

DICK'S Sporting Goods

Nishiki Bicycle

Assembly Guide

Revision 3 – February 2023

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ABOUT THIS GUIDE

This guide provides assembly steps for your new bicycle. It is the owner’s responsibility to follow all applicable steps exactly as written in this guide and to review the checklist at the end of this guide to ensure proper completion of all assembly steps before riding. Read through this entire guide before beginning assembly or maintenance. Bicycles must be properly assembled and maintained to prevent injury. If you have any questions or doubts about your ability to assemble your bicycle, bring your bicycle to a professional bicycle mechanic. You can bring your bicycle to any DICK’S Sporting Goods Store that carries bicycles for FREE assembly.

If you attempt to assemble your own bicycle following this guide, it is strongly recommended that you have a professional bicycle mechanic inspect your bicycle before your first ride.

This guide does not provide use instructions for your new bicycle. Read the **Owner’s Manual** provided with your bicycle for important user instructions.




WARNING: Your bicycle must be properly assembled before use. Improper assembly may result in damage to the bicycle, or an accident resulting in serious injury or death.

We **STRONGLY RECOMMEND** that a professional bicycle mechanic inspect your bike after assembly to ensure proper and safe assembly before riding.

GENERAL WARNING

Like any sport, bicycling involves risk of injury and damage. By choosing to ride a bicycle, you assume the responsibility for that risk, so you need to know and to practice the rules of safe and responsible riding and of proper use and maintenance. Proper assembly, use, and maintenance of your bicycle reduces the risk of injury.

This guide contains the combination of the  safety alert symbol and the signal word “**Warning**” concerning the consequences of failure to properly assemble, maintain, or inspect your bicycle.

- The signal word **WARNING** indicates a hazardous situation that, if not avoided, could result in serious injury or death.

Many of the **WARNINGS** state “you may lose control and fall.” Because any fall can result in serious injury or even death, the consequence of possible injury or death is not always repeated. Because it is impossible to anticipate every circumstance that might involve a potential hazard, the warnings in this guide are not all inclusive. There are risks associated with the use of any bicycle, none of which can be predicted, and all such risks are the sole responsibility of the rider.

REQUIRED TOOLS (NOT INCLUDED)

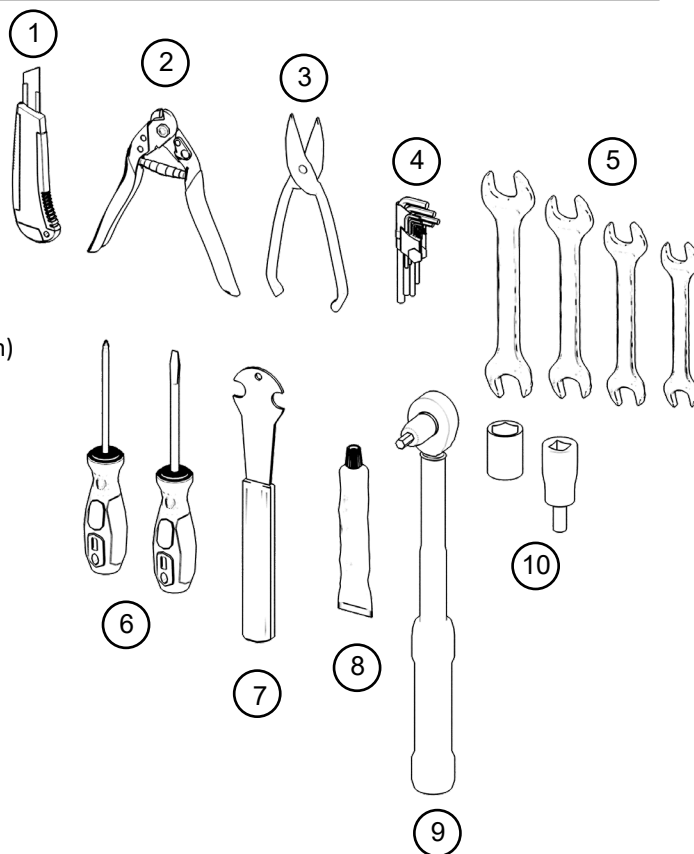
Proper bicycle assembly requires tools that are listed and shown below.

REQUIRED TOOLS ARE NOT INCLUDED WITH YOUR BICYCLE. If you do not have the required tools, do not attempt to assemble your bicycle; bring it to a professional bicycle mechanic.



WARNING: DO NOT use power tools during assembly.

Both over- and under-tightening of threaded components can lead to failure of the fastener or joined component and can cause failure, and could result in serious injury or death.



1. Box cutter
2. Cable cutters
3. Wire cutters
4. Metric Allen keys (2.5, 4, 5, 6, and 8 mm)
5. Open-end wrenches (10 to 17 mm)
6. Screwdrivers – Phillips and flat head
7. Pedal wrench
8. Bike grease
9. Calibrated torque wrench
10. Torque Wrench Attachments: Allen keys and sockets
11. Bike pump or air compressor

IMPORTANCE OF FASTENER TORQUE



WARNING: Failure to follow assembly instructions and warnings could result in bicycle, assembly, or component failure and could result in serious injury or death. Both over- and under-tightening of threaded components can lead to failure of the fastener or joined component and can cause failure, and could result in serious injury or death.


Torque is used to measure the tightness of a threaded fastener (screw or bolt). Over-tightening fasteners can cause damage to the fastener or to the joined component. Under-tightening can cause components to slip and can damage the fastener from fatigue. Failure from fastener damage or slipping components is reduced when threaded components are tightened to a proper torque value.

Torque values depend on fastener size and strength, surface finish and cleanliness, use of lubricant or thread lock compounds, and materials and geometry of joined parts (e.g., steel, aluminum, carbon fiber).

Some components have torque values printed or stamped on them. Preference is always given to printed or stamped torque values on the component. When torque values are not indicated on the component, the assembler or inspector should reference the manufacturer's specifications.

A **Reference Torque Values Table** is supplied on page 48 of this assembly guide with typical torque values for critical tightening points to be referenced only when a torque value is not printed or stamped on a component, or if the manufacturer's specifications are not available.

Printed or stamped values and manufacturer's specifications for proper torque are preferred sources over the Reference Torque Values Table.

NOTE: In this guide, the  wrench symbol is used to indicate steps where a torque wrench must be used to tighten fasteners to the correct specification.



WARNING: If you do not have a torque wrench, bring your bicycle to a professional bicycle mechanic for proper assembly.

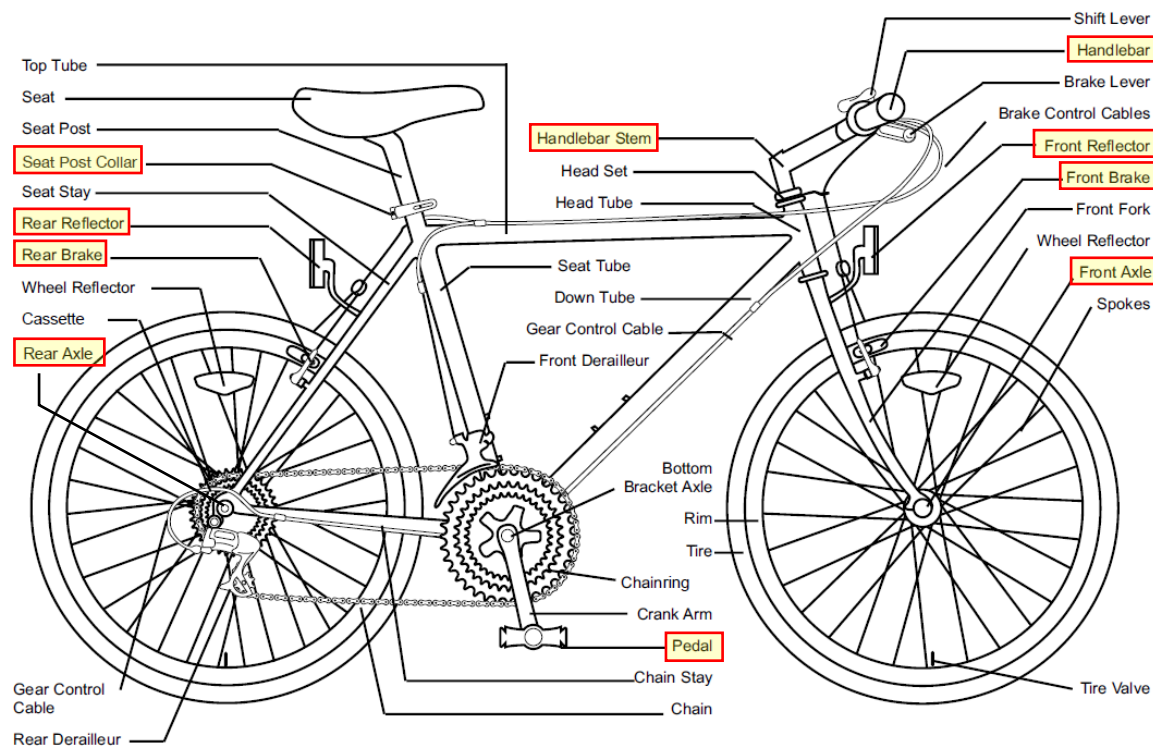
Failure to follow assembly instructions and warnings could result in bicycle, assembly, or component failure and could result in serious injury or death.

PARTS IDENTIFICATION GRAPHICS

MOUNTAIN / HYBRID / PATH & PAVEMENT BICYCLES

Mountain, hybrid, and path & pavement bicycles generally have the parts shown in the graphic below.

General critical tightening points that are described in this assembly guide are highlighted. Some bicycles may have other critical tightening points or parts that are different than those shown in the picture.

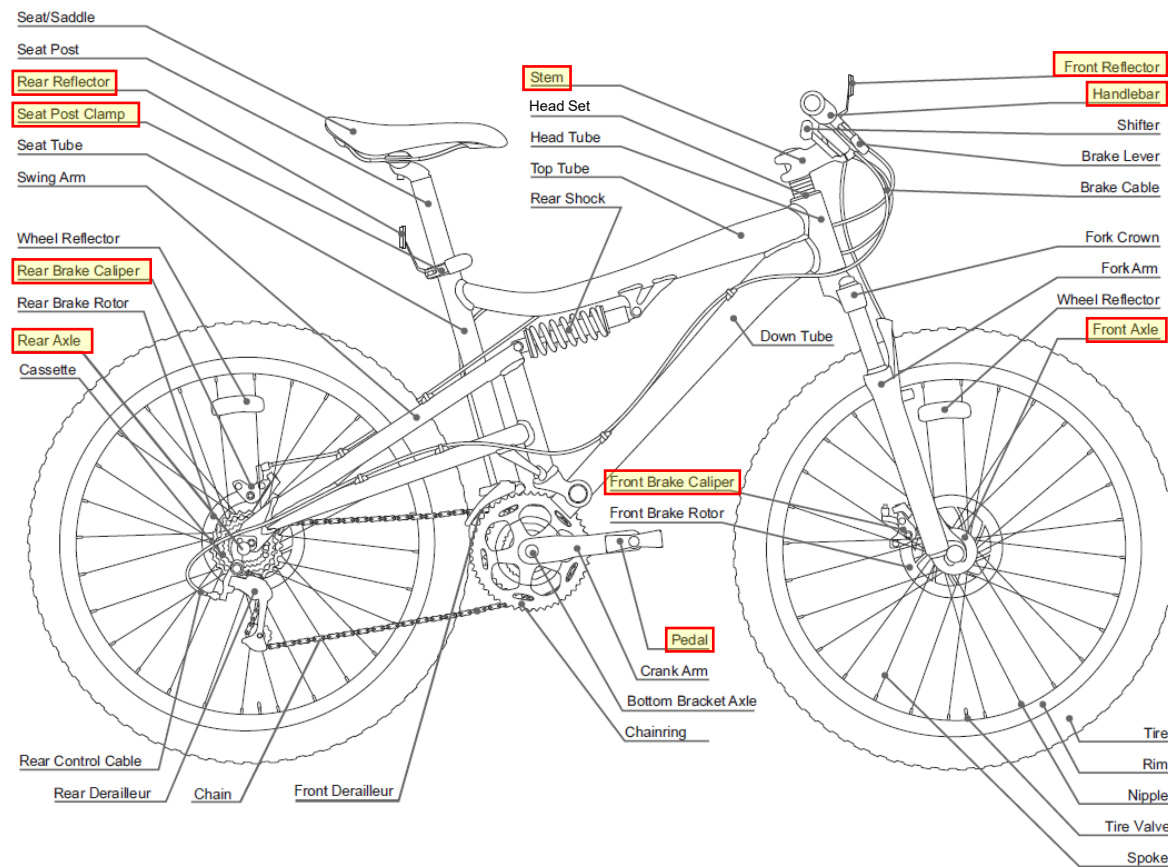


PARTS IDENTIFICATION GRAPHICS

FULL SUSPENSION MOUNTAIN BICYCLES

Full suspension mountain bicycles generally have the parts shown in the graphic below.

General critical tightening points that are described in this assembly guide are highlighted. Some bicycles may have other critical tightening points or parts that are different than those shown in the picture.

