



HERCULES CYCLE GUIDE

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Congratulations

on your new bicycle! Proper assembly and operation of your bicycle is important for your safety and enjoyment. Our customer service department is dedicated to your satisfaction with TI Cycles and its products. If you have questions or need advice regarding assembly, parts, performance, or returns, please contact the experts at TI Cycle.

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About This Manual:

It is important for you to understand your new bicycle.

By reading this manual before you go out on your first ride, you'll know how to get better performance, comfort, and enjoyment from your new bicycle. It is also important that your first ride on your new bicycle is taken in a controlled environment, away from cars, obstacles and other cyclists.

This manual contains important information regarding safety, assembly, use, and maintenance of the bicycle but is **not** intended to be a complete or comprehensive manual covering all aspects concerning bicycle ownership. We recommend consulting a bicycle specialist if you have any doubts or concerns regarding your experience or ability to properly assemble and maintain the bicycle.

A Special Note For Parents and Guardians

It is a tragic fact that most bicycle accidents involve children. As a parent or guardian, you bear the responsibility for the activities and safety of your minor child. Among these responsibilities are to make sure that the bicycle which your child is riding is properly fitted to the child; that it is in good repair and safe operating condition; that you and your child have learned, understand and obey not only the applicable local motor vehicle, bicycle, and traffic laws, but also the common sense rules of safe and responsible bicycling. As a parent, you should read this manual before letting your child ride the bicycle. Please make sure that your child always wears an approved bicycle helmet when riding.

Helmets Save Lives!

- ALWAYS WEAR A PROPERLY FITTED HELMET WHEN RIDING YOUR BICYCLE
- DO NOT RIDE AT NIGHT
- AVOID RIDING IN WET CONDITIONS



Correct Fitting

Make sure your helmet covers your forehead



Incorrect Fitting

Forehead is exposed and vulnerable to serious injury

① Safety

SAFETY SIGNAL WORDS

The following safety signal words indicate a safety message. The symbol alerts you to potential hazards. Failure to follow the warning may result in damage to property, injury, or death.

This manual contains many Warnings and Cautions concerning the consequences of failure to follow safety warnings. Because any fall can result in serious injury or even death, we do not repeat the warning of possible injury or death whenever the risk of falling is mentioned.

WARNING!

Indicates a hazard or unsafe practice that will result in severe injury or death. Failure to read, understand and follow the safety information in this manual may result in serious injury or death.

CAUTION!

Indicates a hazard or unsafe practice that could result in minor injury.

NOTICE

Indicates a hazard unrelated to personal injury, such as property damage.

USER RESPONSIBILITY

WARNING!

Do not install any kind of power plant or internal combustion engine to a bicycle. Adapting a bicycle in this manner poses an extreme safety risk to rider and could result in loss of control or death.

All persons assembling, using, and maintaining the bicycle must read and understand the safety warnings and operating instructions in this manual before using the bicycle.

It is the responsibility of the user, or in the case of a child rider, an adult, to ensure the bicycle is properly maintained and in proper operating condition. Doing so will reduce the risk of injury. Always conduct regular maintenance and inspection of your bicycle. Complete the Safety Checklist at the end of this section before each use.

A responsible adult must always supervise the use of the bicycle by a child. You must ensure:

- The child is wearing the proper protective attire and approved bicycle helmet.
- The child is seated securely and the bicycle is properly fitted to the child.
- The child understands applicable laws and common sense rules of safe responsible bicycling.

BICYCLE SETUP

⚠️ WARNING!

Inability to safely reach the handlebars and dismount the bicycle may result in loss of control of the bicycle. If the bicycle has a top tube on the frame, ensure there is one to three inches of clearance between the rider and the top tube.

Improper setup or maintenance of the bicycle may result in an unexpected movement, loss of control, and serious injury or death.

Correct Bicycle Size

Riding a bicycle that is not correctly sized to the rider may result in the rider’s feet not being able to touch the ground and balance the bicycle, properly reach the handlebar for steering or braking, and loss of control when pedaling.

Use the wheel size in the following table as a guide to match the rider and bicycle. For example, bicycles with a wheel size of 12 inches fit a rider that is 28 to 38 inches tall. **Note:** Some bicycles such as folding bicycles may have smaller wheels but still fit adults.

If the bicycle has a top tube on the frame, check that there is one to three inches of clearance between the rider and the top tube. **Figure 1.1**

Wheel Size	Riders Approximate Height
12 inch	28 - 38 inches tall
16 inch	38 - 48 inches tall
18 inch	42 - 52 inches tall
20 inch	48 - 60 inches tall
24 inch	56 - 66 inches tall
26 inch, 27.5 inch, 29 inch, 700c	64 - 74 inches tall

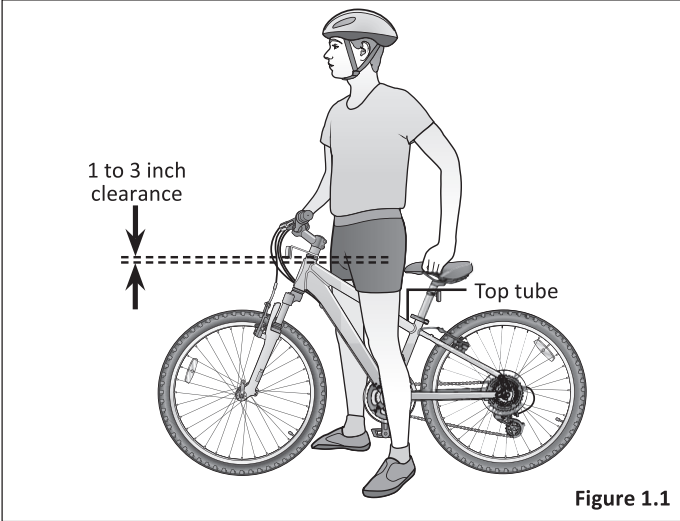


Figure 1.1

1 Safety

Seat Height and Handlebar Reach

⚠ WARNING!

Improperly adjusted seat height could affect the rider's ability to reach the handlebar and pedals may result in an unexpected movement, loss of control, and serious injury or death. Follow these guidelines when adjusting the seat height. Always ensure the seat post **minimum insertion marks** are below the seat clamp and **cannot** be seen. Ensure the seat clamp is locked and the seat cannot move.

- 1 Your legs should be almost completely straight when the pedal is in the down most position, just a slight bend in the knee. **Figure 1.2**

Note: The rider's feet may not touch the ground easily. If this is the case the rider can simply move forward off the seat to mount and dismount the bicycle or the seat can be adjusted lower if the rider is uncomfortable with the height, but note that riding is more difficult with the seat too low, as the legs are in an unnatural position.

Do not raise the seat so much the knees lock straight when pedaling or you have to move forward off the seat to pedal. This is unsafe and the bicycle cannot be controlled in this condition.

- 2 You should be able to safely reach the handlebar with your arms bent slightly (approximately 10 degrees) at the elbow.

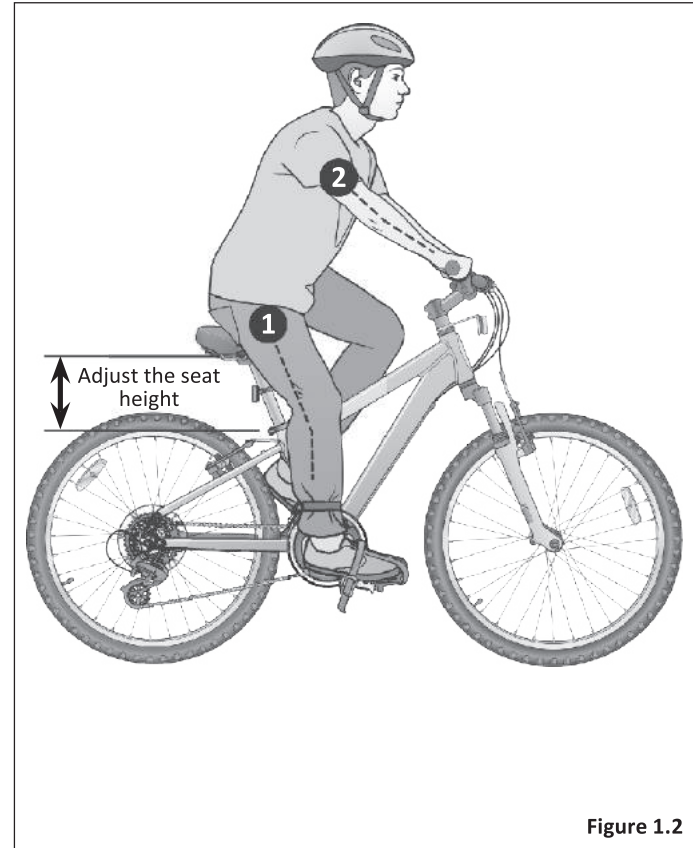


Figure 1.2

Quick-release Levers

⚠ WARNING!

Improper setup or maintenance of the quick-release levers may result in an unexpected movement, loss of control, and serious injury or death. Before riding always check that the quick-release lever is firmly locked in place and the seat does not move.

Wheels

- 1 Some bicycles will come equipped with quick-release levers for the front wheel. The wheels must be securely locked. Ensure the wheel quick-release lever is firmly locked in place. **Figure 1.3**

Seat Post

- 2 Ensure the seat post's *minimum insertion marks* are **not** visible above the quick-release seat clamp and the clamp is locked in place.

Note: See *Section 4: Adjusting the Seat Height* if adjustments are needed.

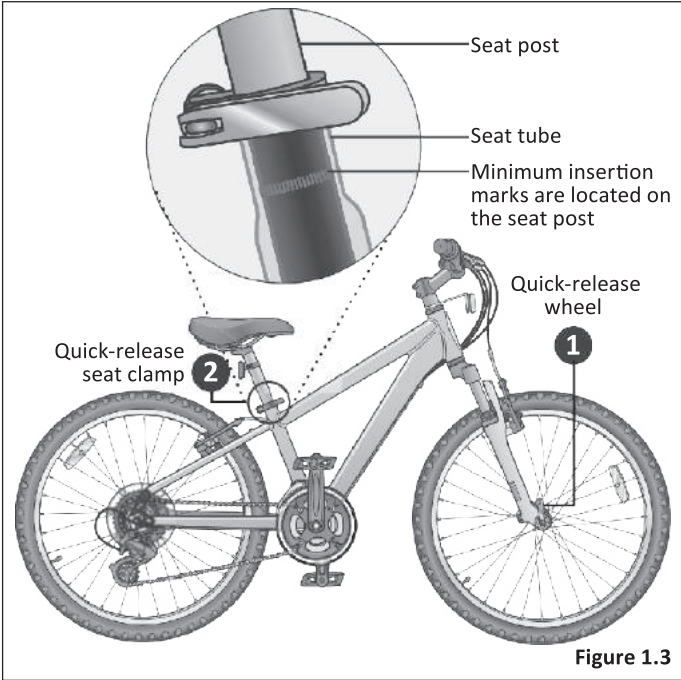


Figure 1.3

PERSONAL SAFETY

WARNING!

Riding a bicycle without protective gear, clothing, or a helmet may result in serious injury or death. Always wear protective gear, clothing, and helmet when riding the bicycle. Ensure protective gear does not interfere with steering, braking, and pedaling.

Protective Gear and Clothing

Always wear: Figure 1.4

- Colors that are easily seen and, if possible, reflective clothing.
- Clothing appropriate for the weather conditions.
- Use of protective gear such as pads for the knees and elbows is highly recommended for children.
- A properly fitted bicycle helmet shall be worn at all times by riders of the bicycle.

Do not wear:

- Loose clothing parts, strings, or jewelry that may become entangled with moving parts on the bicycle or interfere with handling of the bicycle.

- Pants with loose pant legs. If necessary, always tuck pant legs into a sock or use a leg band to avoid the clothing becoming caught in the drive chain.
- Shoes with untied shoe laces.

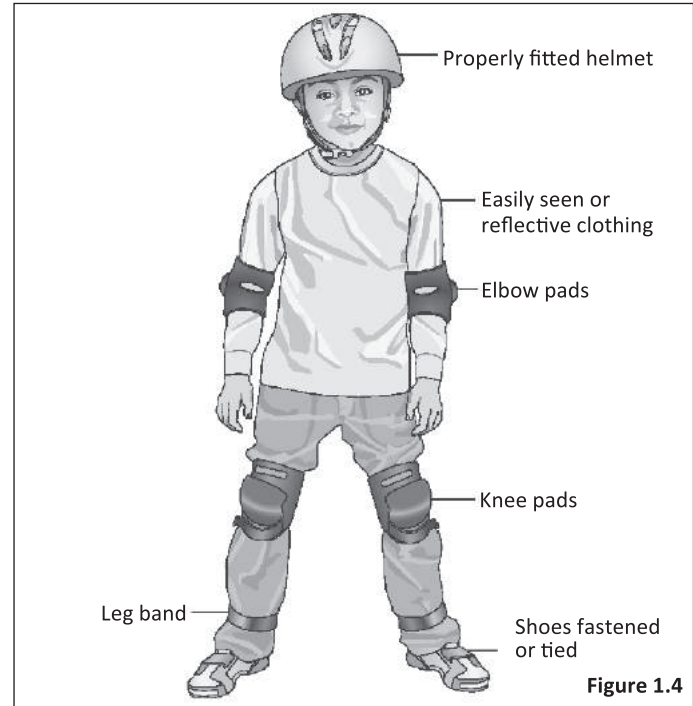


Figure 1.4

Helmet Use

Important! Many states have passed helmet laws regarding children. Make sure you know your state's helmet laws. It is your job to enforce these rules with your children. Even if your state does not have a children's helmet law, it is recommended that everyone wear a helmet when cycling. When riding with a child carrier seat or trailer, children must wear a helmet.

It is strongly advised that a properly fitting, bicycle safety helmet be worn at all times when riding your bicycle. In addition, if you are carrying a passenger in a child safety seat, they must also be wearing a helmet.

The correct helmet should: Figure 1.5

- Be comfortable
- Have good ventilation
- Fit correctly
- Cover forehead

Incorrect helmet position: Figure 1.6

- Helmet **does not** cover the forehead



Figure 1.5

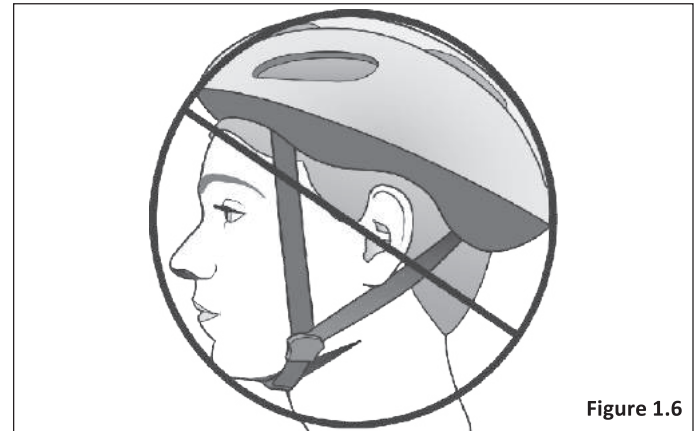


Figure 1.6

1 Safety

Reflectors

⚠ WARNING!

Missing, damaged, or dirty reflectors will affect the ability of others to see and recognize you as a moving bicyclist, increasing the risk of being hit, serious injury or death. Always check the reflectors are in place and make sure they are clean, straight, unbroken and securely mounted before riding the bicycle.

Important! Federal regulations require every bicycle over 24 inches to be equipped with front, rear, wheel, and pedal reflectors. Many states require specific safety devices. It is your responsibility to familiarize yourself with the laws of the state where you ride and to comply with all applicable laws, including properly equipping yourself and your bike as the law requires. Bicycles under 16 inches are considered “sidewalk bicycles” and may not be fitted with reflectors. These bicycles should **not** be ridden on streets, at night or unsupervised by an adult.

Check and confirm the front and rear reflectors are in the correct position: **Figure 1.7**

- **Front Reflector:** Should aim forward (when viewed from above) and be mounted so it is within 5 degrees of vertical.
- **Rear Reflector:** Should aim straight back (when viewed from above) and be mounted so it is within 5 degrees of vertical.

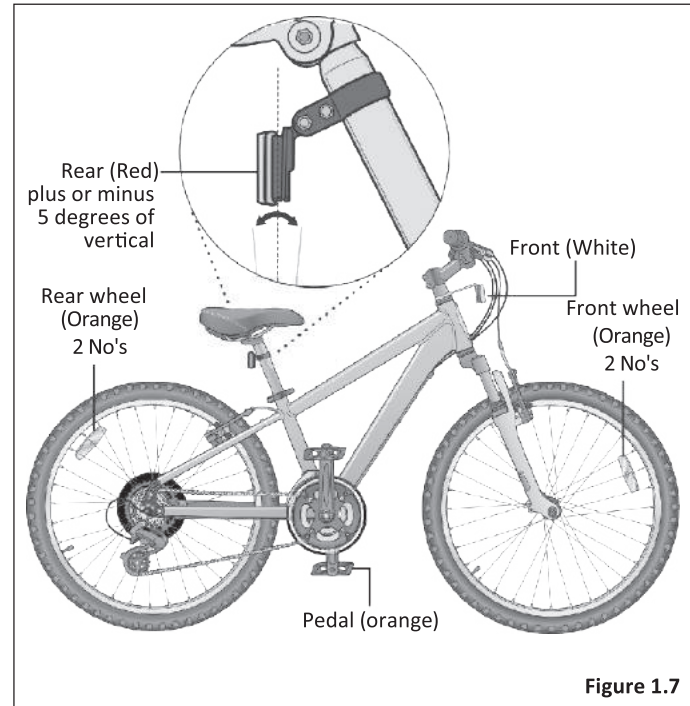


Figure 1.7

RIDING SAFETY

WARNING!

Riding the bicycle in unsafe conditions (i.e. at night), in an unsafe manner, or disregarding traffic laws may result in an unexpected movement, loss of control, and serious injury or death.

General Safety

- Familiarize yourself with all the bicycle's features before riding. Practice gear shifts, braking, and the use of toe clips and straps, if installed.
- Always ride defensively in a predictable, straight line. Never ride against traffic.
- Expect the unexpected (e.g., opening car doors or cars backing out of concealed driveways).
- Take extra care at intersections and when preparing to pass other vehicles.
- Maintain a comfortable stopping distance from all other riders, vehicles and objects. Safe braking distances and forces are subject to the prevailing weather conditions. Do not lock up the brakes. When braking, always apply the rear brake first, then the front. The front brake is more powerful and if it is not correctly applied, you may lose control and fall.
- Always use the correct hand signals to indicate turning or stopping.
- Obey the traffic laws (e.g., stopping at a red light or stop sign, giving way to pedestrians).

- Wear proper riding attire, reflective if possible, and avoid open toe shoes.
- Do not use items that may restrict your hearing and vision.
- Do not carry packages or passengers that will interfere with your visibility or control of the bicycle.

Road Conditions

- Be aware of road conditions. Concentrate on the path ahead. Avoid pot holes, gravel, wet road markings, oil, curbs, speed bumps, drain grates and other obstacles.
- Cross train tracks at a 90 degree angle or walk your bicycle across.

Wet Weather

- When riding in wet weather always wear reflective clothing and use safety lights to enhance visibility.
- Exercise extreme caution when riding in wet conditions.
- Ride at a slower speed. Turn corners gradually and avoid sudden braking.
- Brake earlier, it will take a longer distance to stop.
- Pot holes and slippery surfaces such as line markings and train tracks all become more hazardous when wet.

1 Safety

Night Riding

- **Important!** Riding a bicycle at night is **not** recommended. Check your local laws regarding night riding.
- Ensure bicycle is equipped with a full set of correctly positioned and clean reflectors.
- Use a white light on the front and a red light on the rear. Use lights with flashing capability for enhanced visibility.
- If using battery powered lights, make sure batteries are well charged.
- Wear reflective and light colored clothing. Wear reflective clothing and use safety lights for increased visibility.
- Ride at night only if necessary. Slow down and use familiar roads with street lighting.

