Owner’s Manual for BMX / Freestyle Bicycles

This Owner's Manual contains assembly, operation, and maintenance instructions.

WARNING:

- Check operation of brakes every time before bicycle is ridden.
- The rider must wear a helmet.
- Do not ride at night.
- Check on local bicycle laws before bicycle is ridden.
- Read the entire Owner's Manual before bicycle is assembled, ridden, or maintenance work is performed.

Limited Warranty

Your purchase includes the following limited warranty which is in lieu of all other express warranties. This warranty is extended to the initial consumer purchaser only. Warranty registration is not required. This warranty gives you specific legal rights: you may have other rights which vary from state to state.

FRAME AND FORK: The entire frame and fork are under warranty to be free from faulty materials and workmanship from the date of the original purchase for as long as the bicycle is owned by the original consumer purchaser, except aluminum frames which are under warranty for five (5) years, subject to the Conditions of Warranty below. If the frame or fork should break due to faulty materials or workmanship during the warranty period, the frame or fork, respectively, will be replaced without charge to you, subject to the Conditions of Warranty.

OTHER PARTS: All other parts of the bicycle, except the frame and fork, are under warranty to be free from faulty materials or workmanship for a period of six (6) months from the date of purchase by the original consumer purchaser, subject to the Conditions of Warranty.

If any part fails to function properly due to faulty materials or workmanship during the warranty period, such part will be replaced, without charge to you, subject to the Conditions of the Warranty.

CONDITIONS OF WARRANTY

It is the responsibility of the original consumer purchaser to ensure all parts included in the factory sealed carton are properly installed and that all functional parts including, but not limited to, caliper brakes and wheels, are adjusted and trued properly. It is also the responsibility of the original consumer purchaser to perform or provide all reasonable and necessary maintenance and adjustments to keep the bicycle in good working condition. This warranty does not apply to damage caused by improper installation of parts, failure to properly maintain, or, failure to properly adjust all components, such as brakes, cables, etc., including truing of wheels.

This bicycle has been designed for general transportation and recreational use. This warranty shall become immediately null and void if you any do the following: rent the bicycle: sell the bicycle: give away the bicycle, or, ride the bicycle with more than one person.

The user assumes all risk of personal injuries, damage to, or failure of the bicycle and any other losses if the bicycle is used in any competitive event (such as bicycle racing, bicycle motocross, dirt biking, freestyling, or similar activities, including training), if the bicycle is altered in any way inconsistent with the bicycles originally designed purpose, if the bicycle is used for stunt riding, ramp jumping, acrobatics or similar activities, or used to tow another person or vehicle, used with motors or any power-driven apparatus. Any of the foregoing will invalidate this warranty.

This warranty does not cover ordinary wear and tear, damage caused by improper storage of the bicycle, shipping damage, damage caused either accidentally or deliberately by you or another ,and damage caused as a result of using the bicycle other than for it’s intended purpose.

Owner's Bicycle Identification Record

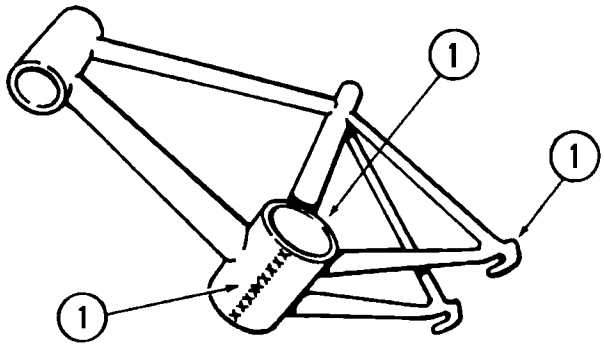
NOTE: This information is only available on the bicycle itself. It is not available from any other source.

Each bicycle has a Model / Serial Number stamped into the frame or printed on a label. The Model / Serial Number [1] can be found on the bottom of the crank housing, on the top of the crank housing, or on the rear of the bicycle as shown. Write this number below to keep it for future reference. If the bicycle is stolen, give this number and a description of the bicycle to the police. This will help them find the bicycle.

You will also need this number if you order parts or request service information from our Customer Service Department. Contact us (EST.) at 1-800-872-2453.

Model / Serial Number

Purchase Date _____ Model Name _____



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Safety Information

Meanings of the Safety Instructions

This symbol is important. See the word **"CAUTION"** or **"WARNING"** which follows it.

The word **"CAUTION"** is before mechanical instructions. If you do not obey these instructions, mechanical damage or failure of a part of the bicycle can occur.

The word **"WARNING"** is before personal safety instructions. If you do not obey these instructions, injury to the rider or to others can occur.

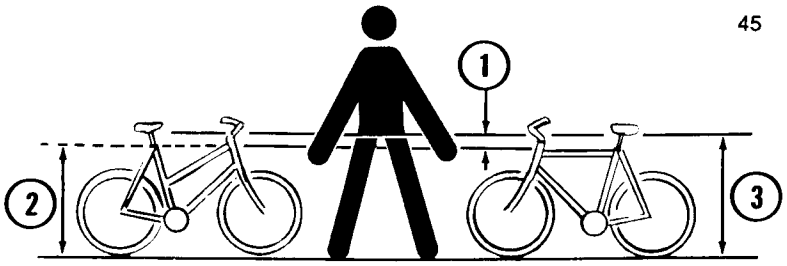
The Owner's Responsibility

WARNING: This bicycle is made to be ridden by one rider at a time for general transportation and recreational use. It is not made to withstand the abuse of stunting and jumping.

If the bicycle was purchased unassembled, it is the owner's responsibility to follow all assembly and adjustment instructions exactly as written in this manual and any "*Special Instructions"* supplied with the bicycle. The owner must make sure all components are securely attached.

If the bicycle was purchased assembled, it is the owner's responsibility, before riding the bicycle for the first time, to make sure the bicycle is assembled and adjusted exactly as written in this manual and any *"Special Instructions"* supplied with the bicycle. The owner must make sure all components are securely attached.

Fitting the Rider to the Bicycle



To determine the correct size of bicycle for the rider:

- Straddle the assembled bicycle with feet shoulder width apart and flat on the ground
- There must be at least one inch of clearance [1] between the highest part of the top tube [2] and the crotch of the rider
- The minimum leg-length for the rider is the highest part of the top tube plus one inch [3].
- The rider must be able to easily reach and operate the brake levers (if so equipped).

Rules of the Road

WARNING: If this is your child's first bicycle, make sure the child understands and obeys the following "Rules of the Road".

WARNING: Failure of the rider to obey the following "Rules of the Road" can result in injury to the rider or to others.

- Rider must have the skill to operate the bicycle safely. Every bicycle has different handling and operation features. Practice riding on large, flat areas away from traffic and other hazards before riding on the road.

- Always wear a bicycle helmet.

- Do not ride at night.

- Make sure the reflectors of your bicycle are correctly positioned. Do not remove the reflector or replace the reflectors with lighted devices that look similar to reflectors.

- Make yourself more visible to motorists. Wear light-colored or reflective clothing, such as a reflective vest and reflective bands for your arms and legs. Use reflective tape on your helmet. Do not let anything cover the reflectors.

- If the bicycle has 16 inch or smaller wheels, ride only on sidewalks or on your own property. Never ride on the street or in alleys that are used by motor vehicles.

- When riding with training wheels:

    - Ride only on level areas.

    - Do not ride on steep hills, uneven sidewalks, or near steps. The bicycle can tip over if a training wheel goes off the edge of the riding surface.

    - Ride straight up and down sloped surfaces, because the bicycle can tip over when riding across sloped surfaces.

    - Slow down at corners because you can not turn as quickly as bicycles without training wheels.

- Obey all traffic regulations, signs, and signals.

- Always wear shoes.

- Use extra caution in wet weather.

    - Ride slowly on damp surfaces because the tires will slide more easily. Apply the coaster, caliper, or cantilever brakes sooner than normal. Greater stopping distance is necessary, especially if the wheel rims and tires are wet.

- Ride on the right side of the road, in a single file, and in a straight line.

- Be aware of drain grates, soft road edges, gravel or sand, pot holes or ruts, wet leaves, or uneven paving.

    - Avoid these hazards to prevent loss of control or damage to your wheels.

    - Cross railroad tracks at a right angle to prevent the loss of control.

- Avoid unsafe actions while riding.

  - Do not carry any passengers.

  - Do not carry any items or attach anything to your bicycle that could hinder your vision, hearing, or control.

  - Do not ride with both hands off the handlebar.

If you have an all terrain style bicycle, obey these additional “Rules of Off-Road Riding”.

- Always wear the correct safety equipment.

- Use extreme caution when not riding on pavement.

- Do not ride in off-road conditions that are beyond your capabilities. Ride trails in relatively flat areas that have few obstacles.

- Be sensitive to the environment, conscientious of the property on which you ride, and considerate of others you may meet on the trail.

Introduction

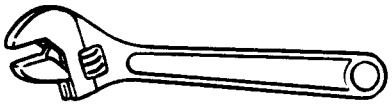
This Owner’s Manual is made for several different bicycles. Some of the illustrations may not look exactly like the parts of the bicycle, but the instructions are correct. If the bicycle has any parts that are not described in this manual, look for separate *“Special Instructions”* that are supplied with the bicycle.

Do not dispose of the carton and packaging until you complete the assembly of the bicycle. This can prevent accidentally discarding parts of the bicycle.

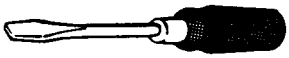
NOTE: All of the directions (right, left, front, rear, etc.) in this manual are as seen by the rider while seated on the bicycle.

Tools Needed

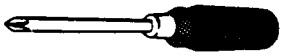
Small Adjustable Wrench
(Jaws must open at least 9/16 inch.)



Large Adjustable Wrench
(Jaws must open at least 1 1/4 inch.)



Flat-blade Screwdriver



Phillips Screwdriver

Slip-Joint Pliers

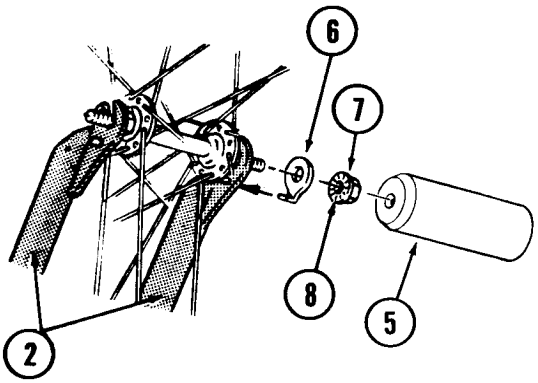
Metric Allen Wrenches
(Needed on some models.)

Important Note

Many models come with accessories such as bottles, handlebar fairings, streamers etc... that may affect the order of the assembly of the bicycle. Please look over all of the pieces that come with your new bicycle and refer to the back section of the manual to see if there are any special requirements associated with that accessory before beginning assembly.

Front Wheel

1. Assemble the front wheel to the fork as shown:



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- Make sure each wheel retainer [6] is correctly seated in the hole of the fork

NOTE: On some wheel retainers, make sure the smaller part goes into the slot of the fork and the flat side is away from the fork.

WARNING: Do not use the nuts without serrations to attach the front wheel.

- Using the nuts [7] with serrations [8], attach the front wheel
- Put the wheel in the center of the fork and tighten both nuts securely.

2. If you wish, install standers on the axles:

NOTE: Your bicycle may not have standers or it may have one of two different styles of standers. The standers are optional. You may choose not to install them on the axles.

If your bicycle has standers that are threaded on one end, no additional tools are necessary to install the standers.

If your bicycle has standers that are not threaded, a socket wrench, a metric socket which fits the axle nut(s), and a three-inch extension are necessary to install the standers:

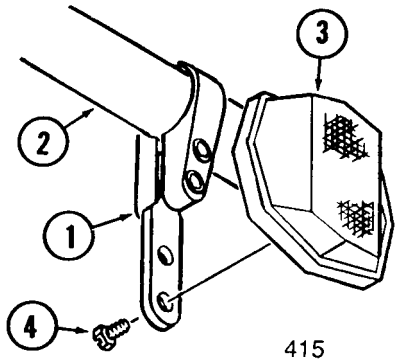
- If your bicycle has threaded standers:
    - Put a stander [5] on each end of the axle and tighten the standers securely.
- If your bicycle has standers and they are not threaded:
    - Put a stander [5] on each end of the axle
    - Put a nut down inside each stander and onto the end of the axle
    - Tighten each nut securely.

Front Reflector Bracket and Clear Reflector

WARNING: Install the reflector exactly as shown or it will not operate correctly.

1. Assemble the front reflector bracket and the clear reflector to the crossbar:

   - Put the front reflector bracket [1] around the crossbar [2]
   - Put the back of the clear reflector [3] on the front reflector bracket
   - Make sure the studs of the clear reflector go into the holes of the front reflector bracket
   - Put the screw [4] through the front reflector bracket and into the back of the clear relfector
   - Tighten the screw
   - Make sure the clear reflector is vertical and points toward the front of the bicycle



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   - Hold the clear reflector in this position and tighten the clamp of the front reflector bracket.

