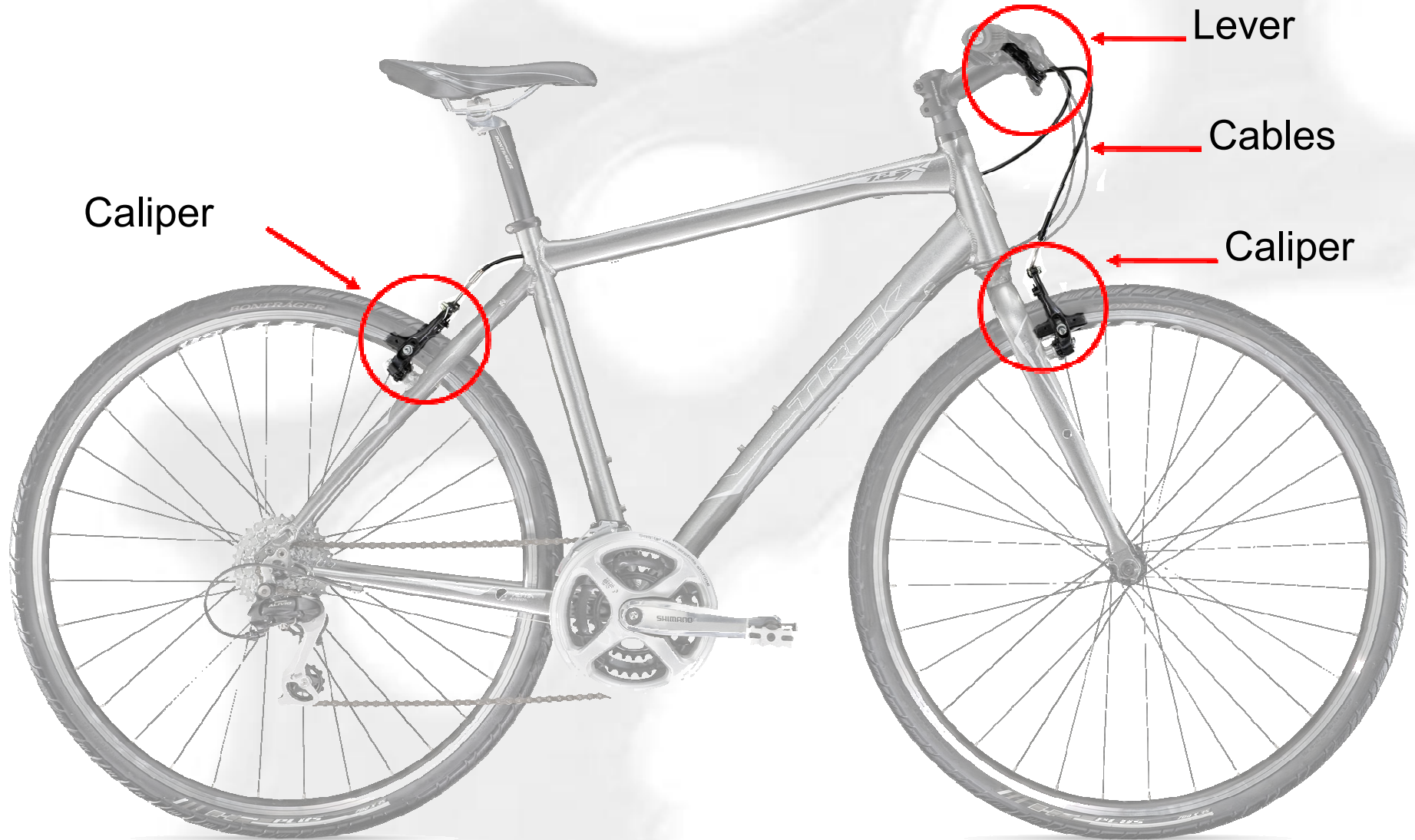


Bicycle Mechanics and Repair Decal
Mechanical Engineering 98/198
Spring 11

Lecture 3

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Components



Main Brake Types - Side Pull Brakes



Dual Pivot