Hill Technique

- Gear down before a climb and continue gearing down as required to maintain pedaling speed.
- If you reach the lowest gear and are struggling, stand up on your pedals. You will then obtain more power from each pedal revolution.
- On the descent, use the high gears to avoid rapid pedaling.
- Do not exceed a comfortable speed; maintain control and take additional care.
- Braking will require additional distance. Initiate braking slowly and earlier than usual.

Cornering Technique

- Brake slightly before cornering and prepare to lean your body into the corner.
- Maintain the inside pedal at the 12 o'clock position and slightly point the inside knee in the direction you are turning.
- Keep the other leg straight, do not pedal through fast or tight corners.
- Decrease your riding speed, avoid sudden braking and sharp turns.

Safe Riding Rules for Children

- Many states require that children wear a helmet while cycling. Always wear a properly fitted helmet.
- Do not play in driveways or the road.
- Do not ride on busy streets.
- Do not ride at night.
- Obey all the traffic laws, especially stop signs and red lights.
- Be aware of other road vehicles behind and nearby.
- Before entering a street: Stop, look left, right, and left again for traffic. If there's no traffic, proceed into the roadway.
- If riding downhill, be extra careful. Slow down using the brakes and maintain control of the steering.
- Never take your hands off the handlebars, or your feet off the pedals when riding downhill.

BEFORE YOU RIDE SAFETY CHECKLIST

Before every ride, it is important to carry out the following safety checks. Do not ride a bicycle that is not in proper working condition!

Accessories

- The reflectors are properly placed and not obscured. **Note:** Bicycles 16" and under may not be equipped with reflectors since small children should not ride at night.
- All other fittings on the bike are properly and securely fastened, and functioning.
- The rider is wearing a properly fitted helmet (protective gear if necessary) and that clothing and loose items are properly constrained.

Bearings

- All bearings are lubricated, run freely and display no excess movement, grinding or rattling.

Brakes

- The front and rear brakes work properly.
- The brake shoe pads are not overly worn and are correctly positioned in relation to the rims.
- The brake control cables are lubricated, correctly adjusted and display no obvious wear.
- The brake control levers are lubricated and tightly secured to the handlebar.

Chain

- The chain is oiled, clean and runs smoothly.

Cranks and Pedals

- The pedals are securely tightened to the crank arms.
- The crank arms are secured to the axle and are not bent.

Frame and Fork

- The frame and fork are not bent or broken.
- The quick-release clamps are locked in place.

Steering

- The handlebar and post are correctly adjusted and tightened, and allow proper steering.
- The handlebars are set correctly in relation to the forks and the direction of travel.
- The handlebar binder bolt is tightened.

Wheels and Tires

- The rims do not have dirt or grease on them.
- The wheels are properly attached to the bicycle and axle.
- The tires are properly inflated within the recommended pressures displayed on the tires sidewall.
- The tires have the proper amount of tread, no bulges or excessive wear.

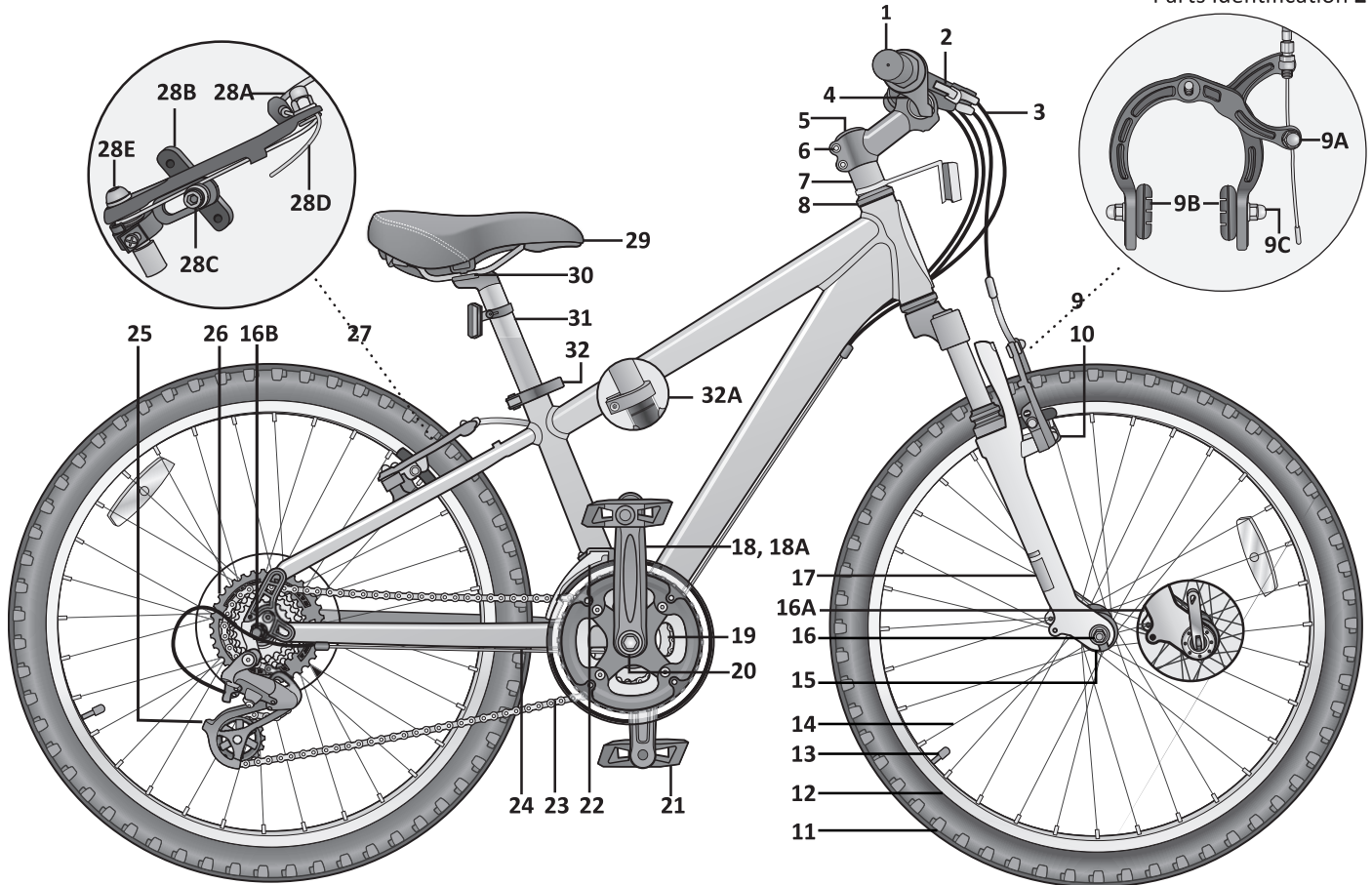
2 Parts Identification

Mountain Bicycle

Get to know the parts of your bicycle. This will help with assembly, maintenance, and troubleshooting. Models vary in color and style.

Part name		Torque (N.m)	Part name		Torque (N.m)	Part name		Torque (N.m)
1	Handle grip	-	13	Valve stem	-	25	Rear derailleur	-
2	Rear brake lever	6 - 9	14	Spoke	-	26	Freewheel	-
3	Brake cable	-	15	Fork dropout	-	27	Linear brake assembly	-
4	Handlebar	-	16	Wheel axle nut (front)	30 - 40	28A	Brake cable pinch bolt	6 - 9
5	Stem binder bolt	16 - 18	16A	Wheel quick-release (option)	-	28B	Brake pad	-
6	Handlebar binder bolt(s)	17 - 19	16B	Wheel axle nut (rear)	30 - 40	28C	Brake pad hardware	6 - 9
7	Stem	-	17	Front fork	-	28D	Brake spring	-
8	Headset	25 - 30	18	Crank arm (1-piece)	35	28E	Brake pivot bolt	6 - 9
9	Caliper brake assembly	6 - 9	18A	Crank arm (3-piece)	40 - 45	29	Saddle (seat)	-
9A	Brake cable pinch bolt	6 - 9	19	Chainwheel	-	30	Seat post attaching hardware	20 - 24
9B	Brake pads	-	20	Bottom bracket lockring	35	31	Seat post	-
9C	Brake pads hardware	6 - 9	21	Pedal	40	32	Seat post quick-release	8 - 10
10	Caliper brake attaching nut	8 - 10	22	Front derailleur	-	32A	Seat post bolted clamp (opt.)	8 - 10
11	Tire	-	23	Chain	-			
12	Rim	-	24	Chain stay	-			

Parts Identification 2



Parts Identification 2

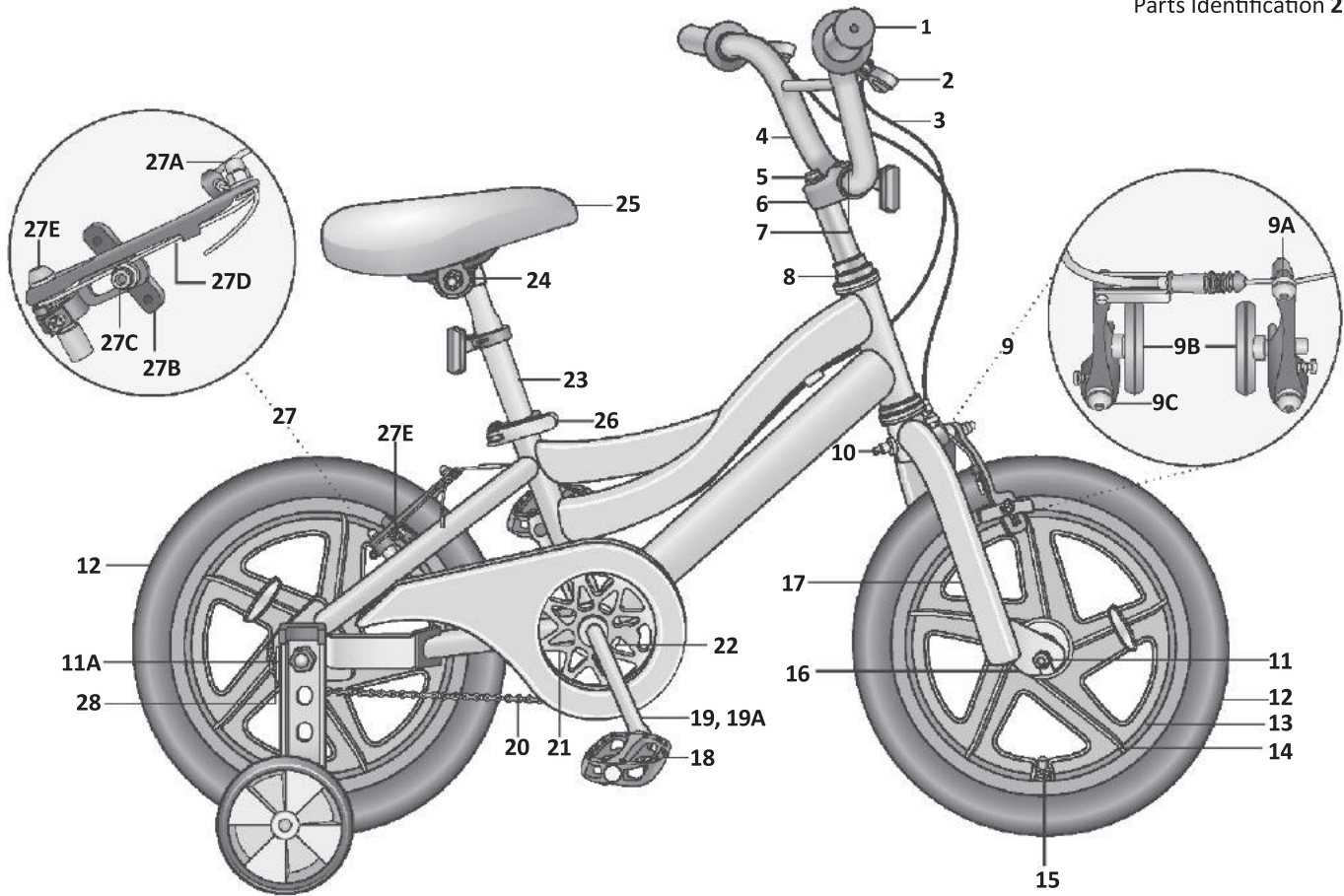
Kids Bicycle

Get to know the parts of your bicycle. This will help with assembly, maintenance, and troubleshooting. Models vary in color and style.

	Part name	Torque (N.m)
1	Handlebar grip	-
2	Rear brake lever	6 - 9
3	Brake cable	-
4	Handlebar	-
5	Handlebar binder bolt(s)	17 - 19
6	Stem	-
7	Stem binder bolt	8 - 20
8	Headset	25 - 30
9	Caliper brake assembly	6 - 9
9A	Brake cable pinch bolt	6 - 9
9B	Brake pads	-
9C	Brake pads hardware	6 - 9
10	Caliper brake attaching nut	8 - 10
11	Wheel axle nut (front)	22 - 28
11A	Wheel axle nut (rear)	22 - 28
12	Tire	-
13	Rim	-
14	Spoke	-
15	Valve stem	-

	Part name	Torque (N.m)
16	Fork dropout	-
17	Fork	-
18	Pedal	40
19	Crank arm (1-piece)	35
19A	Crank arm (3-piece)	40 - 45
20	Chain	-
21	Chainwheel	-
22	Bottom bracket lockring	35
23	Seat post	-
24	Seat post attaching hardware	15 - 19
25	Saddle (seat)	-
26	Seat post clamp	8 - 10
27	Linear brake assembly	-
27A	Brake cable pinch bolt	6 - 9
27B	Brake pad	-
27C	Brake pad hardware	6 - 9
27D	Brake spring	-
27E	Brake pivot bolt	6 - 9
28	Freewheel	-

Parts Identification 2



3 Assembly

⚠ WARNING!

- Improper assembly of this product may result in serious injury or death. Always follow the instructions in this manual and check critical components (e.g. wheels, seat, pedals, brakes, derailleurs, tires) before each use.
- We recommend that you consult a bicycle specialist if you have doubts or concerns as to your experience or ability to properly assemble, repair, or maintain your bicycle. If your bicycle was obtained assembled, we recommend that you read these instructions and perform checks specified in this manual before riding.

Your new bicycle was assembled and tuned in the factory and then partially disassembled for shipping. You may have purchased the bicycle already fully assembled and ready to ride **or** in the shipping carton in the partially disassembled form. The following instructions will enable you to prepare your bicycle for years of enjoyable cycling.

For more details on inspection, lubrication, maintenance and adjustment of any area please refer to the relevant sections in this manual. If you have questions about your ability to properly assemble this unit, please consult a qualified specialist before riding.

TOOLS REQUIRED

If you do not have these tools to hand, there are tools supplied within the carton that are sufficient to assemble the bicycle.

- Phillips head screw driver
- 2.5 mm, 4 mm, 5 mm, 6 mm and 8 mm Allen wrench
- Adjustable wrench or a 9 mm, 10 mm, 14 mm and 15 mm open and box end wrenches
- A pair of pliers with cable cutting ability

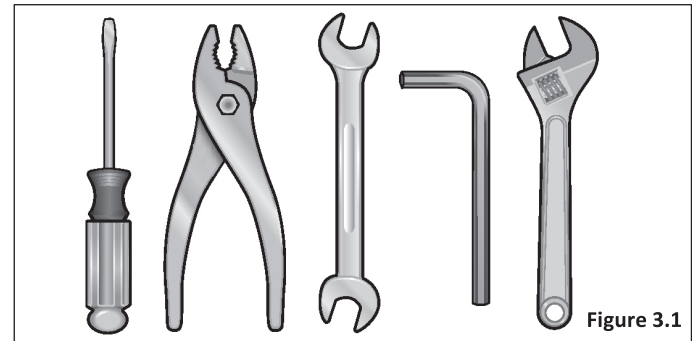
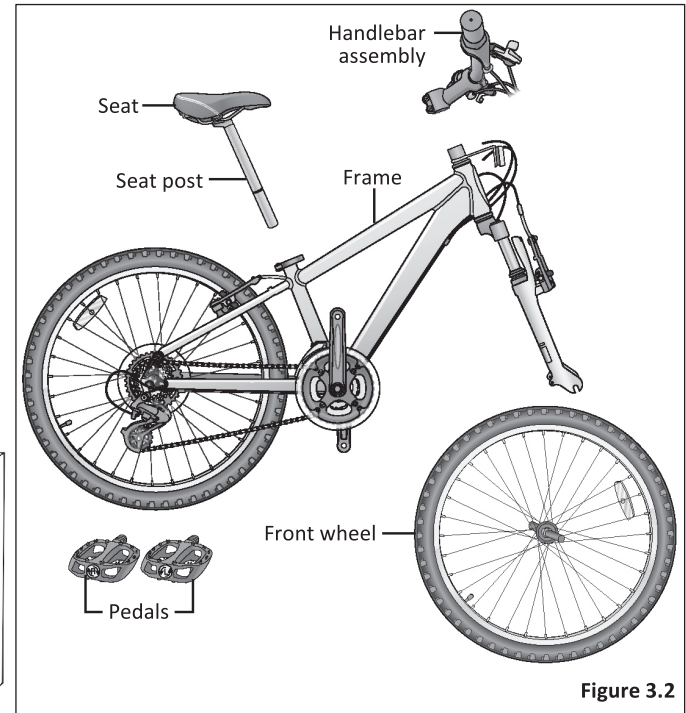


Figure 3.1

GETTING STARTED

- 1 Open the carton from the top and remove the bicycle.
Figure 3.2
- 2 Remove the straps and protective packaging from the bicycle. **Important!** Do not discard packing materials until assembly is complete to ensure that no required parts are accidentally discarded.
- 3 Inspect the bicycle and all accessories & parts for possible shortages. It is recommended that the threads and all moving parts in the parts package be lubricated prior to installation.

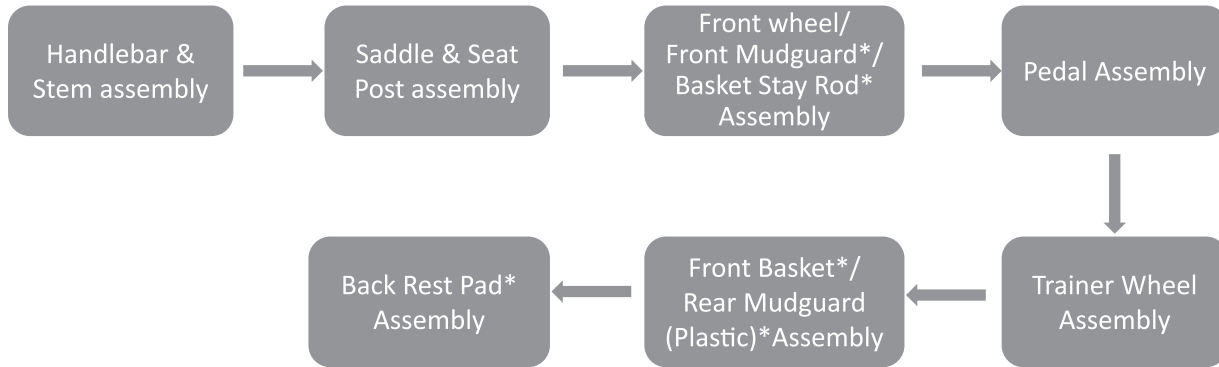


⚠ CAUTION!

Please take adequate care while opening the carton box, the strap and stapler pins used to seal the carton may cause injury.

3 Assembly

BICYCLE ASSEMBLY SEQUENCE



Important Note:

* - If the components are applicable for the model, it needs to be assembled in this sequence.

Bicycle needs to be turned upwards after Saddle & Seat post assembly (Saddle & Handle bar will rest on the ground), to enable customer for easy assembly of Wheel and other parts (It is up to customer to decide based on their convenience in assembling the bicycle).

After assembly, parts needs to be adjusted before taking your first ride.

ATTACH THE HANDLEBAR

⚠ WARNING!

- Improper attachment of the handlebar may result in damage to the stem post, steerer tube and result in loss of control, serious injury or death. Ensure the **minimum insertion marks** on the stem post are **not** visible above the top of the headset.
- Failure to properly tighten handlebar components may result in loss of control, serious injury or death. Always check the handlebar cannot move and is secured to the frame before riding the bicycle.

There are two types of stems that attach the handlebar to the steerer tube. It is either a **quill** or **clamp (threadless) stem**.