Operation and Maintenance

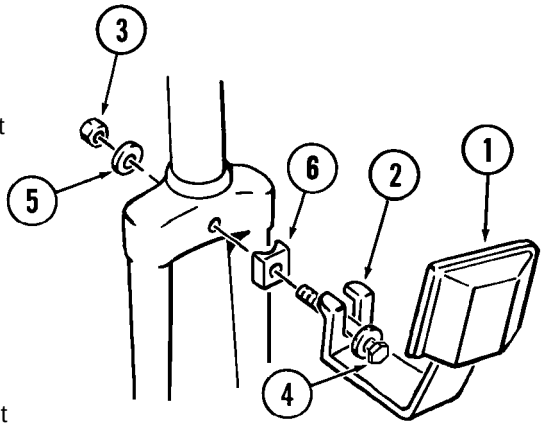
WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap on a damp cloth.

Fork Mounted Front Reflector Bracket and Clear Reflector

1. Assemble the clear reflector to the front reflector bracket:

WARNING: Install the clear reflector exactly as shown or it will not operate correctly.

- Put the clear reflector [1] onto the front reflector bracket [2]
- Make sure the studs on the back of the clear reflector go into the holes of the front reflector bracket
- Put the screw through the front reflector bracket and into the clear reflector
- Tighten the screw.



2. Assemble the front reflector bracket and clear reflector to the fork:

- Assemble the bolt [4], the washers [5], (the radius washer [6] on some models), and the nut [3] to the fork
- Put the slot of the front reflector bracket over the bolt
    - Make sure the front reflector bracket is between the fork (or the radius washer on some models) and the washer
- Hold the front reflector bracket in position and tighten the nut
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).

Operation and Maintenance

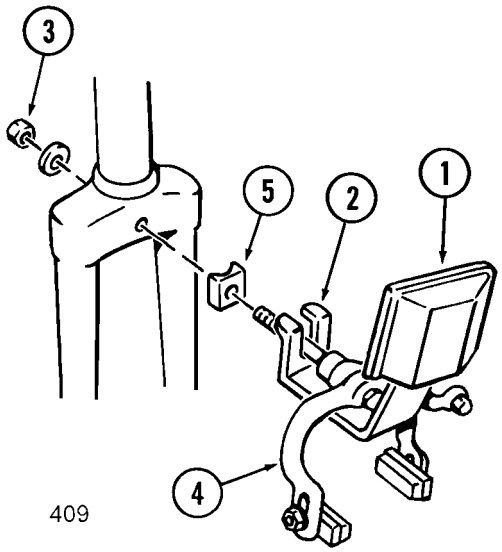
WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Front Reflector Bracket and Clear Reflector

1. Assemble the clear reflector to the front reflector bracket:

WARNING: Install the clear reflector exactly as shown or it will not operate correctly.

- Put the clear reflector [1] onto the front reflector bracket [2]
- Make sure the studs on the back of the clear reflector go into the holes of the front reflector bracket
- Put the screw through the front reflector bracket and into the clear reflector
- Tighten the screw.



2. Assemble the front reflector bracket and clear reflector to the fork:

- Loosen the caliper brake mounting nut [3] on the back of the fork
- Put the slot of the front reflector bracket over the caliper brake mounting bolt
    - Make sure the reflector bracket is between the caliper brake [4] and the washer [5]
- Hold the front reflector bracket and the front caliper brake in position and tighten the caliper brake mounting nut
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Front Reflector Bracket and Clear Reflector

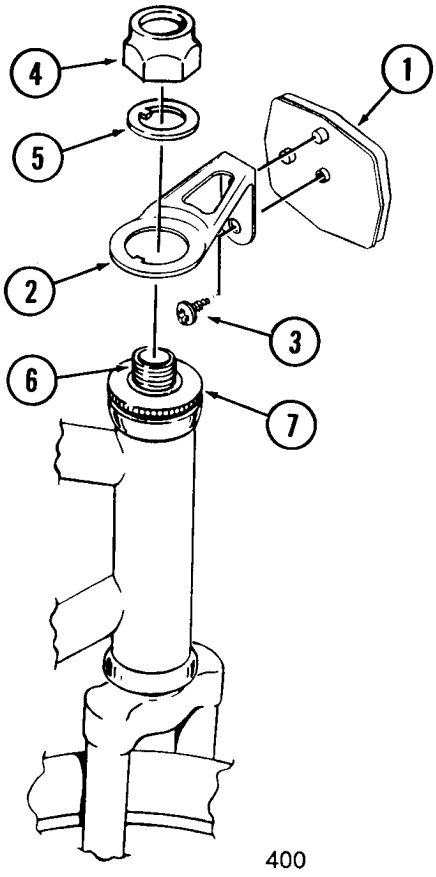
1. Assemble the clear reflector to the front reflector bracket:

WARNING: Install the clear reflector exactly as shown or it will not operate correctly.

- Put the clear reflector [1] onto the front reflector bracket [2]
- Make sure the studs on the back of the clear reflector go into the holes of the front reflector bracket
- Put the screw [3] through the front reflector bracket and into the clear reflector
- Tighten the screw.

2. Assemble the front reflector bracket to the fork:

- Unscrew and remove the locknut [4] and the washer(s) [5] from the fork
- Tighten the bearing cone [7] by hand to make sure the bearings are tight
- Install the front reflector bracket, the washer(s), and the locknut on the fork
- Tighten the locknut
- If necessary, adjust the angle of the front reflector bracket so the clear reflector is vertical (perpendicular to the ground).

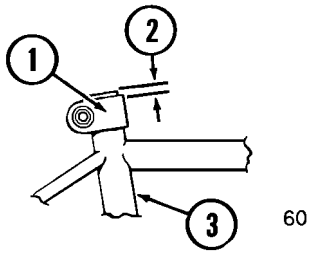


Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Seat

1. Push the post clamp [1] down so you can see 1/16 inch [2] of the seat tube [3] above the post clamp.



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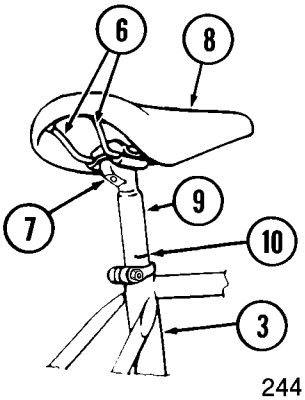
2. Assemble the seat to the seat post:

NOTE: If the seat has a clamp attached to the seat rails, remove and discard the clamp.

- Put the seat rails [6] between the seat clamp [7]
- Tighten the seat clamp just so the seat [8] stays on the seat post [9].



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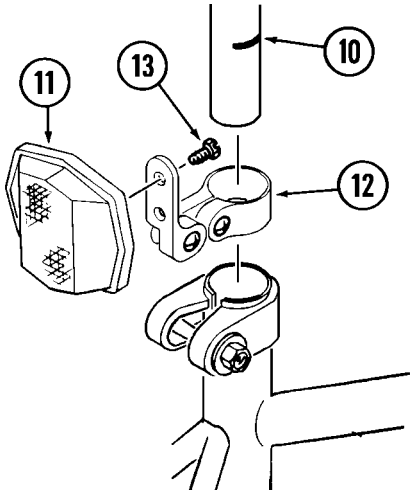
3. Assemble the red reflector to the rear reflector bracket:

- Put the back of the red reflector [11] onto the rear reflector bracket [12]
- Make sure the studs of the red reflector go into the holes of the rear reflector bracket
- Put the screw [13] through the rear reflector bracket and into the back of the red reflector
- Tighten the screw.

4. Put the rear reflector bracket on the seat post;

NOTE: The rear reflector bracket may have a rubber spacer that fits inside the rear reflector bracket. If the rear reflector bracket is too large for the seat post, put the rubber spacer inside the rear reflector bracket.

- Make sure the red reflector is pointed up.



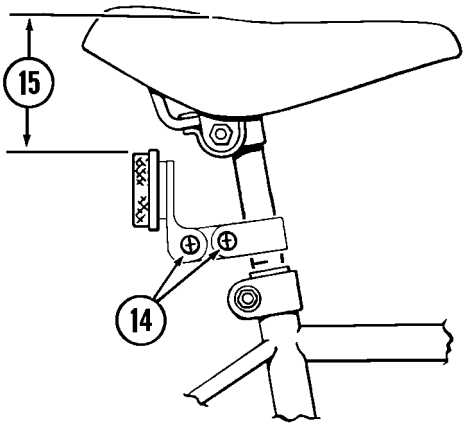
5. Point the seat forward and put the seat post into the seat tube.

6. Put the seat in the correct position:

- Put the seat post into the seat tube

- Put the seat at a comfortable height and angle for the rider

WARNING: Do not ride the bicycle if the “MIN-IN” minimum insertion mark [10] of the seat post is not inside the seat tube.



- Make sure you can not see the “MIN-IN” minimum insertion mark of the seat post above the seat tube

- With the seat in the correct position, tighten both the post clamp [6] and the seat clamp.

7. Put the red reflector in the correct position:

- Loosen the screws [14] of the rear reflector bracket

- Adjust the position of the rear reflector bracket

  - Make sure the red reflector is vertical and points straight toward the rear of the bicycle

  - Make sure there at least three inches of clearance [15] between the top of the seat and the top of the red reflector

- Tighten the screws of the rear reflector bracket.

8. Test the tightness of the seat clamp and the post clamp:

WARNING: Every time you loosen the post clamp, make sure the red reflector is correctly positioned. The red reflector must be vertical, point straight toward the rear of the bicycle, and have three inches of clearance between the top of the seat and the top of the red reflector.

- Try to turn the seat side-to-side and to move the front of the seat up and down

- If the seat moves in the seat clamp

  - Loosen the seat clamp

  - Put the seat in the correct position and tighten the seat clamp tighter than before

  - Do this test again, until the seat does not move in the seat clamp

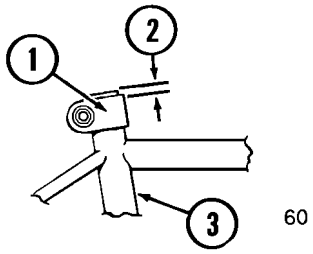
- If the seat post moves in the seat tube
    - Put the seat in the correct position and tighten the post clamp tighter than before
    - Do this test again, until the seat post does not move in the seat tube.

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Seat

1. Push the post clamp [1] down so you can see 1/16 inch [2] of the seat tube [3] above the post clamp.



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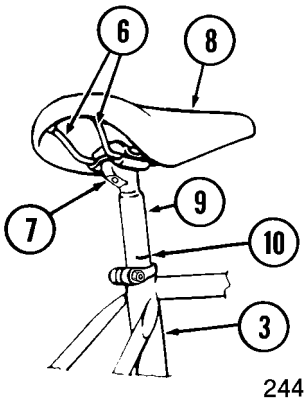
2. Assemble the seat to the seat post exactly as shown:

NOTE: If the seat has a clamp attached to the seat rails, remove and discard the clamp.

- Put the seat rails [6] between the seat clamp [7]
- Tighten the seat clamp just so the seat [8] stays on the seat post [9].



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3. Put the seat in the correct position:

- Put the seat post into the seat tube
- Put the seat at a comfortable height and angle for the rider

WARNING: Do not ride the bicycle if the “MIN-IN” minimum insertion mark [10] of the seat post is not inside the seat tube.

- Make sure you can not see the “MIN-IN” minimum insertion mark of the seat post above the seat tube
- With the seat in the correct position, tighten both the post clamp and the seat clamp.

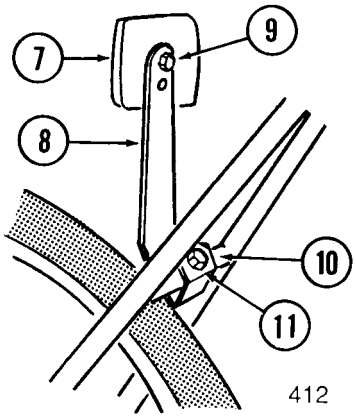
4. Test the tightness of the seat clamp and the post clamp:

- Try to turn the seat side-to-side and to move the front of the seat up and down
- If the seat moves in the seat clamp
  - Loosen the seat clamp
  - Put the seat in the correct position and tighten the seat clamp tighter than before
  - Do this test again, until the seat does not move in the seat clamp

- If the seat post moves in the seat tube:
    - Put the seat in the correct position and tighten the post clamp tighter than before
    - Do this test again, until the seat post does not move in the seat tube.

5. Assemble the red reflector to the rear reflector bracket:

- Put the back of the red reflector [7] onto the rear reflector bracket [8]
- Make sure the studs of the red reflector go into the holes of the rear reflector bracket
- Put the screw [9] through the rear reflector bracket and into the back of the red reflector
- Tighten the screw.



6. Assemble the rear reflector bracket to the frame:

- Remove the hardware from the frame brace [10]
- Put the rear reflector bracket under the frame brace
- Put the bolt [11] through the rear reflector bracket and the frame brace
- Tighten the nut
- If necessary, adjust the position of the rear reflector bracket so the red reflector is vertical.