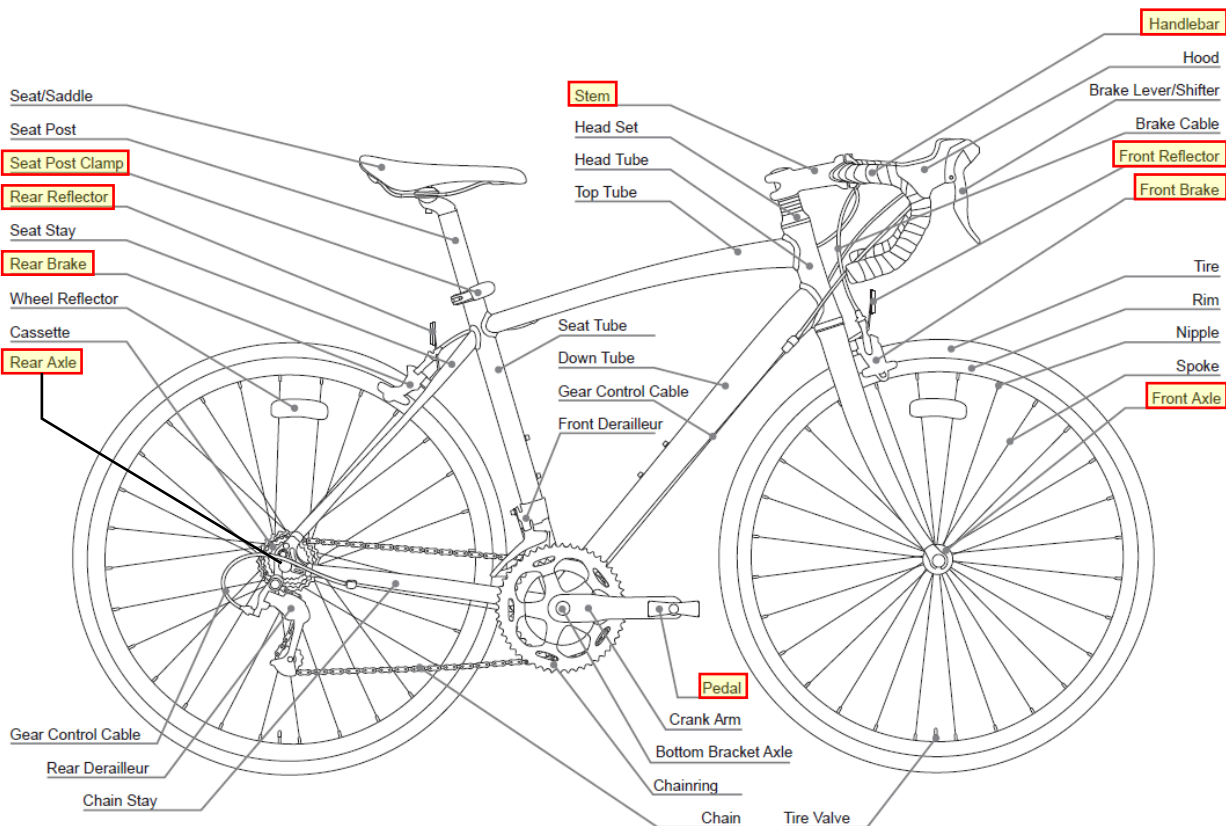


PARTS IDENTIFICATION GRAPHICS

ROAD BICYCLES

Road bicycles generally have the parts shown in the graphic below.

General critical tightening points that are described in this assembly guide are highlighted. Some bicycles may have other critical tightening points or parts that are different than those shown in the picture.

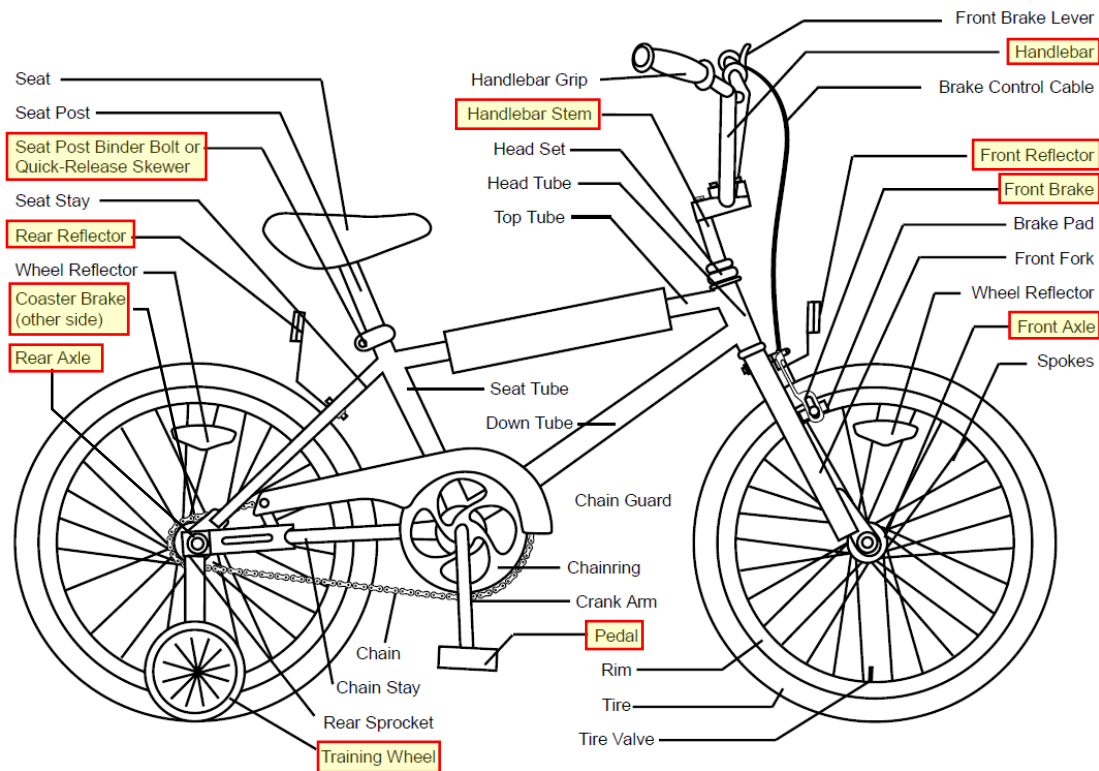


PARTS IDENTIFICATION GRAPHICS

YOUTH BICYCLES

Youth bicycles generally have the parts shown in the graphic below. Youth bicycles may also have parts shown in the other bicycle graphics, such as derailleurs and multiple gears.

General critical tightening points that are described in this assembly guide are highlighted. Some bicycles may have other critical tightening points or parts that are different than those shown in the picture.



UNPACK BICYCLE AND PARTS

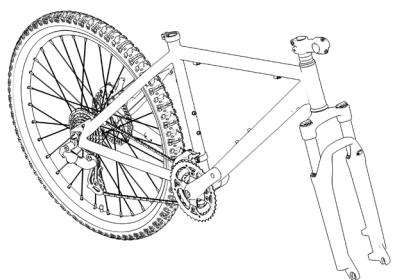
Carefully open the box and remove the packaged bicycle and small parts box.

Remove the packaging. This typically includes cardboard and foam tubes, zip-ties, plastic film, plastic wheel protectors, and plastic fork drop-out protector. Use wire cutters to cut zip-ties, but make sure you do not cut brake or shifter cables.



WARNING: Keep small parts and plastic bags away from children during assembly to reduce the risk of choking and suffocation.

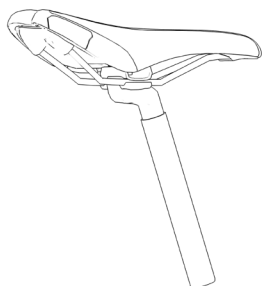
The included parts differ between bicycles and bicycles come from the factory with different levels of pre-assembly. Generally, the box should include:



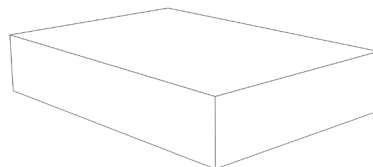
**BICYCLE FRAME WITH REAR WHEEL
AND HANDLEBARS (ATTACHED BY
CABLES, NOT SHOWN HERE)**



FRONT WHEEL



SEAT AND SEAT POST



SMALL PARTS BOX

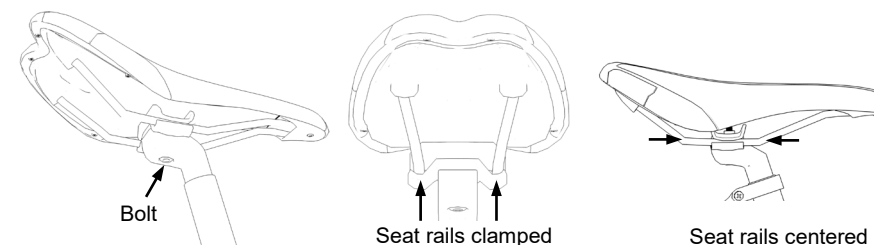
INSTALL SEAT ONTO SEAT POST

Attach the seat to the seat post, if it was not already assembled at the factory, following the appropriate method depending on the style of seat post included with your bicycle. Final seat adjustment is done at the end of this assembly guide (see page 40).

INTEGRATED SEAT CLAMPS

Loosen the bolt(s) on the seat clamps integrated into the top of the seat post and fit the seat rails between the seat rail clamps. The seat should be attached to the seat post with the seat post bolt toward the back of the seat and the seat rails centered in the seat clamps.

Tighten the bolt(s) evenly until the seat rails do not slide in the clamps.



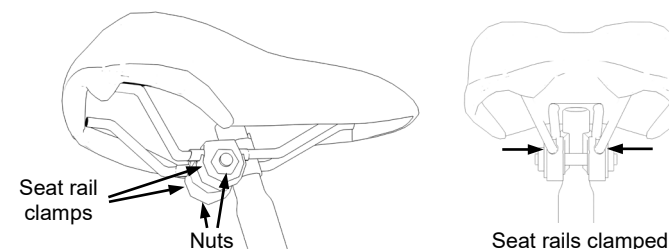
NON-INTEGRATED SEAT CLAMPS

Loosen the nuts on the seat clamps that are pre-assembled to the seat post or to the seat. If seat clamps are pre-assembled:

To the seat, rotate the center part of the seat clamp assembly to insert the seat post.

To the seat post, fit the seat rails between the seat rail clamps. Assemble with the seat rail clamps between the seat post and back of the seat and the seat rails centered in the clamps.

Tighten the nuts evenly until the seat rails do not slide in the clamps.



INSTALL SEAT POST

Assemble the seat and seat post assembly to the bicycle, following the appropriate method depending on the style of seat post binder included with your bicycle.

Apply a light coat of bike grease to the inside of the bicycle seat tube and insert the seat post so that the minimum insertion “MIN” marking is below the top of the bicycle seat tube. This marking should not be visible when seat post is properly assembled.

NOTE: The minimum insertion marking may just be a line without the “MIN” text.

NOTE: Do not overtighten the seat post binder. Overtightening the seat post binder can cause damage to the fastener, seat post, or frame. Tighten quick-release seat post binders by hand only.

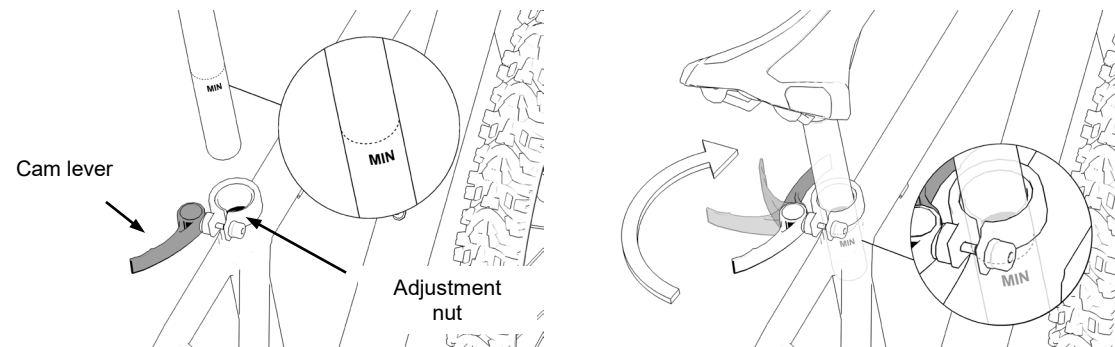
QUICK-RELEASE SEAT POST BINDERS

For quick-release binders, tighten the cam lever by hand as shown to secure the seat post.

Resistance should be felt when the lever is halfway between open and closed to ensure that the binder is properly tightened.

Adjust the nut or bolt on the opposite side of the lever until resistance is felt when the lever is halfway closed.

With the seat post inserted below the “MIN” line and the seat pointed toward the front of the bicycle, fully close the lever and make sure the seat post does not twist in the bicycle.

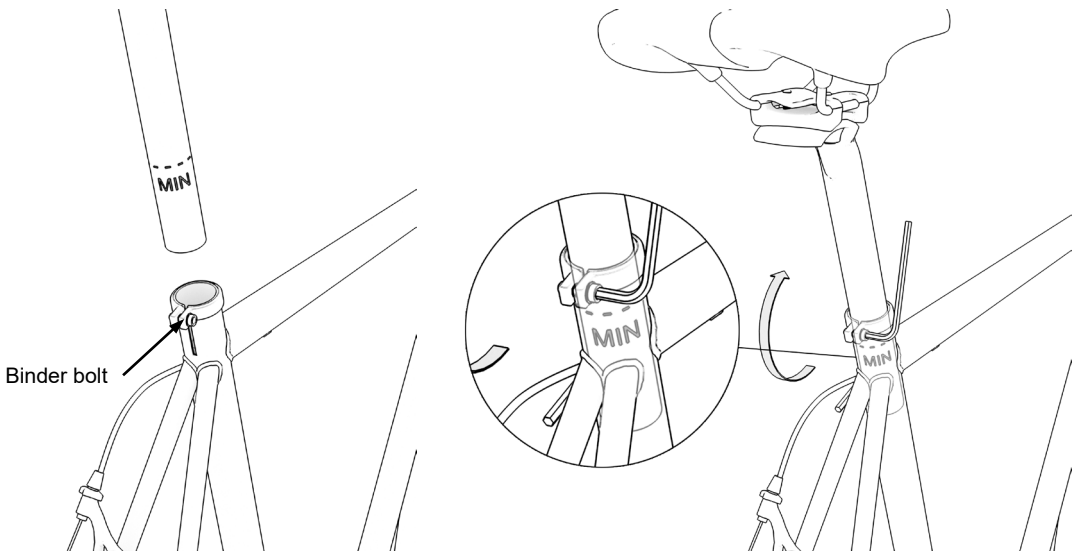


INSTALL SEAT POST

BOLTED SEAT POST BINDERS

Insert the seat post below the “MIN” line and align so that the seat is pointed toward the front of the bicycle.

Use a torque wrench to tighten the bolt on the seat post binder to the specified torque value. 



INSTALL HANDLEBAR STEM

Attach the handlebar stem to the bicycle, following the appropriate method depending on the style of stem included with your bicycle.

NOTE: When installing the stem, make sure both the stem and fork face forward. See graphics on pages 4-8 for correct forward-facing fork orientation.

NOTE: For some bicycles, the stem may already be *loosely* assembled to the handlebars. If so, make sure the brake and shifter cables are not twisted when installing the stem onto the bicycle.