Attaching a Quill Stem

- 1 Turn the front fork to face forward. **Figure 3.3**

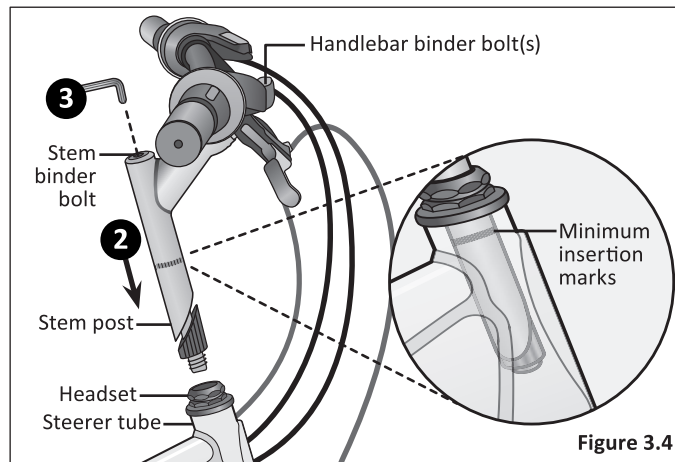
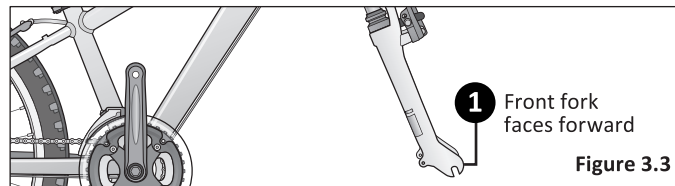
Position the handlebar assembly over the steerer tube. Look at all the cables to be sure they run in a smooth arc from the shifter or brake lever to the front brake or cable stop on the frame. **Important!** If they are twisted or kinked, the shifting and braking will not work. **Figure 3.4**

- 2 Insert the stem post into the steerer tube and adjust the handlebar height until the rider feels they have control of the bicycle and are comfortable. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach** for guidelines.

Assembly 3

Important! Be sure the **minimum insertion marks** do **not** go above the top of the headset and are **not** visible.

- 3 Using a 6 mm Allen wrench tighten the stem binder bolt at the top of the stem post. Check the handlebar binder bolt(s) to be sure they are properly tightened and the handlebar is clamped in place. **Note:** See **Section 4: Adjusting the Handlebar** if adjustments are needed.



3 Assembly

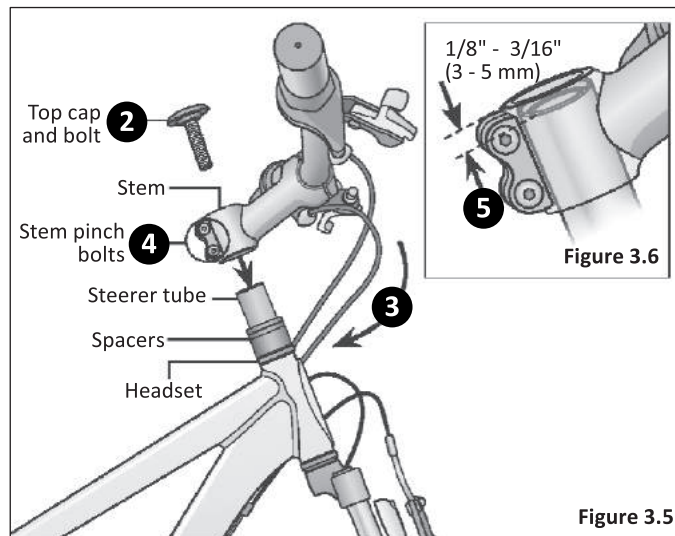
Attaching a Threadless Stem

Important! Do not disassemble the headset or lose any parts. Be sure the end of the fork is on the ground or being held with your free hand, because once you loosen the top cap the fork assembly may fall out of the frame.

- 1 Turn the front fork to face forward (ie: the fork dropout is in the furthest forward position). **Figure 3.3**
- 2 Using a 5 mm Allen wrench loosen the top cap bolt on the steerer tube and remove the top cap and bolt. **Important! Do not** remove the spacers. **Figure 3.5**
- 3 Position the handlebar assembly over the steerer tube. Look at all the cables to be sure they run in a smooth arc from the shifter or brake lever to the front brake or cable stop on the frame. **Important!** If they are twisted or kinked, the shifting and braking will not work.
- 4 While holding the fork assembly in place, use a 6 mm Allen wrench and loosen the stem pinch bolts. Slide the handlebar assembly onto the steerer tube.
- 5 Align and center the stem to the fork and wheel. Tighten the stem pinch bolts until there is no play between the stem and stem tube. **Note:** There should be a 3 to 5 mm (1/8" - 3/16") gap between the top of the stem and stem post. **Figure 3.6**
- 6 Place the top cap onto the top of the steerer tube. Insert and tighten the top cap bolt until it is snug. **Do not over tighten.**

- 7 Using a 5 mm Allen wrench tighten the top cap bolt. Do the following checks to determine if the headset is properly set. Tighten or loosen the top cap bolt if necessary.
 - Lift up the front wheel of the bicycle, if the wheel **does not** move freely left to right the headset is too tight.
 - Hold the handlebar, close the brakes and rock the fork back and forth. If you hear a knock or clunking sound the headset is too loose.

Note: If needed, see **Section 4: Adjusting the Headset** for more detailed information. See **Section 4: Adjusting the Handlebar** for information on aligning the handlebar.



ATTACH THE HANDLEBAR

⚠️ WARNING!

- Improper attachment of the handlebar may result in damage to the stem post, steering tube and result in loss of control, serious injury or death. Ensure the **minimum insertion marks** on the stem post are **not** visible above the top of the headset.
- Failure to properly tighten handlebar components may result in loss of control, serious injury or death. Always check the handlebar cannot move and is secured to the frame before riding the bicycle.

There are two types of stems that attach the handlebar to the steerer tube. It is either a **quill** or **clamp (threadless) stem**.

Attaching a Quill Stem

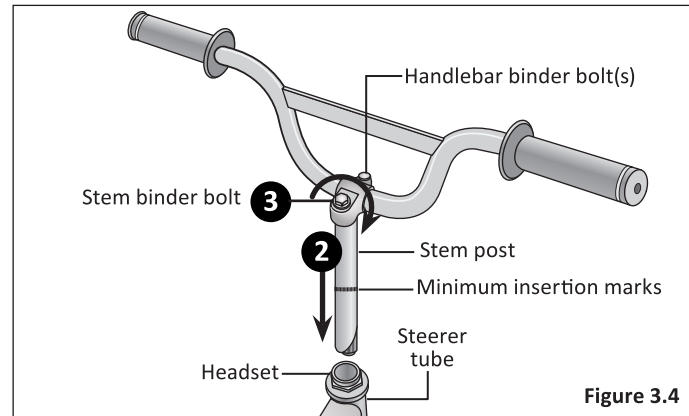
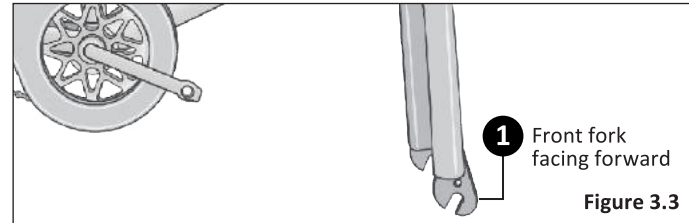
- 1 Turn the front fork to face forward. **Figure 3.3**

Position the handlebar assembly over the steerer tube. Look at all the cables to be sure they run in a smooth arc from the shifter or brake lever to the front brake or cable stop on the frame. **Important!** If they are twisted or linked, the shifting and braking will not work. **Figure 3.4**

- 2 Insert the stem post into the steerer tube and adjust the handlebar height until the rider feels they have control of the bicycle and are comfortable. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach** for guidelines.

Important! Be sure the **minimum insertion marks** do **not** go above the top of the headset and are **not** visible.

- 3 Using a suitable wrench tighten the stem binder bolt at the top of the stem post. Check the handlebar binder bolt(s) to be sure they are properly tightened and the handlebar is clamped in place. **Note:** See **Section 4: Adjusting the Handlebar** if adjustments are needed.



ATTACH THE BRAKE CABLES

⚠ WARNING!

Failure to properly set the brakes may result in the inability to stop the bicycle movement and cause serious injury or death. Be sure the brakes are functioning properly before using the bicycle.

There are four brake options, **Caliper**, **Linear Pull**, **Disc** and **Hydraulic Disc**. If you have hydraulic disc brakes, see the manual on hydraulic disc brakes that came with your bicycle.

Follow these steps if the brake cables are not attached to the brake levers:

- 1 Rotate the cable adjustment barrel and cable nut until the slots are aligned with the slot on the brake lever body.

Figure 3.8

- 2 Press the brake lever towards the grip.

- 3 Slide the brake cable through the slots and place the cable head into the brake lever.

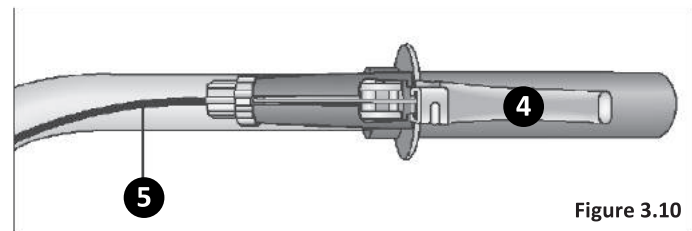
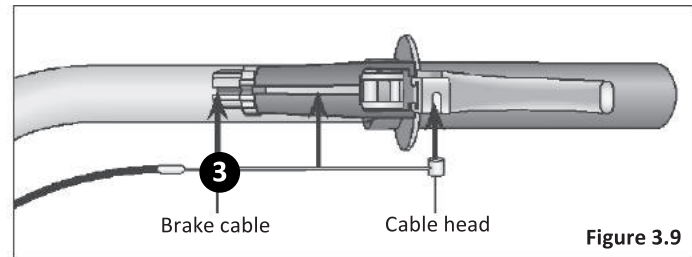
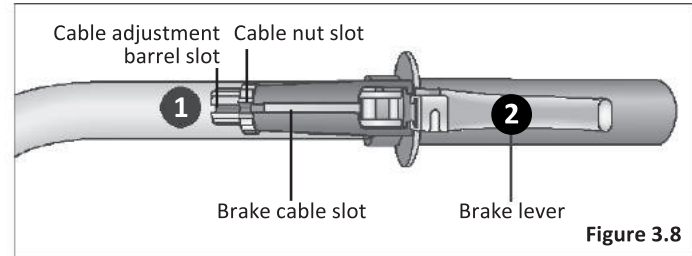
Figure 3.9

- 4 Release the brake lever.

Figure 3.10

- 5 Lightly pull on the cable and rotate the cable nut and cable barrel so they are no longer aligned.

Note: See **Section 4: Adjusting the Brakes** if adjustments are needed.



ATTACH THE SEAT

⚠ WARNING!

Improperly adjusted seat height could affect the rider's ability to reach the handlebar and pedals resulting in unexpected movement, loss of control and serious injury or death. Follow these guidelines when adjusting the seat height. Always ensure the seat post **minimum insertion marks** are below the seat clamp and **cannot** be seen. Ensure the seat clamp is locked and the seat cannot move.

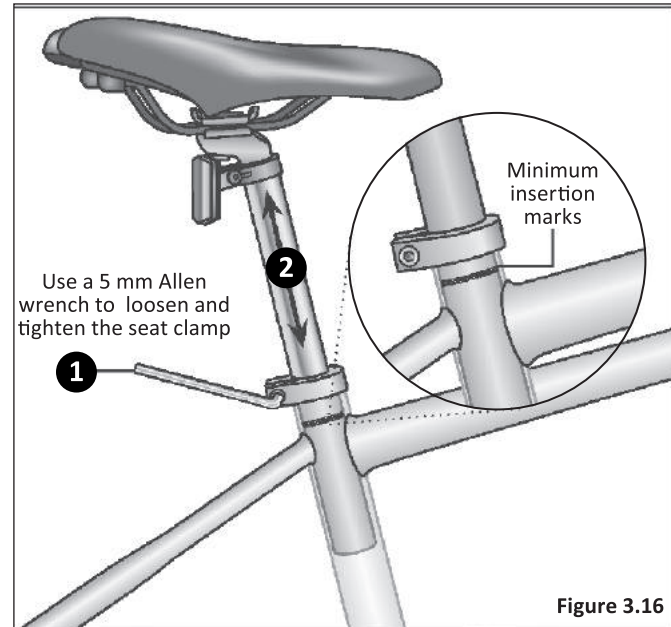
There are two kinds of seat clamps; **bolted** and **quick-release**, and two kinds of seat posts **standard** and **micro-adjust**. The seat assembly should be adjusted with the seat centered on the rails and level. It is recommended to add some grease to all threads and binders on a bicycle, especially on the outside of the seat post. Otherwise it may corrode over time and not be able to be adjusted again.

Bolted Seat Clamp

- 1 Using a 5 mm Allen wrench, loosen the seat clamp bolt and insert the seat post into the seat tube. **Figure 3.16**
- 2 Adjust the seat height up or down until the rider feels they have control of the bicycle and is comfortable.

Important! Be sure the **minimum insertion marks** do not go past the top of the seat clamp and are **not** visible. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach**.

- 3 Tighten the seat clamp bolt to lock the seat in place.
- 4 Check the seat to be sure it does not move



3 Assembly

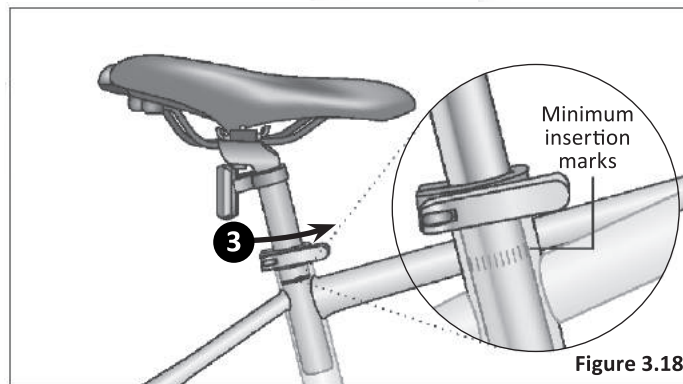
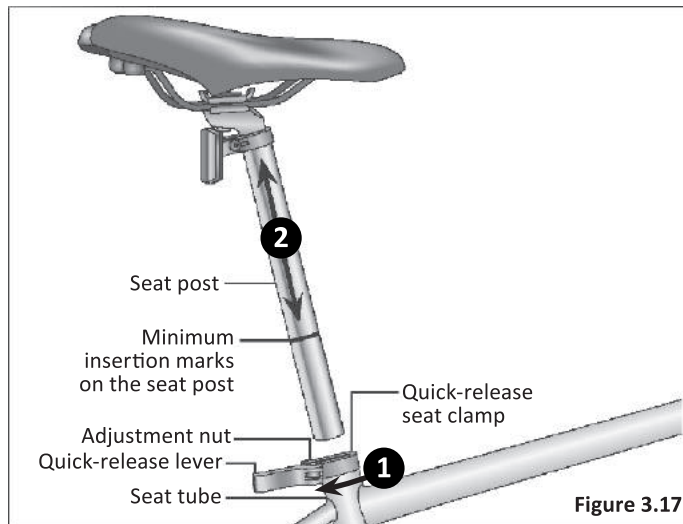
Quick-release Seat Clamp

- 1 Unlock the quick-release lever and insert the seat post into the seat tube. **Figure 3.17**
- 2 Adjust the seat height up or down until the rider feels they have control of the bicycle and is comfortable.

Important! Be sure the *minimum insertion marks* do not go past the top of the seat clamp and are *not* visible. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach.**

- 3 Close the quick-release lever and lock the seat in place. If there is not enough pressure to hold the seat in place open the quick-release lever. With one hand on the quick-release lever and one hand on the adjustment nut, start to hand tighten the adjustment nut until you start to feel some resistance against the seat clamp post. **Do not** attempt to tighten by turning the quick-release lever. The quick-release lever is for closing, the adjustment nut is for adjusting the pressure. **Figure 3.18**
- 4 Try to close the quick-release lever. If it closes easily, open it up and tighten the adjustment nut further. If it is too difficult to close, open the quick-release lever up and loosen the adjustment nut a little and try again.

Important! You should feel resistance when you close the quick-release lever that should leave a temporary impression on your fingers. Open and close the handle to ensure the seat is securely locked in place.



Micro Adjust Seat with Pillar Seat Post

- 1 Place the bottom plate on the pillar seat post. Be sure the holes in the bottom plate and the holes in the seat post are aligned. **Figure 3.19**
- 2 Place the washer on the hex bolt and insert the bolt through the bottom hole of the pillar seat post and bottom plate.
- 3 Place the rails of seat into the grooves of the bottom plate.
- 4 Place the top plate over the top of the seat rails. The hex bolt should be inserted through the hole in the top plate.
- 5 Insert the square nut onto the hex bolt and tighten completely.
- 6 Insert the pillar seat post into the seat tube and adjust the seat height up or down until the rider feels they have control of the bicycle and is comfortable.

Important! Be sure the *minimum insertion marks* do not go past the top of the seat clamp and are *not* visible. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach.**

- 7 Lock the seat in place. **Note:** Refer to the section that pertains to your seat clamping device (bolted or quick-release) on the previous page for instructions.
- 8 Check the seat to be sure it does not move.

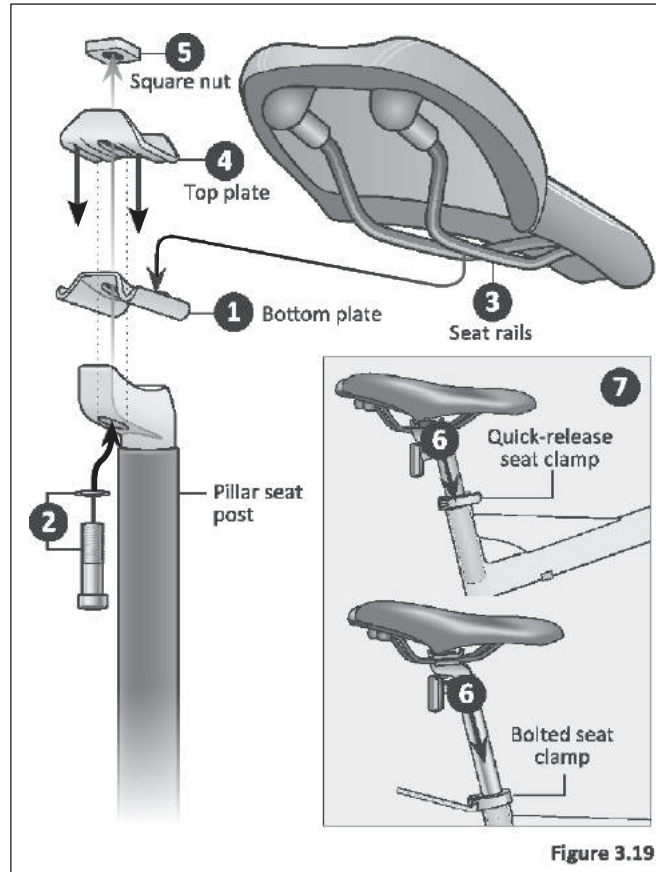
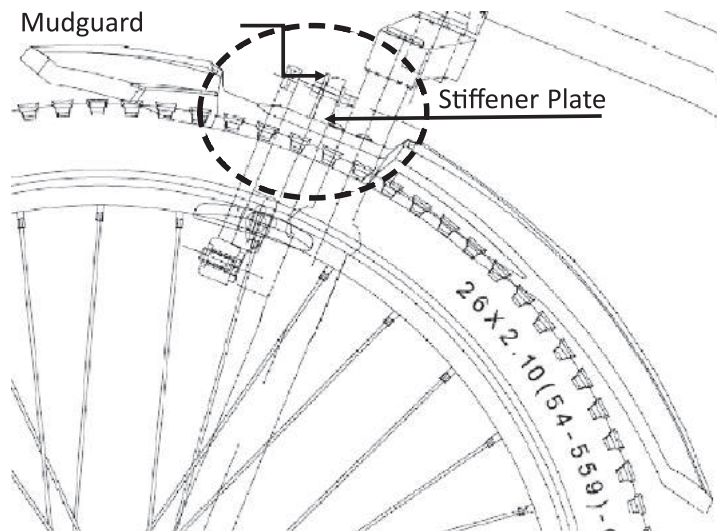


Figure 3.19

ATTACH THE FRONT MUDGUARD



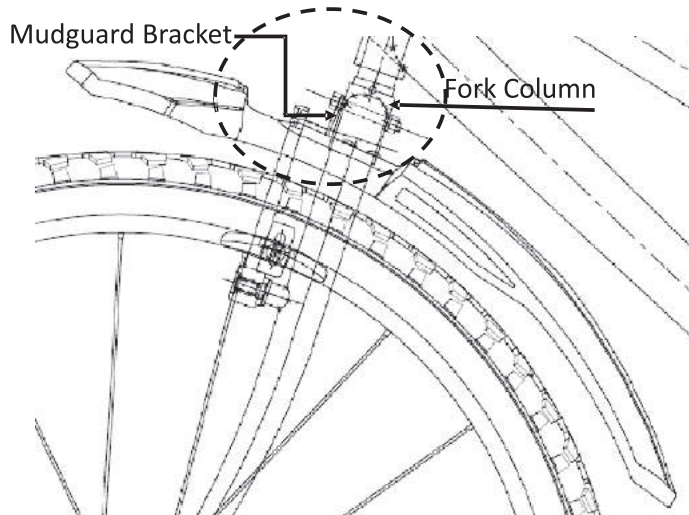
Attaching Plastic Mudguard:

Suspension models with Plastic mudguard

Fix the Front mudguard bracket in Suspension fork Stiffener plate by using the suitable Bolt & Nuts provided for Mudguard assembly.