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

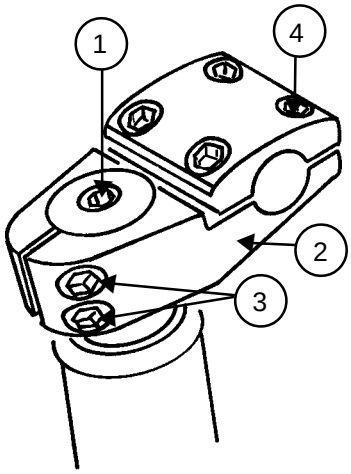
Handlebar and Stem

1. Put the stem in the correct position:

   - If necessary, loosen the top bolt [1] (or optional nut as shown) of the stem [2] and the stem bolt(s) [3] only just enough so the stem can turn on the fork

   - Point the stem toward the front of the bicycle

   - Tighten the top bolt of the stem



WARNING: Do not overtighten the top bolt. Overtightening the top bolt can damage the steering system and cause loss of control.

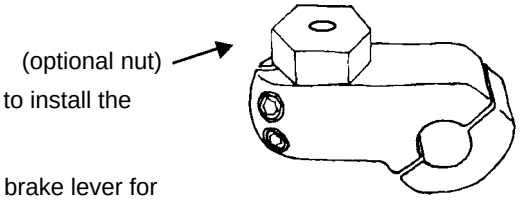
   - Tighten the stem bolt(s) equally.

2. Assemble the handlebar to the stem:

   - Put the handlebar into the stem, but do not tighten the handlebar clamp bolts [4] at this time.

3. Assemble the brake levers to the handlebar:

   - Loosen the clamp screw of each brake lever



   - If necessary, move the handlebar to each side to install the brake levers

   - Put the brake levers on the handlebar with the brake lever for the rear brake on the right side of the handlebar

   - Do not tighten the clamp screws of the brake levers at this time.

4. Tighten the handlebar clamp:

   - Put the handlebar in a comfortable position for the rider

WARNING: If the handlebar clamp in not tight enough, the handlebar can slip in the stem. This can cause damage to the handlebar or stem, and can cause loss of control. Do not overtighten the stem bolts. This can damage the stem or fork, and can cause loss of control.

   - Tighten the bolt(s) of the handlebar clamp equally.

5. Test the tightness of the stem bolts:

   - Straddle the front wheel and hold it between your legs

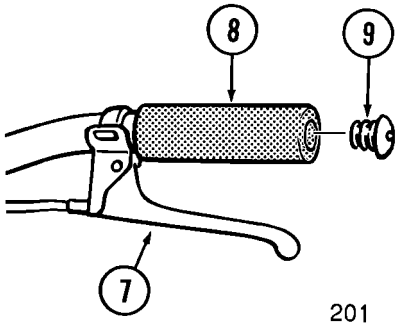
- Try to turn the front wheel by turning the handlebar
- If the handlebar and stem turn without turning the front wheel, realign the stem with the wheel
- Tighten the stem bolt(s) tighter than before (about 1/2 revolution only at a time)
- Do this test again, until the handlebar and stem do not turn without turning the front wheel.

6. Test the tightness of the handlebar clamp:

- Hold the bicycle stationary and try to move the ends of the handlebar forward or backward
- If the handlebar moves, loosen the bolt(s) of the handlebar clamp
- Put the handlebar in the correct position
- Tighten the bolt(s) of the handlebar clamp tighter than before
    - If the handlebar clamp has more than one bolt, tighten the bolts equally
- Do this test again, until the handlebar does not move in the handlebar clamp.

7. Assemble the grips to the handlebar:

- Mix five drops of liquid soap in a cup of water
- Make the ends of the handlebar and the inside of each grip [10] wet with the mixture
- Using a twisting motion, push each grip on the handlebar as shown
- If the grips are open on both ends, push a plastic plug [9] into each end of the handlebar.



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WARNING: Use only soap and water to install the grips. The grips may slip while wet. Allow the grips to completely dry before you ride the bicycle.

8. Put each brake lever in the correct position:

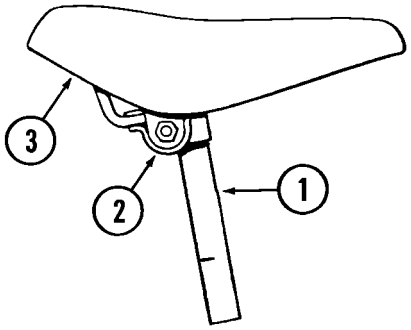
- Put each brake lever in a position that is comfortable to the rider
- Tighten the clamp screw of each brake lever.

Seat

1. Assemble the seat post to the seat:

   - Put the seat post [1] fully through the seat clamp [2] of the seat [3]

   - Tighten the seat clamp just enough so the seat post stays on the seat.



NOTE: If your bicycle has a frame mounted rear reflector bracket, ignore Steps 4,5, and 8.

If your bicycle has seat post mounted rear reflector bracket, ignore Steps 2 and 3.

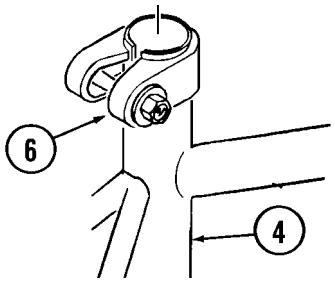
2. Assemble the red reflector to the rear reflector bracket:

   - Put the back of the red reflector [7] onto the rear reflector bracket [8]

   - Make sure the studs of the red reflector go into the holes of the rear reflector bracket

   - Put the screw [9] through the rear reflector bracket and into the back of the red reflector

   - Tighten the screw.



3. Assemble the rear reflector bracket to the frame:

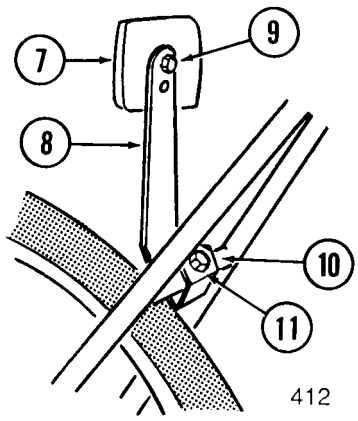
   - Remove the hardware from the frame brace [10]

   - Put the rear reflector bracket under the frame brace

   - Put the bolt [11] through the rear reflector bracket and the frame brace

   - Tighten the nut

   - If necessary, adjust the position of the rear reflector bracket so the red reflector is vertical.



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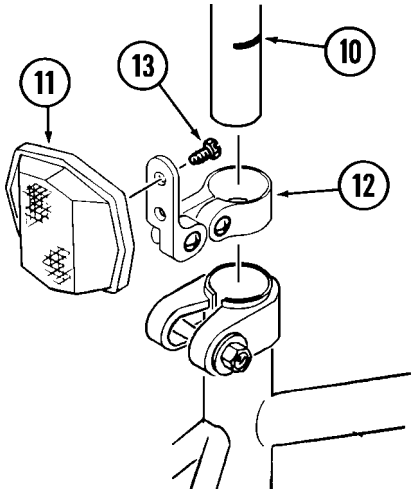
4. Assemble the red reflector to the rear reflector bracket:

- Put the back of the red reflector [11] onto the rear reflector bracket [12]

- Make sure the studs of the red reflector go into the holes of the rear reflector bracket

- Put the screw [13] through the rear reflector bracket and into the back of the red reflector

- Tighten the screw.



5. Put the rear reflector bracket on the seat post;

NOTE: The rear reflector bracket may have a rubber spacer that fits inside the rear reflector bracket. If the rear reflector bracket is too large for the seat post, put the rubber spacer inside the rear reflector bracket.

- Make sure the red reflector is pointed up.

6. Point the seat forward and put the seat post into the seat tube.

7. Put the seat in the correct position:

- Put the seat post into the seat tube [4]

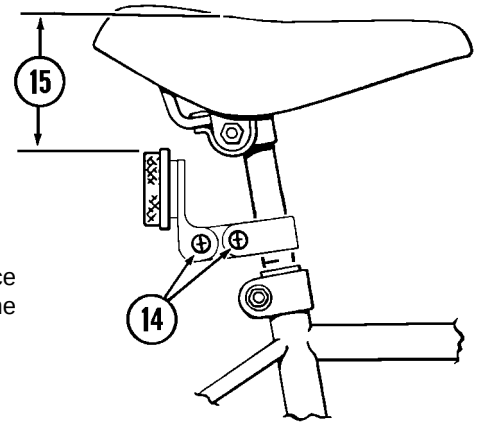
- Put the seat at a comfortable height and angle for the rider

WARNING: Do not ride the bicycle if the “MIN-IN” minimum insertion mark [10] of the seat post is not inside the seat tube.

- Make sure you can not see the “MIN-IN” minimum insertion mark of the seat post above the seat tube

- With the seat in the correct position, tighten both the post clamp [6] and the seat clamp.

8. Put the seat post mounted rear reflector bracket in the correct position:



- Loosen the screws [14] of the rear reflector bracket
- Adjust the position of the rear reflector bracket
    - Make sure the red reflector is vertical and points straight toward the rear of the bicycle
    - Make sure there at least three inches of clearance [15] between the top of the seat and the top of the red reflector
- Tighten the screws of the rear reflector bracket.

9. Test the tightness of the seat clamp and the post clamp:

WARNING: Every time you loosen the post clamp, make sure the red reflector is correctly positioned. The red reflector must be vertical, point straight toward the rear of the bicycle, and have three inches of clearance between the top of the seat and the top of the red reflector.

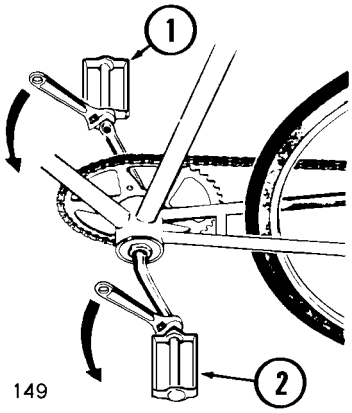
- Try to turn the seat side-to-side and to move the front of the seat up and down
- If the seat moves in the seat clamp
    - Loosen the seat clamp
    - Put the seat in the correct position and tighten the seat clamp tighter than before
    - Do this test again, until the seat does not move in the seat clamp
- If the seat post moves in the seat tube
    - Put the seat in the correct position and tighten the post clamp tighter than before
    - Do this test again, until the seat post does not move in the seat tube.

Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap and a damp cloth.

Pedals

CAUTION: There is right pedal marked “R” and a left pedal marked “L”. The pedal marked “R” has right-hand threads. Tighten it in a clockwise direction. The pedal marked “L” has left-hand threads. Tighten it in a counter-clockwise direction. Make sure you turn the pedal marked “L” into the left side of the crank.



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1. Turn the right pedal marked “R” [1] into the right side of the crank and the left pedal marked “L” [2] into the left side of the crank.

2. Tighten the pedals:

   - Make sure the threads of each pedal are fully into the crank

   - The recommended torque (tightness) for each pedal is 23 ft.-lbs.

3, If necessary, assemble the pedal reflectors to each pedal.

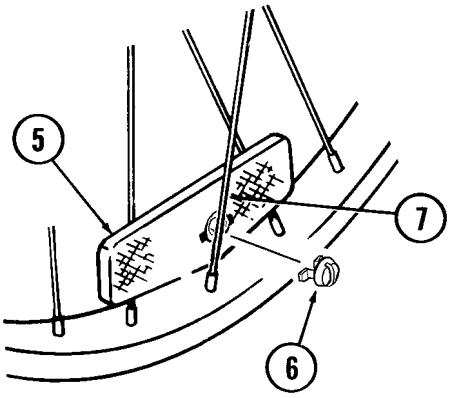
Spoke Reflectors

Assemble a spoke reflector to each wheel:

- Make sure the center of each spoke reflector [5] is no more than three inches from edge of the wheel rim

- Put the fastener [6] over a spoke [7] and into each spoke reflector

- Turn each fastener clockwise one-quarter of a turn.



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Operation and Maintenance

WARNING: For your own safety, do not ride the bicycle if the reflectors are incorrectly installed, damaged, or missing. Make sure the front and rear reflectors are vertical. Do not allow the visibility of the reflectors to be blocked by clothing or other articles. Dirty reflectors do not work well. Clean the reflectors, as necessary, with soap on a damp cloth.

Special Note

The following pages contain many different styles of braking systems that may or may not be included on the bicycle your purchased.

Review your bicycle parts carefully and follow the instructions provided for those parts that are applicable.

Coaster Brake

Operation

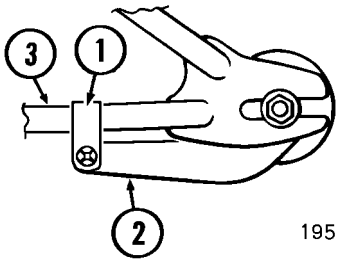
Operate the coaster brake as follows:

- Push the pedals backward to move the chain backward
- The chain activates the coaster brake mechanism that is inside the rear wheel hub
- As you push the pedals backward with increasing force, the braking action of the coaster brake increases.

If your bicycle has a caliper brake(s) in addition to the coaster brake, always use the coaster brake as the main brake to stop the bicycle.

