

Welcome to the Recycled Cycles Park Tool Bike Maintenance Class. This class will hopefully be a very enjoyable and educational experience for us all. Your instructors will be Doug Sumi and Travis "Tre" Wideman. Combined they have over 12 years of bike maintenance experience under their belts.

Goal: To provide you with the knowledge and skills to properly maintain your bicycle and well as diagnose and repair problems.

Much of bike maintenance is understanding how and why bicycles components work; by knowing how they work and why they work the way they do it is much easier to recognize and solve specific problems or issues.

The class will be broken up into six sessions:

1. Intro/Hub and Headsets
2. Drivetrain (Chain, Rear Cogs, Chainrings and Cranks.
3. Basic Wheel Maintenance
4. Braking Systems
5. Shifters and Derailleurs
6. B.Y.O.B. (Bike, that is)

Each class will have both lectures with visuals and hands-on instructing. Unfortunately due to lack of space we ask that you do not bring your own bicycle to work on in class. We will be more than happy to address questions that may be specific to your bike and we can work with your bike in the final session.

The manual for our classes is the very detailed [Park Big Blue Book of Bicycle Repair 2<sup>nd</sup> Edition](#). This manual will come in very handy in the future when working on your own bike and we welcome you to take notes in your manual. There will be times for specific questions to be asked and we encourage you to apply what you are learning to your own bicycle and components. Everyone has a copy of the manual and there are detailed pictures and descriptions of the different types and styles of components. As there are many different types of components, we ask that you please take time to become acquainted with your bike while at home and to highlight in your manual the types of components you own. This will allow us to better answer your questions in class.

#### Class 1: Hubs and Headsets.

Hubs can be found in Chapter 4, and we will cover:

A: Function of Hubs, Types of Hubs

B: Removal and Re-Installation of Rear Cogs (Freewheel or Cassette)

C: Disassembly, Inspection, and Replacement and/or Reassembly of hub internals

D: Proper Adjustment of Hubs

E: Freehub body removal and inspection.

Headsets can be found in chapter 12.

A: Headset function

B: Headset types

C: Headset overhaul and adjustment

D: Headset removal and installation and frame prep.

#### Class 2: Drivetrain

Pedals, Cranks and Bottom Brackets (BB) are found in Chapter 7.

A: Pedal Installation and removal, signs of wear

B: Crank removal and Installation

C: Bottom bracket removal, installation and troubleshooting

Chains are found in Chapter 8.

- A: Determining proper chain type and length.
- B: Chain service
- C: Inspection for wear and importance of doing so
- D: Chain cleaning and lubrication

Cassettes and Freewheels (Sprockets) are found in Chapter 3.

- A: Function of Rear Cogs
- B: Removal and Inspection of Cogs
- C: Indications and Signs of Wear
- D: Track/Fixie cogs

### Class 3: Wheels

Wheels are found in Chapter 5.

- A: Basic Wheel Theory
- B: Four Aspects of Truing
- C: Wheel and Rim Damage

### Class 4: Braking Systems

Braking Systems are found in Chapters 11 and 12.

- A: Cable systems and function
- B: Pad Inspection and Replacement/Adjustment and "Toe"
- C: Caliper Types and Compatibility Issues
- D: Caliper Adjustments
- E: Disc Brakes.

### Class 5: Shifters and Derailleurs

Shifters and Derailleurs can be found in Chapter 9.

- A: Front and Rear Derailleur Function
- B: Shifter Functions
- C: Placement/Positioning of Shifters and Derailleurs
- D: Derailleur Limiting and Indexing settings including "Trim"
- E: Importance of proper Cable and Housing
- F: Compatibility between shifting systems/brands

### Class 6: Your Bike

Use your knowledge and ours as well as the necessary tools to fine tune or have answered any questions specific to your bike.