Note :

Please adjust the mudguard to ensure it does not touches the tire after the wheel assembly



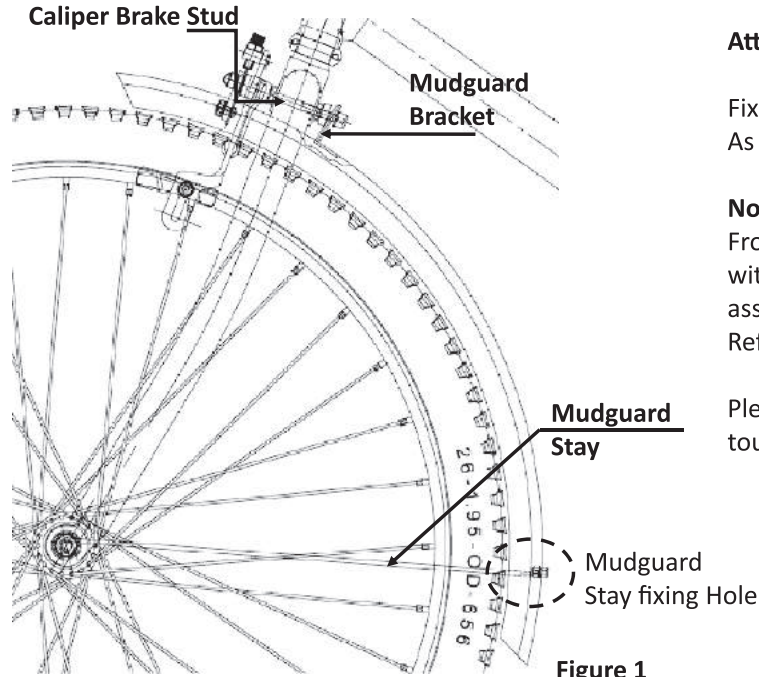
Attaching Plastic Mudguard:

Non Suspension models with Plastic mudguard

Fix the Front mudguard bracket in Fork Column by using the suitable Bolt & Nuts provided in the carton for Mudguard assembly.

Note :

Please adjust the mudguard to ensure that it does not touches the tire after the wheel assembly



Attaching Steel Mudguard with Stays:

Fix the Front mudguard bracket in Caliper brake stud As shown in Figure 1

Note :

Front Mudguard stays comes in assembled condition with the Mudguard, if it is not assembled, please assemble the mudguard stay in the Stay fixing Hole Refer Figure 1.

Please adjust the mudguard to ensure it does not touches the tire after the wheel assembly

Figure 1

ATTACH THE FRONT WHEEL

There are two types of front wheel assemblies; **nutted** and **quick-release**. **Note:** Quick-release wheels may be on both the front and rear wheels or just one. Also, some tire tread patterns have a direction, so compare your front tire and rear tire of the bicycle so that both tread patterns face the same way.

Nutted Front Wheel

- 1 Position the front wheel between the front fork legs with the axle resting inside the fork drop outs. **Note:** If the front wheel has a disc brake insert the disc rotor into the slot on the caliper body as you insert the wheel axle into the fork drop out. **Important!** Be sure the wheel is as **centered** as possible between the fork legs. **Figure 3.11**
- 2 Place the axle washers on the axle and slide it up against the fork drop out.
- 3 Attach the two axle nuts on the axle. Tighten one nut part way, then tighten the other nut. Repeat until both sides are tightened securely. Be sure that the wheel is centered between the fork legs.
- 4 If the wheel is off center, loosen the axle nut on the side that has a smaller gap between tire and fork leg and use your hand to push the wheel to a centered position; hold the wheel with one hand and tighten the axle nut and check again. Repeat if needed to be sure the wheel is centered and securely tightened.

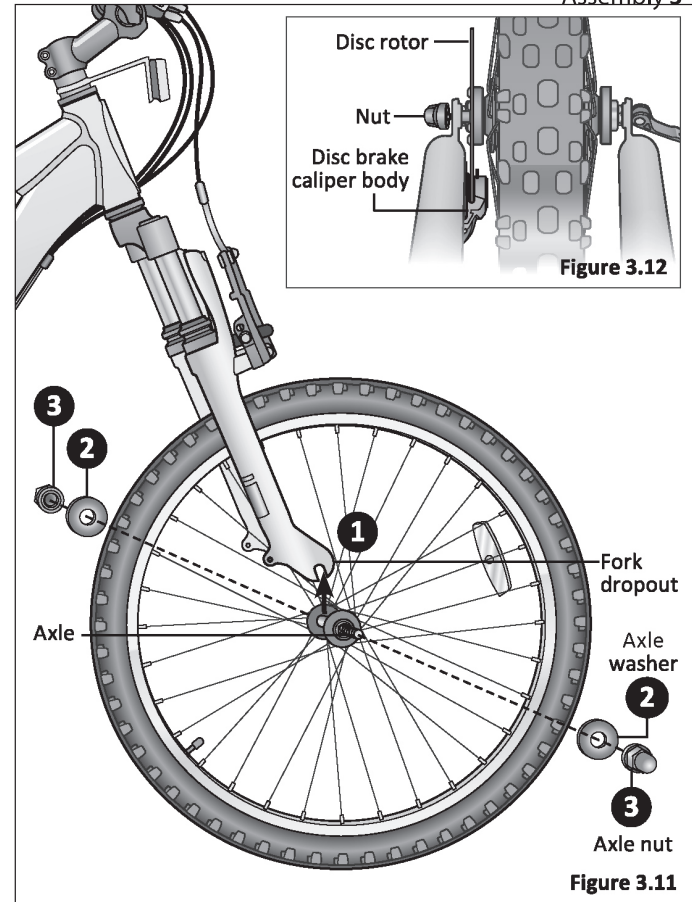


Figure 3.11

3 Assembly

Quick-release Front Wheel

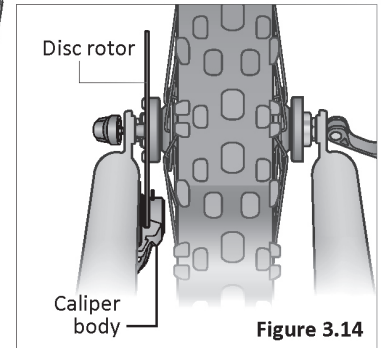
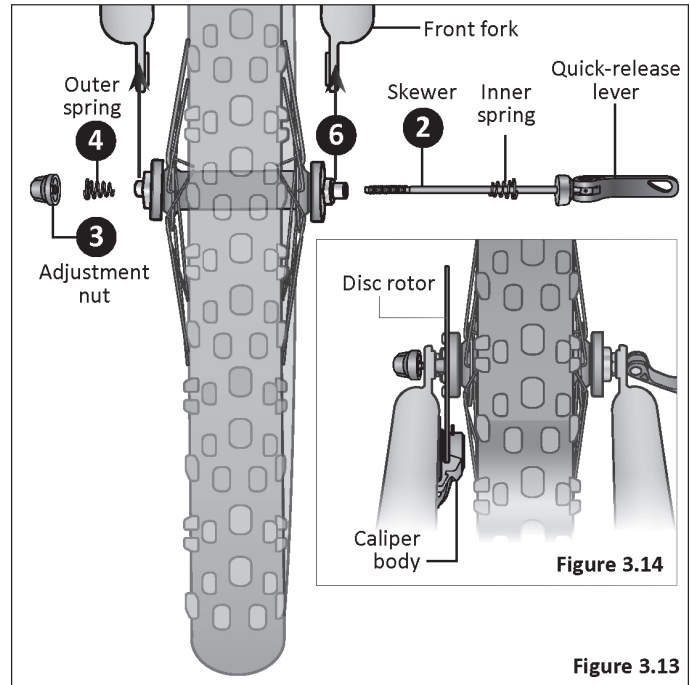
⚠ WARNING!

- All quick-release levers should be inspected before every ride to be sure they are fully closed and secure. Failure to properly close a quick-release lever can cause loss of control of the bicycle resulting in injury or death.
- Make sure the wheel is properly seated and the quick-release lever is properly closed.

- 1 Some tire tread patterns have a direction, so compare your front tire and rear tire of the bicycle so that both tread patterns face the same way.
- 2 Locate the skewer from the small parts carton of your bicycle. **Figure 3.13**
- 3 Unscrew the adjustment nut from the skewer, remove outer spring and slide the skewer through the front wheel axle so the quick-release lever is on the side of the bike **opposite** the chain.
- 4 Slide the outer spring over the end of the skewer. **Note:** The smaller end should be in towards the wheel.
- 5 Begin to thread the adjustment nut back onto the skewer, but do not tighten too far. Allow enough play so you can place the axle into the fork dropout.

- 6 Slide the wheel into the fork dropout slots. **Note:** If you have a wheel with disc brakes insert the disc rotor into the center of the disc brake at the same time you are inserting the wheel axle into the fork dropout.

Important! Be sure the wheel is as **centered** as possible between the fork legs.



- 7 Move the quick-release lever into the **open** position. With one hand on the quick-release lever and one hand on the adjustment nut, start to hand tighten the adjustment nut until you start to feel some resistance against the fork.

Figure 3.15

- 8 Try to close the quick-release lever. If it closes easily, open it up and tighten the adjustment nut further. If it is too difficult to close, open the quick-release lever up and loosen the adjustment nut a little and try again. **Do not** attempt to tighten by turning the quick-release lever. The quick-release lever is for closing, the adjustment nut is for adjusting the tension.

Important! You should feel resistance when you close the quick-release lever that should leave a temporary impression on your fingers. Open and close the handle to ensure the wheel is securely locked in place.

- 9 Re-check that the handlebars are perpendicular to the front wheel. Adjust if needed.

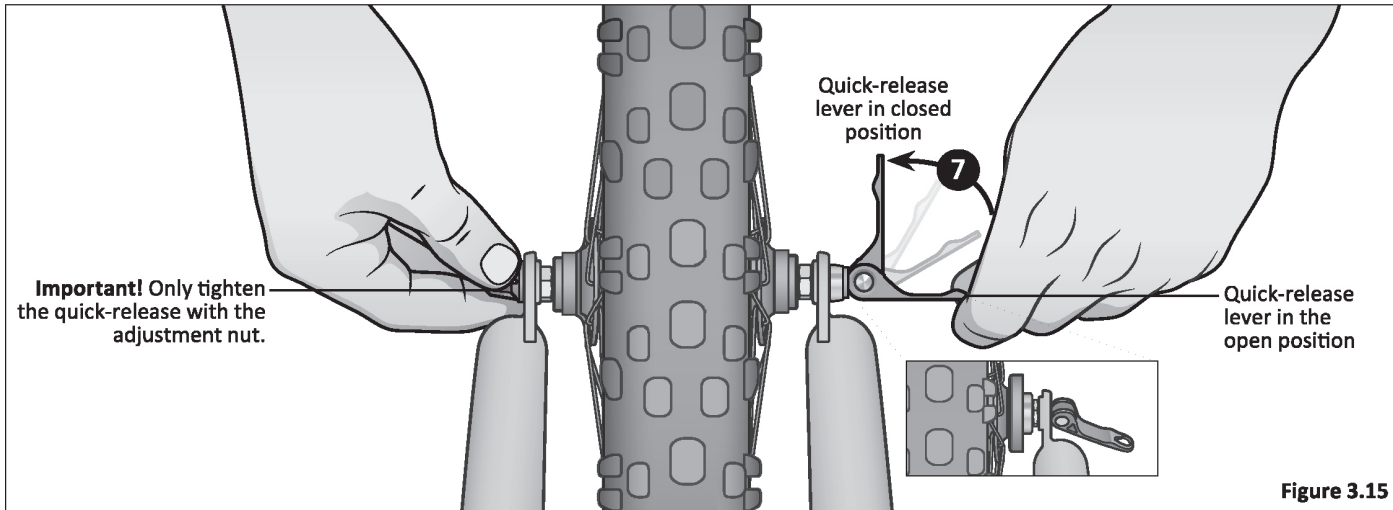


Figure 3.15

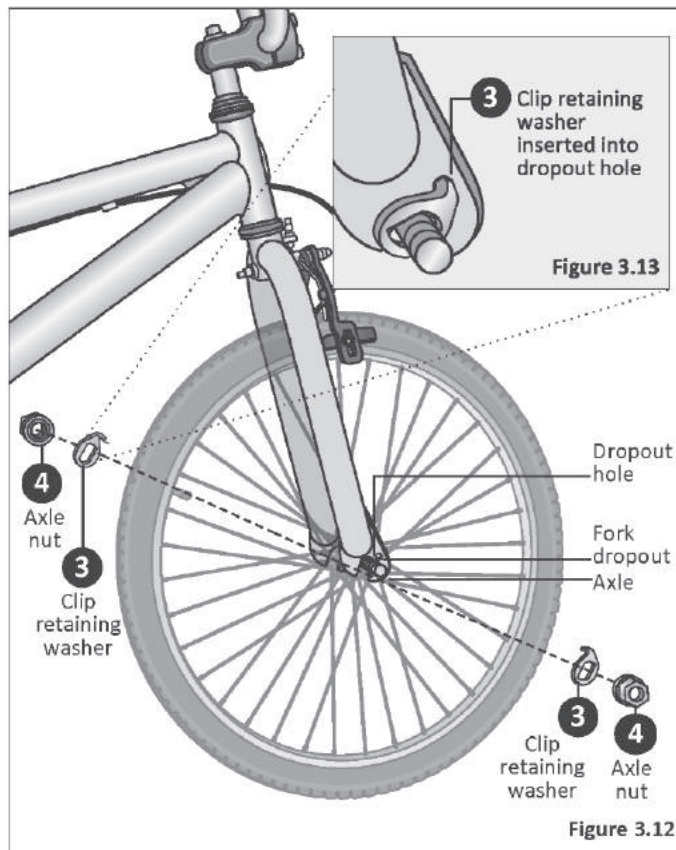
3 Assembly

Nutted with Clip Retaining Washer

- 1 Loosen the axle nuts on the front wheel. If there is a washer inside of the axle nut, it belongs outside of the fork dropouts. **Figure 3.12**
- 2 Position the front wheel between the front fork legs with the axle resting inside the fork drop out.

Important! Be sure the wheel is as **centered** as possible between the fork legs.

- 3 Place the clip retaining washer on the axle and slide it up against the fork drop out. Make sure the hooked end is inside the small hole of the fork dropout. **Figure 3.13**
- 4 Place the two outer axle nuts on and tighten evenly. Tighten one side part way, then tighten the other side and repeat until both sides are tightened securely. Be sure that the wheel remained centered between the fork legs.
- 5 If it is off center, loosen the axle nut on the side that has a smaller gap between tire and fork leg and use your hand to push the wheel to a centered position; hold the wheel with one hand and tighten the axle nut and check again. Repeat if needed to be sure the wheel is centered and securely tightened.



ATTACH THE PEDALS

⚠ WARNING!

- Attachment of an incorrect pedal into a crank arm can strip pedal threads and cause irreparable damage. Visually match the R and L marking on the pedal and crank arm before attaching the pedals. Before your first ride, please check to ensure your pedals are attached correctly.
- It is very important that you check the crank set for correct adjustment and tightness before riding your bicycle.

- 1 Match the pedal marked R with the right-hand crank arm and match the pedal marked L with the left-hand crank arm.

Figure 3.20

- 2 Place the threaded pedal into the threaded hole on the crank arm.
- 3 By hand, slowly turn the spindle the correct direction. Clockwise for right side pedal, counterclockwise for left side pedal. **Important!** Stop if you feel resistance! This may be an indication the spindle is entering the hole at an angle. Remove the spindle and repeat step two.
- 4 If the spindle is entering the hole cleanly then use a 15 mm wrench or pliers to tighten completely.
- 5 Remove the dust caps and tighten the crank axle nuts using a 15 mm wrench.

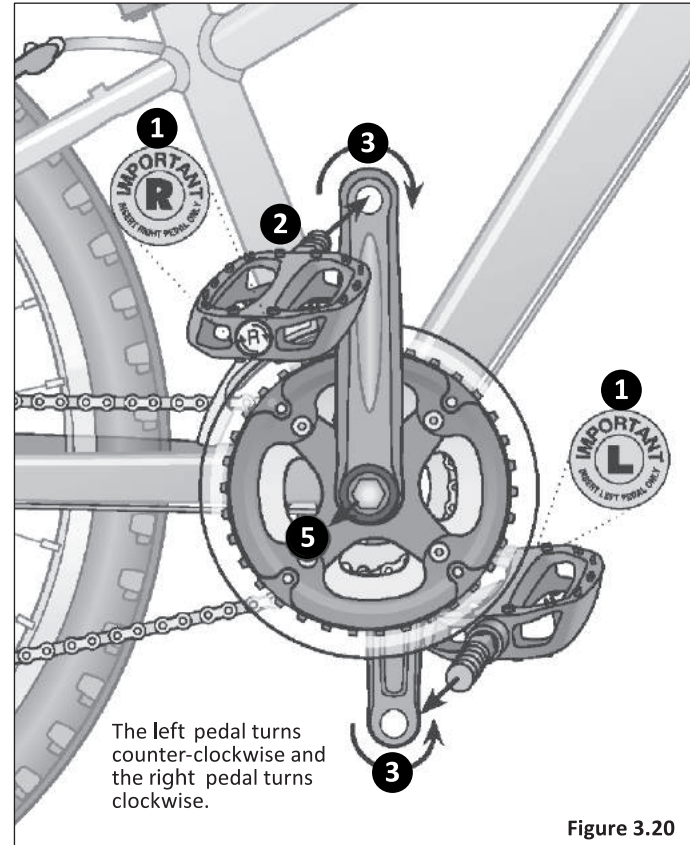


Figure 3.20

ATTACH THE TRAINING WHEELS

WARNING!

Failure to properly assemble and set up the training wheels may cause instability and tip over resulting in serious injury or death. Always check the training wheels before using the bicycle.

Note: Not all bicycles will accept training wheels. If your bicycle did not come stock with training wheels, please call customer care 1800 102 2324 to help determine if after-market training wheels can be attached.

There are three different braces used to attach the training wheels to the bicycle: the *c-shape brace*, the *flat brace* and the *flat brace with stabilizer*. Determine which brace was included with your bicycle and follow the instructions below.

C-Shape Brace

- 1 Remove the outer axle nut and washer from the rear wheel axle. **Figure 3.16**
- 2 Place the brace stabilizer washer onto the axle and align the washer so that the notch on the washer fits into the frame drop out.
- 3 Place the C-shaped wheel brace onto the axle.