WARNING: If you do not obey the following instructions, injury to the rider or to others can occur:

- When you ride the bicycle the first time, test the coaster brake and practice using it at a low speed in a large level area that is free of obstructions.
- Every time the bicycle is ridden, make sure the clamp [1] on the brake arm [2] is securely attached to the chain stay [3] of the bicycle frame. The coaster brake will not work correctly if the brake arm is not attached to the chain stay.



- Always try to brake while going in a straight line. If you must brake while turning; when the pavement is wet; or when the pavement is covered with sand, gravel, or leaves, start to brake sooner than normal and apply the brake intermittently to reduce the chance of skidding.
- Be careful when riding downhill or at a high speed because as your speed increases, a longer distance to stop the bicycle will be necessary. Slow for curves because too much speed can force you to make a turn that is too wide.
- Have the coaster brake repaired by a bicycle service shop the first time you notice that it does not stop the bicycle quickly and smoothly or just does not work as well as it has in the past.

Maintenance

Every two years, more often if you ride in dusty or dirty conditions, have a bicycle service shop clean and lubricate the parts of the coaster brake that are inside the rear wheel hub.

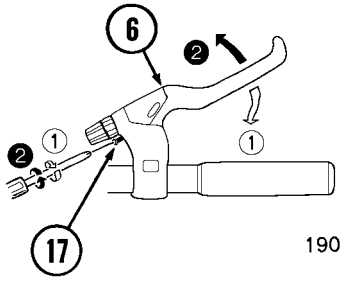
Brake System

WARNING: You must assemble and adjust the front and rear caliper or u-brakes as written before you ride the bicycle.

Front Caliper Brake Assembly

1. Adjust each brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [17] to change the distance of the brake lever [6] from the grip
   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.



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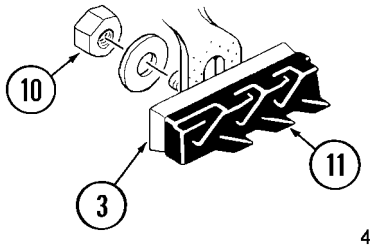
2. Put the brake shoes in the correct position:

   - If you removed a brake shoe to install the front wheel, put the brake shoe on the front caliper brake
   - Loosen the nut [10] of each brake shoe
   - If the rubbing surface of the brake shoes has arrows [11] as shown, make sure the arrows point toward the rear of the bicycle
     - The entire rubbing surface must be flat against the wheel rim when you operate the brake
     - The brake shoe must not touch the tire when you operate the brake



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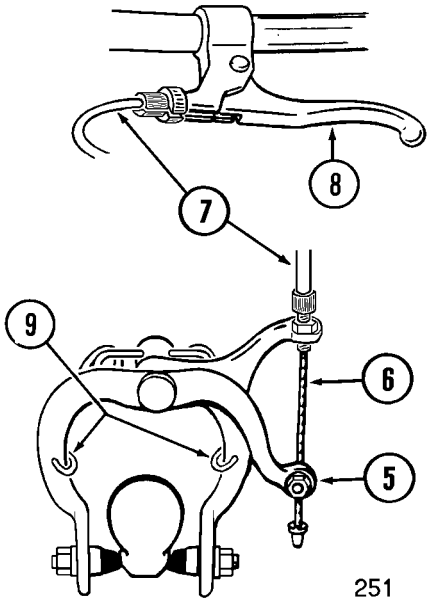
   - Hold each brake shoe in position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position
   - If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before
   - Do this test again, until each brake shoe does not move.

4. Attach the cable wire to the front caliper brake:

- Connect the anchor of the cable wire [6] to the front brake lever [8]
- Put the cable wire and sheath down through the hole in the stem
- Push the cable wire and sheath down through the cable guide on hte fork leg
- Loosen the nut on the cable clamp [5] of the rear caliper brake
- Put the cable wire down through the adjusting barrel and the hole in the bolt of the cable clamp
- Have someone squeeze the caliper arms [2] together and hold them so the brake shoes [3] are against the wheel rim [4] until you complete this assembly
- Make sure both ends of the cable sheath are fully in the recesses of the caliper brake and the brake lever
- Make sure both ends of the return spring [9] are hooked around the inside edges of the caliper arms
- Using pliers, pull the cable wire tight
- Hold the cable wire in this position and tighten the nut on the cable clamp.



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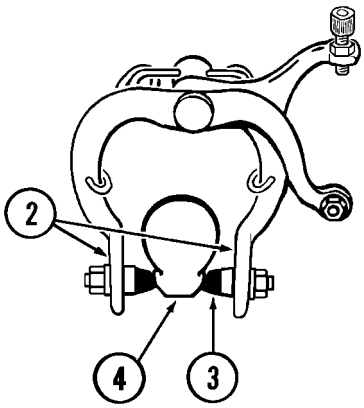

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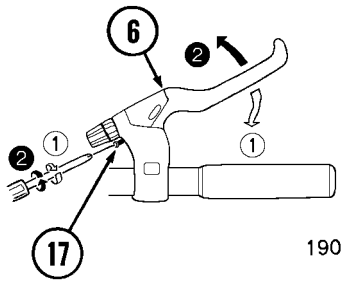
5. Test the tightness of the cable clamp:
   - Squeeze the front brake lever with strong pressure
   - If the cable wire moves in the cable clamp of the caliper brake, loosen the nut on the cable clamp
     - Remove the slack from the cable wire, but tighten the nut on the cable clamp tighter than before
     - Do this test again, until the cable wire does not move in the cable clamp of the caliper brake
   - Put a small metal cap onto the end of the cable wire and crimp it onto the cable wire
   - Squeeze the front brake lever with strong pressure fifteen to twenty times
   - Adjust the brakes as written in the “Adjustments” section.

Front U-Brake Assembly

1. Adjust the front brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [17] to change the distance of the brake lever [6] from the grip

   - Make sure the back of the grip is no more than 3 1/2 inches from the front of the front brake lever.



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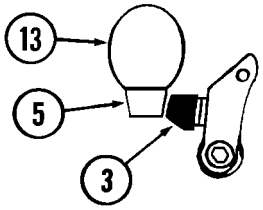
2. Put the brake shoes in the correct position:

   - Loosen the nut of each brake shoe [3]

   - Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim [5]

   - Make sure the brake shoe does not touch the tire [13]



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   - Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

   - If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before

   - Do this test again until each brake shoe does not move.

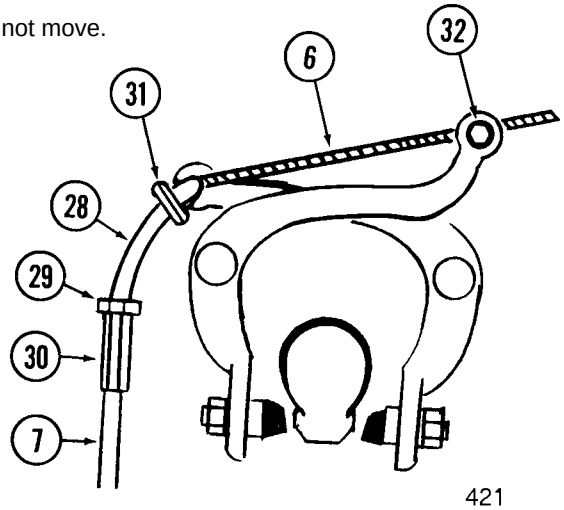
4. Attach the cable wire to the front u-brake:

   - Connect the anchor of the cable wire [6] to the front brake lever [8]

   - Put the cable wire and sheath down through the hole in the stem

   - Push the cable wire and sheath down through the cable guide on the fork leg

   - Put the cable wire through the metal tube [28] so the locknut [29] and adjusting barrel [30] are against the cable sheath [7]



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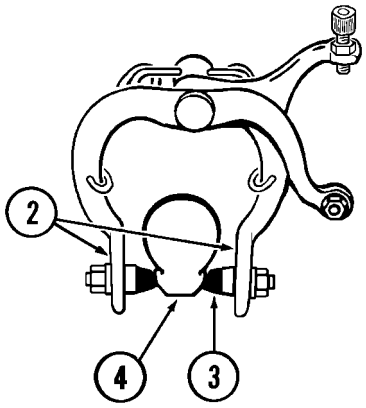
NOTE- Your bike may or may not have the metal cap shown.

- Put the cap [31] on the end of the metal tube
- Loosen the nut on the cable clamp [32] of the front u-brake
- Put the cable wire through the brake arm and then through the cable clamp
- Make sure the cap is seated in the recess of the brake arm
- Have someone squeeze the brake arms [2] together and hold them so the brake shoes [3] are against the wheel rim [4] until you complete this assembly
- Make sure both ends of the cable sheath are fully in the recesses of the metal tube and the brake lever
- Pull the cable wire tight
- Hold the cable wire in this position and tighten the nut on the cable clamp.



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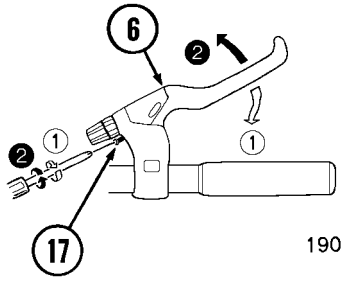
5. Use the adjusting barrel to put the brake shoes in the correct position:

- Turn the adjusting barrel as necessary to put the brake shoes 1/16 inch from the wheel rim
- Squeeze the front brake lever with strong pressure fifteen to twenty times
- Adjust the brakes as written in the “Adjustments” section.

Rear Caliper Brake Assembly



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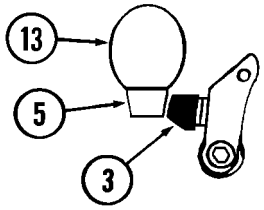
1. Adjust each brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [17] to change the distance of the brake lever [6] from the grip

   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.

2. Put the brake shoes in the correct position:



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   - Loosen the nut of each brake shoe [3]

   - Make sure that each brake shoe is no more than 1/16 inch from the wheel rim

   - Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim [5]

   - Make sure the brake shoe does not touch the tire [13]

   - Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

   - If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before

   - Do this test again until each brake shoe does not move.

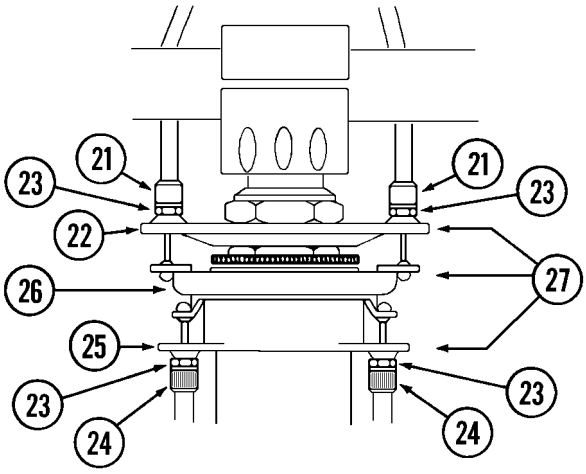
4. Assemble the upper split cable to the hand lever:

NOTE: The upper split cable is Y-shaped. Assemble the single end to the brake lever and the double end to the rotor. Assemble the longer cable of the double end to the left side of the rotor.

   - Put the anchor of the cable wire into the rear brake lever.

5. Assemble the upper split cable to the rotor:

- Push the anchor of each cable wire through the upper cable stop [22]
- Turn each upper adjusting barrel [21] into the upper cable stop [22] so the threads are just even with the bottom of the upper cable stop
    - Make sure that both upper adjusting barrels are into the upper cable stop the same amount
- Put each cable wire through the slot of the bearing unit [26] to attach the anchor of each cable wire to the bearing unit as shown



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- Tighten the locknut of each upper adjusting barrel to hold it in this position.

6. Assemble the lower split cable to the rotor:

- Push the anchor of each cable wire through the lower cable stop [25]
- Turn each lower adjusting barrel [24] into the upper cable stop so the threads are just even with the top of the lower cable stop
    - Make sure that both lower adjusting barrels are into the lower cable stop the same amount
- Put each cable wire through the slot of the bearing unit [26] to attach the anchor of each cable wire to the bearing unit as shown
- Tighten the locknut [23] of each lower adjusting barrel to hold it in this position.

7. Attach the cable wire to the rear caliper brake:

- Connect the anchor of the cable wire [6] to the brake lever [8]
- Put the cable wire and sheath down through the hole in the stem
- Push the cable wire and sheath down through the cable guide on the fork leg
- Loosen the nut on the cable clamp [5] of the rear caliper brake

- Put the cable wire down through the adjusting barrel and the hole in the bolt of the cable clamp

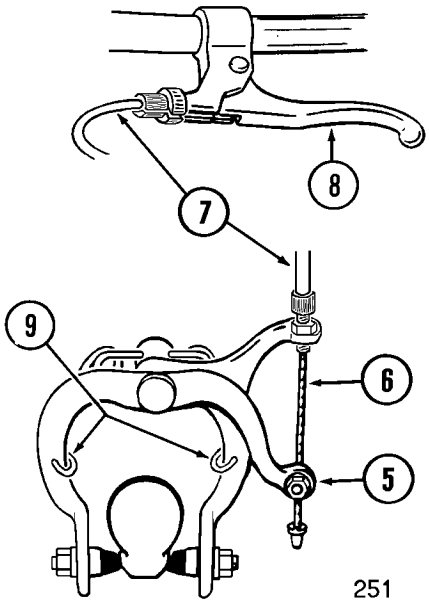
- Have someone squeeze the caliper arms [2] together and hold them so the brake shoes [3] are against the wheel rim [4] until you complete this assembly

- Make sure both ends of the cable sheath are fully in the recesses of the caliper brake and the brake lever

- Make sure both ends of the return spring [9] are hooked around the inside edges of the caliper arms

- Using pliers, pull the cable wire tight

- Hold the cable wire in this position and tighten the nut on the cable clamp.



