whenever you are no longer able to ride your Helix, inside a train station for example, you should roll it as far as possible before carrying it for the shortest distance.
- It is recommended that the folded bike is carried one-handed, most comfortably with your arm straight and the bike to your side. The bike should be held by main frame below the saddle.
- If you have to carry the bike for any distance, then it may be appropriate to swap the bike between each hand at suitable intervals, depending on your capabilities.
- Carrying the folded bike two-handed is only advisable over a very short distance, as it can only be done by holding the bike at chest/stomach level in order to avoid knocking your legs or knees against the bike; this requires both arms to be bent with an approx 90 degree bend, which will place extra strain on your arms.
- The folded bike is not designed to be used as a stool, do not sit on the bike when folded.

MAINTENANCE

Helix is manufactured using the highest quality materials and as such requires very little maintenance. There are however a few important areas that require attention.

LUBRICATION

It is important to lubricate components to keep them running safely and efficiently. We recommend you do this regularly, though some parts will need more frequent lubrication.

CHAIN

- The chain has to be well-lubricated for smooth pedaling. Apply chain lubricant while turning the pedals backwards, making sure it flows onto the rollers; allow the oil to work in by continuing to turn the pedals backwards, then wipe off any excess. When lubricating the chain its worth remembering that you are trying to lubricate the chain rollers and not the plates, any lubricant on the plates isn't going to aid drivetrain

efficiency and will simply serve to attract dirt. The best method is to carefully apply one drop of lubricant to each roller, this will take a little longer than just squirting lube on the chain while you back pedal, but will ensure the lube gets where it's needed and nowhere else.

ALFINE

- The Shimano Alfine 11 (SG-S700 & SG-7001)
 - To maintain product performance, oil should be changed after the first 1,000 km from start of use of the product, and once every 2 years thereafter (or after every 5,000 km if bicycle is ridden frequently).
 - When performing maintenance, use only Shimano SG-S700 OIL.
 - If SG-S700 OIL is not used, problems such as an oil leakage and gear shifting malfunction may occur.

DERAILLEUR

- The Shimano SLX M675 rear derailleur requires no maintenance.

SINGLE SPEED

- The single speed requires no maintenance.

CABLE RETURN SPRING

- The cable return spring should be greased if the cable begins to show signs of moving with difficulty. It should also be greased if it begins to squeak.

HELICAL HINGES

- **DO NOT LUBRICATE** - The helical hinges are designed for use in dirty environments and do not require lubrication. Road oils and grease will not affect their performance.

FORK AND STEERER LOCKING DEVICES

- **DO NOT LUBRICATE** - The fork and steerer locks are designed to never need adjustment and require no lubrication for the lifetime of their use. Road oils and grease will not affect their performance.

Any good quality general purpose grease is satisfactory. For the chain, "dry" chain lubricants with good penetrating properties give the best results. Consider the environmental impact of the lubricants and greases and use them responsibly.

CLEANING

Do not use a hose or pressure washer as this can force water into bearings and moving parts, driving out lubricant and causing corrosion. We advise using hot soapy water and a sponge to clean the bike.

ROUTINE REPLACEMENTS

Planned replacement is advised to ensure both safety and good performance. The suggested intervals between replacements are for bicycles subjected to normal use; the most appropriate timing depends on the conditions of use and riding style. We recommend genuine Helix replacement parts for safety critical components.

DRIVETRAIN

Over time, the chain and sprockets will wear, commonly known as chain stretch; this will result in inefficient and rough power transmission. We recommend replacing the chain and sprockets every 1500 – 5000 KM, but regular cleaning and lubrication will prolong the chain's life. Never use a new chain on worn sprockets or vice versa. To measure chain stretch, you may wish to use a chain stretch tool.