Single Pivot

Main Brake Types - Center Pull Brakes



Cantilever



U Brake

Main Brake Types - V Brakes



Other Types of Brakes



Brake



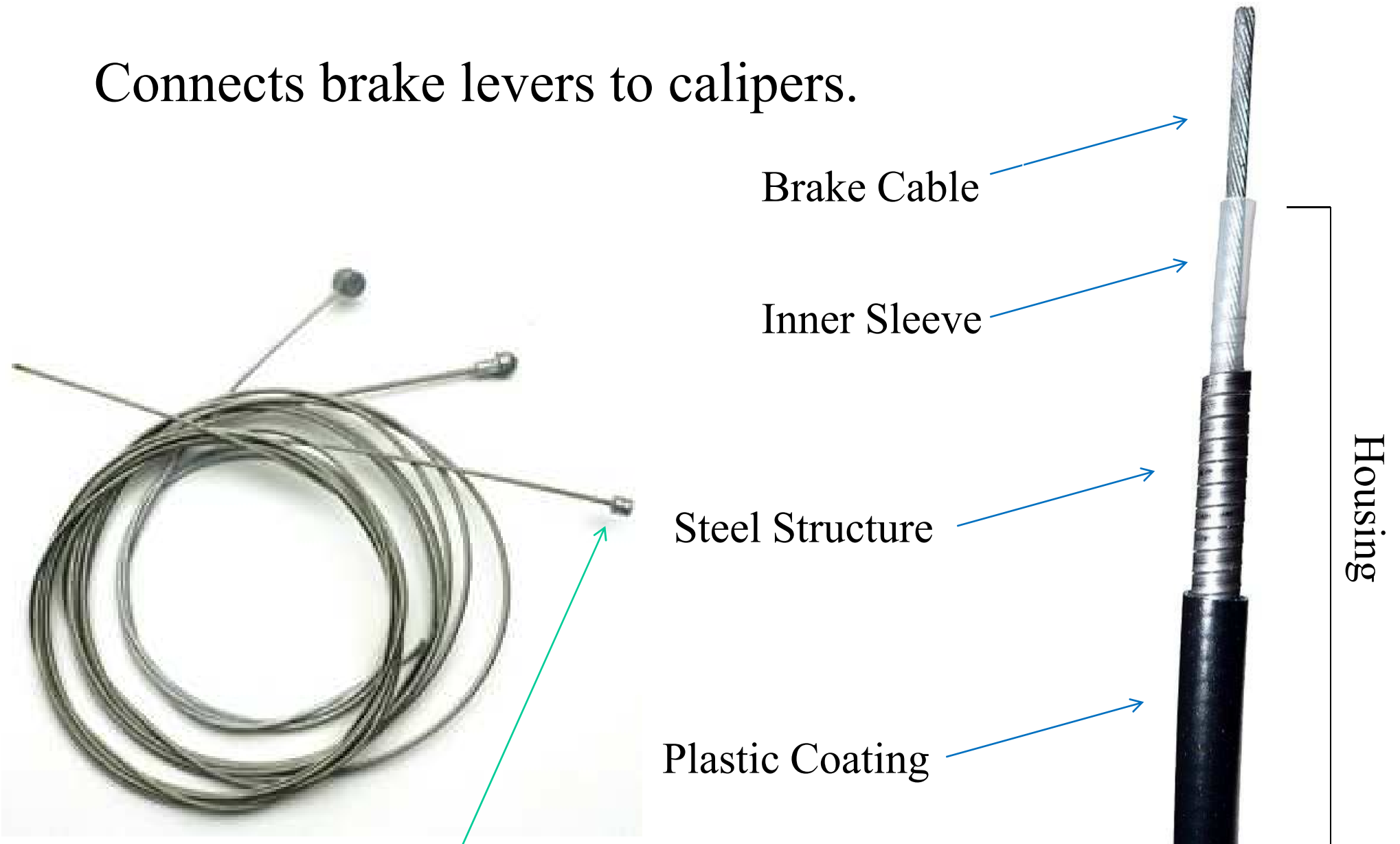
Brake



Brake

Brake Cable Function

Connects brake levers to calipers.