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8. Test the tightness of the cable clamp:

- Squeeze the front brake lever with strong pressure

- If the cable wire moves in the cable clamp of the caliper brake, loosen the nut on the cable clamp

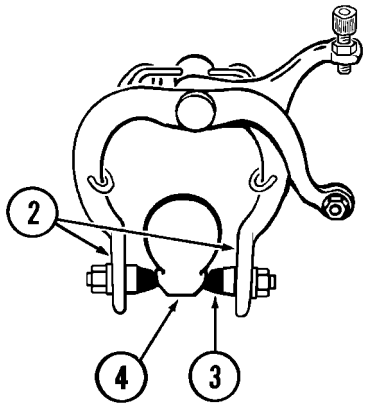
    - Remove the slack from the cable wire, but tighten the nut on the cable clamp tighter than before

    - Do this test again, until the cable wire does not move in the cable clamp of the caliper brake

- Put a small metal cap onto the end of the cable wire and crimp it onto the cable wire

- Squeeze the front brake lever with strong pressure fifteen to twenty times

- Adjust the brakes as written in the “Adjustments” section.



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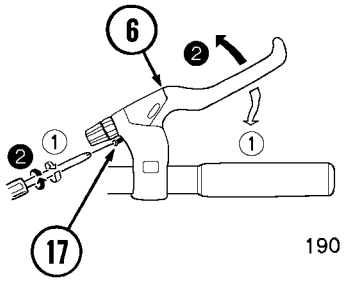
Rear U-Brake Assembly

1. Adjust each brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [17] to change the distance of the brake lever [6] from the grip

   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.



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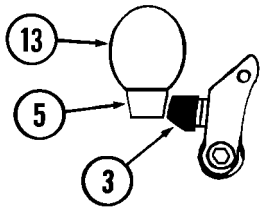
2. Put the brake shoes in the correct position:

   - Loosen the nut of each brake shoe [3]

   - Make sure that each brake shoe is no more than 1/16 inch from the wheel rim

   - Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim [5]



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   - Make sure the brake shoe does not touch the tire [13]

   - Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

   - If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before

   - Do this test again until each brake shoe does not move.

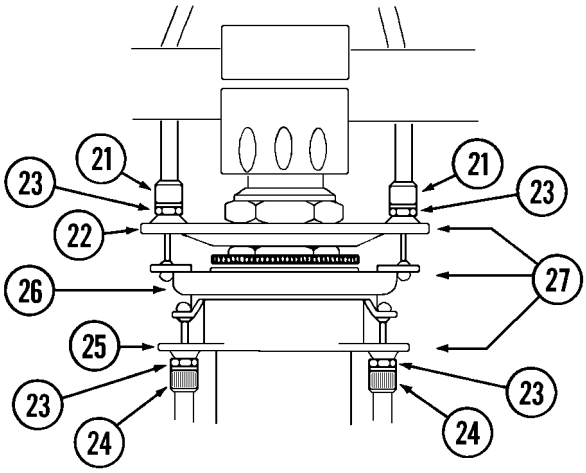
4. Assemble the upper split cable to the hand lever:

NOTE: The upper split cable is Y-shaped. Assemble the single end to the brake lever and the double end to the rotor. Assemble the longer cable of the double end to the left side of the rotor.

   - Put the anchor of the cable wire into the rear brake lever.

5. Assemble the upper split cable to the rotor:

- Push the anchor of each cable wire through the upper cable stop [22]
- Turn each upper adjusting barrel [21] into the upper cable stop [22] so the threads are just even with the bottom of the upper cable stop
    - Make sure that both upper adjusting barrels are into the upper cable stop the same amount
- Put each cable wire through the slot of the bearing unit [26] to attach the anchor of each cable wire to the bearing unit as shown



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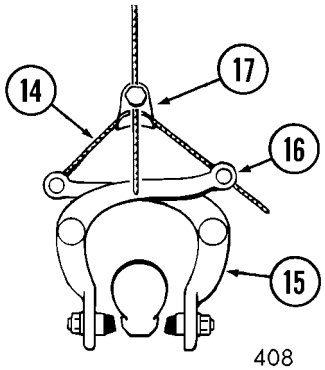
- Tighten the locknut of each upper adjusting barrel to hold it in this position.

6. Assemble the lower split cable to the rotor:

- Push the anchor of each cable wire through the lower cable stop [25]
- Turn each lower adjusting barrel [24] into the upper cable stop so the threads are just even with the top of the lower cable stop
    - Make sure that both lower adjusting barrels are into the lower cable stop the same amount
- Put each cable wire through the slot of the bearing unit [26] to attach the anchor of each cable wire to the bearing unit as shown
- Tighten the locknut [23] of each lower adjusting barrel to hold it in this position.

7. Assemble the cross over cable to the rear caliper brake:

- Put the anchor lug of the crossover cable [14] into the caliper brake arm [15]



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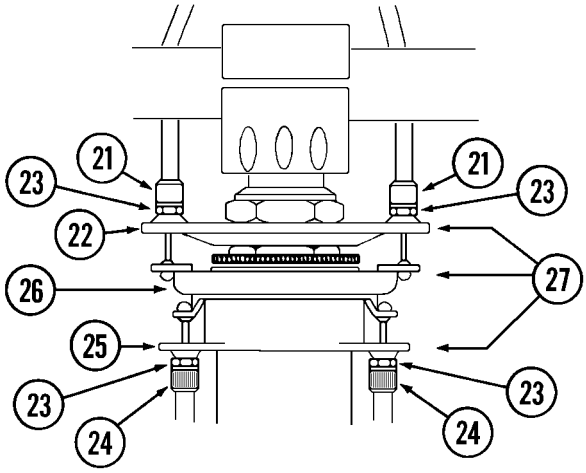
- Loosen the nut of the cable clamp [16]
- Put the cross over cable into the groove of the cable carrier [17]
- Put the end of the crossover cable through the cable clamp
- Have someone squeeze the caliper arms together so the brake shoes are against the wheel rim
- Using pliers, pull the crossover as tight as possible
- Hold the caliper arms and the crossover cable in this position and tighten the cable clamp
- Crimp a small metal cap onto the end of the cable wire and the end of the crossover cable.

8. Test the tightness of the cable clamp and the cable carrier:
   - Squeeze the brake lever with firm pressure
   - Make sure the crossover cable does not move in the cable clamp
   - If the crossover cable moves in the cable clamp, loosen the nut on the cable clamp
     - Do Step 7 again, but tighten the cable clamp tighter than before
     - Do this test again until the crossover cable does not move in the cable clamp
   - If the cable wire moves in the cable carrier, loosen the nut on the cable carrier
   - Have someone squeeze the caliper arms together so the brake shoes are against the wheel rim
   - Pull the cable wire as tight and push the cable carrier up the cable wire as far as possible
   - Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier
   - Do this test again until the cable wire does not move in the cable carrier.

Rotor Adjustment

NOTE: The upper cable stop, the bearing unit [26], and the lower cable stop must all be parallel [27] to each as you turn the front wheel and use the rear caliper brake.



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- Move the handlebar back and forth and squeeze the rear brake lever
- If the bearing unit does not remain parallel:
    - Loosen the lock nut of one lower adjusting barrel
    - Turn the adjusting barrel in or out until the bearing unit remains parallel
    - Tighten the lock nut
- Turn the front wheel around 1/2 revolution
- Move the handlebar back and forth and squeeze the rear brake lever
- If the bearing unit does not remain parallel:
    - Loosen the lock nut of one upper adjusting barrel
    - Turn the adjusting barrel in or out until the bearing unit remains parallel
    - Tighten the lock nut.
    - Make sure each brake shoe is aligned with the wheel rim and does not rub the tire [13]
- Hold each brake shoe in this position and tighten the nut.

Operation

Operate the front and rear caliper or u-brakes as follows:

- Squeeze the brake lever located on the handlebar
- The brake lever pulls on a cable wire that is attached to the caliper or u-brake
- The caliper or u-brake squeezes the wheel rim between two brake shoes.

Operate the caliper or u-brake by slowly and continuously squeezing both brake levers until you feel the braking action. Make a habit of always using both the front and rear caliper or u-brakes to stop the bicycle. You will stop in the shortest distance by using both brakes.

WARNING: If you do not obey the following instructions, injury to the rider or to others can occur:

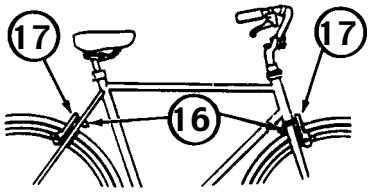
- Before you ride the bicycle for the first time, check and adjust the caliper or u-brakes as written in the "Adjustments" section. Then test the caliper and cantilever brakes and practice using them at low speed in a large and level area that is free of obstructions.
- When correctly used, the caliper or u-brake system is very effective. But, if you apply the front brake too strongly, you can be thrown off the bicycle. Make a habit of always using both brakes to stop the bicycle.
- Always try to brake while going in a straight line. If you must brake while turning; when the pavement is wet; or if the pavement is covered with sand, gravel, or leaves, start to brake sooner than normal and apply the brakes intermittently to reduce the chance of skidding
- If the wheel rims are wet, start to brake sooner than normal because a longer distance to stop the bicycle will be necessary
- Be careful when riding downhill or at a high speed because as your speed increases, a longer distance to stop the bicycle will be necessary. Slow for curves because too much speed can force you to make a turn that is too wide.
- Keep wax, oil, grease, etc. off the wheel rims and the brake shoes. These lubricants will reduce brake performance and a longer distance to stop the bicycle will be necessary.
- Check and adjust the caliper or u-brakes the first time they do not stop the bicycle quickly and smoothly, do not stop the bicycle as well as they have in the past, or if either brake lever can touch the grip.

Caliper Brake Adjustment

WARNING: If you do not frequently check and clean the caliper brakes, lubricate the cable wires, and make adjustments and repairs as needed, injury to the rider others can occur.

1. Make sure the mounting nut of each caliper brake is tight:

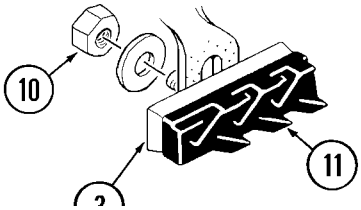
   - Tighten the mounting nut to the recommended torque of 80 in.-lbs.



2. Check both brake shoes of the caliper brake for wear:

   - Replace both of the brake shoes [3] if the arrows [11] on the rubbing surface of either brake shoe is worn off

   NOTE: If the brake shoes had no original arrows, replace both brake shoes when the rubber block of either one wears to within 1/8 inch from the metal backing.



3. Make sure the brake shoes are in the correct position:

   - Loosen the nut [10] of each brake shoe

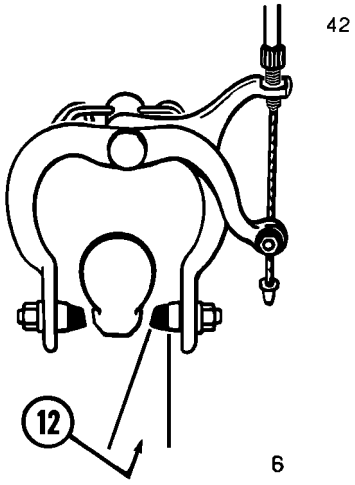
   - If the rubbing surface of the brake shoes have arrows [11] as shown, make sure the arrows point toward the rear of the bicycle

   - Make sure the rubbing surface of the each brake shoe is at the correct angle [12]

     - The entire rubbing surface of the brake shoe must be flat against the wheel rim when you operate the brake

     - The brake shoe must not touch the tire when you operate the brake

   - Hold each brake shoe in this position and tighten the nut on the brake shoe



4. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

- If a brake shoe moves, do Step 4 again, but tighten the nut tighter than before

- Do this test again, until each brake shoe does not move.