QUILL STEMS

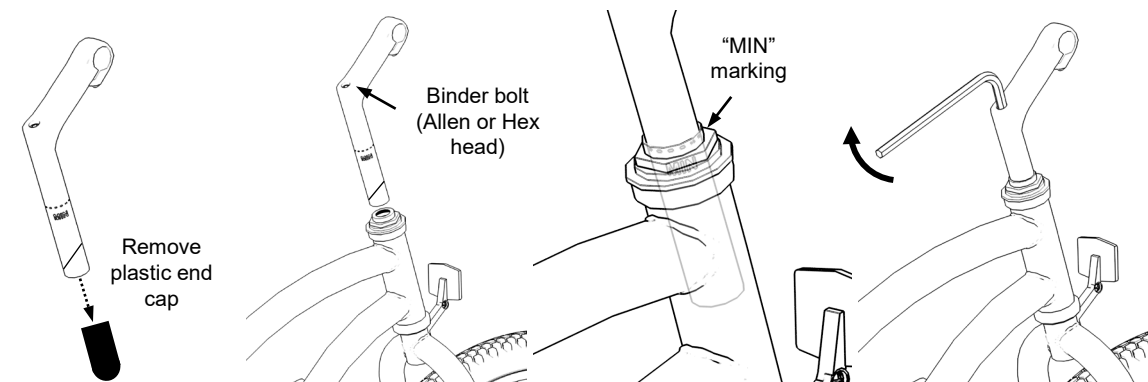
Remove the plastic end cap. Then apply a light coat of grease inside the fork steerer tube.

Insert the quill stem so that the “MIN” marking is below the top of the fork steerer tube. This marking should not be visible when properly installed.

Align the quill stem so that it is facing the same direction as the front of the fork and tighten the binder bolt until the stem does not move up or down or side to side in the steerer tube.

Use a torque wrench to tighten the stem binder bolt to the specified torque value. 

NOTE: On some youth bicycles, the stem binder bolt may have a Hex head instead of an Allen head.



INSTALL HANDLEBAR STEM

THREADLESS STEMS

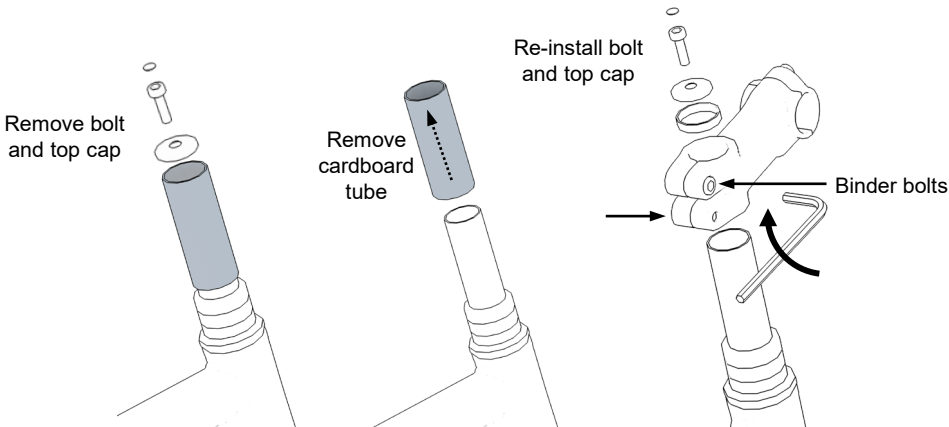
Remove the top cap and cardboard tube from the fork steerer tube; hold the fork in place when removing the top cap so that it does not fall off of the bicycle.

Install the stem onto the fork steerer tube and re-install the top cap.

Tighten the top cap only enough to remove play or looseness in the head set bearings; the fork should be able to turn smoothly but not move up and down or side to side relative to the frame.

Align the stem so that it is facing the same direction as the front of the fork and tighten the binder bolt(s) until the stem does not move side to side on the steerer tube when holding the fork in place.

Use a torque wrench to tighten the stem binder bolt(s) to the specified torque value. 



WARNING: Do not overtighten the stem binder bolts. Over- or under-tightening the stem binder bolts can damage the fasteners or stem and can result in serious injury or death.

INSTALL HANDLEBARS

Attach the handlebars to the stem, if they were not already *loosely* assembled to the stem at the factory.

NOTE: On some youth bicycles, the handlebar is welded to the stem and there are no handlebar binder bolts to adjust.

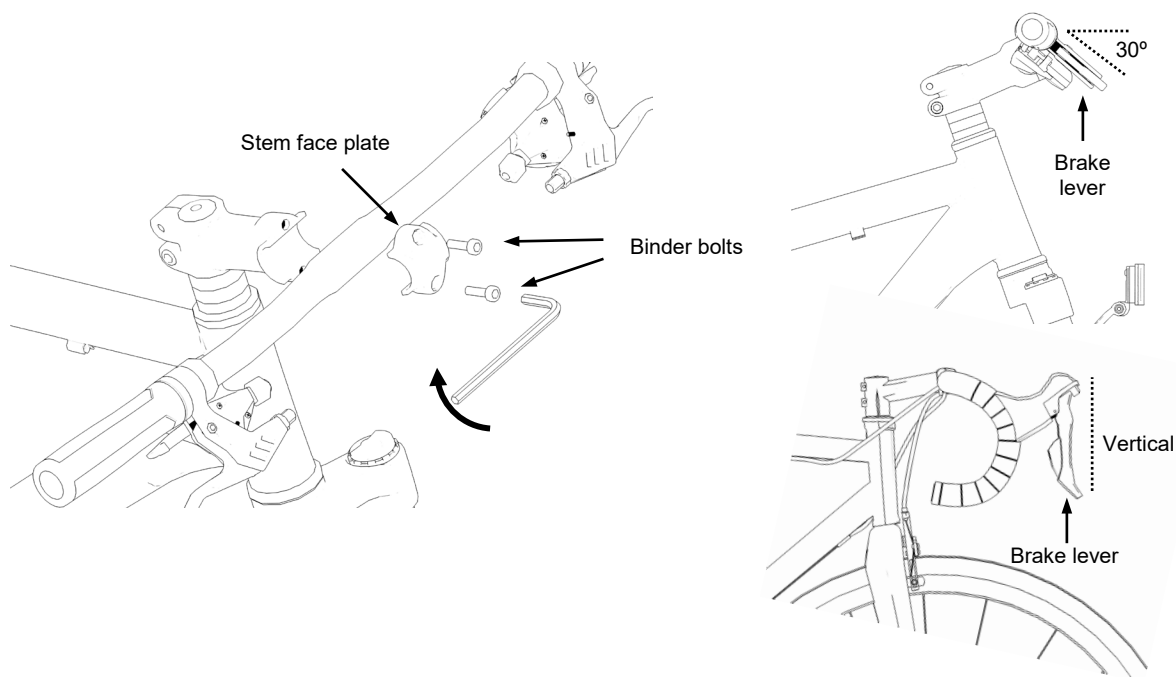
Remove the stem face plate and handlebar binder bolts from the stem.

Make sure that the cables are not twisted, and install the handlebars with brake levers pointing forward.

For bicycles with flat bars, make sure the brake levers point slightly downward (~30°).

For road bicycles with drop bars, make sure the brake levers are vertical.

Center handlebars in the stem and re-install the face plate and binder bolts.



INSTALL HANDLEBARS


Tighten binder bolts evenly for stems with two or four binder bolts.

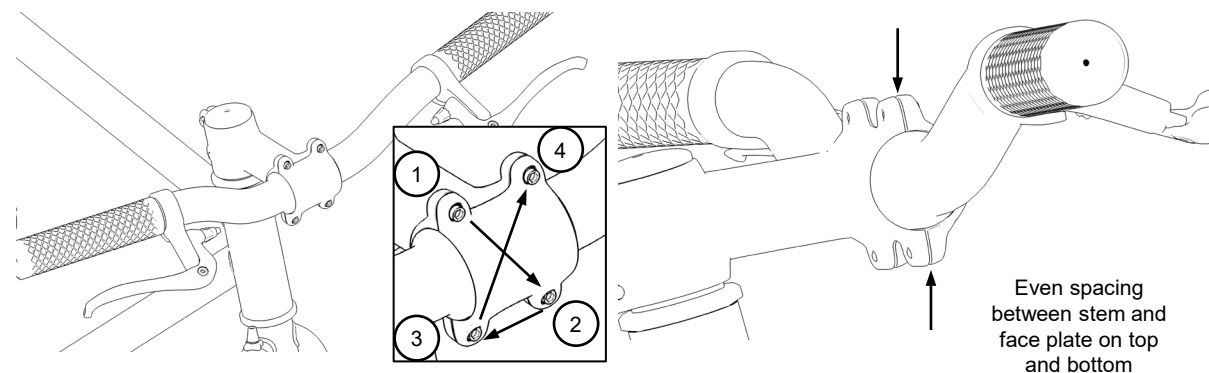


WARNING: Do not overtighten the handlebar binder bolts. Over- or under-tightening the handlebar binder bolts can damage the fasteners or stem and can result in serious injury or death.

Tighten the binder bolts in the order shown below for stems with four binder bolts.

Tighten until the handlebars no longer rotate in the stem, making sure that there are even gaps between the stem face plate and the stem on top and bottom of the stem.

Use a torque wrench to tighten the handlebar binder bolt(s) to the specified torque value. 



INSTALL FRONT WHEEL

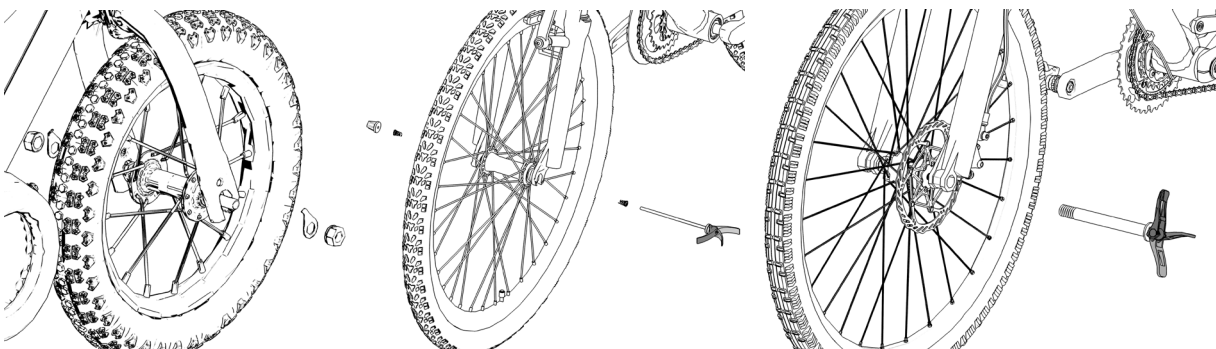
NOTE: If your bicycle came with fenders to install, see page 31 for fender installation instructions before installing the front wheel.

There are three different front wheel attachment styles, shown below. Make sure to follow the assembly instructions that match your front wheel.

BOLT-ON

QUICK-RELEASE

THRU-AXLE



For all front wheel types, make sure that the front wheel is installed so that the tire tread is going in the right direction according to the arrow on the side of the tire.



INSTALL FRONT WHEEL

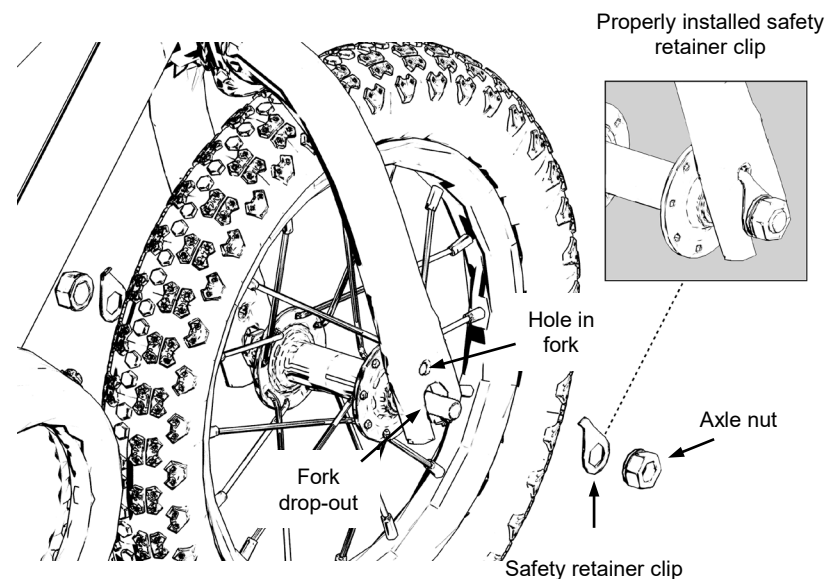
BOLT-ON WHEELS

Loosen the axle nuts and insert axle into both fork drop-outs. Make sure the safety retainer clips are installed on the axle and are positioned between the fork drop-outs and the axle nuts.

Insert the safety retainer clips into the holes on the fork drop-outs.

Tighten each nut while pushing the axle up into each fork drop-out.

Tighten each axle nut to the specified torque value using a torque wrench. 



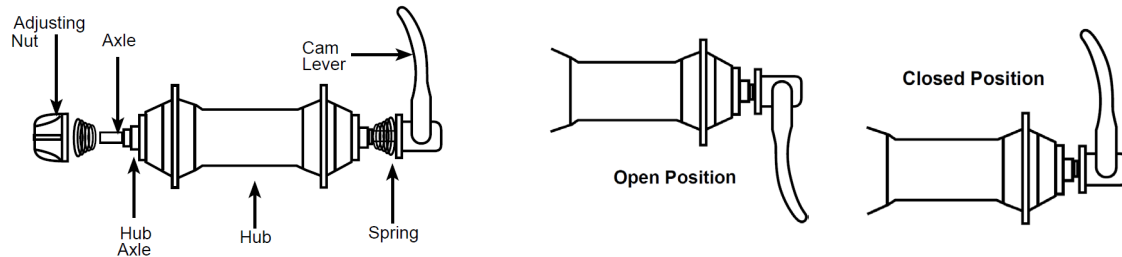
NOTE: Some youth bicycles also have safety retainer clips on the rear wheel, which are pre-assembled at the factory. Make sure the safety retainer clips are properly installed on the rear wheel, if applicable.