Shifter Cable – not to be confused with brake cable

Replacing Brake Cables

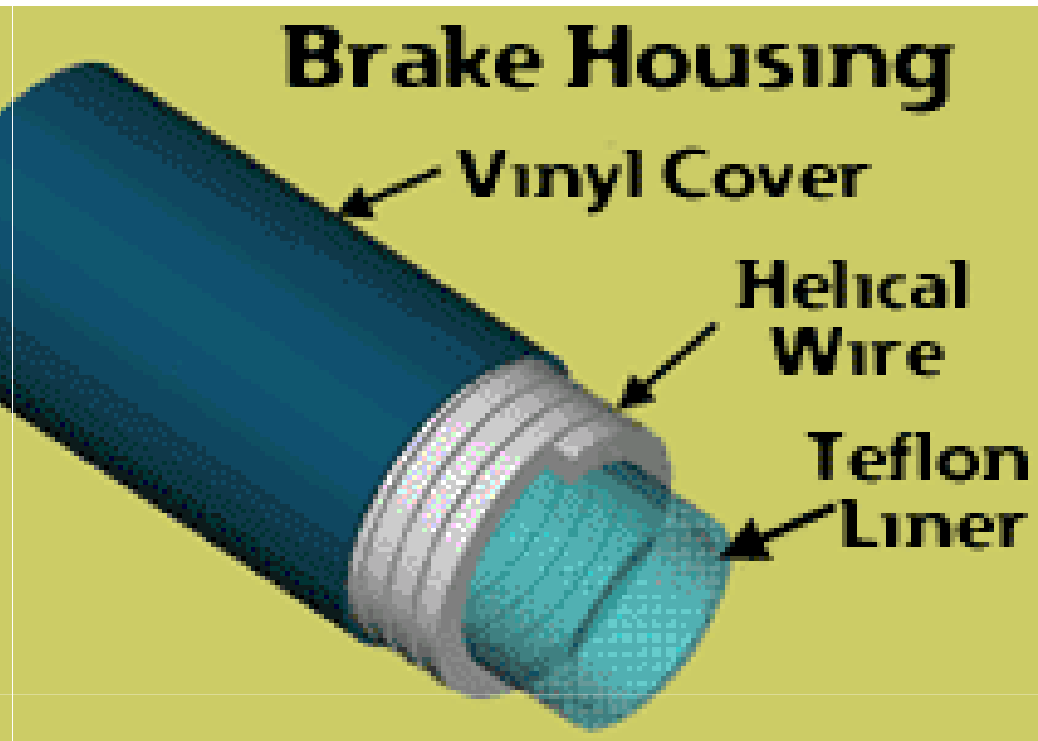
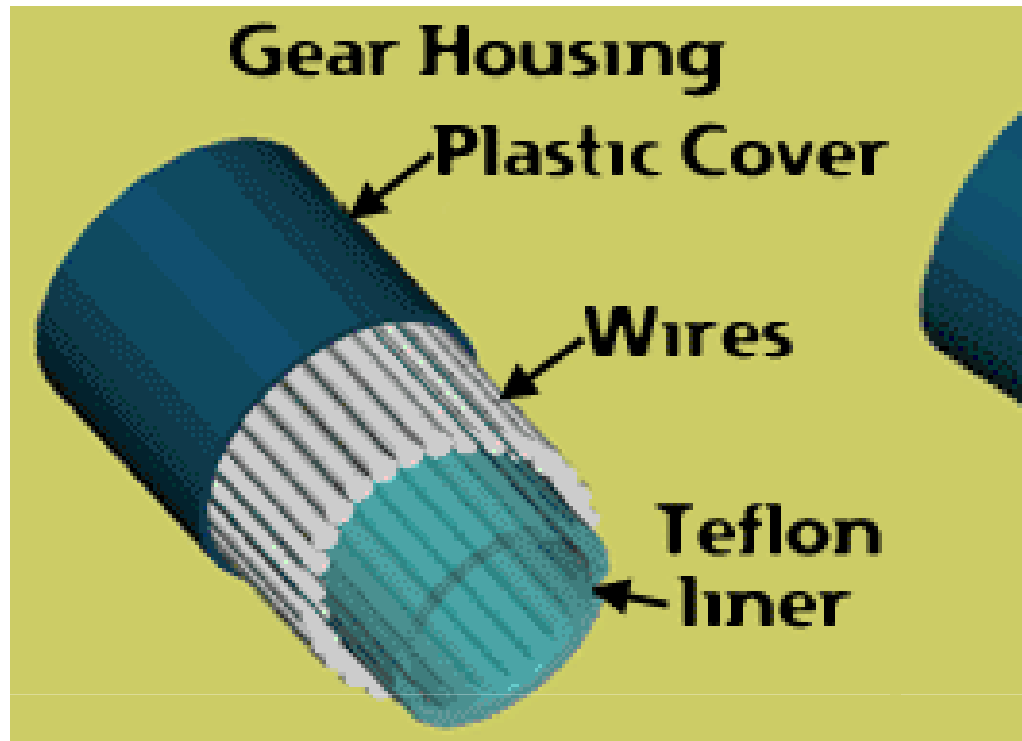
Replacement cable should have the same “nipple.”