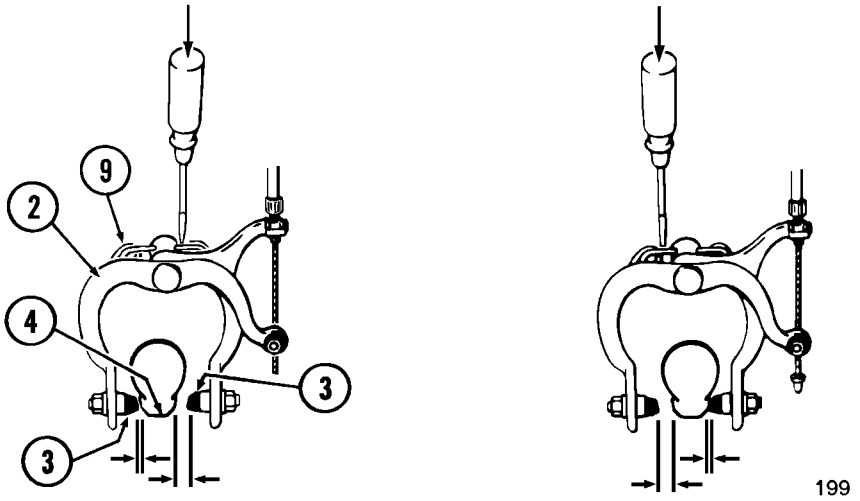
5. Make sure the brake shoes of the caliper brake are the same distance from the wheel rim:

- If not, lightly hit downward on the same side of the return spring [9] (or the metal block) as the brake shoe [3] that is farther away from the wheel rim [4]

- Make sure both ends of the return spring stay hooked around the inside edge of the caliper arms [2]

- Squeeze the brake lever two or three times

- Do this step again, until both brake shoes are the same distance from the wheel rim.



6. Put the brake shoes about 1/16 inch [18] from the wheel rim:

- Loosen the locknut [19]

  - Turn the adjusting barrel [20] clockwise to move the brake shoes [3] away from the wheel rim [4]

  - Turn the adjusting barrel counter-clockwise to move the brake shoes toward the wheel rim

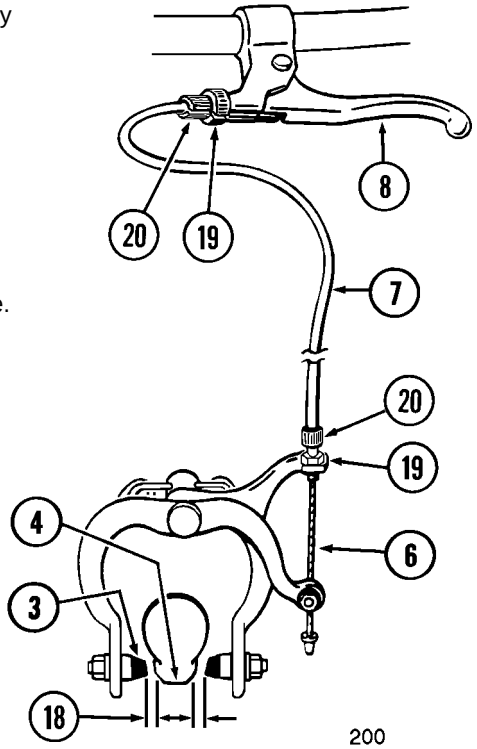
  - Make sure that no brake shoe rubs on the wheel rim when you are not using the brake

  - If rubbing occurs, move the brake shoes away from the wheel rim a small amount

WARNING: Do not move the brake shoes away from a wheel rim that is not true (straight). This can cause the caliper brake to be less effective and unsafe. To allow safe adjustment of the caliper brake, have a bicycle service shop true the wheel.

- Tighten the locknut

- If you can not turn the adjusting barrel counter-clockwise far enough to put the brake shoes in the correct position, remove the slack from the cable wire.



7. Remove the slack from the cable wire between the brake lever and the caliper brake:

- Loosen the locknut and turn it counter-clock-wise until it is against the adjusting barrel

- Turn the adjusting barrel fully into the brake lever or the caliper brake

  - Turn the adjusting barrel counter-clockwise two or three revolutions

- Have someone hold the brake shoes against the wheel rim

- Loosen the nut on the cable clamp

- Using pliers, pull the cable wire tight

- Hold the cable wire in this position and tighten the nut on the cable clamp.

8. Test the tightness of the cable clamp:

- Squeeze the front brake lever with strong pressure

- If the cable wire moves in the cable clamp, do the Step 7 again, but tighten the nut on the cable clamp tighter than before

- Do this test again, until the cable wire does not move in the cable clamp

- Use the adjusting barrel to put the brake shoes 1/16 inch from the wheel rim.

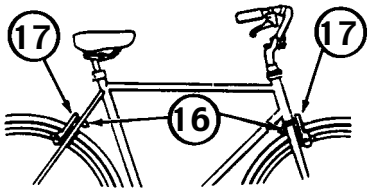
U-Brake Adjustment

1. Make sure the mounting nut of the caliper brake is tight:

   - Tighten the mounting nut to the recommended torque of 80 in.-lbs.

2. Check both brake shoes of the caliper brake for wear:

NOTE: If the brake shoes had no original arrows, replace both brake shoes when the rubber block of either one wears to within 1/8 inch from the metal backing.



3. Put both brake shoes are the same distance from the wheel rim:

   - Turn the spring adjustment screw [7] in or out, as necessary, until both brake shoes the same distance [8] from the wheel rim

   - If your brakes do not have a spring adjustment screw, they may have a hex-shape or another mechanism around or near the spring of each brake arm

      - Loosen the mounting bolt of each brake arm

      - Turn the hex-shape or other mechanism as necessary to put both brake shoes of each brake the same distance from the wheel rim

      - Tighten the mounting bolt of each brake arm.

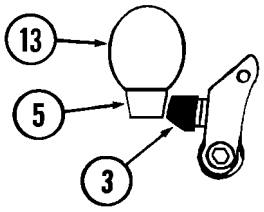
4. Make sure the brake shoes are in the correct position:

   - Loosen the nut of each brake shoe [3]

   - Make sure each brake shoe is no more than 1/16 inch from the wheel rim [5]

   - Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim

   - Make sure the brake shoe does not touch the tire [13]



   - Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

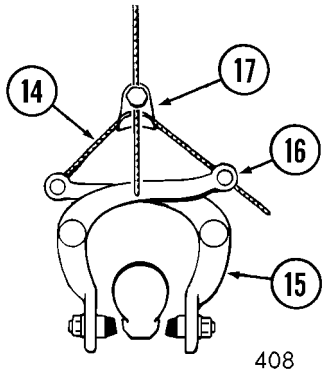
5. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

- If a brake shoe moves, do Step 3 again, but tighten the nut tighter than before

- Do this test again until each brake does not move.

6. Test the tightness of the cable clamp and the cable carrier of the rear u-brake:



- Squeeze the brake lever with firm pressure

- Make sure the crossover cable [14] does not move in the cable clamp [16]

- If the crossover cable moves in the cable clamp, loosen the nut on the cable clamp

- Pull the crossover cable tight and tighten the cable clamp tighter than before

  - Do this test again until the crossover cable does not move in the cable clamp

- If the cable wire moves in the cable carrier [17], loosen the nut on the cable carrier

- Have someone squeeze the caliper arms [15] together so the brake shoes are against the wheel rim

- Pull the cable wire as tight and push the cable carrier up the cable wire as far as possible

- Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier

- Do this test again until the cable wire does not move in the cable carrier

- Use the adjusting barrel to put the the brake shoes 1/16 inch from the wheel rim.

7. Test the tightness of the cable clamp of the front u-brake:

- Squeeze the brake lever with strong pressure

- If the cable wire moves in the cable clamp of the caliper brake, loosen the nut on the cable clamp

  - Remove the slack from the cable wire, but tighten the nut on the cable clamp tighter than before

  - Do this test again, until the cable wire does not move in the cable clamp of the caliper brake

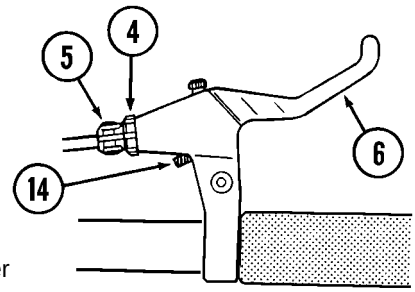
- Use the adjusting barrel to put the the brake shoes 1/16 inch from the wheel rim.

Brake System

WARNING: You must assemble and adjust the rear v-brake as written before you ride the bicycle.

1. Adjust the brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [14] to change the distance of the brake lever [6] from the grip
   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.

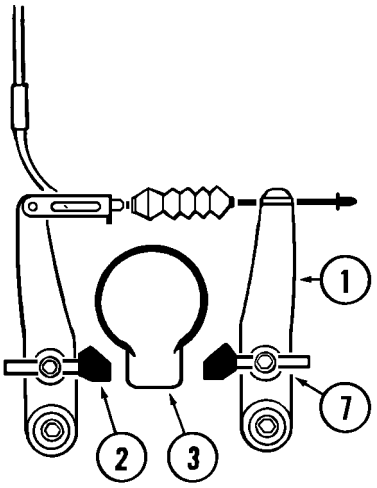


2. Attach the cable wire to the rear v-brake:

   - Connect the anchor of the cable wire to the rear brake lever
   - Make sure both ends of the cable sheath are fully in the recesses of the curved tube and the brake lever.

3. Put the brake shoes in the correct position:

   - Loosen the nut of each brake shoe [2]
   - Make sure the rubbing surface of each brake shoe is flat against the wheel rim [3]
   - Make sure each brake shoe is aligned with the wheel rim and does not rub the tire
   - Hold each brake shoe in this position and tighten the nut.



4. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position
   - If a brake shoe moves, do Step 3 again, but tighten the nut tighter than before
   - Do this test again until each brake does not move.

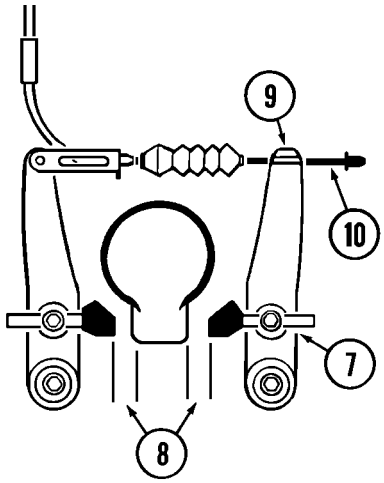
5. Test the tightness of the cable clamp:

   - Squeeze the rear brake lever with firm pressure

- Make sure the cable wire does not move in the cable clamp
- If the cable moves in the cable clamp, loosen the nut on the cable clamp
    - Pull the cable wire tight and tighten the cable clamp tighter than before
    - Do this test again until the cable wire does not move in the cable clamp
- Squeeze the rear brake lever with firm pressure fifteen to twenty times
- Put a small metal cap onto the end of the cable wire and crimp it onto the cable wire.

Rear V-Brake Adjustments

1. Check both brake shoes or the rear v-brake for wear:
    - Replace both brake shoes if the arrows or tread on the rubbing surface of either brake shoe is worn off.



2. Make sure the brake shoes are correctly positioned:
    - Loosen the nut of each brake shoe
    - Make sure the rubbing surface of each brake shoe is flat against the wheel rim
    - Make sure each brake shoe is aligned with the wheel rim and does not rub the tire
    - Hold each brake shoe in this position and tighten the nut.

3. Put both brake shoes are the same distance from the wheel rim:
    - Turn the spring adjustment screw [7] in or out, as necessary, until both brake shoes the same distance [8] from the wheel rim
    - If your brakes do not have a spring adjustment screw, they may have a hex-shape or another mechanism around or near the spring of each brake arm
        - Loosen the mounting bolt of each brake arm

- Turn the hex-shape or other mechanism as necessary to put both brake shoes of each brake the same distance from the wheel rim

- Tighten the mounting bolt of each brake arm.

4. Put the brake shoes about 1/16 inch from the wheel rim:

- Loosen the locknut

  - Turn the adjusting barrel clockwise to move the brake shoes away from the wheel rim.

  - Turn the adjusting barrel counter-clockwise to move the brake shoes closer to the wheel rim

- Make sure that neither brake shoe rubs on the wheel rim when you are not using the brake

  - If rubbing occurs, move the brake shoes away from the wheel rim a small amount

  WARNING: Do not move the brake shoes away from a rim that is not true (straight). This can cause the v-brake to be less effective and unsafe. To allow safe adjustment of the v-brake, have a bicycle service shop true the wheel.

- Tighten the locknut

- If you can not turn the adjusting barrel counter-clockwise far enough to put the brake shoes in the correct position, remove slack from the cable wire.

5. Remove slack from the cable wire between the brake lever and the rear v-brake:

- Loosen the locknut and turn it counter-clockwise until it is against the adjusting barrels

- Turn the adjusting barrel fully into the brake lever

  - Turn the adjusting barrel counter-clockwise two or three revolutions

- Have someone hold the brake shoes against the wheel rim

- Loosen the nut on the cable clamp [9]

- Using pliers, pull the cable wire [10] tight

- Hold the cable wire in this position and tighten the nut on the cable clamp.

6. Test the tightness of the cable clamp:

- Squeeze the brake lever with strong pressure
- If the cable wire moves in the cable clamp, do Step 5 again, but tighten the nut on the cable clamp tighter than before
- Do this test again, until the cable wire does not move in the cable clamp
- Do step 4 again to put the brake shoes 1/16 inch from the wheel rim.

Operation

Operate the front caliper brake and the rear v-brake as follows:

- Squeeze the brake lever located on the handlebar
- The brake lever pulls on a cable wire that is attached to the caliper or v-brake
- The caliper or v-brake squeezes the wheel rim between two brake shoes.

Operate the caliper and v-brake by slowly and continuously squeezing both brake levers until you feel the braking action. Make a habit of always using both brakes to stop the bicycle. You will stop in the shortest distance by using both brakes.