INSTALL FRONT WHEEL

QUICK-RELEASE WHEELS

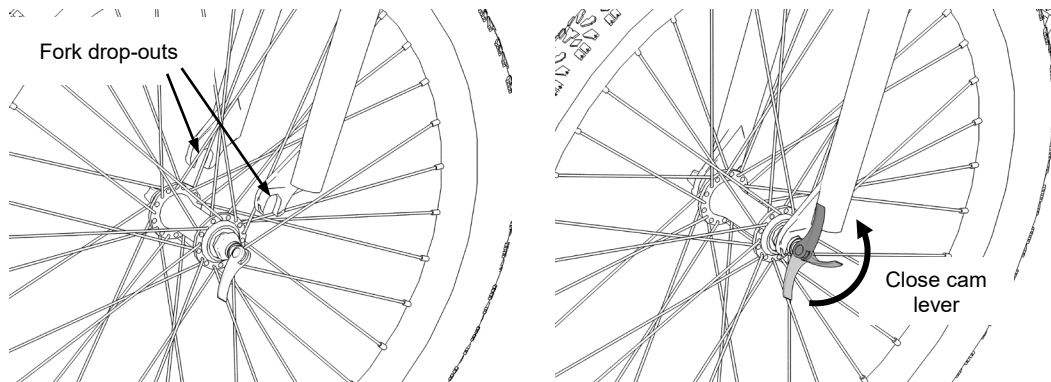
Remove the quick-release adjusting nut and one spring.

Slide the quick-release axle into the wheel hub axle from the left side of the wheel (opposite side of the bicycle from the chain), and replace the spring and nut.



Insert the wheel axle into the fork drop-outs on both sides and tighten the adjusting nut by hand so that resistance is just felt when the cam lever is halfway between the open and closed positions.

While pushing the wheel axle into the drop-outs evenly, fully close the cam lever with the lever facing upward.



INSTALL FRONT WHEEL

THRU-AXLE WHEELS

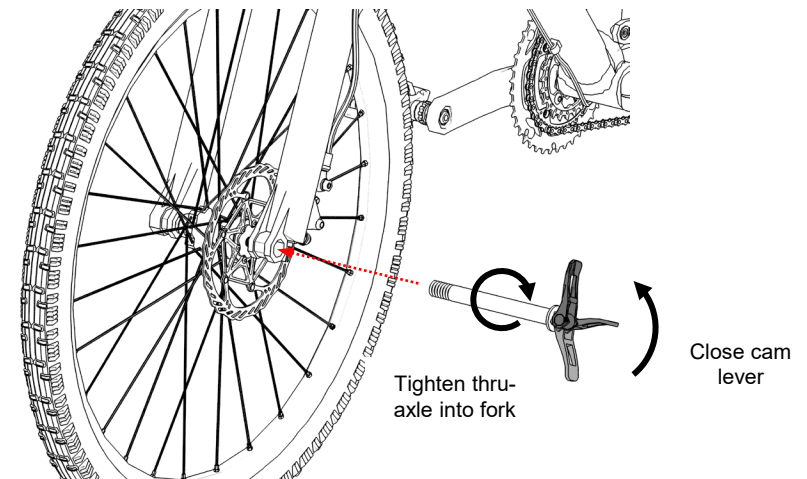
There are several types of thru-axe designs. Most thru-axes thread into the fork leg, and most designs include a cam lever that should be tightened by hand.

Follow directions, if included, for tightening thru-axe wheels of a specific axle design, or refer to the manufacturer's specifications.

Insert the front wheel into the fork and then insert the thru-axe through the fork legs and wheel hub.

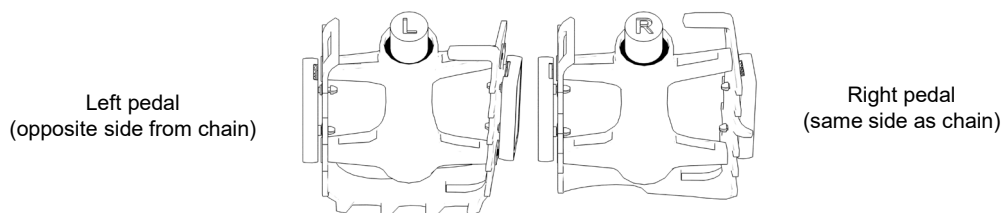
Tighten the axle by hand and then close the cam lever according to the manufacturer's specifications.

Do not use a tool to tighten the front wheel thru-axe unless specified by the manufacturer's specifications.



INSTALL PEDALS

Bicycle pedals are side-specific and cannot be interchanged. There are markings on the end of the pedal axles to designate which side of the bicycle they belong. "L" is the left pedal and "R" is the right pedal. Do not attempt to install pedals on the wrong side of the bicycle.

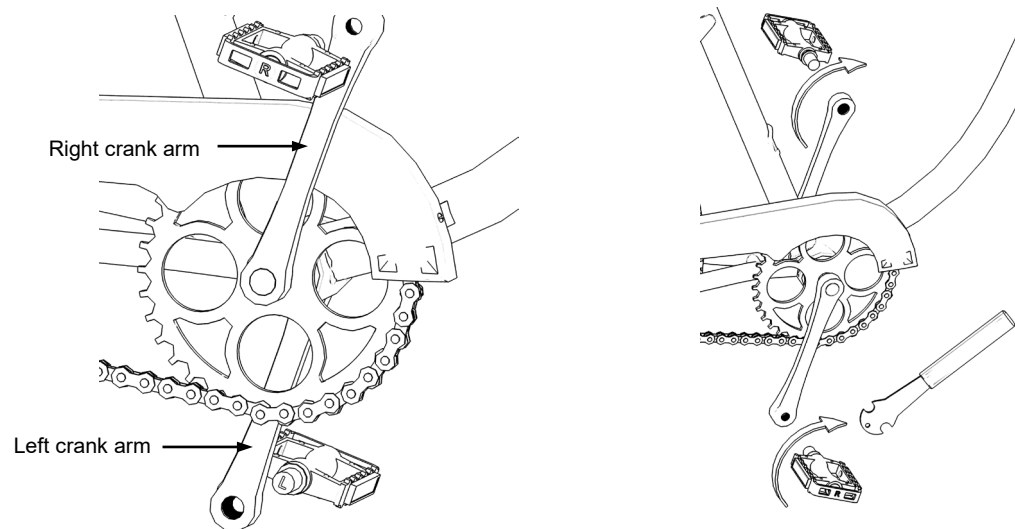


WARNING: Improper installation of the pedals may cause the pedal to come off while riding and may result in serious injury.

Apply bike grease to the pedal axle threads before installing the pedals to the crank arms.

Thread the **RIGHT pedal CLOCKWISE** into the crank arm **on the same side as the chain**.
Thread the **LEFT pedal COUNTER-CLOCKWISE** into the crank arm.

Use a pedal wrench to securely tighten the pedals approximately 1/4 of a full turn past the point where resistance is felt.



ASSEMBLE FRONT BRAKE

Your bicycle may be equipped with either **V-brakes**, **caliper brakes**, **disc brakes**, or **U-brakes**. Follow the appropriate assembly method depending on the style of brakes on your bicycle.

Front brake assembly starts with installation of the front brake cable to the left brake lever and the brake caliper.

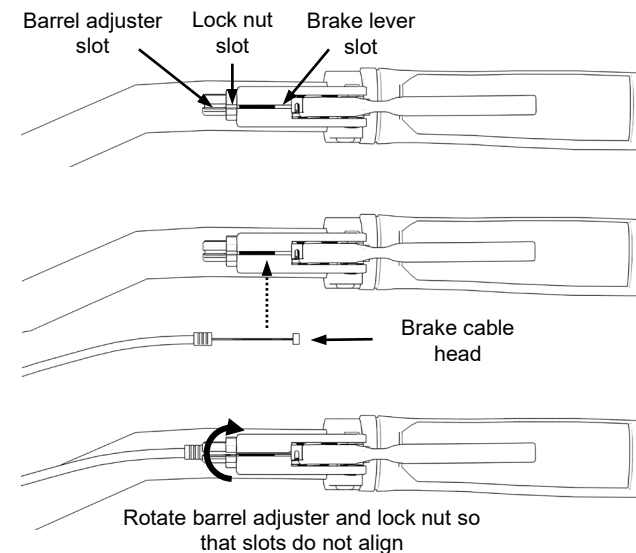
NOTE: Some disc brakes use hydraulic fluid instead of a cable. In this case, the brake fluid is already installed in the brake line between the brake lever and the caliper.

Align the slots on the brake lever, the barrel adjuster, and the lock nut to install the cable.

Press the brake lever toward the handlebar and insert the cable head into the lever.

Slide the brake cable through the slots, and slide the cable housing into the end of the barrel adjuster.

Rotate the lock nut and barrel adjuster so that they are no longer aligned with the brake lever slot.



ASSEMBLE FRONT BRAKE

V-BRAKES

Insert the cable end into the brake noodle and slide the noodle up to the housing. Slide on the rubber brake cable boot, and insert the noodle into the slotted retainer on the right caliper arm.

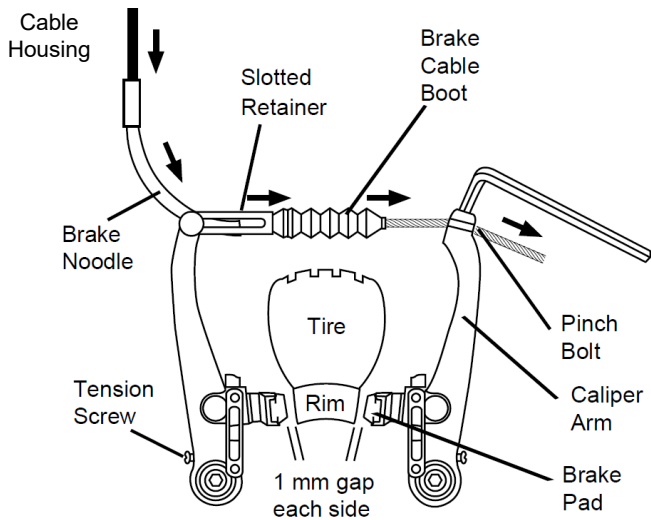
Loosen the pinch bolt on the left caliper arm and insert the cable in the groove behind the bolt.

Squeeze the caliper arms together and pull the cable through the groove so that there is a 1 mm gap between each brake pad and the rim.

Tighten the pinch bolt enough that the cable does not slip when the lever is squeezed firmly.

Adjust the tension screw on each arm to get equal spacing between each brake pad and the rim.

Cut the remaining brake cable to 4 inches long and crimp the cable end protector onto the cable end.



ASSEMBLE FRONT BRAKE

DISC BRAKES

Route the cable housing through the guide on the fork (if applicable), or route the cable inside the fork, as shown, and fasten the cable to the fork with a zip-tie.

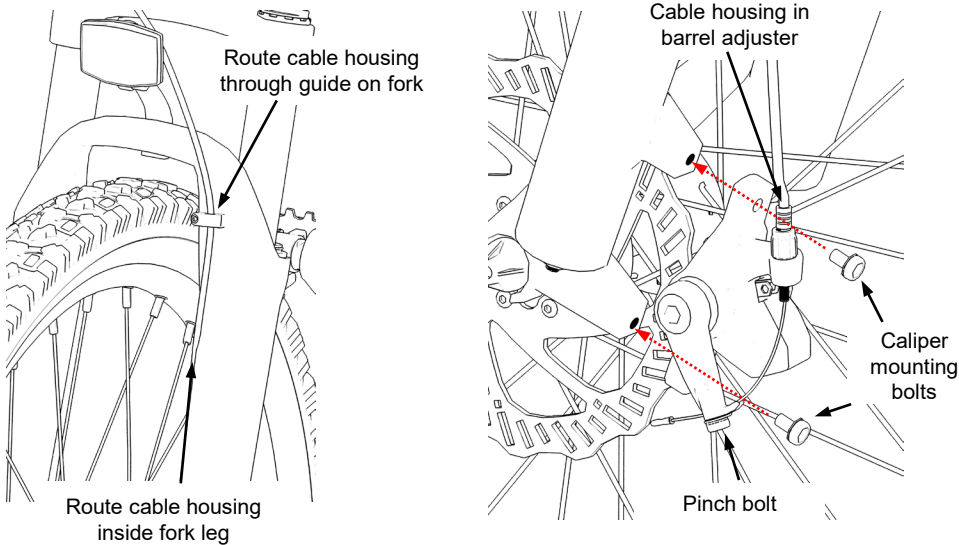
Loosely install the caliper to the fork with the caliper mounting bolts, as shown, if not already assembled at the factory. Prevent the wheel from turning while assembling the disc brake caliper.

Loosen the pinch bolt on the brake caliper, and insert the cable through the barrel adjuster hole on the caliper and into the groove behind the pinch bolt. Ensure that the cable housing is inserted in the barrel adjuster.

Pull the cable through the groove so that there is a small gap between each brake pad and the disc rotor.

Tighten the pinch bolt enough that the cable does not slip when the lever is squeezed firmly. Cut the remaining brake cable to 4 inches long and crimp the cable end protector onto the cable end.

WARNING: Do not assemble or adjust disc brakes while the wheel is turning as the disc rotor is sharp and may cause laceration or amputation. Ensure wheel is not turning before working on disc brakes.



ASSEMBLE FRONT BRAKE

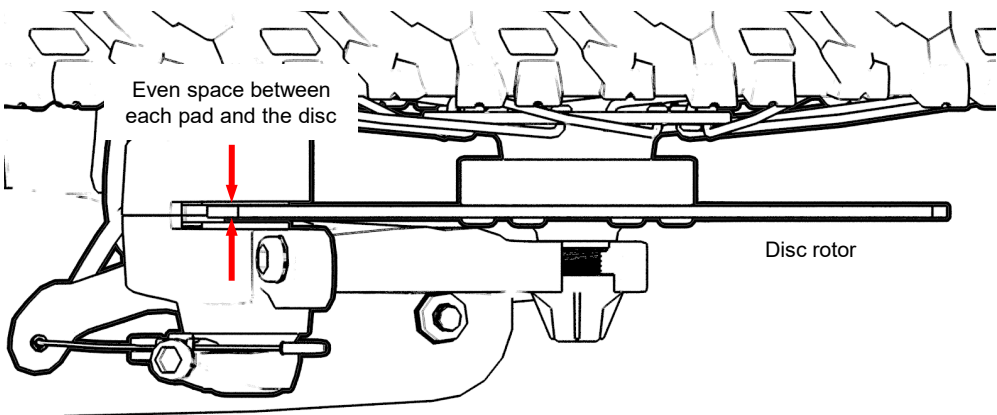
DISC BRAKES CONTINUED

Align disc brake caliper with the rotor by loosening both caliper mounting bolts so that the caliper moves freely.