Pear – Road Bikes



Standard – Mountain Bikes

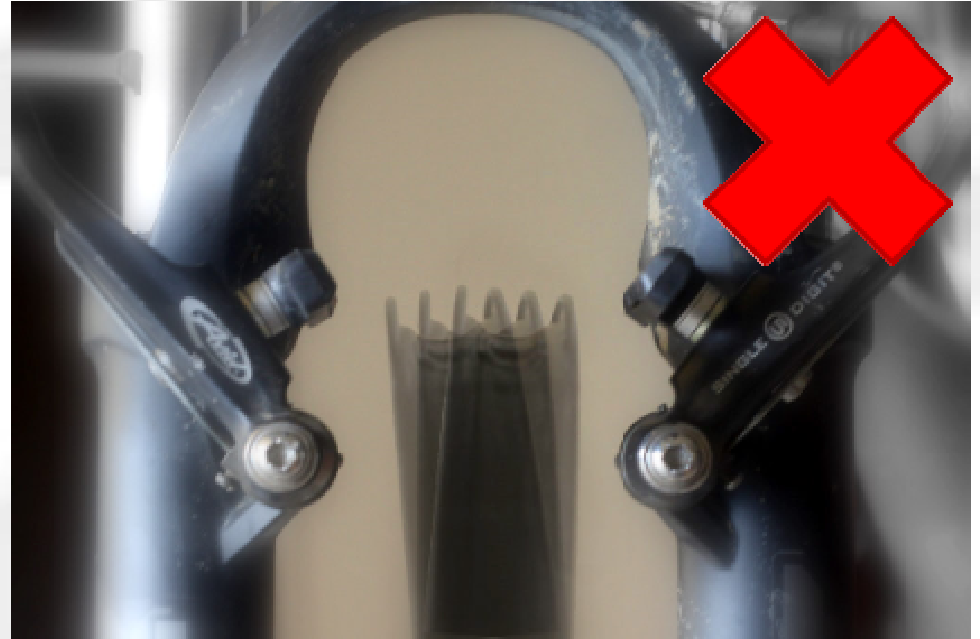


Do not confuse brake housing with gear housing!

Before Adjusting Your Brakes



Wheel must be centered in the fork.



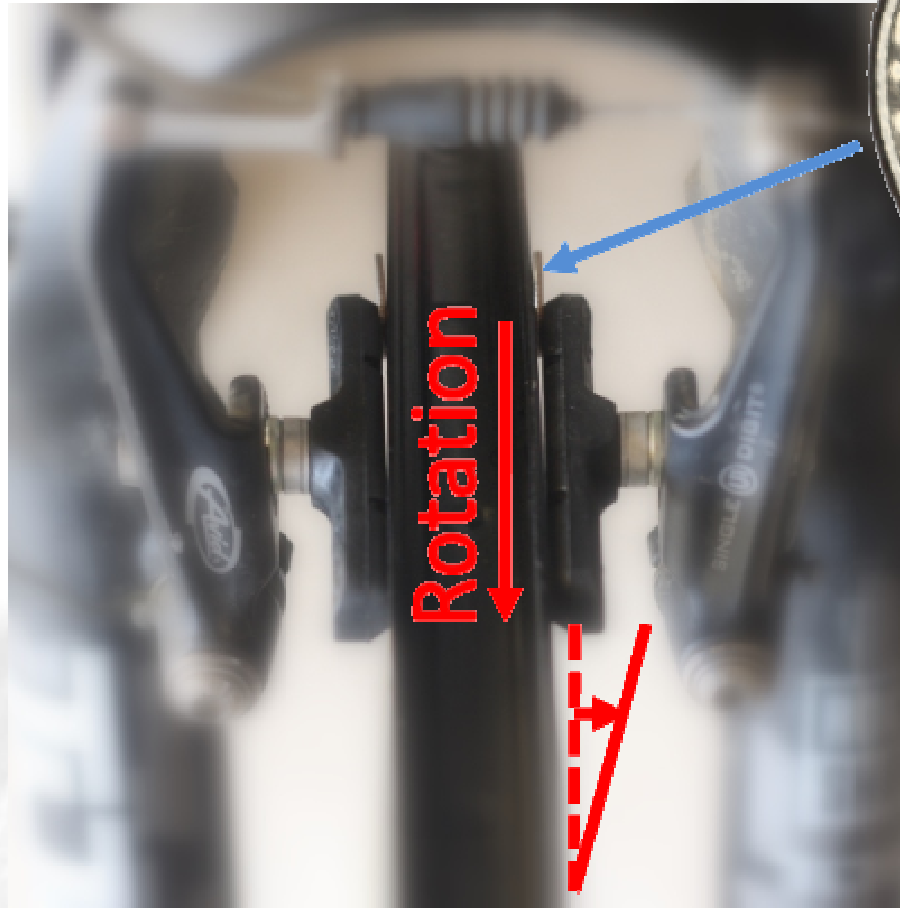
Wheel must be true (no wobble side to side when rotated)

Aligning Brake Pads



Make sure the pad is centered in relation to the rim.