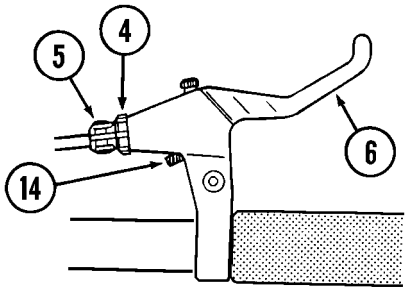
WARNING: If you do not obey the following instructions, injury to the rider or to others can occur:

- The front caliper brake has a quick-release lever on the brake arm. Before you ride, make sure the quick-release lever is locked in the closed position. Turn the quick-release lever down and then push it up to lock in the closed position.
- Before you ride the bicycle for the first time, check and adjust the caliper and v-brakes as written in the "Adjustments" section. Then test the caliper and v-brakes and practice using them at low speed in a large and level area that is free of obstructions.
- When correctly used, the caliper and v-brake system is very effective. But, if you apply the front brake too strongly, you can be thrown off the bicycle. Make a habit of always using both brakes to stop the bicycle.
- Always try to brake while going in a straight line. If you must brake while turning; when the pavement is wet; or if the pavement is covered with sand, gravel, or leaves, start to brake sooner than normal and apply the brakes intermittently to reduce the chance of skidding
- If the wheel rims are wet, start to brake sooner than normal because a longer distance to stop the bicycle will be necessary
- Be careful when riding downhill or at a high speed because as your speed increases, a longer distance to stop the bicycle will be necessary. Slow for curves because too much speed can force you to make a turn that is too wide.
- Keep wax, oil, grease, etc. off the wheel rims and the brake shoes. These lubricants will reduce brake performance and a longer distance to stop the bicycle will be necessary.
- Check and adjust the caliper and cantilever brakes the first time they do not stop the bicycle quickly and smoothly, do not stop the bicycle as well as they have in the past, or if either brake lever can touch the grip.

Brake System

WARNING: You must assemble and adjust the front caliper brake and the rear cantilever brake or v-brake as written before you ride the bicycle.

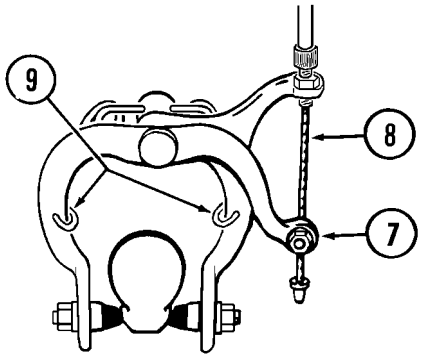
Front Caliper Brake Assembly



1. Adjust each brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [14] to change the distance of the brake lever [6] from the grip

   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.



2. Attach the cable wire to the front caliper brake lever:

   - Connect the anchor of the cable wire to the front brake lever

   - Make sure both ends of the cable sheath are fully in the recesses of the caliper brake and the brake lever

   - Make sure both ends of the return spring [9] are hooked around the inside edges of the caliper arms.

3. Test the tightness of the cable clamp:

   - Squeeze the front brake lever with strong pressure

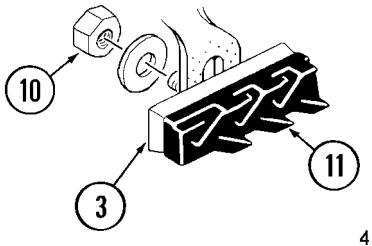
   - If the cable wire [8] moves in the cable clamp [7] of the caliper brake, loosen the nut on the cable clamp

      - Remove the slack from the cable wire, but tighten the nut on the cable clamp tighter than before

      - Do this test again, until the cable wire does not move in the cable clamp of the caliper brake

   - Put a small metal cap onto the end of the cable wire and crimp it onto the cable wire.

4. Put the brake shoes in the correct position:



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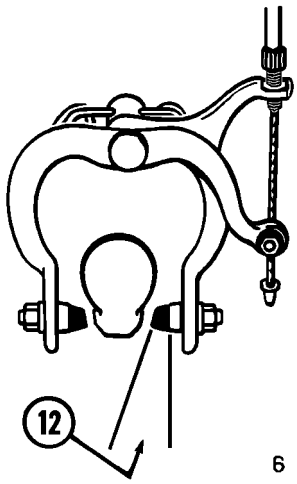
- Loosen the nut [10] of each brake shoe [3]
- If the rubbing surface of the brake shoes has arrows [11] as shown, make sure the arrows point toward the rear of the bicycle
- Make sure the rubbing surface of each brake shoe is at the correct angle [12]
    - The entire rubbing surface must be flat against the wheel rim when you operate the brake
    - The brake shoe must not touch the tire when you operate the brake
- Hold each brake shoe in position and tighten the nut of the brake shoe.



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5. Test the tightness of each brake shoe:

- Try to move each brake shoe out of position
- If a brake shoe moves, do Step 4 of this section again, but tighten the nut tighter than before
- Do this test again, until each brake shoe does not move.

6. Adjust the front caliper brake before you ride the bicycle:

WARNING: The front caliper brake may have a quick-release lever on the brake arm. Before you ride, make sure the quick-release lever is locked in the closed position. Turn the quick-release lever down and then push it up to lock in the closed position.

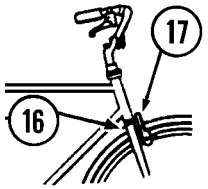
- Squeeze the front brake lever with strong pressure fifteen to twenty times
- Adjust the front caliper brake as written in the “Front Caliper Brake Adjustments” section.

Front Caliper Brake Adjustments

WARNING: If you do not frequently check and clean the front caliper brake, lubricate the cable wires, and make adjustments and repairs as needed, injury to the rider others can occur.

1. Make sure the mounting nut [16] of the caliper brake [17] is tight:

   - Tighten the mounting nut to the recommended torque of 80 in.-lbs.



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2. Check both brake shoes of the caliper brake for wear:

   - Replace both of the brake shoes if the arrows on the rubbing surface of either brake shoe is worn off

   NOTE: If the brake shoes had no original arrows, replace both brake shoes when the rubber block of either one wears to within 1/8 inch from the metal backing.

3. Make sure the brake shoes are in the correct position:

   - Loosen the nut of each brake shoe

   - If the rubbing surface of the brake shoes have arrows as shown, make sure the arrows point toward the rear of the bicycle

   - Make sure the rubbing surface of the each brake shoe is at the correct angle

     - The entire rubbing surface of the brake shoe must be flat against the wheel rim when you operate the brake

     - The brake shoe must not touch the tire when you operate the brake

   - Hold each brake shoe in this position and tighten the nut on the brake shoe

4. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position

   - If a brake shoe moves, do Step 3 again, but tighten the nut tighter than before

   - Do this test again, until each brake shoe does not move.

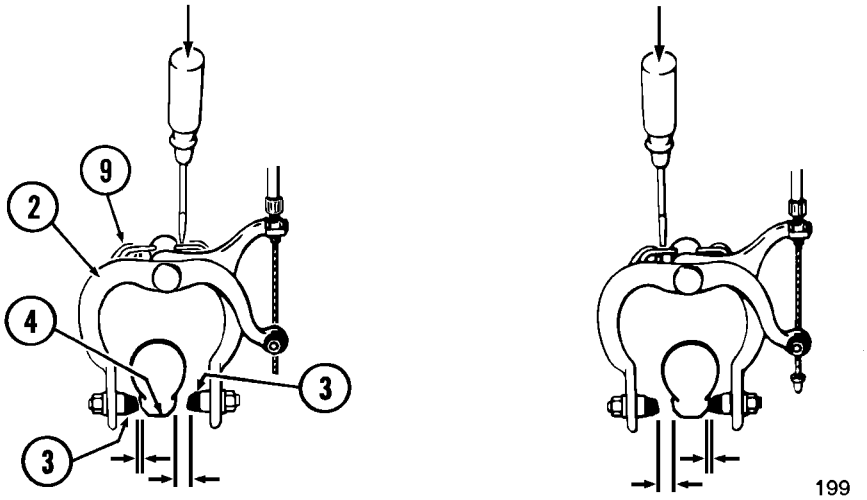
5. Make sure the brake shoes of the caliper brake are the same distance from the wheel rim:

- If not, lightly hit downward on the same side of the return spring [9] (or the metal block) as the brake shoe [3] that is farther away from the wheel rim [4]

- Make sure both ends of the return spring stay hooked around the inside edge of the caliper arms [2]

- Squeeze the brake lever two or three times

- Do this step again, until both brake shoes are the same distance from the wheel rim.



6. Put the brake shoes about 1/16 inch [18] from the wheel rim:

- Loosen the locknut [19]

  - Turn the adjusting barrel [20] clockwise to move the brake shoes [3] away from the wheel rim [4]

  - Turn the adjusting barrel counter-clockwise to move the brake shoes toward the wheel rim

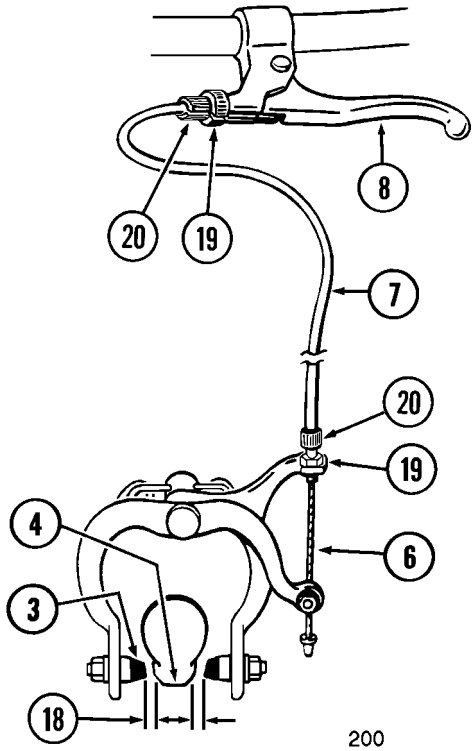
  - Make sure that no brake shoe rubs on the wheel rim when you are not using the brake

  - If rubbing occurs, move the brake shoes away from the wheel rim a small amount

WARNING: Do not move the brake shoes away from a wheel rim that is not true (straight). This can cause the caliper brake to be less effective and unsafe. To allow safe adjustment of the caliper brake, have a bicycle service shop true the wheel.

- Tighten the locknut

- If you can not turn the adjusting barrel counter-clockwise far enough to put the brake shoes in the correct position, remove slack from the cable wire.



7. Remove slack from the cable wire between the brake lever and the front caliper brake:

   - Loosen the locknut and turn it counter-clockwise until it is against the adjusting barrel

   - Turn the adjusting barrel fully into the brake lever or the caliper brake

     - Turn the adjusting barrel counter-clockwise two or three revolutions

   - Have someone hold the brake shoes against the wheel rim

   - Loosen the nut on the cable clamp

   - Using pliers, pull the cable wire tight

   - Hold the cable wire in this position and tighten the nut on the cable clamp.

8. Test the tightness of the cable clamp:

   - Squeeze the front brake lever with strong pressure

   - If the cable wire moves in the cable clamp, do Step 7 again, but tighten the nut on the cable clamp tighter than before

   - Do this test again, until the cable wire does not move in the cable clamp

   - Use the adjusting barrel to put the brake shoes 1/16 inch from the wheel rim.

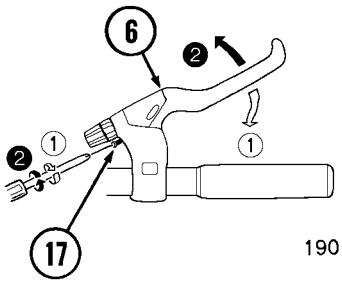
Brake System

WARNING: You must assemble and adjust the rear u-brake before you ride the bicycle.

Assembly of Rear U-Brake

1. Adjust each brake lever so the distance from the grip is comfortable to the rider:

   - Turn the adjustment screw [17] to change the distance of the brake lever [6] from the grip
   - Make sure the back of each grip is no more than 3 1/2 inches from the front of each brake lever.



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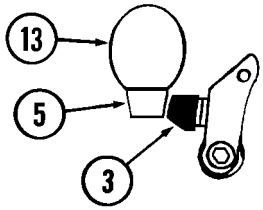
2. Put the brake shoes in the correct position:

   - Loosen the nut of each brake shoe [3]
   - Make sure that each brake shoe is no more than 1/16 inch from the wheel rim
   - Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim [5]
   - Make sure the brake shoe does not touch the tire [13]



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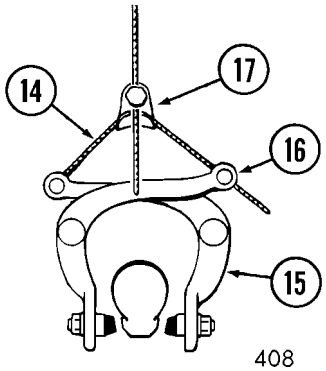
   - Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

   - Try to move each brake shoe out of position
   - If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before
   - Do this test again until each brake shoe does not move.