- 4 Replace the washer and axle nut. Tighten the axle nut securely, making sure that the wheel brace stays in the proper vertical position.
- 5 The elongated hole on the wheel brace allows the training wheel height to be adjusted for proper fit.

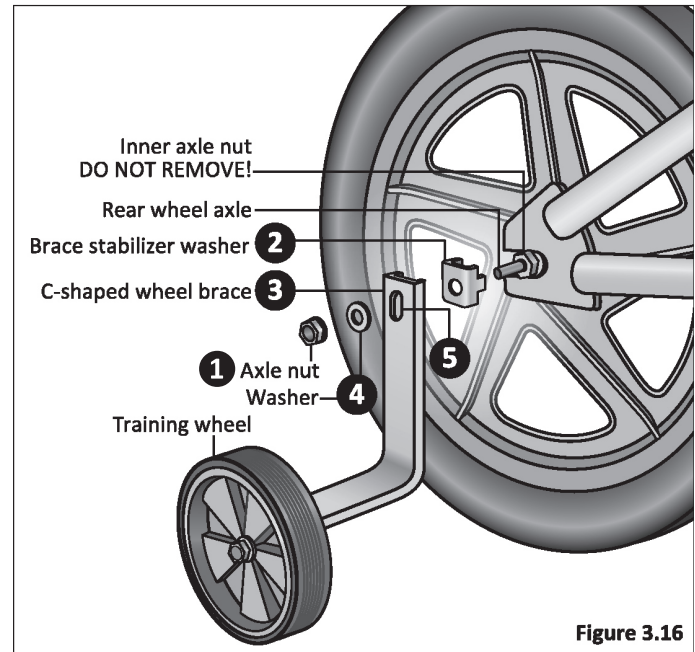


Figure 3.16

ATTACH THE REAR MUDGUARD

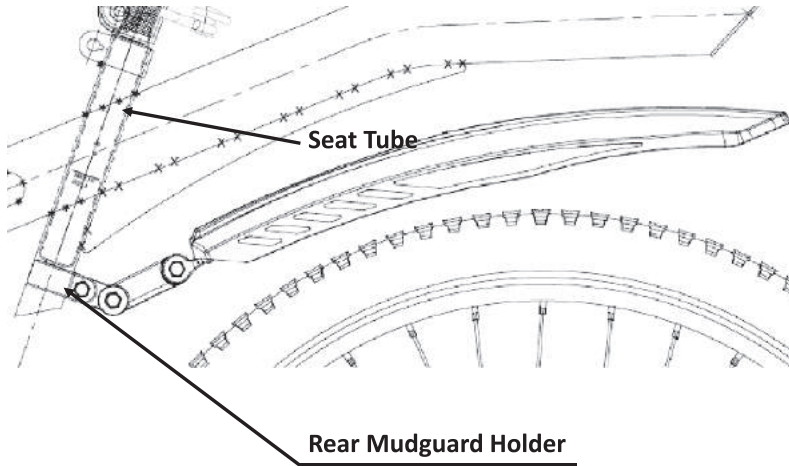


Figure 1

REFERENCE : Rear mudguard assembled in Seat Tube

Attaching Plastic Mudguard:

Models with Suspension & W/O Suspension:

Fix the Rear mudguard Holder in Seat Tube or Seat Post by using the suitable Bolt & Nuts provided in the along with the Mudguard Pack.

Refer Figure 1

Note :

Please adjust the mudguard to ensure it does not touches the tire after the wheel assembly

In case of Steel mudguards, it comes in assembled condition.

3 Assembly

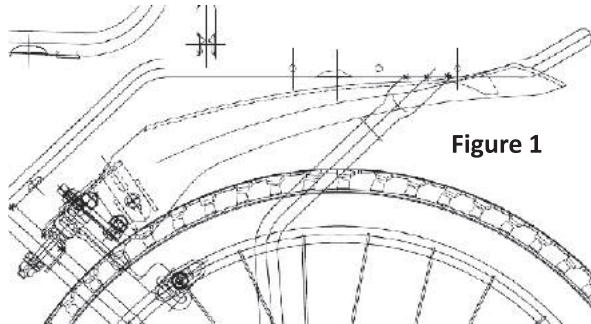


Figure 1

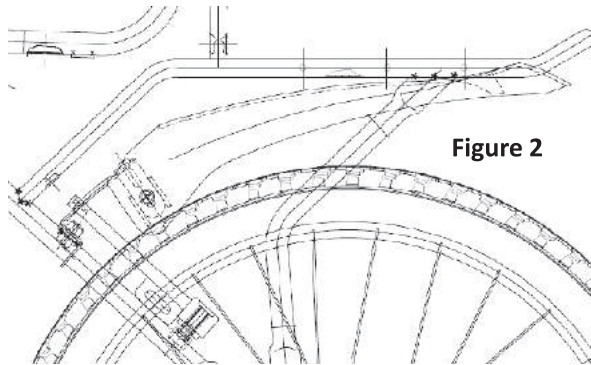


Figure 2

Attaching Plastic Mudguard (Kids Models):

Models with Caliper brake:

Fix the Front mudguard bracket in Caliper brake stud as shown in **Figure 1**

Models with V-Brake :

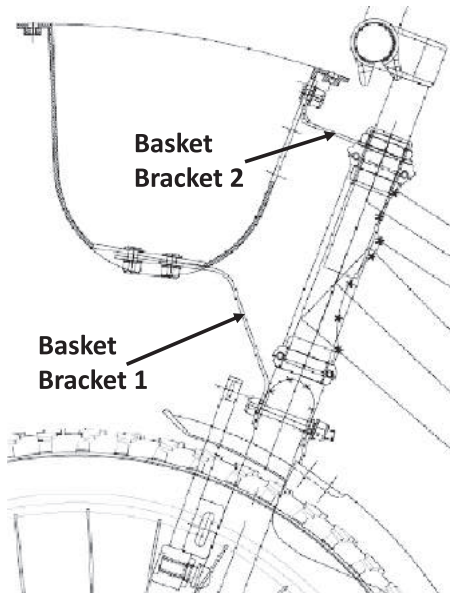
Fix the Front mudguard bracket on Seat stay Bridge plate with suitable fasteners as shown in **Figure 2**

Note :

Please adjust the mudguard to ensure it does not touches the tire after the wheel assembly

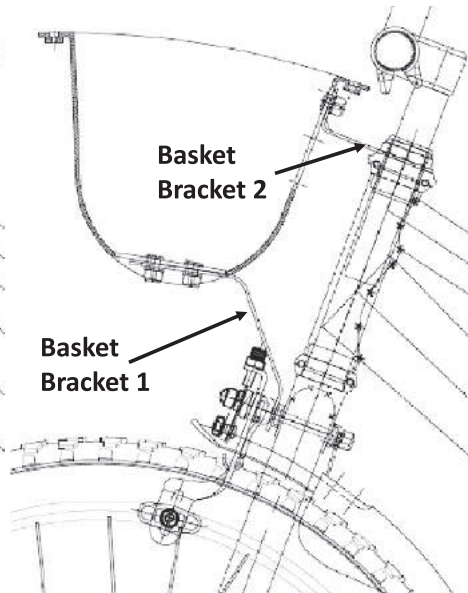
In case of Steel mudguards, it comes in assembled condition.

ATTACH THE FRONT BASKET (KIDS MODELS)



MODELS WITH V-BRAKE

Figure 1



MODELS WITH CALIBER BRAKE

Figure 2

Models with V-Brake :

Fix the Basket brackets and as shown in **Figure 1** and tighten it firmly.

Models with Caliber Brake :

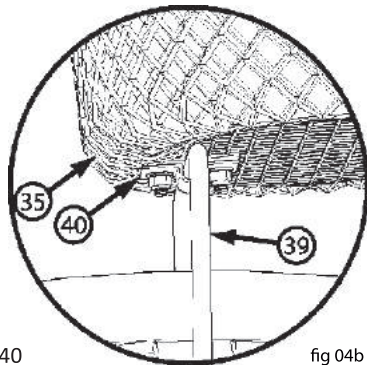
Fix the Basket brackets and as shown in **Figure 2** and tighten it firmly.

Note :

Fasteners required for the basket fixing will be supplied along with Carton or Basket pack.

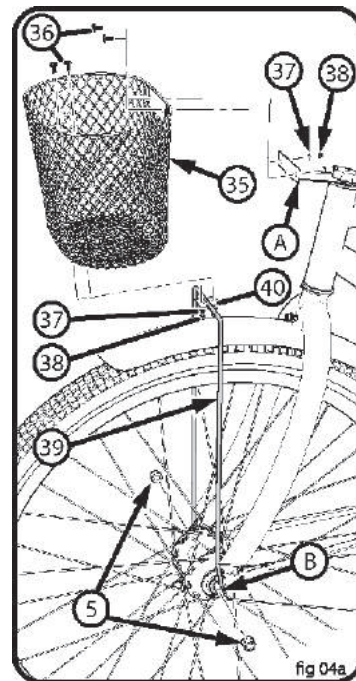
Wire Mesh Basket Assembly (if equipped)

1. Attach Support Legs (39) to bottom of Basket (35) using Bracket (40), Screws (36) [x2], Washers (37) [x2] and Nuts (38) [x2]. Tighten Securely.
2. Make sure Support Legs (39) set between Bracket (40) and Basket (35) (fig 04b).
3. If installed, remove Axle Nuts (5).
4. Place Support Legs (39) on to Axle (B) on both sides.
5. Install Axle Nuts (5) hand tight.
6. Place Basket (35) into position against upper Bracket (A) and attach with Screws (36)[x2], Washers (37) [x2] and Nuts (38) [x2]. Tighten Securely.
7. Attach Axle Nuts (5) securely.
8. Tighten Axle Nuts (5) firmly.



40

fig 04b



NOTE: Ensure wheel spins freely without contacting fork or fender.

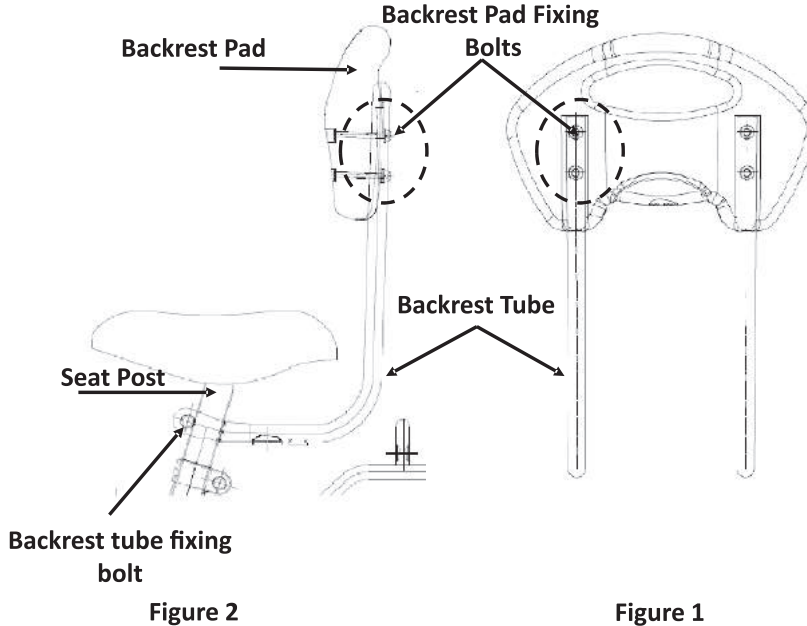


WARNING: Put the wheel in the center of the fork and tighten both nuts to the recommended torque.



WARNING: Failure to obey these steps can allow the front wheel to loosen while riding. This can cause injury to the rider or to others.

ATTACH THE BASKET REST PAD (KIDS MODELS)



Step 1:

Fix the Basket back rest pad with Back rest tube with the suitable fasteners provided along with the Basket rest pad as shown in **Figure 1** and tighten it firmly.

Step 1:

Fix the Basket back rest Tube with Seat tube with the suitable fasteners provided along with the Bolt & Nut as shown in **Figure 2** and tighten it firmly.

Warning!!!

Please ensure Back rest tube is tightened firmly with seat tube. If not, it will create serious injury to the rider.

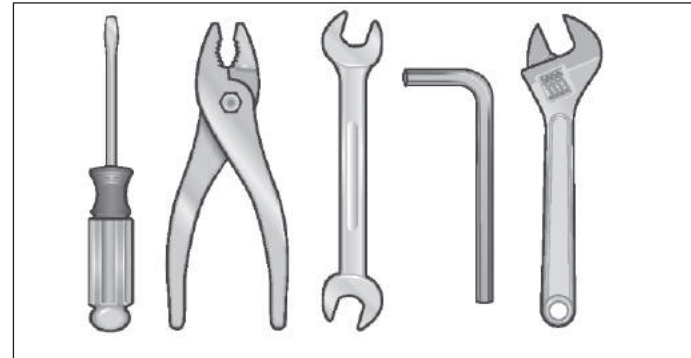
4 Adjustments

After your bicycle is assembled you will need to make adjustments. If you need replacement parts or have questions pertaining to the assembly of your bicycle, call the service line direct at: Toll free: 1800-102-2324.

Customer Service hours: Monday - Friday 10 AM- 5 PM Indian Standard Time (IST)

TOOLS REQUIRED

- Phillips head screw driver
- 4 mm, 5 mm, 6 mm and 8 mm Allen wrench
- Adjustable wrench or a 9 mm, 10 mm, 14 mm and 15 mm open and box end wrenches
- A pair of pliers with cable cutting ability



4 Adjustments

ADJUSTING THE BRAKES

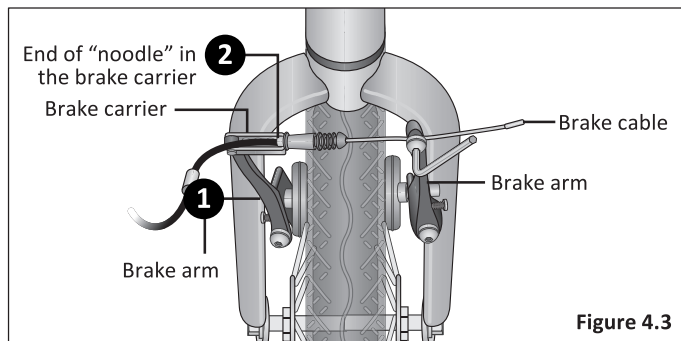
⚠ WARNING!

Failure to properly set the brakes may result in the inability to stop the bicycle movement and cause serious injury or death. Be sure the brakes are functioning properly before using the bicycle.

Adjusting Linear Pull Brakes

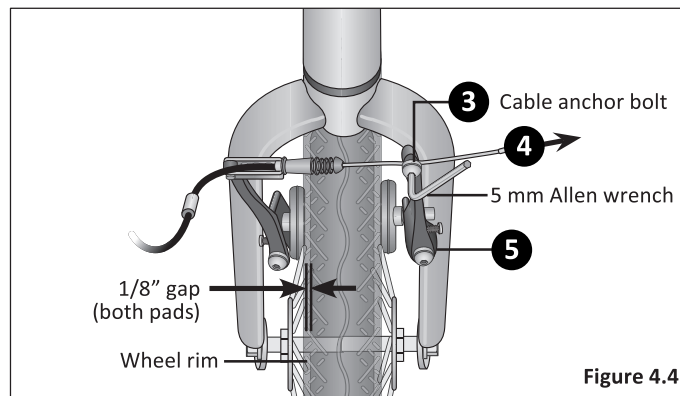
Attaching the Brake Cable to the Brake Caliper

- 1 Squeeze the two brake arms together until the brake pads touch the wheel rim. **Figure 4.3**
- 2 With your other hand, pull on the brake cable and insert the end of the “noodle” into the brake carrier.



Adjusting the Brake Pads

- 3 Check the brake cable is seated in the brake lever. Using a 5 mm Allen wrench loosen the cable anchor bolt enough so the brake cable can move freely. **Figure 4.4**
- 4 Pull the brake cable through the cable anchor so the left brake arm moves towards the rim and there is approximately a 1/8” (3 mm) gap between the brake pad and rim.
- 5 Move the right brake arm towards the rim until there is approximately a 1/8” (3 mm) gap between the brake pad and rim.
- 6 Using the 5 mm Allen wrench, firmly tighten the cable anchor bolt completely.



Important! Before riding the bicycle it is important to check the brakes. If you squeeze the brake lever and one brake arm moves more than the other (or not at all) the brake is not centered. You will need to fine-tune the brake pads. Multiple adjustments may be necessary to center the brake pads, correctly set the brake pressure and set the gap between the brake pad and rim.

Adjust the Brake Pad Alignment

Check that all brake pads are aligned correctly. If not, use a 5 mm Allen wrench and loosen the bolt enough so you can reposition the pad. Position the pad so it is evenly centered on the rim. Retighten the bolt after positioning the pad correctly.

Figure 4.5

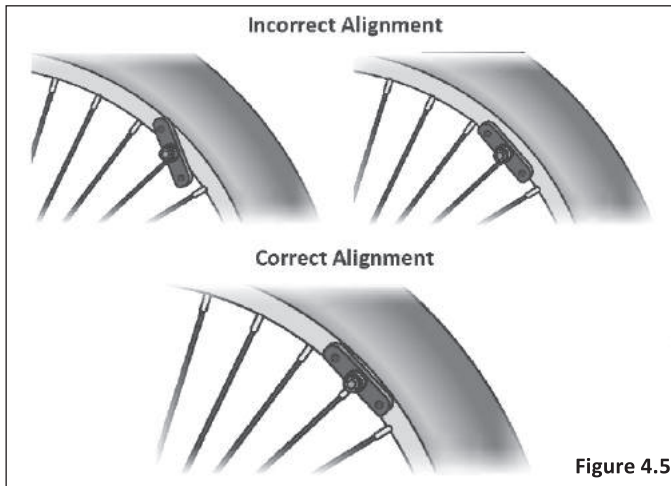


Figure 4.5

Center the Brake Pads

Rotate the wheel and look straight down at the gap between the rim, brake pads and fork. If you find the gap between these are uneven it indicates the wheel, the brake pads, or both are not centered.

- 1 If you see the gap between the fork and wheel is uneven loosen the axle nuts and adjust the wheel until centered.

Figure 4.6

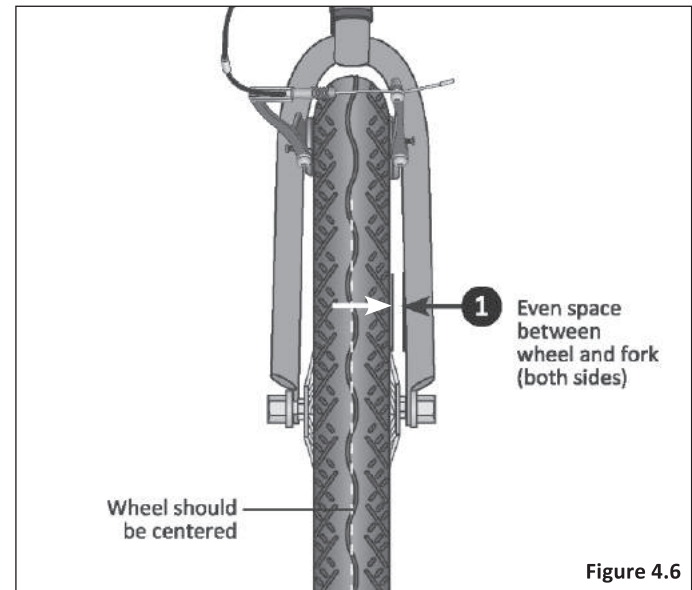


Figure 4.6

4 Adjustments

- 2** If the gap between the brake pad and wheel is uneven, adjust the position of the brake pad.
 - Using a phillips head screwdriver, adjust the brake arm screws on either side of the brake arm. **Note:** Turning the screw **clockwise** moves the pad away from the rim. Turning the screw **counterclockwise** moves the pad towards the rim. **Figure 4.7**
 - Start with the side where the pad is closest to the rim or is not moving properly. Turn the screw to move the pad towards or away from the rim.
 - Adjustments to these screws should be made in small increments, one-quarter to one-half turn then checked by activating the brake lever three to four times after each adjustment. If you continue to adjust the screw until you have noticeable movement you will run out of adjustment.
- 3** Pull and release the brake lever a few times and check if the pads are centered.
- 4** If necessary, repeat steps one and two until the brake pads are centered and the gap between the pads and rim is close to 1/8 inch.