Brake Toe-In



Use a dime or a credit card to help set the gap.

To prevent brake squeal and ensure even contact, angle the pads towards the direction of rotation of the wheel(front of bike).

When to Replace Pads



Metal shards embedded
in pad rubber

Step worn into pad



Replacing Brake Pads

- Know when to replace your brake pads!



Grooves are one way to know when to replace your pads.

WORN –
NEEDS TO
BE
REPLACED!

NEW! SAFE
AND
AWESOME!

Maintaining Brake Pads



- Keep both rims and brake pads clean
 - Remove any large particles
 - Sand brake pads
 - Clean rims
- **DON'T USE OIL/GREASE!**

Braking Tips...



...so this doesn't happen to you



Front or Back?

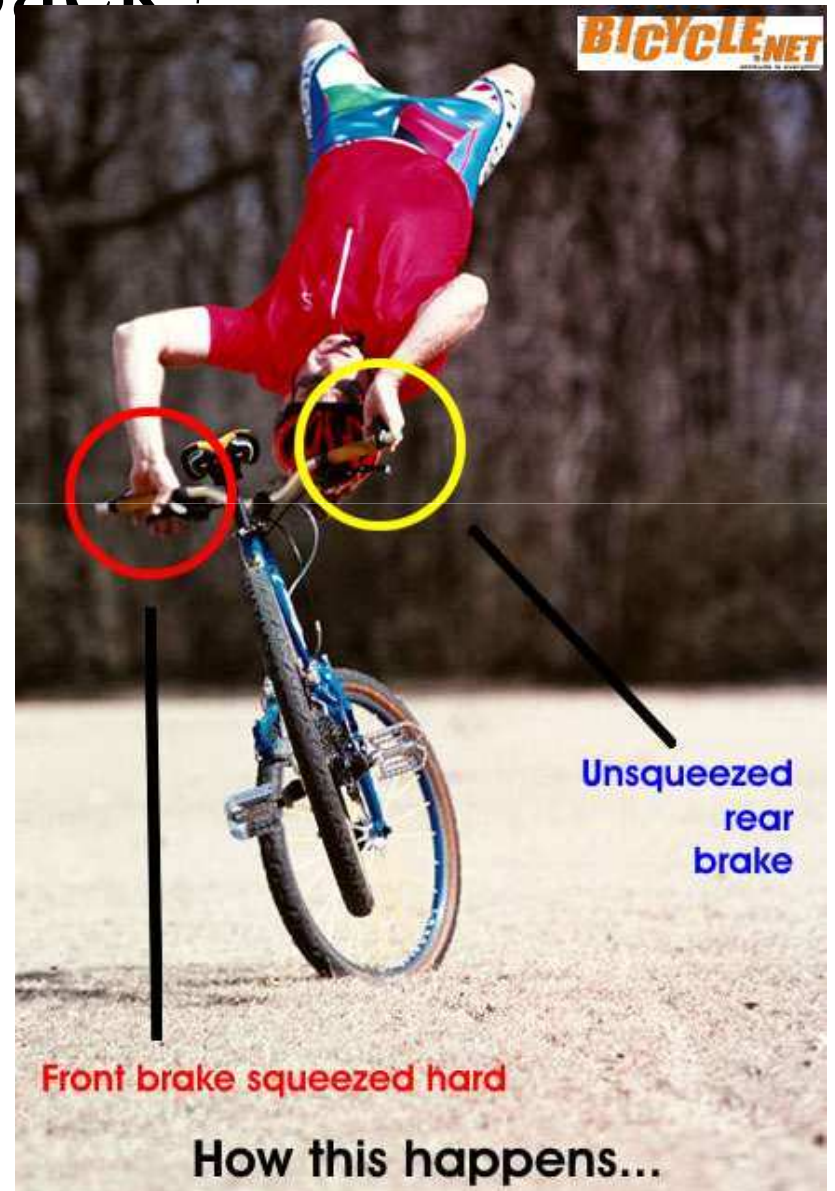
Front Brake!!!

~95% braking power

Rear Brake

Slippery surfaces

Flat front



Tips so you don't hurt yourself

Cornering:

BOTH brakes

Emergency Braking:

LEAN BACK

Mostly Front Brake