CABLES & HOUSING

Cables do not have an indefinite life and to reduce the risk of failure, replace the cables at intervals of 6000 KM or less. Cable and housing lengths are critical and incorrect length could affect the safety and performance of your bicycle. Only use compressionless housing for brakes and shifter. For best results, use only high quality cables and housing and have them fitted by a certified bicycle mechanic. Although the brake and shifter cables are pre-stretched, inevitably there is further initial stretch. As this affects shifting control, the derailleur or Alfine should be checked for correct adjustment.

BRAKE PAD AND ROTORS

Check your brake pads and rotors for wear and replace them as needed.

TIRES

The risk of punctures increases with use as the tire tread starts to wear away. Once you notice your tire tread wearing thin, replace the tire. This will reduce your chances of puncture and increase pedaling efficiency.

SPOKES

Within the first 100KM of use, the tension of the spokes should be checked and adjustments made to suit. If a spoke becomes loose for any reason, neighboring spokes will be carrying extra load and may fail.

SAFETY

Helix is designed for use on roads and well-made paths carrying a maximum load not exceeding 110kg (rider and luggage weight included). Helix is not intended for stunts, cross-country riding or extreme sports. Your Helix should be used for its intended purpose. Misuse may lead to failure of some components and void your Helix warranty. We do not recommend fitting a child seat or trailer to your Helix, doing so will invalidate the Helix warranty.

Before riding your Helix for the first time, and periodically thereafter, please pay close attention to the following:

- We recommend the use of an approved cycling helmet, even in countries where their use is not mandatory.
- Read and follow the national legal requirements of the country where you are riding, and comply with all applicable traffic laws.
- Check brakes, tires and steering regularly.
- Keep brakes and gears properly adjusted and operating cables in good condition.
- In rain, the brakes may be less effective and roads more slippery so brake sooner
- Check that all wheel nuts are properly tightened.
- When riding in the dark, wear reflective clothing and use lights (front and rear); check to ensure that your lights comply with local laws.

Before or after each ride, pay close attention to the following:

- Ensure that the quick release seatpost clamp is secured and the saddle is at the correct height.
- Check that the locking mechanisms are engaged with secondary safety engaged.
- During folding and unfolding as well as during use and maintenance, avoid putting your hands or fingers anywhere they may be caught or trapped.
- Ensure the bike is correctly folded or unfolded to avoid possible injury.
- Never try to alter the height of the handlebar stem where it may interfere with the steerer secondary safety.

WARNING

Take special care of the following warnings and dangers:

- Pinch points and sharp spots - During folding and unfolding as well as during use and maintenance, avoid putting your hands or fingers anywhere they may be caught or trapped especially the folding points and disc brakes.
- Tipping hazard - Helix was designed to stand when folded but it can fall over. Be careful of your surroundings and ensure that you place Helix in a safe place so as not to injure anyone or damage property in the event it falls over. Furthermore, if any of the tires become flat or uneven, particularly when stored for long periods of time, Helix may fall over.
- Do not sit on the bike without engaging the fork, steerer, seatpost and swingarm locks.
- Do not sit on the bike when folded.
- Do not ride with seatpost in the folded position or slid forward position.
- Do not over-tighten the seatpost binder as you may damage the frame.

Many components on a bike are highly stressed and with high mileage, heavy loads or hard riding, will eventually reach the end of their design life; in particular, aluminum alloy has a limited fatigue life. Failure in use can cause injury. You should check all load-bearing parts for any signs of damage, corrosion, or cracking and replace if necessary. Please visit a reputable bicycle store with a licensed bicycle mechanic for expert advice if you are uncertain. The bike must not be subject to any modification, repair or replacement other than as authorized by Helix Labs Inc.

The bike must be serviced by a licensed bicycle mechanic.

If the bike has been subject to a crash or impact you should stop using the bike immediately and have the bike shipped to Helix Labs Inc. for inspection. Damaged components should be replaced before the bike is ridden again. Any deep scratches or gouges can severely weaken the component and cause premature failure of the part. Note: We recommend that genuine Helix parts are used for safety-critical components.

HELIX LABS INC.
<https://www.helix.ca>

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