Note: If you run out of adjustment capability on one side, adjust the screw on the opposite side. If you run out of adjustment capability on both screws do a minor adjustment to the brake cable. Adjustments should be made to each side as equally as possible to prevent running out of adjustment capability.

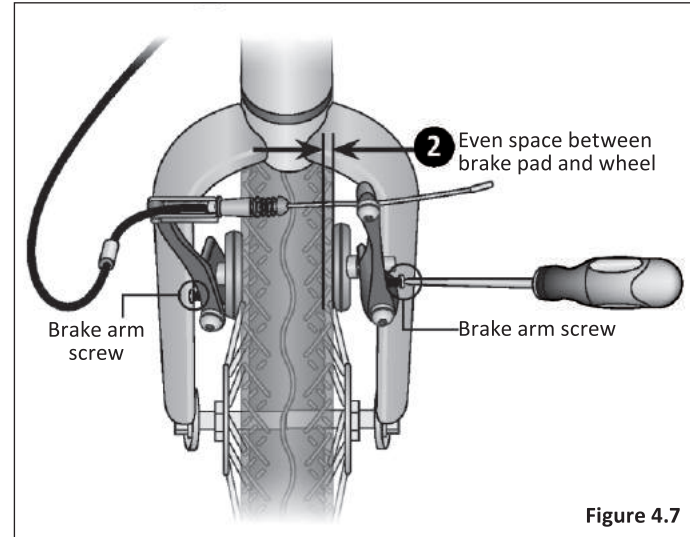
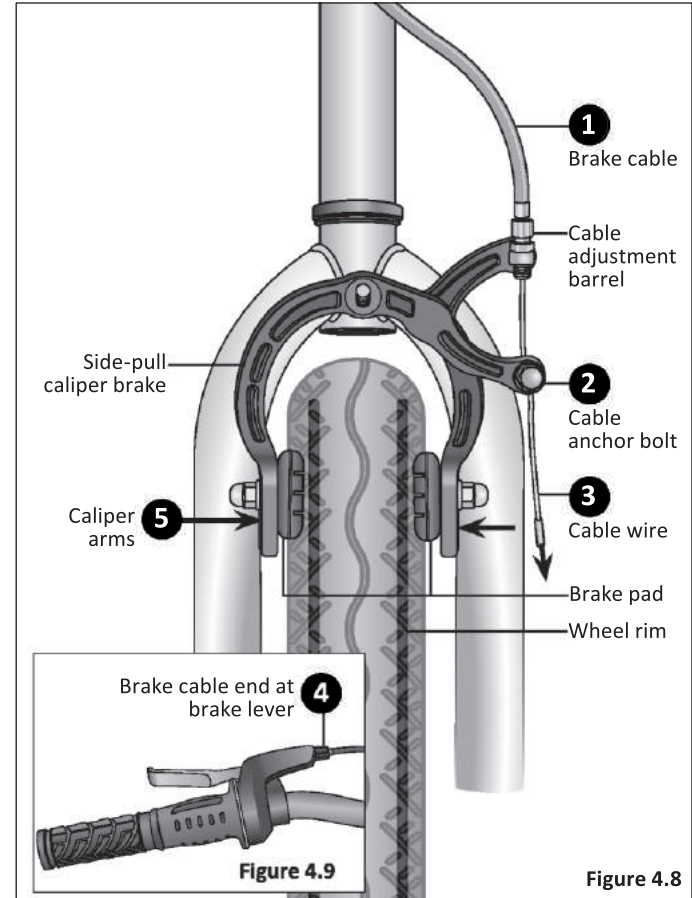


Figure 4.7

Adjusting the Side-pull Caliper Brake

Attaching the Brake Cable to the Brake Caliper

- 1 If the brake cable is disconnected at the caliper, thread the brake wire through the adjustment barrel. **Figure 4.8**
- 2 Loosen the cable anchor bolt until you can see a gap large enough for the cable wire.
- 3 Thread the cable wire through the gap. By hand, screw the cable anchor bolt snug enough to hold the cable wire.
- 4 Check the cable end is seated in the brake lever.
- 5 With one hand squeeze the caliper arms until both brake pads contact the rim. Loosen the cable anchor bolt just enough to allow the cable wire to move freely.
- 6 While holding the caliper closed, use your other hand to pull the brake cable tight (through the cable anchor bolt). Check that the cable end is seated in the brake lever and the barrel adjuster of the brake.
- 7 Tighten the cable anchor bolt as much as you can by hand and then while still squeezing the caliper arms until both brake pads contact the rim, tighten the cable anchor bolt fully with a 10 mm box wrench. **Note:** Use the adjustment barrel(s) to fine-tune the brake cable tension. Turning the barrel clockwise will loosen the brake cable tension, counter-clockwise will tighten the brake cable tension. **Figure 4.9**

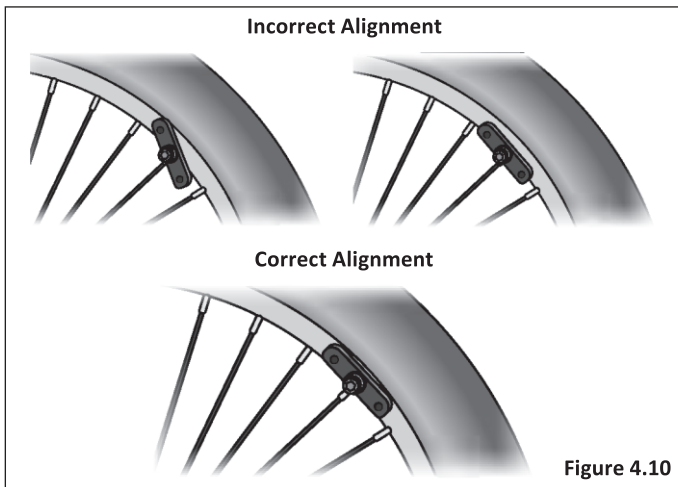


4 Adjustments

Adjusting the Brake Pads

Important! Before riding the bicycle it is important to check the brakes. If you squeeze the brake lever and one brake arm moves more than the other (or not at all) the brake is not centered. You will need to fine-tune the brake pads. Multiple adjustments may be necessary to center the brake pads, correctly set the brake pressure and set the gap between the brake pad and rim.

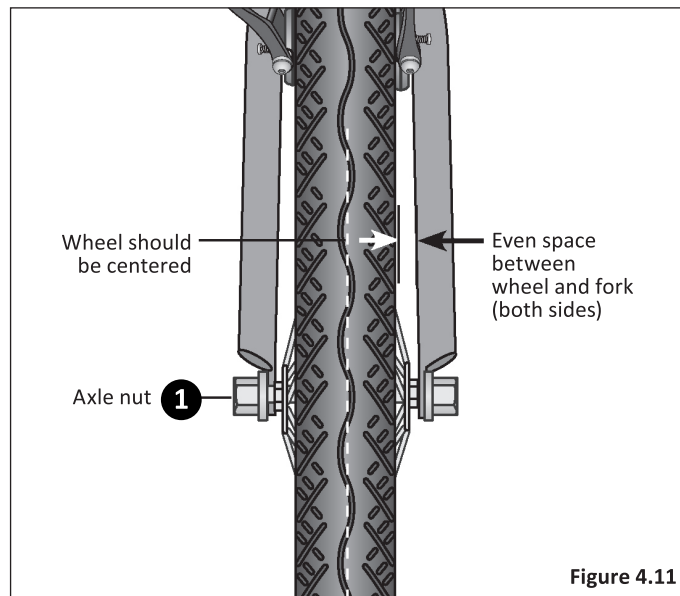
- 1 Check that all brake pads are aligned correctly. If not, use a 5 mm Allen wrench and loosen the bolt enough so you can reposition the pad. Position the pad so it is evenly centered on the rim. Retighten the bolt after positioning the pad correctly. **Figure 4.10**



Center the Brake Pads

Rotate the wheel and look straight down at the gap between the rim, brake pads and fork. If you find the gap between these are uneven it indicates the wheel, the brake pads, or both are not centered.

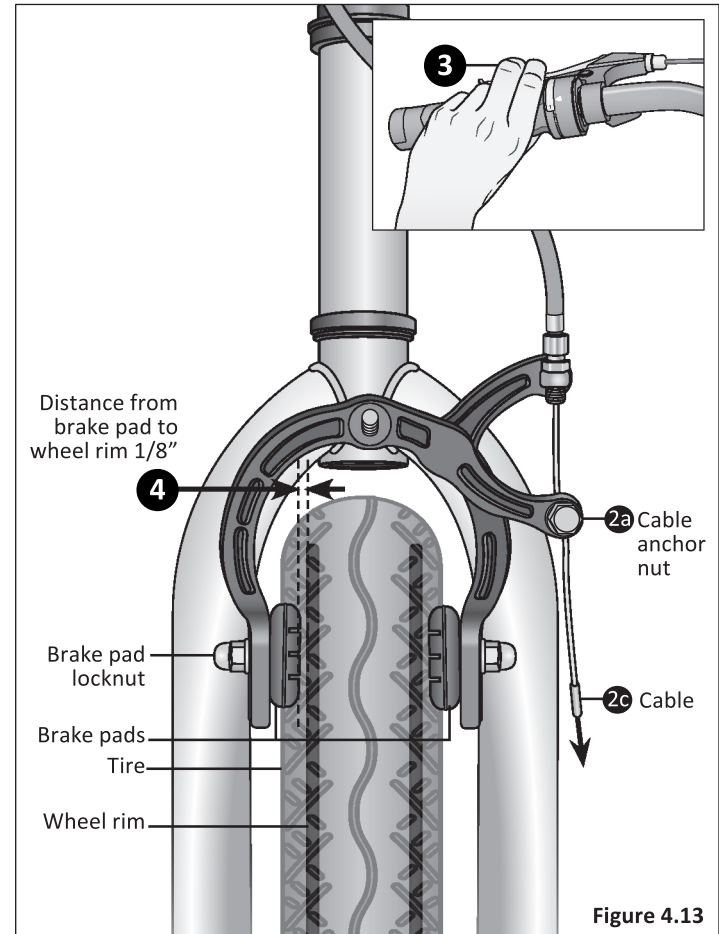
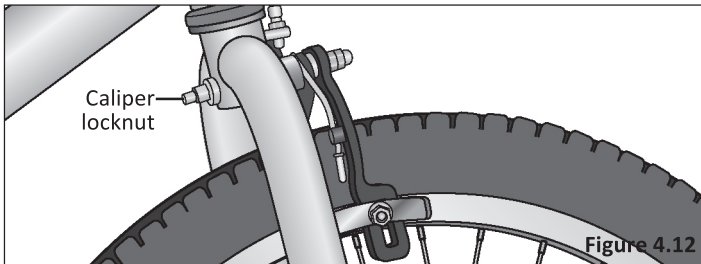
- 1 If you see the gap between the fork and wheel is uneven loosen the axle nuts and adjust the wheel until centered. **Figure 4.11**



- 2 If the gap between the brake pad and wheel is uneven, adjust the cable tension. **Figure 4.13**
 - 2a Loosen the cable anchor nut.
 - 2b Using one hand, squeeze the brake pads against the rim.
 - 2c Pull the slack out of the cable.
 - 2d While holding tension on the cable, tighten the cable anchor nut.

Note: Watch the brake if it begins to shift or rotate, then release the brake lever and use your hand to rotate the brake caliper back until both sides of the brake move equally. Sometimes it is necessary to over-rotate the brake slightly, so that as you tighten the caliper locknut, the brake will end up centered. **Figure 4.12**

- 3 Pull and release the brake lever a few times and check if the pads are centered.
- 4 If necessary, repeat steps one through three until the brake pads are centered and the gap between the pads and rim is close to 1/8 inch.



4 Adjustments

Check the Brakes

- 1 After adjusting the brake, squeeze the brake lever as hard as you can several times and re-inspect the brake pads, centering and brake lever travel. If the brake pads are no longer square to the rim, repeat brake pad adjustments.
Figure 4.14
- 2 Be sure that brake pads return to a centered position by spinning the wheel and listening for the brake pad rubbing the rim on either side. Re-adjust as needed.
- 3 Check that the brake cable tension allows the brake lever about 1/3 of the travel before the brake pads contact the rim. If the cable has stretched or slipped, re-adjust the brake cable tension by loosening cable anchor bolt and pulling more cable through the anchor or use brake adjustment barrels for fine tuning brake cable tension.

Brake is correctly adjusted when:

- The brake pads do not drag on the rim when the brake is open. **Figure 4.15**
- Both brake pads move away from the rim equally when the brake is released.
- When the brake is applied, the brake pads contact the rim before the brake lever reaches about 1/3 of the way to the handlebar.

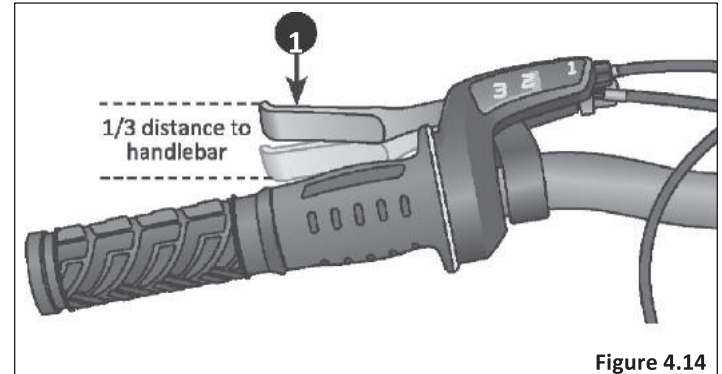


Figure 4.14

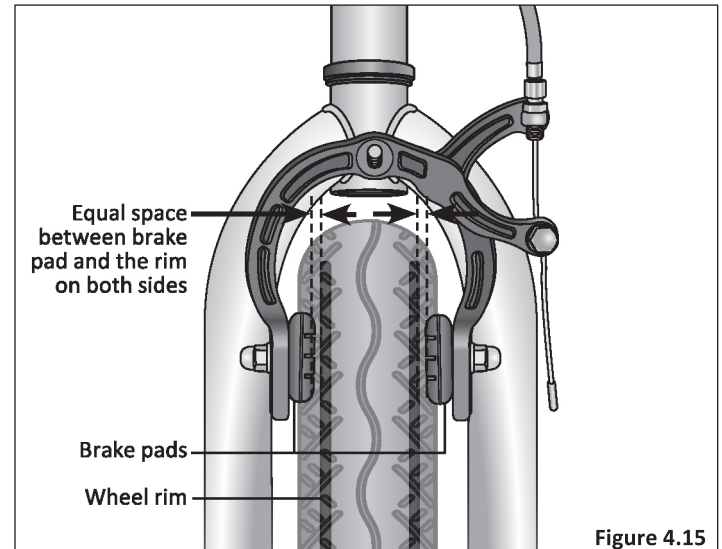


Figure 4.15

Adjusting the Disc Brake

⚠️ WARNING!

- Disc brakes are sharp, keep fingers away from the brake caliper and rotor. If fingers contact the disc brake while the wheel is turning serious injury may occur.

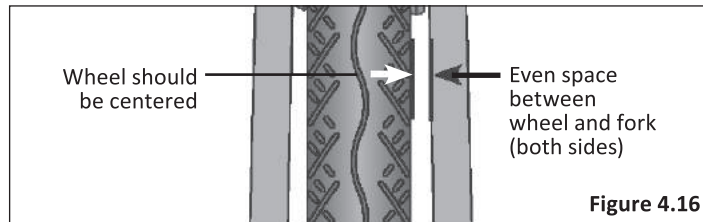
Important! Different types of disc brakes may require specific adjustments not covered in this section. If you are unsure of what needs to be done see a *qualified bicycle mechanic*.

Misalignment of the disc brake may be due to the following:

- The wheel is not centered.
- The caliper body is misaligned.
- The brake pads are not centered.

Center the Wheel

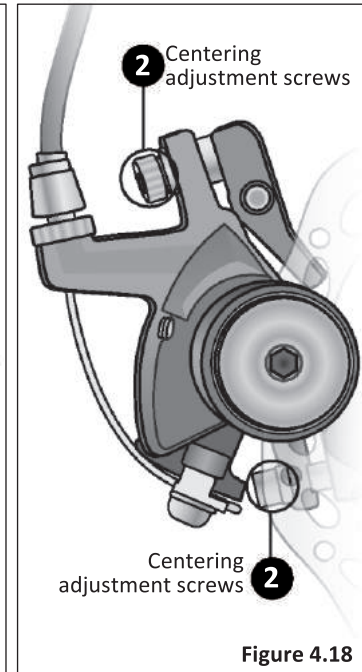
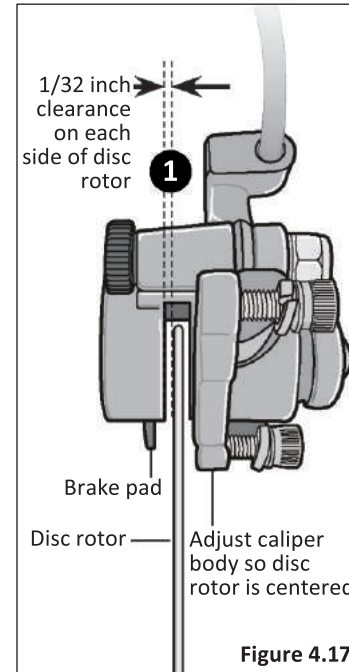
- 1 Rotate the wheel and look at the gap between the rim and fork. If the gap is uneven, loosen the axle nuts and adjust until the wheel and disc rotor are centered. **Figure 4.16**



Realign the Caliper Body

Using a 5 mm Allen wrench, loosen the two centering adjustment screws. Adjust the caliper body until the gap between the disc rotor and the brake pads in the caliper body is even ($1/32$ " per side). **Figure 4.17**

Tighten the centering adjustment screws.



4 Adjustments

Center the Brake Pads

- 1 Insert a 1/32" spacer gage between the disc rotor and brake pad. **Figure 4.19**
- 2 Using a 2.5 mm Allen wrench, loosen the set screw.
- 3 Using a 5 mm Allen wrench, turn the brake pad adjustment screw to move the brake pad. Turning the pad clockwise moves it towards the disc rotor, counterclockwise moves the pad away from the disc rotor.
- 4 Adjust the pad until the gap between the disc rotor and the brake pads are even (1/32" per side).
- 5 Re-tighten the set screw.

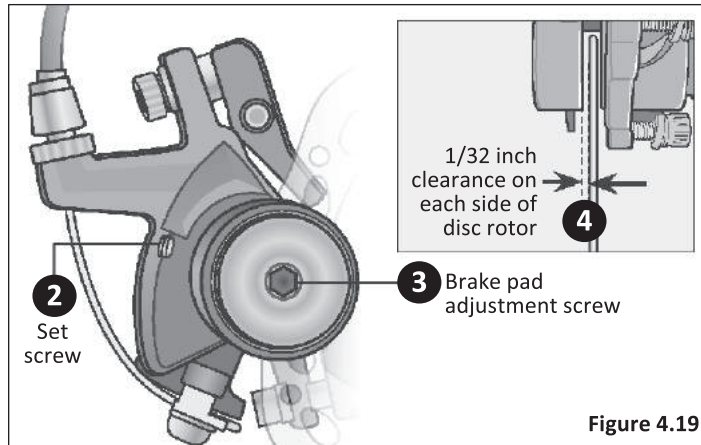


Figure 4.19

Attaching the Brake Cable to the Brake Arm

- 1 If the brake cable wire is not attached to the brake arm then loosen the cable anchor bolt until you can see a gap large enough for the brake cable wire. **Figure 4.20**
- 2 Pull on the brake cable wire and place it under the cable anchor bolt.
- 3 Tighten the cable anchor bolt. **Note:** The brake cable should *not* be "pulling" on the brake arm.