Then firmly pull the brake lever and tighten the brake caliper bolts while holding the lever tight to ensure even brake pad spacing on either side of the disc rotor.



WARNING: Do not assemble or adjust disc brakes while the wheel is turning as the disc rotor is sharp and may cause laceration or amputation. Prevent wheel from turning while working on disc brakes.



ASSEMBLE REAR BMX BRAKE

Some freestyle BMX bicycles come equipped with a de-tangler system for the rear brake that will allow the handlebar to spin 360-degrees without binding the cables. It is very important that this system is assembled correctly to prevent binding.

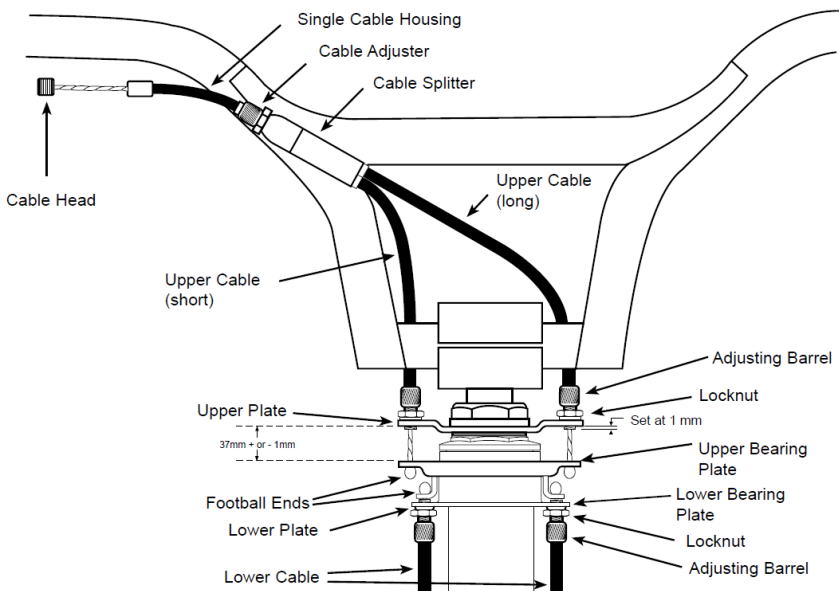
The lower cable is usually pre-assembled to the de-tangler system from the factory, but the upper cable needs to be assembled.

Insert the cable head into the brake lever, as shown on page 21.

Route the upper cables through the handlebars and thread the adjusting barrels into the de-tangler upper plate, as shown, with the short upper cable closest to the right brake lever.

Thread the adjusting barrels into the upper plate so that 1 mm of adjusting barrel threads stick out below the plate, and tighten the locknuts against the upper plate.

Insert the football cable ends into the upper bearing plate slots. Make sure that when you pull the brake lever the upper bearing plate is lifted by both upper cables.



ASSEMBLE REAR BMX BRAKE

REAR U-BRAKES

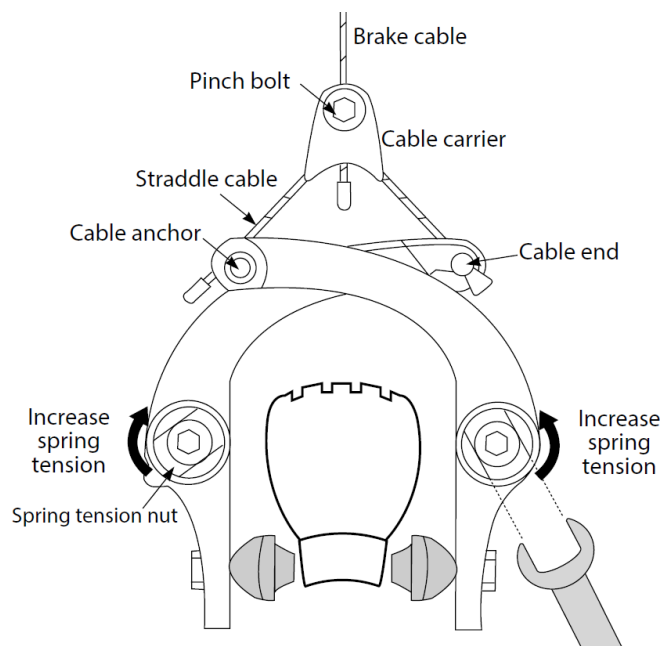
Assemble the rear brake as shown, if not already assembled from the factory.

Insert the brake cable through the carrier cable pinch bolt and tighten the bolt.

Insert the hook cable end of the straddle cable into the brake caliper and feed the straddle cable through the cable carrier.

Insert the free end of the straddle cable into the cable pinch bolt on the brake arm and tighten the bolt so that the cable does not slip when the brake lever is firmly squeezed.

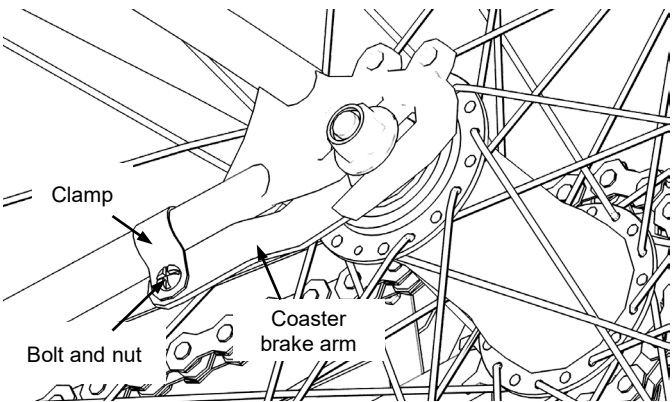
Adjust the cable and spring tension, as shown, so that each brake pad is 1–2 mm away from the rim.



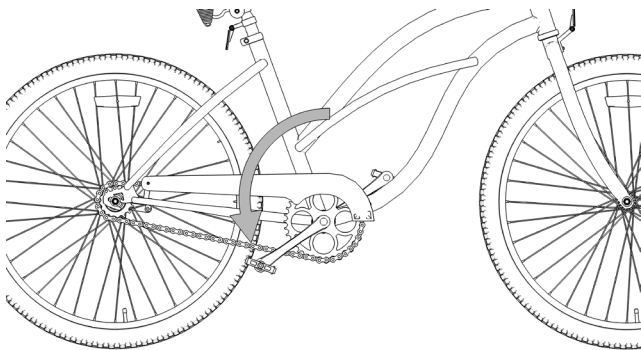
CHECK COASTER BRAKE ASSEMBLY

Some bicycles are equipped with a coaster brake on the back wheel that engages by pedaling backward (counter-clockwise). Coaster brakes are typically pre-assembled at the factory when the rear wheel is installed, but it is always important to check the coaster brake assembly and function at this point.

Check that the coaster brake arm is properly fastened to the frame with a bolt and nut, as shown. Check that the nut is tight on the bolt.



To check the function of the coaster brake, apply force to the pedals in the backward direction to engage the brake and lock the rear wheel from spinning. Make sure that when this force is applied the rear wheel does not turn.

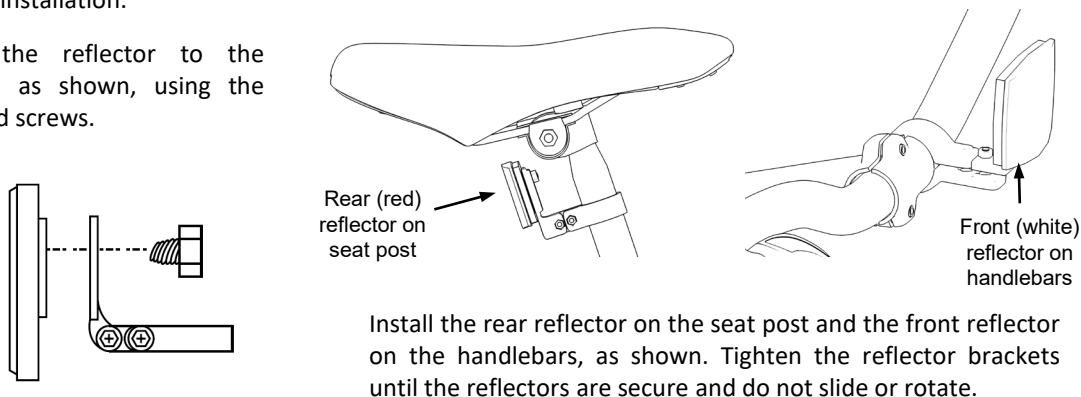


INSTALL REFLECTORS

Your bicycle is supplied with one front reflector (white), one rear reflector (red), two wheel reflectors (white), and pedal reflectors (orange). Reflectors are important safety devices that are designed as an integral part of your bicycle. Federal regulations require every bicycle to be equipped with front, rear, wheel, and pedal reflectors. They should remain securely fitted and in good, clean condition at all times.

Wheel and pedal reflectors are usually pre-assembled at the factory. Front and rear reflectors may require installation.

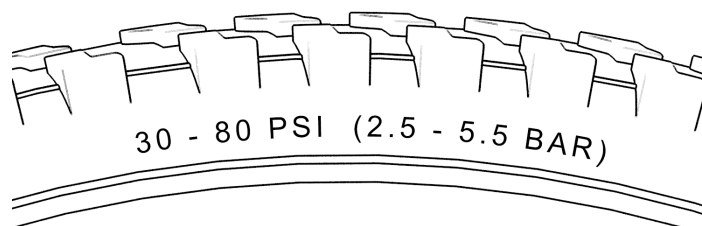
Install the reflector to the bracket, as shown, using the provided screws.



! WARNING: Do not ride your bicycle if the reflectors are incorrectly installed, damaged, or missing. Failing to do so can result in serious injury or death.

INFLATE TIRES

Inflate your tires using a hand or foot pump to a pressure within the range shown on the tire sidewalls.



NOTE: Do not inflate your tires more than the maximum value shown on the tire sidewall.

ASSEMBLE & INSTALL TRAINING WHEELS

Some youth bicycles come with training wheels that need to be assembled and installed on the bicycle. If the training wheels come with assembly instructions, follow those instructions.

ASSEMBLY

There are two options when attaching the training wheels to the wheel brace. Determine which option is used on your bicycle and follow the given instructions for that option.

Option 1

Position a washer on the shoulder bolt. Insert the shoulder bolt through the wheel. Follow with another flat washer. Then securely tighten a hex nut onto the shoulder bolt.

Insert the shoulder bolt through the wheel brace and set the washer on the shoulder bolt.

Lock the training wheel in place by securely tightening another hex nut onto the shoulder bolt. Repeat for both training wheels.

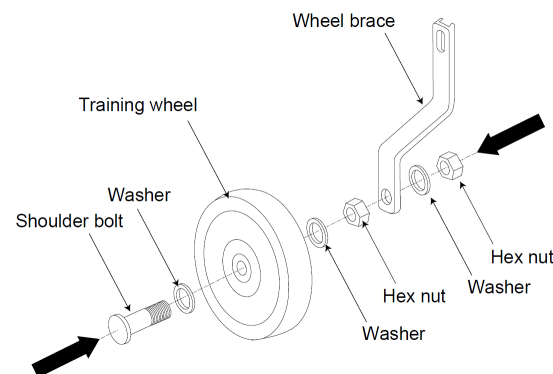
Option 2

Insert the shoulder bolt through the wheel. Follow with a flat washer.

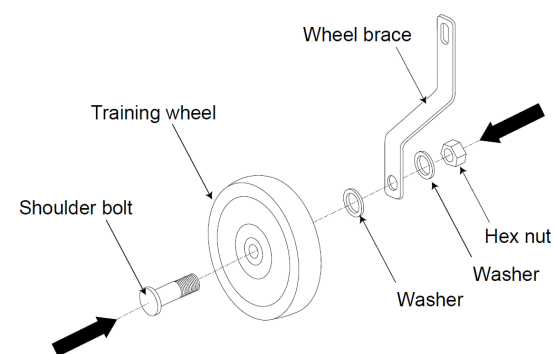
Insert the shoulder bolt through the wheel brace and set the washer on the shoulder bolt.

Lock the training wheel in place by securely tightening another hex nut onto the shoulder bolt. Repeat for both training wheels.

OPTION 1



OPTION 2



ASSEMBLE & INSTALL TRAINING WHEELS

INSTALLATION

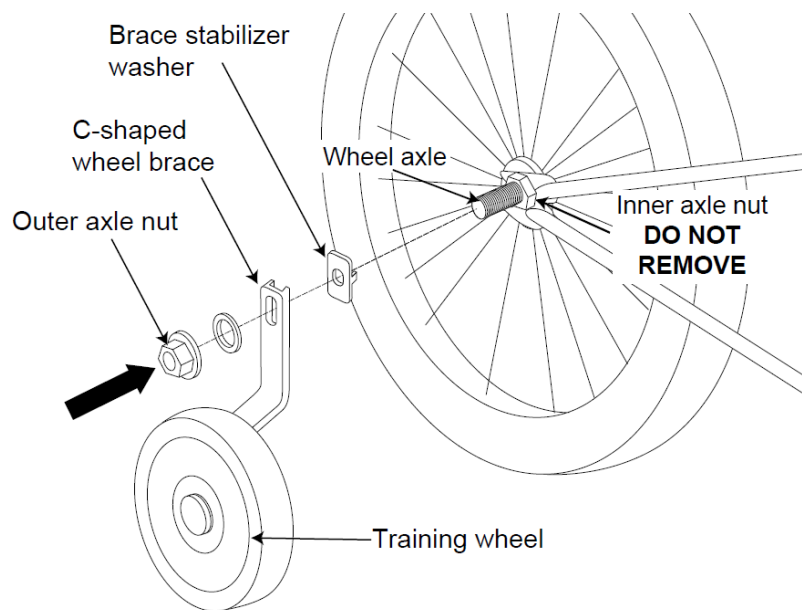
Place the brace stabilizer washer onto the wheel axle and align the washer so that the notch on the washer fits into the rear frame drop-out.

Place the C-shaped wheel brace onto the axle so that it fits over the brace stabilizer washer.