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4. Assemble the cross over cable to the rear caliper brake:

   - Put the anchor lug of the crossover cable [14] into the caliper brake arm [15]

- Loosen the nut of the cable clamp [16]
- Put the cross over cable into the groove of the cable carrier [17]
- Put the end of the cross over cable through the cable clamp
- Have someone squeeze the brake arms together so the brake shoes are against the wheel rim
- Using pliers, pull the crossover as tight as possible
- Hold the brake arms and the crossover cable in this position and tighten the cable clamp
- Crimp a small metal cap onto the end of the cable wire and the end of the crossover cable.

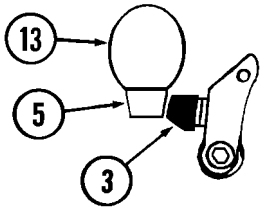
5. Test the tightness of the cable clamp and the cable carrier:
   - Squeeze the brake lever with firm pressure
   - Make sure the crossover cable does not move in the cable clamp
   - If the crossover cable moves in the cable clamp, loosen the nut on the cable clamp
     - Do Step 4 again, but tighten the cable clamp tighter than before
     - Do this test again until the crossover cable does not move in the cable clamp
   - If the cable wire moves in the cable carrier, loosen the nut on the cable carrier
   - Have someone squeeze the caliper arms together so the brake shoes are against the wheel rim
   - Pull the cable wire as tight and push the cable carrier up the cable wire as far as possible
   - Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier
   - Do this test again until the cable wire does not move in the cable carrier.

Adjustment of Rear U-Brake

1. Check both brake shoes of the u-brake for wear:

NOTE: If the brake shoes had no original arrows, replace both brake shoes when the rubber block of either one wears to within 1/8 inch from the metal backing.

2. Make sure the brake shoes are in the correct position:



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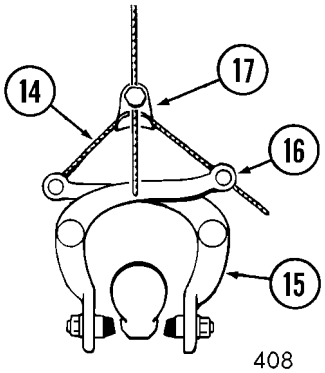
- Loosen the nut of each brake shoe [3]
- Make sure each brake shoe is no more than 1/16 inch from the wheel rim [5]
- Make sure the entire rubbing surface of each brake shoe is flat against the wheel rim
- Make sure the brake shoe does not touch the tire [13]
- Hold each brake shoe in the correct position and tighten the nut of the brake shoe.

3. Test the tightness of each brake shoe:

- Try to move each brake shoe out of position
- If a brake shoe moves, do Step 2 again, but tighten the nut tighter than before
- Do this test again until each brake does not move.

4. Test the tightness of the cable clamp and the cable carrier:



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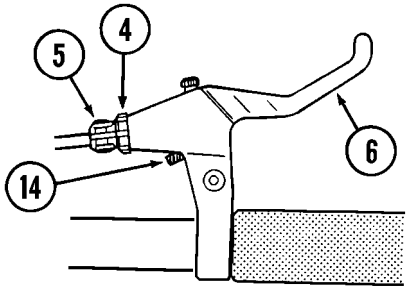
- Squeeze the brake lever with firm pressure
- Make sure the crossover cable [14] does not move in the cable clamp [16]
- If the crossover cable moves in the cable clamp, loosen the nut on the cable clamp
    - Pull the crossover cable tight and tighten the cable clamp tighter than before
    - Do this test again until the crossover cable does not move in the cable clamp

- If the cable wire moves in the cable carrier [17], loosen the nut on the cable carrier
- Have someone squeeze the brake arms [15] together so the brake shoes are against the wheel rim
- Pull the cable wire as tight and push the cable carrier up the cable wire as far as possible
- Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier
- Do this test again until the cable wire does not move in the cable carrier.

5. Put both brake shoes the same distance from the wheel rim:

- Turn the spring adjustment screw on the brake arms until both brake shoes of each brake are the same distance from the wheel rim
- If your brakes do not have a spring adjustment screw, they may have a hex-shape or another mechanism around or near the spring of each brake arm
    - Loosen the mounting bolt of each brake arm
    - Turn the hex-shape or other mechanism as necessary to put both brake shoes of each brake the same distance from the wheel rim
    - Tighten the mounting bolt of each brake arm.

6. Put the brake shoes in the correct position:



- Loosen the locknut [4]
- Turn the adjusting barrel [5] clockwise to put the brake shoes [3] 1/16 inch from the wheel rim [4]
- Make sure that neither brake shoe rubs on the wheel rim when you are not using the brake
- If rubbing occurs, move the brake shoes away from the wheel rim a small amount

WARNING: Do not move the brake shoes away from a wheel rim that is not true (straight). This can cause the u-brake to be less effective and unsafe. To allow safe adjustment of the u-brake, have a bicycle service shop true the wheel.

- Tighten the locknut

- Have someone hold the brake shoes against the wheel rim
- Loosen the nut on the cable carrier
- If you can not turn the adjusting barrel counter-clockwise far enough to put the brake shoes in the correct position, remove the slack from the cable wire.

7. Remove the slack from the cable wire:

- Loosen the locknut and turn it counter-clockwise until it is against the adjusting barrel
- Turn the adjusting barrel fully into the brake lever or the u-brake
    - Turn the adjusting barrel counter-clockwise two or three revolutions
- Have someone squeeze the brake arms together so the brake shoes are against the wheel rim
- Pull the cable wire tight and push the cable carrier up the cable wire as far as possible
- Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier
- Use the adjusting barrel to put the brake shoes in the correct position.

8. Test the tightness of the cable carrier:

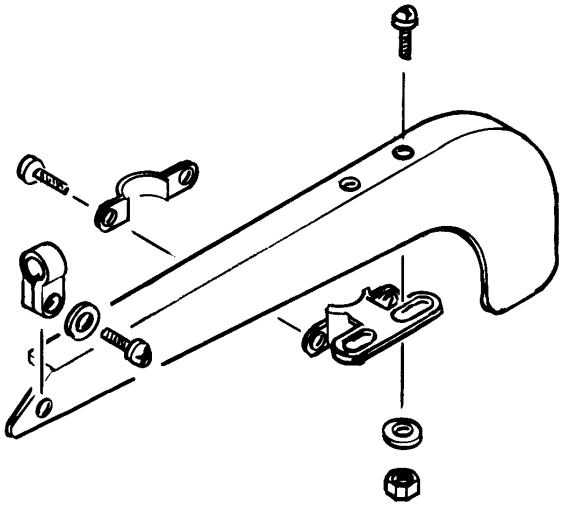
- Squeeze the brake lever with firm pressure
- If the cable wire moves in the cable carrier, loosen the nut on the cable carrier
- Have someone squeeze the caliper arms together so the brake shoes are against the wheel rim
- Pull the cable wire as tight and push the cable carrier up the cable wire as far as possible
- Hold the cable wire and the cable carrier in this position and tighten the nut on the cable carrier
- Do this test again until the cable wire does not move in the cable carrier.

Chainguard

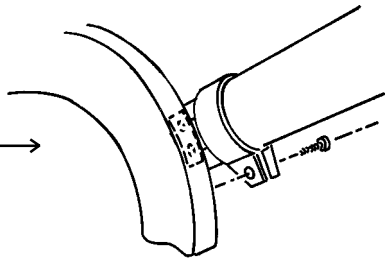
WARNING: Assemble the chainguard to the bicycle frame before you ride the bicycle. Do not ride the bicycle if the chainguard is not assembled.

Assemble the chainguard to the bicycle frame:

- Use the shorter screws to assemble the metal clamp to the chainguard
- Put the plastic clamp around the seat stay of the bicycle frame
- Put the metal clamp around the seat tube of the bicycle frame
- Put the chainguard to the rear of the bicycle as far as possible
    - Make sure the chainguard does not touch the front sprocket or the chain.



NOTE- Some models may have a different method of attaching the front of the chainguard as shown. →



Repair and Service

WARNING:

- Inspect the bicycle frequently. Failure to inspect the bicycle and to make repairs or adjustments, as necessary, can result in injury to the rider or to others. Make sure all parts are correctly assembled and adjusted as written in this manual and any *"Special Instructions".*

- Immediately replace any damaged, missing, or badly worn parts.

- Make sure all fasteners are correctly tightened as written in this manual and any *"Special Instructions"* . Parts that are not tight enough can be lost or operate poorly. Overtightened parts can be damaged. Make sure any replacement fasteners are the correct size and type.

NOTE: Have a bicycle service shop make any repairs or adjustments for which you do not have the correct tools or if the instructions in this manual or any "Special Instructions" are not sufficient for you.

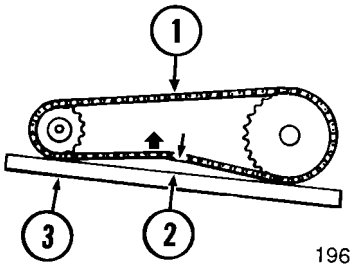
Chain Adjustment

Maintenance

The chain must be at the correct tightness. If too tight, the bicycle will be difficult to pedal. If too loose, the chain can come off the sprockets.

WARNING: The chain must remain on the sprockets. If the chain comes off the sprockets, the coaster brake will not operate.

When the chain [1] is at the correct tightness, you can pull it one-half inch [2] away from a straightedge [3] as shown.



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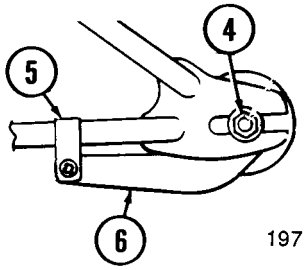
Adjust the tightness of the chain as follows:

- Loosen the axle nuts [4] of the rear wheel

- Loosen the clamp [5] on the brake arm [6] if youre bike is equipped with a coaster brake, but do not remove the nut and the screw from the clamp

(Coaster brake models only)



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NOTE: Make sure the rear wheel is in the center of the bicycle frame.

- Move the rear wheel forward or backward as necessary, until you can pull the chain one-half inch away from a straightedge

- Hold the wheel in this position and tighten the axle nuts to the recommended torque of 14 ft.-lbs.

- Tighten the brake arm clamp.

Tires

Maintenance

Frequently check the tire inflation pressure because all tires lose air slowly over time. For extended storage, keep the weight of the bicycle off the tires.

WARNING: Do not ride or sit on the bicycle if either inner tube is under inflated. This can damage the tire and inner tube. Do not use unregulated air hoses to inflate the inner tubes. An unregulated hose can suddenly over inflate bicycle tires and cause them to burst.

Use a hand or a foot pump to inflate the inner tubes. Service station meter-regulated air hoses are also acceptable. The correct inflation pressure is shown on the tire sidewall.

Before adding air to any tire, make sure the edge of the tire (the bead) is the same distance from the rim, all around the rim, on both sides of the tire. If the tire does not appear to be seated correctly, release air from the inner tube until you can push the bead of the tire into the rim where necessary. Add air slowly and stop frequently to check the tire seating and the pressure, until you reach the correct inflation pressure.

Replace worn or defective tires and inner tubes.

Inspection of the Bearings

Maintenance

Frequently check the bearings of the bicycle. Have a bicycle service shop lubricate the bearings once a year or any time they do not pass the following tests.

Head Tube Bearings

The fork should turn freely and smoothly at all times. With the front wheel off the ground, you should not be able to move the fork up, down, or side-to-side in the head tube.

Crank Bearings

The crank should turn freely and smoothly at all times and the front sprockets should not be loose on the crank. You should not be able to move the pedal end of the crank from side-to-side.

Wheel Bearings

Lift each end of the bicycle off the ground and slowly spin the raised wheel by hand. The bearings are correctly adjusted if:

- The wheel spins freely and easily
- The weight of the spoke reflector, when you put it toward the front or rear of the bicycle, causes the wheel to spin back and forth several times
- There is no side-to-side movement at the wheel rim when you push it to the side with light force.

Lubrication

Maintenance

WARNING: Do not over lubricate. If oil gets on the wheel rims or the brake shoes, it will reduce brake performance and a longer distance to stop the bicycle will be necessary. Injury to the rider or to others can occur.

The chain can throw excess oil onto the wheel rim. Wipe excess oil off the chain.

Keep all oil off the surfaces of the pedals where your feet rest.

Using soap and hot water, wash all oil off the wheel rims, the brake shoes, the pedals, and the tires. Rinse with clean water and dry completely before you ride the bicycle.

Using a light machine oil (20W) and the following guidelines, lubricate the bicycle:

What	When	How
Brake Levers	every six months	Put one drop of oil on the pivot point of each brake lever
Caliper Brakes	every six months	Put one drop of oil on the pivot point of each caliper brake.
Caliper Brakes	every six months	Put one drop of oil on the pivot point of each caliper brake.

Brake Cables	every six months	Put four drops of oil into both ends of each cable. Allow the oil to soak back along the cable wire.
Pedals	every six months	Put four drops of oil where each pedal axle goes into the pedal.
Chain	every six months	Put one drop of oil on each roller of the chain. Wipe all excess oil off the chain.
Rear Sprocket	every six months	Lay the bicycle on its left side. Slowly turn the rear wheel clockwise. Put four drops of oil in the crack between the rear sprockets (which are stationary) and the freewheel body (which is turning clockwise).