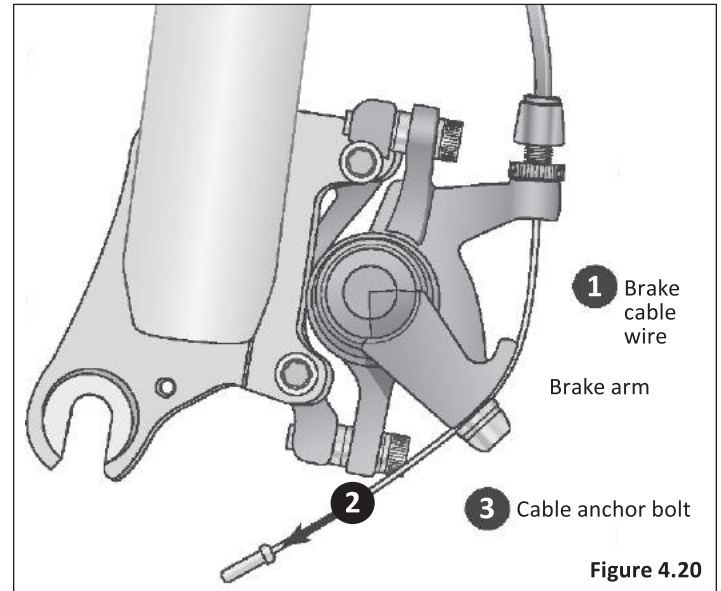


Figure 4.20

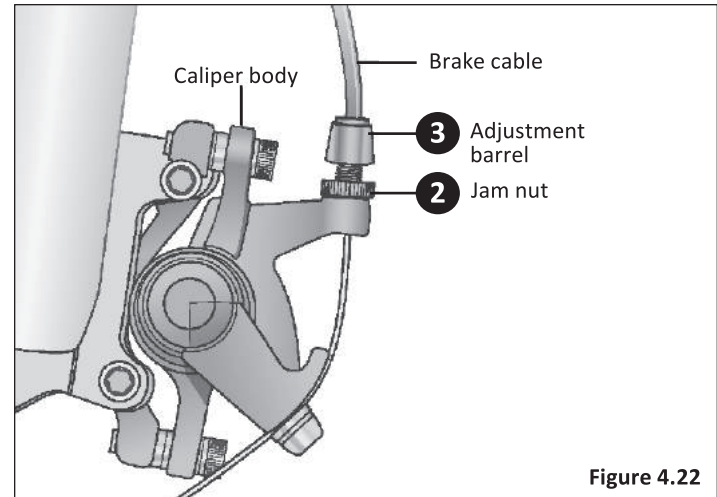
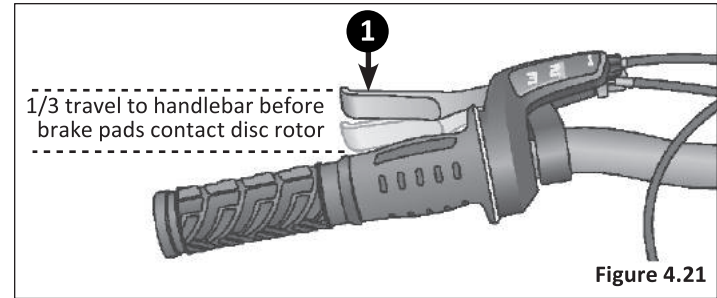
Adjusting the Cable Tension

- 1 Check that the brake cable tension allows the brake lever about 1/3 of the travel before the brake pads contact the disc rotor. If the cable has stretched or slipped, re-adjust the brake cable tension. **Figure 4.21**
- 2 At the caliper body, or brake lever, slightly loosen the jam nut that is next to the adjustment barrel. **Figure 4.22**
- 3 Turn the adjustment barrel to adjust the cable tension. Turning clockwise will loosen the brake cable tension, counter-clockwise will tighten the brake cable tension.
- 4 Re-check that the brake cable tension allows the brake lever about 1/3 of the travel before the brake pads contact the disc rotor. When you have the brake tension you want then tighten the jam nut.

Brake is correctly adjusted when:

- The brake pads do not drag on the disc rotor.
- Both brake pads move away from the disc rotor equally when the brake is released.
- When the brake is applied, the brake pads contact the disc rotor before the brake lever reaches about 1/3 of the way to the handlebar.

After brake adjustment, squeeze the brake lever as hard as you can several times and re-inspect if the wheel and brake pads are centered. If necessary, repeat brake adjustments.



4 Adjustments

ADJUSTING THE DERAILEUR

⚠ WARNING!

Ensure all bolts are secured tightly and the chain does not fall off in either direction.

Although the front and rear derailleurs are initially adjusted at the factory, you will need to inspect and re-adjust both before riding the bicycle.

Adjust the Rear Derailleur

- 1 Begin by shifting the rear shifter to largest number indicated and place the chain on the smallest sprocket. **Figure 4.23**
- 2 Adjust the high limit screw so the guide pulley and the smallest sprocket are lined up vertically. **Figure 4.24**
- 3 Shift through the gears, making sure each gear achieved is done quietly and without hesitation. If necessary, use the barrel adjuster to fine-tune each gear by turning it the direction you want the chain to go. For example, turning clockwise will loosen the cable tension and move the chain away from the wheel, while turning counter-clockwise will tighten cable tension and direct the chain towards the wheel.
- 4 Shift the rear shifter to gear one and place the chain on the largest cog.

- 5 Adjust the low limit screw in quarter turn increments until the guide pulley and the largest cog are aligned vertically.
- 6 Again, shift through each gear several times, checking that each gear is achieved smoothly. It may take several attempts before the rear derailleur and cable is adjusted properly.

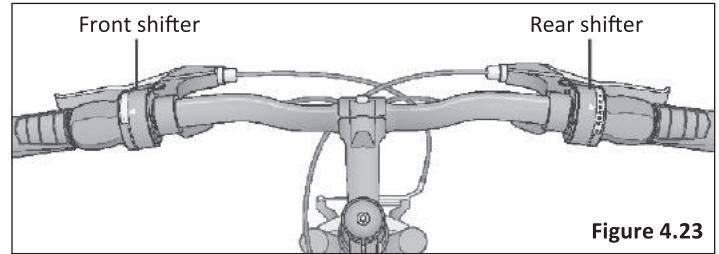


Figure 4.23

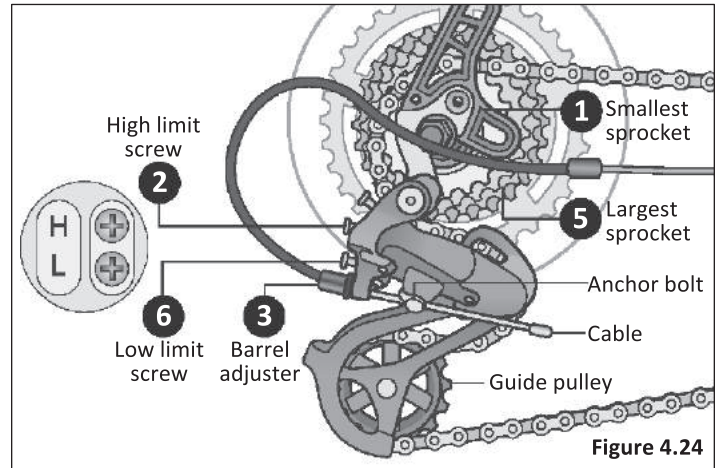


Figure 4.24

Adjust the Front Derailleur

⚠ WARNING!

Do not ride a bicycle that is not shifting properly. Overlooking proper adjustments may cause irreparable damage to the bicycle and/or bodily injury. Never move the shifter while pedaling standing up, or under heavy load, nor pedal backwards after having moved the shifter. This could jam the chain and cause serious damage to the bicycle and/or rider.

- 1 Shift both shifters to the smallest number indicated and place the chain on the corresponding cog and chainwheel.
- 2 Disconnect the front derailleur cable from the cable anchor bolt. **Figure 4.25**
- 3 Check the position of the front derailleur; it should be parallel with the outer chainwheel and clear the largest chainwheel by 1-3 mm when fully engaged.
- 4 With the chain on the smallest chainwheel in front and the largest cog in back, adjust the low limit screw so the chain is centered in the front derailleur cage.
- 5 Reconnect the cable, pull any slack out and tighten the cable anchor bolt securely.
- 6 Shift the front shifter to the largest chainwheel. If the chain does not go onto the largest chainwheel, turn the high limit screw in 1/4 turn increments counter-clockwise until the chain engages the largest chainwheel.

If the chain falls off the largest chainwheel and into the pedals, you will need to turn the high limit screw in 1/4 turn increments clockwise until the chain no longer falls off.

- 7 Shift through every gear, using the barrel adjusters to fine-tune each transition. The barrel adjuster for the front derailleur is located on the front shifter where the cable comes out of the shifter. Clockwise will loosen the cable tension and direct the chain closer to the frame while counter-clockwise will tighten the cable tension and direct the chain away from the frame.

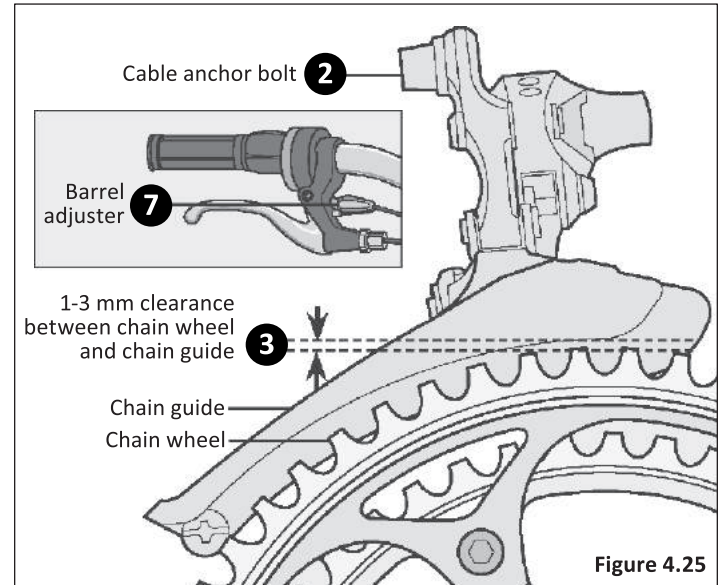


Figure 4.25

ADJUSTING THE SEAT HEIGHT

⚠ WARNING!

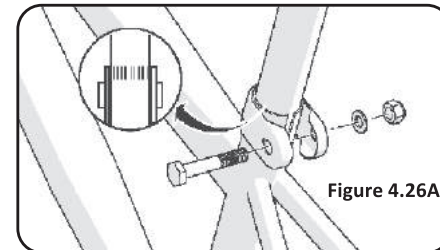
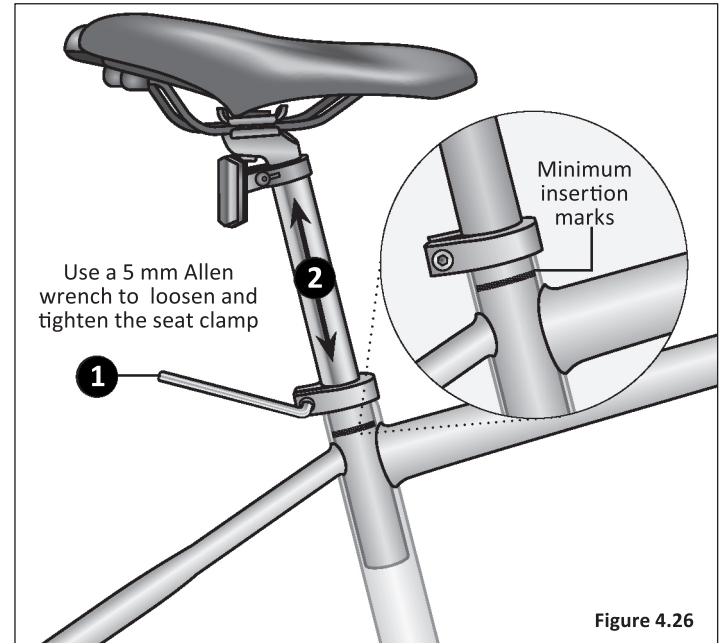
Improperly adjusted seat height could affect the rider's ability to reach the handlebar and pedals resulting in unexpected movement, loss of control and serious injury or death. Follow these guidelines when adjusting the seat height. Always ensure the seat post **minimum insertion marks** are below the seat clamp and **cannot** be seen. Ensure the seat clamp is locked and the seat cannot move.

Bolted Seat Clamp

- 1 Using a 5 mm Allen wrench, loosen the seat clamp bolt. **Figure 4.26**
Using a suitable spanner, loosen the seat clamp bolt. **Figure 4.26A**
- 2 Adjust the seat height up or down until the rider feels they have control of the bicycle and are comfortable.

Important! Be sure the **minimum insertion marks** do not go past the top of the seat clamp and are **not** visible. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach.**

- 3 Tighten the seat clamp bolt to lock the seat in place.
- 4 Check the seat to be sure it does not move.



Quick-release Seat Clamp

- 1 Unlock the quick-release lever. **Figure 4.27**
- 2 Adjust the seat height up or down until the rider feels they have control of the bicycle and are comfortable.

Important! Be sure the *minimum insertion marks* do not go past the top of the seat clamp and are *not* visible. See **Section 1, Fig. 1.2: Seat Height and Handlebar Reach.**

- 3 Close the quick-release lever and lock the seat in place. If there is not enough pressure to hold the seat in place open the quick-release lever. With one hand on the quick-release lever and one hand on the adjustment nut, start to hand tighten the adjustment nut until you start to feel some resistance against the clamp post. **Do not** attempt to tighten by turning the quick-release lever. The quick-release lever is for closing, the adjustment nut is for adjusting the pressure. **Figure 4.28**

- 4 Try to close the quick-release lever. If it closes easily, open it up and tighten the adjustment nut further. If it is too difficult to close, open the quick-release lever, loosen the adjustment nut a little and try again.

Important! You should feel resistance when you close the quick-release lever that should leave a temporary impression on your fingers. Open and close the handle to ensure the seat is securely locked in place.

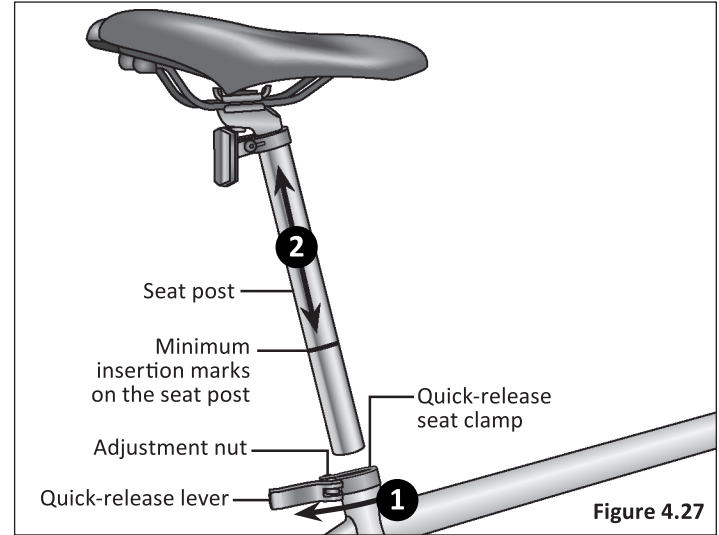


Figure 4.27

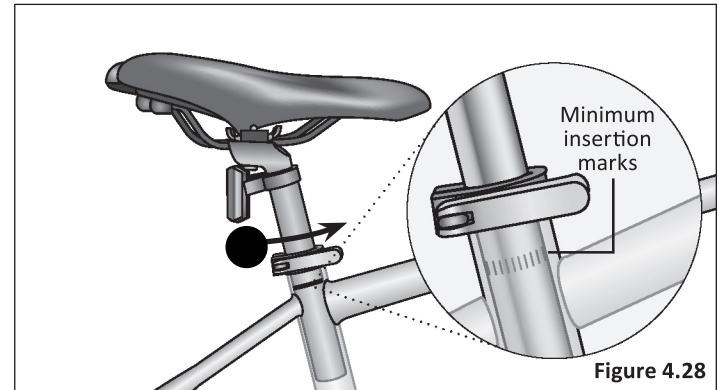


Figure 4.28

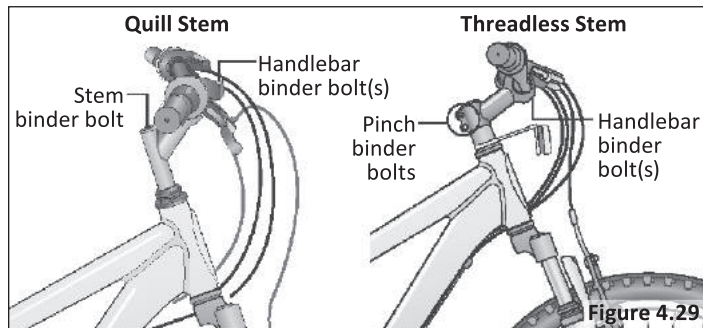
ADJUSTING THE HANDLEBAR

⚠ WARNING!

- Improper adjustment of the handlebar may result in damage to the stem post, steering tube and result in loss of control, serious injury or death. Ensure the **minimum insertion marks** on the stem post are **not** visible above the top of the headset.
- Failure to properly tighten handlebar components may result in loss of control, serious injury or death. Always check the handlebar cannot move and is secured to the frame before riding the bicycle.

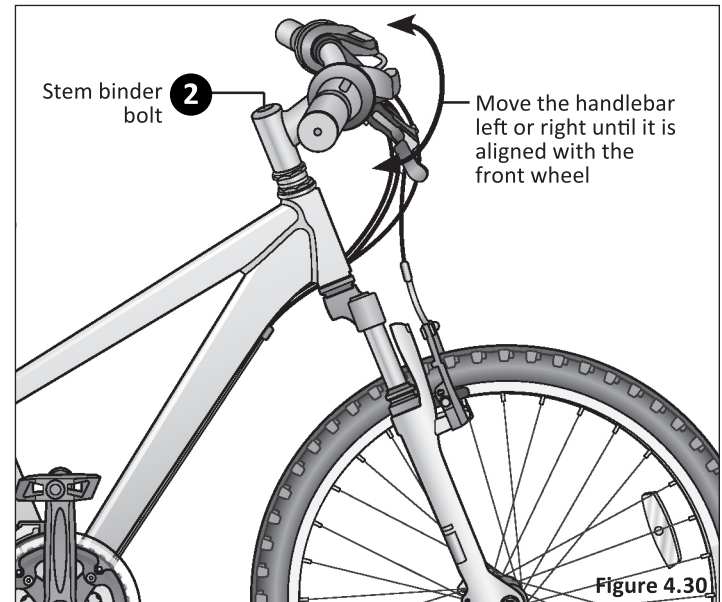
Adjusting the Handlebar Height

Instructions for adjusting the handlebar height depend on whether your bicycle has a **quill** or **clamp (threadless) stem**.
Figure 4.29



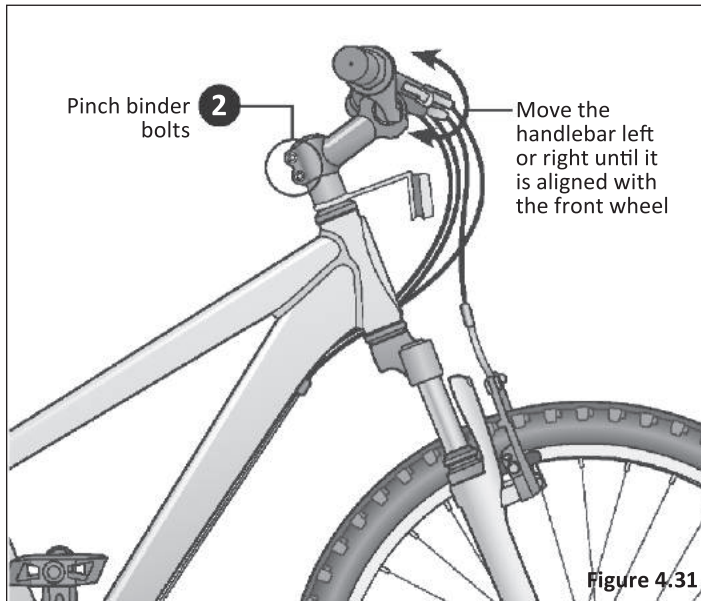
Align the Handlebar (with quill stem)

- 1 Stand in front of the handlebar and hold the front wheel between your legs.
- 2 Using a 6 mm Allen wrench, loosen the stem binder bolt and move the handlebar left or right until it is aligned with the front wheel. **Figure 4.30**
- 3 Tighten the stem binder bolt and check the handlebar is securely attached and cannot move.