Install the washer and outer axle nut.

Tighten the outer axle nut securely, making sure that the wheel brace stays in the proper vertical position.

When the bicycle is upright, each training wheel should be lifted slightly off the ground. The elongated hole on the wheel brace allows for adjusting training wheel height.



INSTALL ACCESSORIES

FENDERS

Some bicycles come with fenders that may need to be installed. Rear fenders are usually pre-assembled.

Front Fender

First remove the front wheel from your bicycle, if it was already attached.

Place the fender assembly onto the fork, making sure the attachment holes and fender bracket holes line up. Attach the fender with the 10 mm hex bolt and nut.

Tighten the bolt until secure.

Reinstall the front wheel (see pages 16–19).

Rear Fender

First remove the rear wheel. Loosen the axle nuts or QR cam lever, remove the chain from the rear wheel cassette or sprocket, and remove the wheel from the bike.

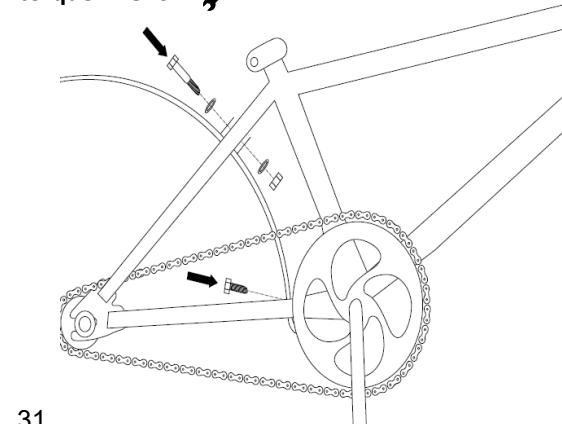
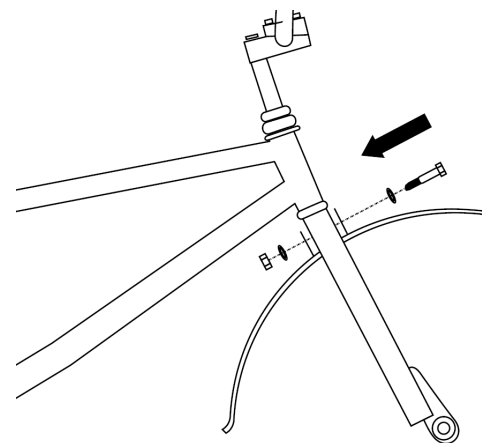
Place the fender assembly between the seat stays, making sure the fender bracket holes line up with those in the frame.

Attach the fender by using one screw to directly mount the fender onto the frame near the crank.

Next, use the 10 mm hex bolt and nut to attach the fender to the brace between the seat stays, near the seat post.

Tighten all bolts and screws until snug.

Reinstall the rear wheel. For bolt-on wheels, **tighten each axle nut to the specified torque value using a torque wrench.**



INSTALL ACCESSORIES

AXLE PEGS

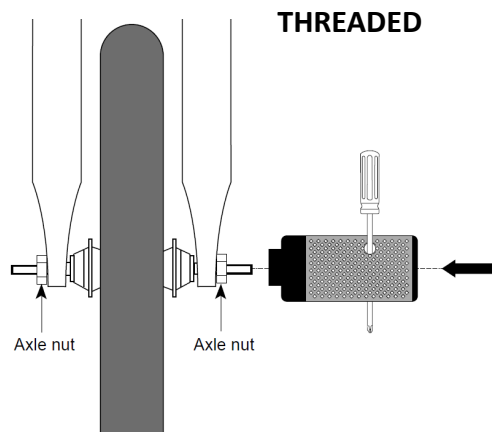
Some youth BMX bicycles come with axle pegs that need to be installed.

Threaded Pegs: This style of peg is threaded to fit the wheel axle after the wheels are installed.

Thread the peg onto the axle by hand.

Then place a screwdriver through the mounting holes of the peg and continue turning clockwise.

Tighten against the frame or fork for a snug fit. Repeat for all the remaining pegs.




Non-Threaded Pegs: This style of peg is installed when the wheel is installed.

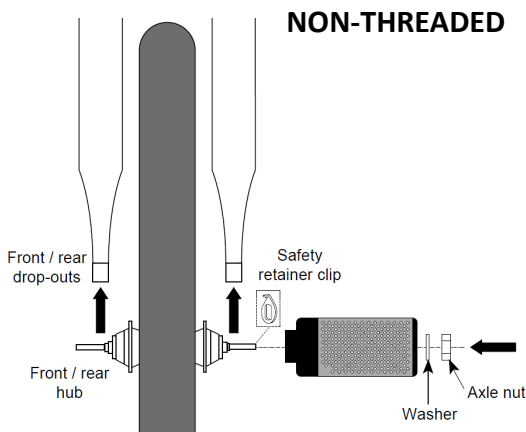
First remove the axle nuts from the wheel.

Make sure that the safety retainer clip stays on the axle and in the hole on the fork or frame of the bicycle.

Slide the peg onto the axle, followed by a flat washer and lastly the axle nut.

Tighten the axle nut clockwise until the peg fits snugly against the frame or fork. Repeat for all the remaining pegs.

Tighten each axle nut to 22–34 Nm using a torque wrench. 



INSTALL ACCESSORIES

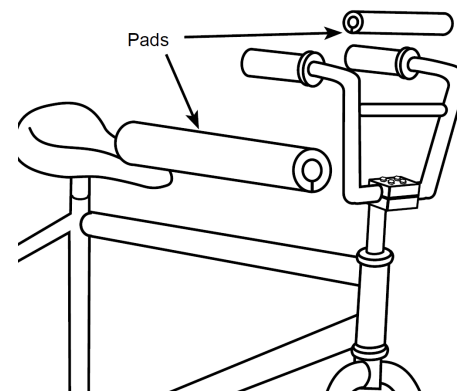
PADS

Some youth bicycles come with pads that need to be installed.

If your bicycle is supplied with pads, wrap the foam inner cushion around the appropriate bar.

Place the outer cover over the inner cushion and press the hook & loop closure together securely.

Turn the pad so the closure faces the ground.



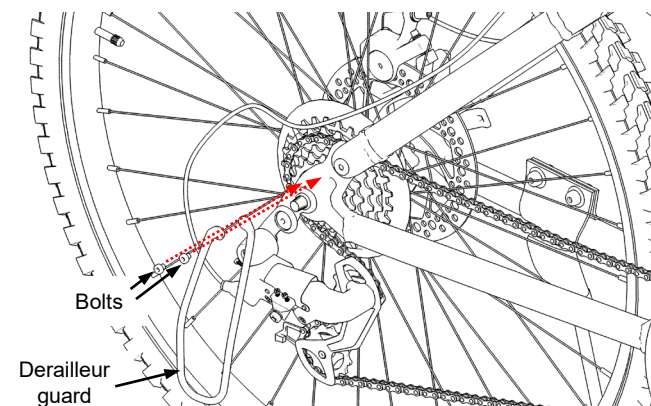
DERAILLEUR GUARD

Some youth bicycles come with a rear derailleur guard that needs to be installed to protect the rear derailleur from damage.

Install the rear derailleur guard as shown using the two supplied screws that thread into holes in the frame above the wheel axle.

Tighten the screws enough that the derailleur guard is secure and does not move.

Make sure the guard does not contact the derailleur.



ADJUST BRAKES

RIM BRAKES

Adjust the brake pad alignment one pad at a time.

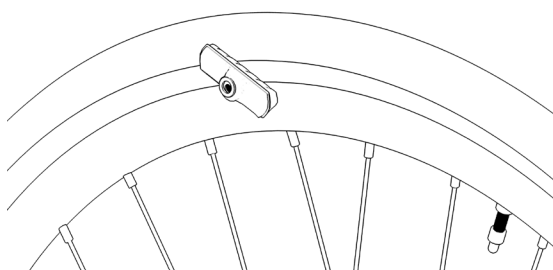
Loosen the nut or bolt on the brake pad, allowing it to move freely. Align the brake pad so that it matches the curvature of the wheel and so that it is centered on the rim and not touching the tire.

Squeeze the brake lever lightly to hold the brake pad in place as you adjust its position on the rim. Then hold the brake pad in place and tighten the nut or bolt enough so that the brake pad does not move on the brake arm.

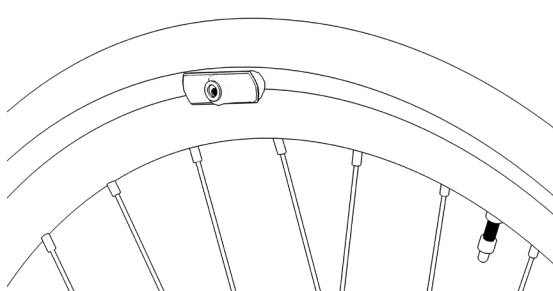
Once you tighten the brake pad, make sure that the braking surface is parallel to the wheel rim. Repeat the pad alignment on the other brake pads.

NOTE: Spin the wheel and make sure that the pad does not contact the tire when the brake is not engaged.

INCORRECT ALIGNMENT



CORRECT ALIGNMENT

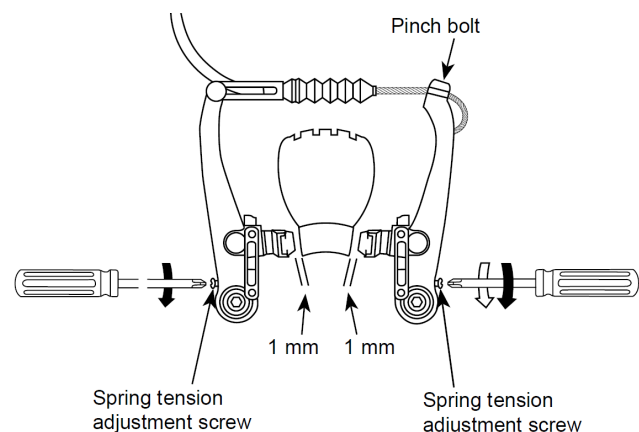


Use the spring tension adjustment screws to achieve even spacing between each brake pad and the rim.

Adjust the brake cable tension so that there is about 1 mm of spacing between each pad and the rim.

Loosen the pinch bolt and pull the cable through to tighten.

Retighten the pinch bolt enough so that the cable does not slip when the brake lever is firmly squeezed.



ADJUST BRAKES

DISC BRAKES

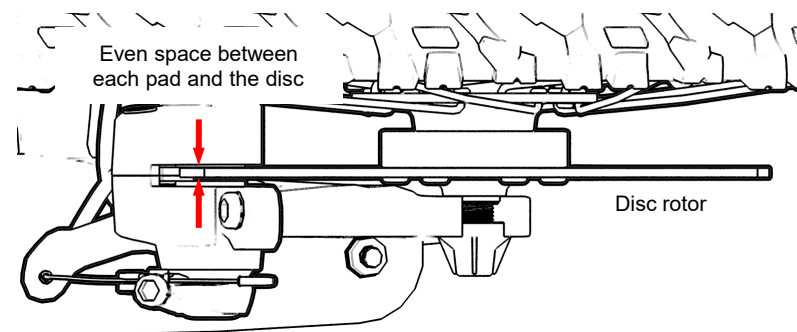
Disc brake pad alignment is done by adjusting the position of the caliper on the frame (rear brake) or fork (front brake).

First, loosen both caliper mounting bolts so that the caliper moves freely on the frame or fork.

Then squeeze the brake lever and tighten the caliper mounting bolts enough so that the caliper does not move on the frame or fork. This should achieve even pad spacing on either side of the disc rotor.



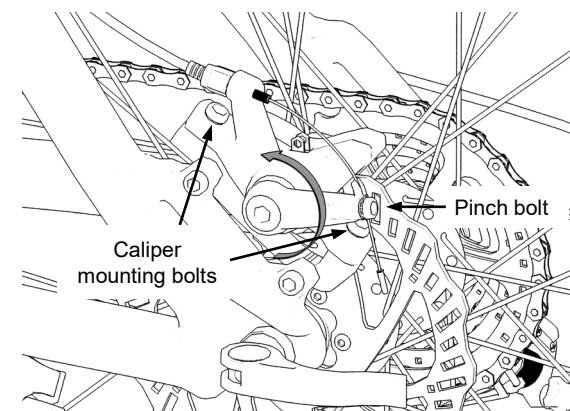
WARNING: Do not assemble or adjust disc brakes while the wheel is turning as the disc rotor is sharp and may cause laceration or amputation. Prevent wheel from turning while working on disc brakes.



Adjust the brake cable tension so that the brake lever does not move more than halfway to the handlebars when firmly squeezed.

To adjust, loosen the cable pinch bolt on the caliper and pull the cable through.

Tighten the cable pinch bolt enough so that the cable does not slip under the pinch bolt when the brake lever is firmly squeezed.



ADJUST DERAILLEURS

REAR DERAILLEUR

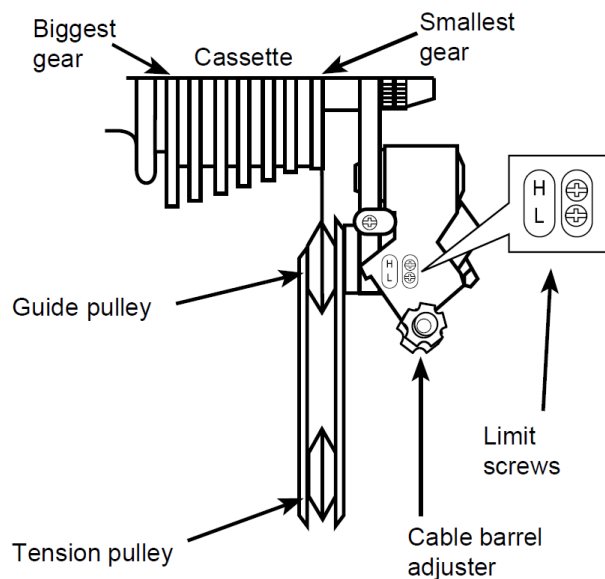
Adjust the derailleur cable tension and set screw limits for proper function and smooth shifting.

The right shifter controls the rear derailleur. Your shifter may be a twist shifter or a trigger style shifter, depending on the bicycle. For a twist shifter, you twist the shifter to change gears. For a trigger style shifter, you push or pull the triggers to change gears.

For both shifter types, the highest number is for the smallest gear on the cassette and the lowest number is for the biggest gear on the cassette.



WARNING: Keep fingers clear of the chain and gears while adjusting derailleurs as there is a risk of injury including laceration or amputation.



NOTE: Always turn the pedals while shifting. Do not shift while the pedals are stationary.

ADJUST DERAILLEURS

REAR DERAILLEUR

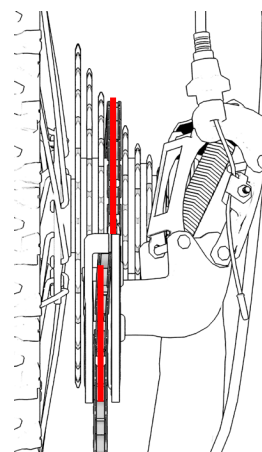
First, shift to the highest number (smallest gear). Loosen the cable pinch bolt. Adjust the high (H) limit screw with a screwdriver so that the guide pulley on the derailleur is aligned with the smallest gear. Then pull any slack out of the cable and re-tighten the pinch bolt.

Then shift to the next smallest number (next biggest gear). Check that the pulley is aligned with the next biggest gear. If the pulley is to the right of the gear, the cable needs more tension. If the pulley is to the left of the gear, the cable needs less tension.

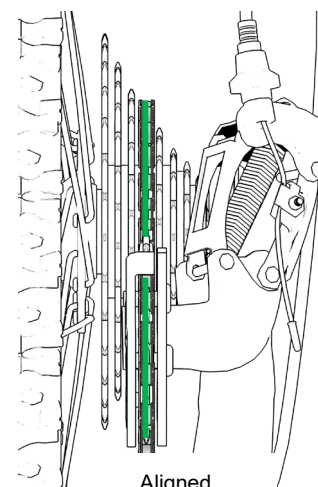
Minor tension adjustments can be made using the barrel adjuster on the derailleur or on the shifter. Turn the barrel counter-clockwise to increase cable tension and clockwise to decrease tension.

Repeat for each larger gear until the derailleur pulley is always aligned with the correct gear.

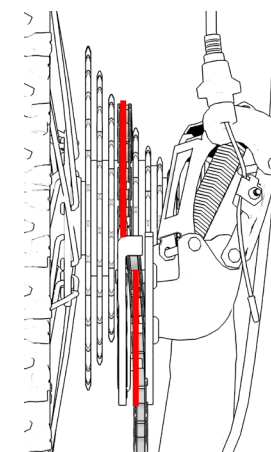
Then shift to the smallest number (largest cassette gear). Try to shift the chain past the largest gear by shifting in the direction of the smallest numbers; this is "overshifting." Adjust the low (L) limit screw so that the guide pulley stays aligned with the largest gear and so the chain does not move past the largest gear when you attempt to overshift.



Cable too tight



Aligned



Cable too loose

ADJUST DERAILLEURS

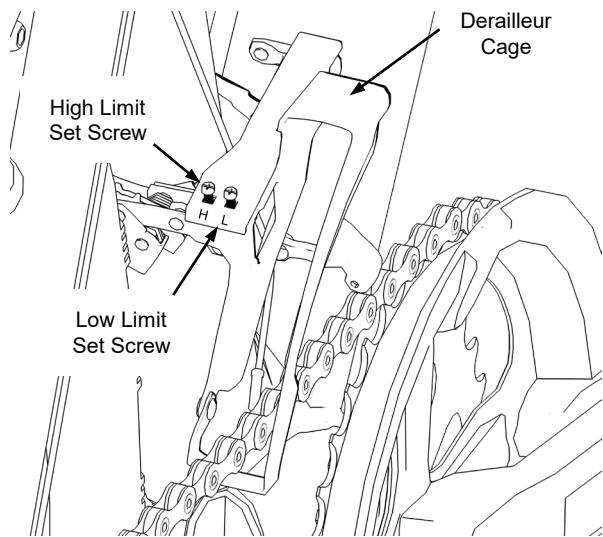
FRONT DERAILLEUR

Adjust the derailleur cable tension and set screw limits for proper function and smooth shifting.

The left shifter controls the front derailleur. On the front derailleur, the highest number on the shifter is for the biggest chainring and the lowest number is for the smallest chainring.



WARNING: Keep fingers clear of the chain and gears while adjusting derailleurs as there is a risk of injury including laceration or amputation.



ADJUST DERAILLEURS

FRONT DERAILLEUR

First, shift to the smallest number (smallest chainring). Loosen the cable pinch bolt. Adjust the low (L) limit screw so that the inside of the front derailleur cage is as close to the chain as possible without rubbing while pedaling. Then pull any slack out of the cable and re-tighten the pinch bolt.

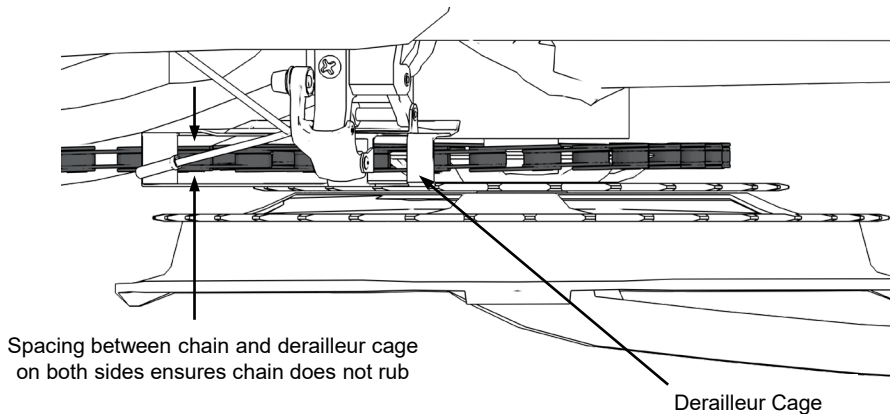
Then shift to the biggest chainring. Try to shift the chain past the big chainring (overshift). Adjust the high (H) limit screw so that the chain does not go past the big chainring and so the outside of the derailleur cage is as close to the chain as possible without rubbing while pedaling.

Then shift to the smaller chainrings. If the chain does not easily shift to a smaller chainring, decrease the cable tension. If the chain does not easily shift back up to larger chainrings, increase the cable tension.


Minor cable tension adjustments can be made using the barrel adjuster on the left shifter. Turn the barrel counter-clockwise to increase cable tension and clockwise to decrease tension.

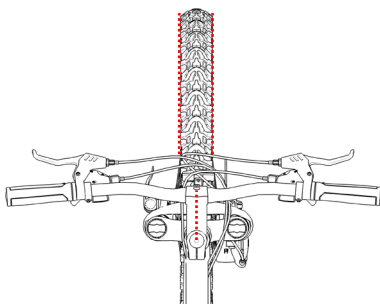
Larger cable tension adjustments should be made when the derailleur is at the smallest chainring. Loosen the pinch bolt, adjust the cable tension, and re-tighten the pinch bolt.


In each chainring, use the right shifter to shift through the full range of gears on the cassette and make sure that the chain does not rub on the front derailleur cage in any gear. If the chain rubs on the cage in the smallest cassette gear, the cable needs more tension. If the chain rubs on the cage in the biggest cassette gear, the cable needs less tension.

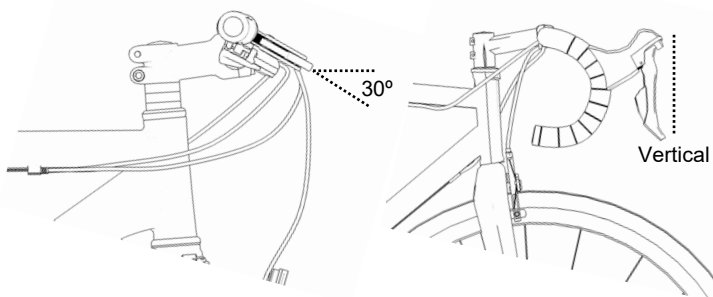



FINAL ALIGNMENT

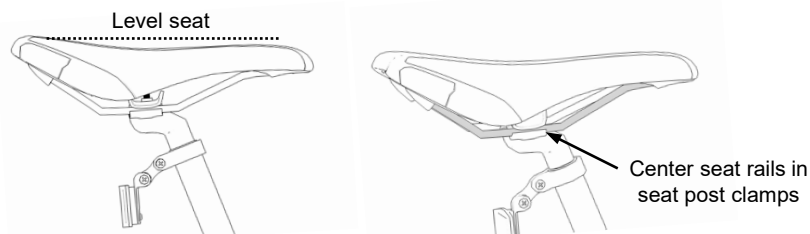
Align the stem with the front wheel. Loosen the stem binder bolt(s) and align the stem with the front wheel. **Tighten the stem binder bolt(s) to the specified torque value using a torque wrench.** 



Align the handlebars in the stem. Loosen the handlebar binder bolt(s) and rotate the handlebars so that the brake levers are at the correct angle. **Tighten the handlebar binder bolt(s) evenly in the order shown and to the specified torque value using a torque wrench.** 



Align the seat. Loosen the seat post clamp bolt(s) or nuts, center the seat rails in the clamps, and tilt the seat so that it is level to the ground. **Tighten the bolt(s) or nuts to the specified torque value using a torque wrench.** 



SAFE ASSEMBLY CHECKLIST

Once you are finished assembling your bicycle, use the following checklist to make sure your bicycle is properly and safely assembled before riding.

READ YOUR ENTIRE BICYCLE OWNER'S MANUAL BEFORE RIDING YOUR BICYCLE.



WARNING: Your bicycle must be properly assembled before use. Improper assembly may result in damage to the bicycle, or an accident resulting in serious injury or death.

We **STRONGLY RECOMMEND** that a professional bicycle mechanic inspect your bike after assembly to ensure proper and safe assembly before riding.

- ☐ **BOLT CHECK:** Make sure there are no loose bolts, nuts, or threaded fasteners on the bicycle.
- ☐ **WHEEL RETENTION:** Make sure the front and rear wheels are tightly secured to the bicycle. For bolt-on wheels, make sure the safety retainer washers are properly installed and nuts are properly torqued. For quick-release and thru-axle wheels, make sure the levers are closed and tightened toward the frame or fork.
- ☐ **STEM:** Make sure the stem binder bolts are tight and properly torqued.
- ☐ **HANDLEBARS:** Make sure the handlebar binder bolts are tight and properly torqued.
- ☐ **PEDALS:** Make sure the pedals are securely tightened to the crank arms.
- ☐ **HAND BRAKES:** Make sure that brake cables are secure to brake calipers and do not slip when the brake levers are firmly squeezed. Make sure the brake levers stop halfway to the handlebars when firmly squeezed. Make sure that brakes lock the wheels when brake levers are firmly squeezed.
- ☐ **COASTER BRAKE:** Make sure the rear wheel locks when pedaling backward.
- ☐ **SEAT:** Make sure the seat is tight and seat rail clamp bolt(s) or nuts are properly torqued.
- ☐ **SEAT POST:** Make sure the seat post is tightly secured to the bicycle. For bolted seat post binders, make sure the bolt is properly torqued. For quick-release seat post binders, make sure the lever is closed and tightened toward the frame.
- ☐ **REFLECTORS:** Make sure that reflectors are securely fastened to the bicycle. Make sure the front white reflector faces forward and the rear red reflector faces backward.
- ☐ **TIRES:** Make sure the tires are properly inflated within the pressure range printed on the tire.
- ☐ **DERAILLEURS:** Make sure the shifter cables are securely tightened to the derailleurs. Make sure the rear derailleur shifts the chain smoothly up and down the cassette when pedaling. Make sure the front derailleur shifts the chain smoothly up and down the chainrings when pedaling.
- ☐ **TRAINING WHEELS:** Make sure training wheels are properly assembled to brackets and that all fasteners are tight. Make sure the training wheel brackets are properly and securely assembled to the bicycle. When the bicycle is held upright, make sure each training wheel is lifted slightly off the ground.
- ☐ **ACCESSORIES:** Make sure the included accessories (fenders, pegs, pads, derailleur guard, chain guard) are properly installed and do not interfere with the wheels, chain, or brakes.

PRE-RIDE SAFETY CHECKLIST

Inspect your bicycle for proper and safe function before each and every ride using the following checklist.

If you have any concerns during pre-ride safety inspections, bring your bicycle to a professional bicycle mechanic immediately.



WARNING: Failure to conduct pre-ride checklist may result in malfunction of a critical part that could result in serious injury or death.

- ☐ **BOLT CHECK:** There are no loose bolts, nuts, or threaded fasteners on the bicycle.
- ☐ **FRAME AND FORK:** The frame and fork are not bent, cracked, or broken.
- ☐ **WHEELS AND TIRES:**
 - The front and rear wheels are tightly secured to the bicycle.
 - Tires are not damaged or excessively worn and are properly inflated.
 - Rims are true and not bent or damaged; spokes are tight and not broken.
- ☐ **STEERING:**
 - The stem and handlebars are tight and facing forward with fasteners properly torqued.
 - The stem is aligned with the front wheel and does not move when the wheel is held in place.
 - Handlebars do not rotate in the stem.
- ☐ **BRAKES:**
 - Front and rear brakes function properly and lock the wheels when levers are firmly squeezed.
 - Brake pads, rims, and disc rotors are positioned correctly and are not excessively worn.
 - Brake cables are not worn or fraying.
 - Brake levers are securely fastened to the handlebars.
 - Coaster brakes are properly fastened and functioning.
- ☐ **PEDALS AND CRANKS:**
 - Pedals are securely fastened to the crank arms, are not damaged, and have reflectors.
 - Crank arms are securely fastened and properly torqued to the bottom bracket.
- ☐ **SEAT AND SEAT POST:**
 - The seat is securely fastened to the seat post.
 - The seat post is securely fastened and properly torqued to the frame.
- ☐ **REFLECTORS:** Reflectors are securely fastened to the bicycle and are not obscured.
- ☐ **DRIVETRAIN:**
 - Chain is lubricated, correctly tensioned, and not damaged. Gears are not bent or damaged.
 - Shifter cables are securely fastened to derailleurs and chain shifts smoothly when pedaling.
- ☐ **TRAINING WHEELS:** Training wheels are securely fastened to the bicycle.
- ☐ **ACCESSORIES:** All accessories are secured to the bicycle and do not interfere with the wheels, chain, or brakes.