Align the Handlebar (with threadless stem)

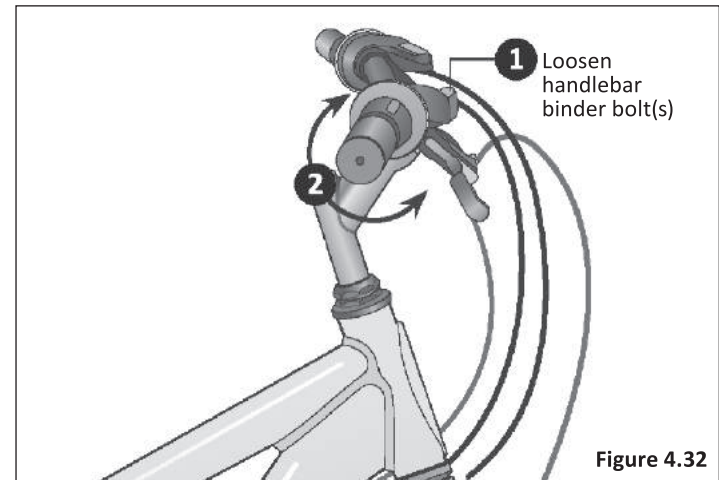
- 1 Stand in front of the handlebar and hold the front wheel between your legs.
- 2 Using a 6 mm Allen wrench, loosen the pinch binder bolts and move the handlebar left or right until it is aligned with the front wheel. **Figure 4.31**
- 3 Tighten the stem binder bolt and check the handlebar is securely attached and cannot move.



Adjust the Handlebar Angle (all stem types)

- 1 Using a 6 mm Allen wrench loosen the handlebar binder bolt(s). **Figure 4.32**
- 2 Rotate the handlebar into the desired position.
- 3 Check that the handlebar is centered to the frame and front wheel. Sit on the seat and check your reach to grips, shifters and brakes. Refer to **Section 1, Fig. 1.2: Seat Height and Handlebar Reach** for guidelines.

Tighten the handlebar binder bolt(s) and check the handlebar is securely attached and cannot move.



5 Use

⚠ WARNING!

Failure to follow all local and state regulations and laws pertaining to bicycle use as well as the safety warnings in this manual may result in serious injury or death. Always follow all local and state regulations and laws pertaining to bicycle use, follow the safety warnings in this manual and use common sense when riding the bicycle. Always conduct a pre-ride check of the bicycle condition before riding.

BRAKE OPERATION

⚠ WARNING!

If the front brake is applied too quickly or too hard, the front wheel can stop turning resulting in a front pitch over or cause the bicycle to lose steering function leading to a crash.

Disc brake rotor's become hot during use and can burn the skin if contacted. Do not touch or come in contact with the disc rotor when it is hot. Allow it to cool before touching.

Hand operated brakes have a separate hand lever to operate front and rear brakes. Front hand brake levers are located on the right side of the handlebar, and rear hand brake levers are located on the left side of the handlebar. **Figure 5.1**

You may operate one brake at a time, or all together, however, be careful to pay close attention to front brakes locking up. To avoid this:

- Apply both brakes simultaneously, while shifting your body weight back slightly to compensate for braking force.
- As terrain changes, the rider must practice and learn how the bicycle will respond in a new terrain or weather change. The same bicycle will react differently if it is wet, or if there is gravel on the road etc.
- Always test the brakes and be sure you feel comfortable with the reaction. If the riding conditions are too steep (off road for example) and you are unsure, dismount the bicycle and walk past the questionable terrain before riding again.
- Remember that as you apply the brakes your weight will want to shift forward, and the wheels will want to stop.

Note: See **Section 4: Adjusting the Brakes** for information on brake adjustment.

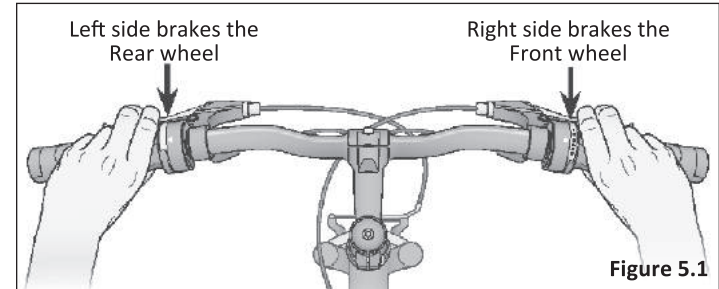


Figure 5.1

GEAR OPERATION

⚠ WARNING!

Improper shifting can result in the chain jamming, or becoming derailed resulting in loss of control, serious injury or death. Always be sure the chain is fully engaged in the desired gear before pedaling hard. Avoid shifting while standing up on the pedals or under load.

Multi speed bicycles can have *internal* or *derailleur* gear systems.

Important! Best practices for proper shifting:

- Pedal the bicycle with little pressure on the pedals, and move the shifter one gear at a time, ensuring that the chain is fully engaged in that gear before applying more pressure on the pedals.
- For bicycles with 3 front chain rings; avoid “Cross Chaining”, which is the position when the chain is in the smallest cog in the rear combined with the inner or smallest chain ring in the front, or the largest cog in the rear and the outer or largest chain ring in the front. These gear positions put the chain at the most extreme angle and can cause premature wear to the drivetrain. Bicycles with 3 front chain rings have enough gear “overlaps” that these gears are not needed. **Figure 5.2**
- It is OK to ride the whole time in only one gear if this is comfortable.
- Shift only while pedaling forward and seated. When shifting, lessen the pressure exerted on the pedals during the shift.

- Once you have successfully shifted gears, it is OK to start to pedal hard if desired.
- Pedaling hard while shifting can cause the chain to skip and not engage the appropriate gear.
- Backpedaling should be avoided on derailleur bikes because the chain can jam and cause the bike to become unstable. See **Section 4: Adjusting the Derailleur** for further information on proper gear adjustment.

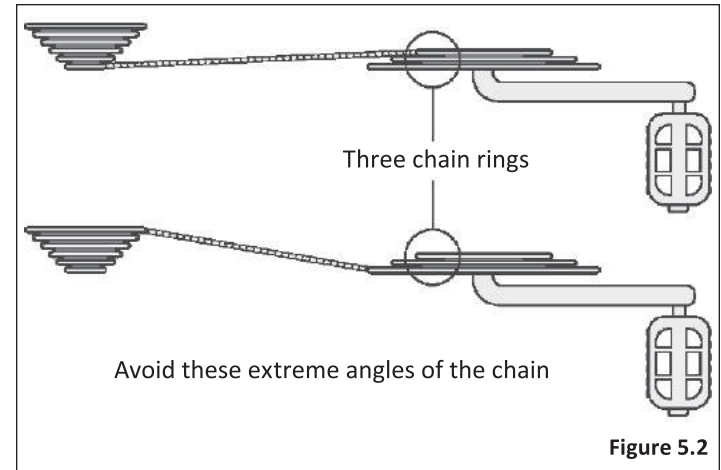


Figure 5.2

5 Use

Using the Rear Shifter

The rear shifter (right) will have an indicator that reads either **low to high** or a series of numbers from 1 and up. Low or “1” is the lowest gear. This is used for slower riding, hill climbing, or to allow for easier pedaling. It is recommended to start off in this gear and move through the gears as speed increases as needed, or comfortable.

Using the Front Shifter

Note: Not all models have a front shifter. The front (left) shifter will have an indicator that reads either **low to high** or a series of numbers from 1 and up. Low or “1” is the lowest gear. The front shifter acts much like the rear shifter, but the change between gears is greater. This means that one shift at the rear derailleur will be a subtle change in pedaling speed, but one shift at the front derailleur will be a large change in pedaling speed. Think of the front shifter as a range; **low and high** or **low, medium, and high**. Low is used for slower riding, hill climbing, or to allow for easier pedaling. It is recommended to start off in this gear and move through the gears as speed increases as needed, or comfortable.

To Use the Trigger-style Shifter

Rear shifter: Use your index finger to shift up to a higher gear, and your thumb to shift down to lower gear.

Left shifter: Use your index finger to shift down to a lower gear, and your thumb to shift up to higher gear. **Figure 5.3**

To Use the Twist-style Shifter

Turn the area of the handlebar grip closest to the gear numbers to the desired gear level. **Figure 5.4**

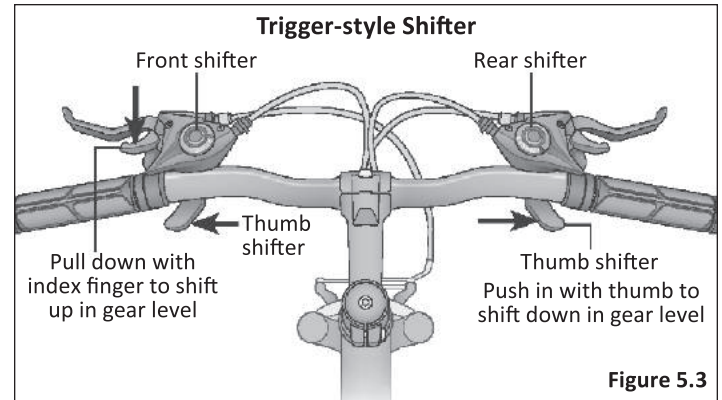


Figure 5.3

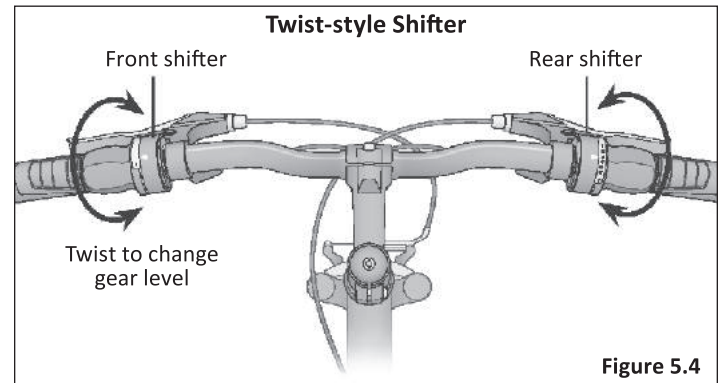


Figure 5.4

6 Maintenance

WARNING!

- Failure to conduct maintenance on the bicycle may result in malfunction of a critical part and serious injury or death. Proper maintenance is critical to the performance and safe operation of the bicycle.
- The recommended intervals and need for lubrication and maintenance may vary depending on conditions the bicycle is exposed to. Always inspect the bicycle and conduct necessary maintenance before each use of the bicycle.

This section presents important information on maintenance and will assist you in determining the proper course of action to take if you do have a problem with the operation of the bicycle. If you have questions regarding maintenance please call our customer service, toll free, at **1800-102-2324** or see a qualified bicycle mechanic. **Do not** call the store where the bicycle was purchased.

Correct routine maintenance of your new bike will ensure:

- Smooth running
- Longer lasting components
- Safer riding
- Lower running costs

BASIC MAINTENANCE

The following procedures will help you maintain your bicycle for years of enjoyable riding.

- For painted frames, dust the surface and remove any loose dirt with a dry cloth. To clean, wipe with a damp cloth soaked in a mild detergent mixture. Dry with a cloth and polish with car or furniture wax. Use soap and water to clean plastic parts and rubber tires. Chrome plated bikes should be wiped over with a rust preventative fluid.
- Store your bicycle under shelter. Avoid leaving it in the rain or exposed to corrosive materials.
- Riding on the beach or in coastal areas exposes your bicycle to salt which is very corrosive. Wash your bicycle frequently and wipe or spray all unpainted parts with an anti-rust treatment. Make sure wheel rims are dry so braking performance is not affected. After rain, dry your bicycle and apply anti-rust treatment. If the hub and bottom bracket bearings of your bicycle have been submerged in water, they should be taken out and re-greased. This will prevent accelerated bearing deterioration.
- If paint has become scratched or chipped to the metal, use touch up paint to prevent rust. Clear nail polish can also be used as a preventative measure.
- Regularly clean and lubricate all moving parts, tighten components and make adjustments as required.

LUBRICATION SCHEDULE

Component	Lubricant	Method
Weekly		
Chains	Chain lube or light oil	Brush on or squirt
Brake calipers	Oil	Three drops from oil can
Brake levers	Oil	Two drops from oil can
Freewheel	Oil	Two drops from oil can
Derailleur Systems	Light oil or grease	All pivot points should be lubricated (more often in severely rainy or muddy conditions). Wipe off any excess oil.
Brake cables	Lithium based grease	Remove cable from casing. Grease entire length. Wipe off excess lubrication from other surfaces.
Brake lever and caliper pivot points	Light oil	Two to three drops from oil can
Shifting cables	Thin layer of grease	Clean and grease
Yearly		
Bottom bracket	Lithium based grease	Disassemble
Pedals	Lithium based grease	Disassemble
Wheel bearings	Lithium based grease	Disassemble
Headset	Lithium based grease	Disassemble
Seat stem	Lithium based grease	Disassemble
Pedals: that can be disassembled		See bicycle mechanic for maintenance.

Note: The frequency of maintenance should increase with use in wet or dusty conditions. Do not over lubricate. Remove excess lubricant to prevent dirt build up. **Never** use a degreaser to lubricate your chains (WD-40®).

TROUBLESHOOTING GUIDE

Problem	Possible Cause	Remedy
Gear shifts not working properly	<ul style="list-style-type: none"> • Derailleur cables sticking/stretched/ damaged • Front or rear derailleur not adjusted properly • Indexed shifting not adjusted properly 	<ul style="list-style-type: none"> • Lubricate/tighten/replace cables • Adjust derailleurs • Adjust indexing
Slipping chain	<ul style="list-style-type: none"> • Excessively worn/chipped chain wheel or freewheel sprocket teeth • Chain worn/stretched • Stiff link in chain • Non compatible chain/chain wheel freewheel 	<ul style="list-style-type: none"> • Replace chain wheel, sprockets and chain • Replace chain • Lubricate or replace link • Seek advice at a bicycle shop
Chain jumping off freewheel sprocket or chain wheel	<ul style="list-style-type: none"> • Chain wheel out of true • Chain wheel loose • Chain wheel teeth bent or broken • Rear or front derailleur side-to-side travel out of adjustment • Cross chaining and shifting under load 	<ul style="list-style-type: none"> • Re-true if possible, or replace • Tighten mounting bolts • Repair or replace chain wheel/set • Adjust derailleur travel
Constant clicking noises when pedaling	<ul style="list-style-type: none"> • Stiff chain link • Loose pedal axle/bearing • Loose bottom bracket axle/bearings • Bent bottom bracket or pedal axle • Loose crankset 	<ul style="list-style-type: none"> • Lubricate chain/adjust chain link • Adjust bearings/axle nut • Adjust bottom bracket • Replace bottom bracket axle or pedals • Tighten crank bolts
Grinding noise when pedaling	<ul style="list-style-type: none"> • Pedal bearings too tight • Bottom bracket bearings too tight • Chain fouling derailleurs • Derailleur jockey wheels dirty/binding 	<ul style="list-style-type: none"> • Adjust bearings • Adjust bearings • Adjust chain line • Clean and lubricate jockey wheels

Problem	Possible Cause	Remedy
Freewheel does not rotate	<ul style="list-style-type: none"> • Freewheel internal pawl pins are jammed 	<ul style="list-style-type: none"> • Lubricate. If problem persists, replace freewheel
Brakes not working effectively	<ul style="list-style-type: none"> • Brake pads worn down • Brake pads/rim greasy, wet or dirty • Brake cables are binding/stretched/damaged • Brake levers are binding • Brakes out of adjustment 	<ul style="list-style-type: none"> • Replace brake pads • Clean pads and rim • Clean/adjust/replace cables • Adjust brake levers • Center brakes
When applying the brakes they squeal/squeak	<ul style="list-style-type: none"> • Brake pads worn down • Brake pads toe-in incorrect • Brake pads/rim dirty or wet • Brake arms loose 	<ul style="list-style-type: none"> • Replace pads • Correct pads toe-in • Clean pads and rim • Tighten mounting bolts
Knocking or shuddering when applying brakes	<ul style="list-style-type: none"> • Bulge in the rim or rim out of true • Brake mounting bolts loose • Brakes out of adjustment • Fork loose in head tube 	<ul style="list-style-type: none"> • True wheel or take to a bike shop for repair • Tighten bolts • Center brakes and/or adjust brake pads toe-in • Tighten headset
Wobbling wheel	<ul style="list-style-type: none"> • Axle broken • Wheel out of true • Hub comes loose • Headset binding • Hub bearings collapsed • Quick-release mechanism loose 	<ul style="list-style-type: none"> • Replace axle • True wheel • Adjust hub bearings • Adjust headset • Replace bearings • Adjust quick-release mechanism

6 Maintenance

Problem	Possible Cause	Remedy
Steering not accurate	<ul style="list-style-type: none">• Wheels not aligned in frame• Headset loose or binding• Front forks or frame bent	<ul style="list-style-type: none">• Align wheels correctly• Adjust/tighten headset• Take bike to a bike shop for possible frame realignment
Frequent punctures	<ul style="list-style-type: none">• Inner tube old or faulty• Tire tread/casing worn• Tire unsuited to rim• Tire not checked after previous puncture• Tire pressure too low• Spoke protruding into rim	<ul style="list-style-type: none">• Replace inner tube• Replace tire• Replace with correct tire• Remove sharp object embedded in tire• Correct tire pressure• File down spoke

7 Warranty

LIMITED WARRANTY :

TICI Cycle of India (TICI) warrants that each product is free from defects in materials and workmanship. During the warranty period, TICI provides free replacement of the following parts of Hercules & BSA cycles against manufacturing defects.

PARTS WARRANTY:

1. The Frame and Fork for a period of 2 Years from the date of original purchase (DOP)
2. The Chain-wheel, Freewheel, Hubs, Axle, Pedals, Rims, Saddle, Handlebar for a period of 1 Year from the DOP
3. Tyres, Tubes, Chromium Plating for a period of 6 Months from the DOP
4. Fasteners & other plastic parts – Not covered under warranty

Details of what are manufacturing defects against which the above parts are warranted are available with all the authorized dealers of TICI.

CONDITIONS OF WARRANTY:

In the event of any manufacturing defect in the above mentioned parts being noticed during the Warranty period, please contact the authorised dealer from whom this product was purchased or the nearest TICI Customer Care office whose contact details are given below in the card, who on being satisfied on the validity of the claim under this Warranty will arrange for free replacement.

The Warranty is limited to the free replacement, to the original owner only, for the part(s) Warranted, if found to be suffering from any manufacturing defects and which in the opinion of the TICI has not been damaged by accident, misuse, abuse or other improper treatment.

The liability of the TICI shall be limited solely to the free replacement of the defective part(s) subject to the conditions of the Warranty. All other costs shall be those of the purchaser.

The TICI shall be the sole arbiter of whether the part suffers from a manufacturing defect or not. In no event shall the TICI be liable to the purchaser of said product or third parties for special or consequential damage. The Warranty card should be retained by the buyer till the end of the Warranty period and produced to the TICI while making a claim under the Warranty.

The enforcement of the Warranty should be in accordance with the procedure shown herein. All disputes shall be subject to Chennai jurisdiction only.

The Warranty is available for all Hercules & BSA products purchased in India only.

For your convenience, TICI has established Customer Care Centers: To locate the dealer nearest you or for service assistance or resolution of a service problem or for product information or your feedbacks please contact:

TICI - Customer Care

By email: customercare@bsahercules.com

By phone (10am to 5pm, Mon - Fri)

All india Toll free no: 1800-102-2324

PURCHASE RECORD

Fill in immediately and retain as a record of your purchase.
Please retain your sales receipt for any possible warranty claims.

Your Name: _____

Address: _____

City: _____ State: _____

Date Purchased: _____

Place of Purchase: _____

Model and Brand Information: _____

Wheel Size: _____ Color: _____

Model Number: _____

Date : _____

Frame Number: _____