MAINTENANCE

This section only describes basic maintenance and recommended intervals to keep your bicycle in good riding condition. This section does not describe how to perform advanced maintenance or repairs that should only be done by a professional bicycle mechanic. Consult a professional bicycle mechanic to determine maintenance requirements for your bicycle.

BREAK-IN INSPECTION

New bicycles have a “break-in” period during which initial adjustments may change with use. Bicycle manufacturers and dealers recommend having your bicycle professionally serviced after 20 to 30 days of riding.

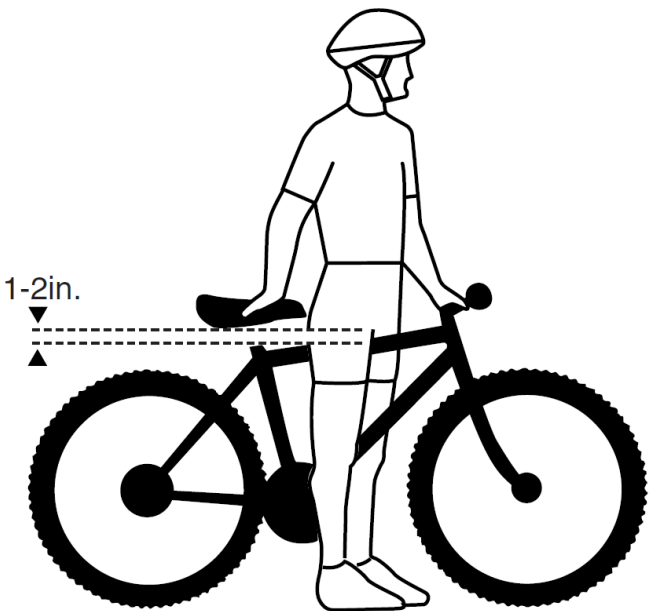
ROUTINE INSPECTION

BEFORE EVERY RIDE	EVERY 3 TO 6 MONTHS	AT LEAST EVERY YEAR
<div>1. Complete the Pre-Ride Safety Checklist.</div> <div>2. Check tire pressure.</div> <div>3. Wipe down chain with a dry rag, apply a light coat of chain lubricant, and wipe off excess lubricant.</div>	<div>1. Thoroughly degrease and clean chain, cassette, chainrings, and derailleurs with bike-friendly soap and low-pressure water. Re-apply lubricant to chain and derailleur pulleys.</div> <div>2. Clean and lubricate brake and shifter cables.</div>	<div>Service bicycle at local bicycle shop, including:</div> <div>1. Check drivetrain for wear and replace chain, chainrings, and cassette as needed.</div> <div>2. Check brake pad wear and replace brake pads as needed.</div> <div>3. Check tire wear and replace as needed.</div> <div>4. Inspect critical components for excessive wear and damage, and replace as needed.</div>

CORRECT FRAME SIZE

When selecting a new bicycle, the correct choice of frame size is a very important safety consideration. Most full-sized bicycles come in a range of frame sizes. These sizes usually refer to the distance between the center of the bottom bracket and the top of the frame seat tube.

The ideal clearance will vary according to bicycle type and rider preference. Clearance makes straddling the frame when off the saddle easier and safer in situations such as sudden traffic stops. Women can use a men’s style bicycle to determine the correct size women’s model.



NOTE: For safe and comfortable riding, there should be clearance of no less than 1–2 inches between the groin area of the intended rider while the rider straddles the bicycle with both feet flat on the ground and the top tube of the bicycle frame.

CHOOSING YOUR CORRECT FRAME SIZE

These tables are only intended as a guide:

MOUNTAIN BIKE/COMFORT BIKE/ PERFORMANCE HYBRID BIKE CHART*			
Rider Height (feet/inches)	Inseam Length (inches)	Bike Frame Size (inches)	Bike Frame Size (name)
4 ft. 11 in. - 5 ft. 3 in.	25 in. - 27 in.	13 - 15 in.	XS
5 ft. 3 in. - 5 ft. 7 in.	27 in. - 29 in.	15 - 17 in.	SM
5 ft. 7 in. - 5 ft. 11 in.	29 in. - 31 in.	17 - 19 in.	MD
5 ft. 11 in. - 6 ft. 2 in.	31 in. - 33 in.	19 - 21 in.	LG
6 ft. 2 in. - 6 ft. 4 in.	33 in. - 35 in.	21 - 23 in.	XL
6 ft. 4 in. +	35 in. +	23 in. +	XL**

* APPLIES TO BOTH OUR MEN'S AND LADIES' BICYCLES ** NO LARGER SIZE AVAILABLE

ROAD BIKE SIZING CHART (COMPACT GEOMETRY)			
Rider Height (feet/inches)	Inseam Length (inches)	Bike Frame Size (centimeters)	Bike Frame Size (name)
4 ft. 10 in. - 5 ft. 1 in.	25 in. - 27 in.	42 cm	XS
5 ft. 1 in. - 5 ft. 5 in.	27.5 in. - 28 in.	46 cm	SM
5 ft. 5 in. - 5 ft. 9 in.	28.5 in. - 31 in.	50 cm	MD
5 ft. 9 in. - 6 ft. 1 in.	31.5 in. - 33 in.	55 cm	LG
6 ft. 1 in. - 6 ft. 3 in.	33.5 in. - 34 in.	59 cm	XL
6 ft. 3 in. +	34.5 in. +	59 cm	XL**

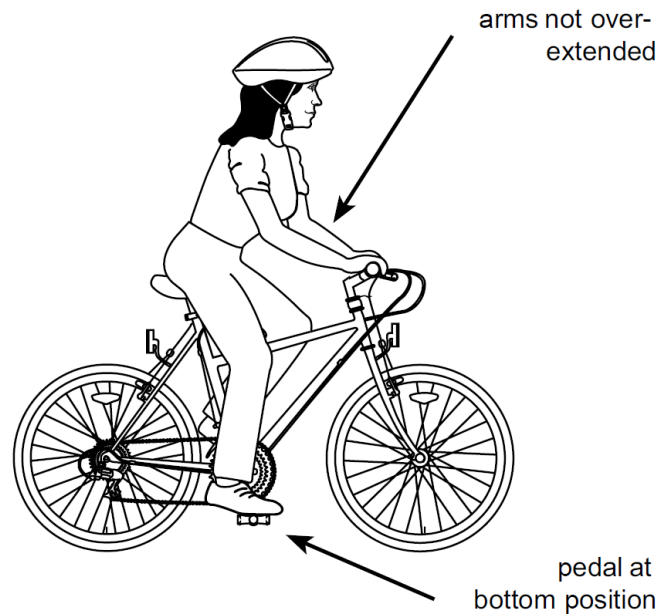
** NO LARGER SIZE AVAILABLE

RIDING POSITION

To obtain the most comfortable riding position and to offer the best possible pedaling efficiency, the seat height should be set correctly in relation to the rider's leg length. The correct saddle height should not allow leg strain from over-extension, and the hips should not rock from side to side while the rider pedals. While sitting on the bicycle with one pedal at its lowest point, place the ball of your foot on that pedal. The correct saddle height will allow the knee to be slightly bent in this position.

Refer to the seat post installation section to learn how to properly loosen the seat post binder, adjust the height, and re-tighten the binder.

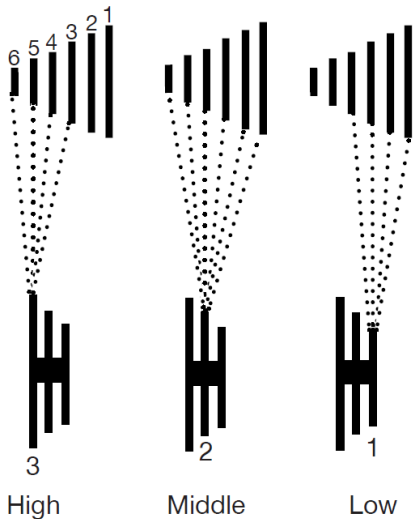
NOTE: Under no circumstances should the seat post show the minimum insertion "MIN" marking above the frame.



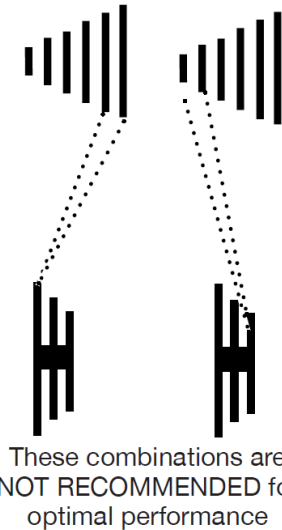
DERAILLEUR OPERATING PRINCIPLES

The front derailleur is operated by the left shift lever, and the rear derailleur is operated by the right shift lever. To operate, you must be pedaling forward. You cannot shift derailleur gears when you are stopped or when pedaling backward. Before shifting, ease up on the pedaling pressure. For a smooth gear change when approaching a hill, shift to a lower gear BEFORE your pedaling speed slows down too much. When coming to a stop, shift to a lower gear first so it will be easier when you start riding again. For optimal performance and extended chain life, it is recommended that you avoid using the extreme combinations of gear positions for extended periods. See the schematic below for optimal gear combinations.

OPTIMAL GEAR COMBINATIONS



GEAR COMBINATIONS TO AVOID




SELECT NISHIKI TORQUE SPECIFICATIONS

When a component has a torque specification printed or stamped directly on the component, always follow the fastener torque value printed or stamped on that component.

If a component does not have a torque specification printed or stamped directly on the component, use the select manufacturer's torque specifications for Nishiki bicycles contained in the chart below.

Component designs and materials are subject to change without notice. Therefore, it is recommended that the assembler always refer to the most current manufacturing specifications.



WARNING: Failure to follow assembly instructions and warnings could result in bicycle, assembly, or component failure and could result in serious injury or death. Both over- and under-tightening of threaded components can lead to failure of the fastener or joined component and can cause failure, and could result in serious injury or death.

SELECT NISHIKI TORQUE SPECIFICATIONS (NEWTON-METERS)

Bike	Stem Binder (Nm)	Handlebar Binder (Nm)	Pedals (Nm)	Axle Nuts (Nm)	Seat Post Binder (Nm)
Anasazi	6	5-6	34	NS	NS
Colorado 24	6	5-6	34	NS	NS
Colorado Comp/Sport	8	6	40-50	NS	NS
Gravel	6	6	40-50	NS	18-22
Manitoba	5-6	5-6	34	NS	NS
Pueblo	22	20	40-50	35-45	NS
Tamarack	18	18	40-50	34-45	NS
Youth Balance/12"/16"	18-22	NS	40-50	34-45	NS

SELECT NISHIKI TORQUE SPECIFICATIONS (INCH-POUNDS)

Bike	Stem Binder (in-lbs)	Handlebar Binder (in-lbs)	Pedals (in-lbs)	Axle Nuts (in-lbs)	Seat Post Binder (in-lbs)
Anasazi	53	44-53	301	NS	NS
Colorado 24	53	44-53	301	NS	NS
Colorado Comp/Sport	71	53	354-443	NS	NS
Gravel	53	53	354-443	NS	159-195
Manitoba	44-53	44-53	301	NS	NS
Pueblo	195	177	354-443	301-398	NS
Tamarack	159	159	354-443	301-398	NS
Youth Balance/12"/16"	159-195	NS	354-443	301-398	NS

REFERENCE TORQUE VALUES TABLE

If a component does not have a torque specification printed or stamped directly on the component, follow the most current manufacturer's specifications for fastener torque during the assembly and inspection processes, when available. The following reference torque values are provided for use when manufacturer's specifications are not available.

The torque values provided for each tightening point below are **reference values only**. Reference torque values come from a review of a number of industry-leading bicycle manufacturers, component manufacturers, and other reputable sources.

Tightening Point	Torque (Nm)		Torque (in-lbs)	
	Min	Max	Min	Max
Brake Cable Pinch Bolt	5.7	7.6	51	67
Brake Disc Caliper Mount	6.4	10.6	57	93
Brake Disc Rotor (Six M5 bolts)	3.4	5.7	30	50
Brake Lever Bolt	4.8	7.4	43	66
Brake U-Brake Caliper to Frame or Fork	8.0	9.3	71	82
Brake V-Brake Cantilever Calipers (arms) to Frame	4.4	9.8	39	87
Crank Bolt	33.9	48.1	300	425
Handlebar Binder: four-bolt	4.9	13.2	43	117
Handlebar Binder: one- or two-bolt	9.2	20.8	81	184
Headset Threaded Locknut	18.3	31.1	162	275
Pedal Into Crank	33.5	40.2	297	356
Seat Post Binder	3.6	12.9	32	114
Seat Rail Binder: Two vertical bolts integrated	4.5	11.1	40	98
Seat Rail Binder: One vertical bolt integrated or non-integrated	19.1	29.3	169	259
Stem Binder Bolts: Threadless	4.8	15.2	43	134
Stem Binder Bolt: Quill	12.6	25.0	112	221
Wheel Axle Nuts to Fork: Front	22.1	34.1	196	302
Wheel Axle Nuts to Frame: Rear	27.3	35.7	242	316

REVISION HISTORY

Revision	Date	Notes
1	December 2021	New bicycle assembly manual.
2	December 2022	Updated title of the assembly manual. Added select fastener torque specifications for Nishiki bicycles. Updated the disc brake assembly instructions and warnings.
3	February 2023	Updated specific torque values.

LIMITATIONS

The purpose of this document is to communicate a recommended DICK'S Sporting Goods Bicycle Assembly Guide. Exponent detailed specific issues relevant to bike assembly, as requested by DICK'S Sporting Goods. The scope of services performed during this investigation may not adequately address the needs of other users of this document, and any reuse of this document or its findings, conclusions, or recommendations is at the sole risk of the user. The opinions and comments formulated during this investigation are based on observations and information available at the time of the investigation. No guarantee or warranty as to future life or performance of this document is expressed or implied.

The findings presented herein are made to a reasonable degree of engineering certainty. We have endeavored to be accurate and complete in our assignment. If new data become available or there are perceived omissions or misstatements in this report, we ask that they be brought to our attention as soon as possible so we have the opportunity to address them.

Nothing in this document shall be construed as design services. Although we have exercised usual and customary care in the investigation and preparation of this document, the responsibility for the specific design, construction, and use of its products, as well as the content of this manual, remains fully with DICK'S Sporting Goods.