

## Mechanical Failures, Prevention, and Solutions

### Common Mechanical Failures:

#### Bolts coming loose or falling off:

- Tighten down EVERYTHING before leaving (except adjusting hardware).
- Use blue loctite or lockwashers on the troublemakers: ALL RACK BOLTS, bike shoe cleat bolts, the cap nut on old center pull brakes.
- Brings spares for the troublemakers.

#### Flat tires:

- Bring a spare tube with each bike as well as patch kits and pumps. Everyone should know how to change a tire.
- For a flat free trip use unpatched, thorn-resistant tubes, Kevlar or other puncture resistant tires, tire liners.
- Keep tire pressure correct, it is marked on the tire sidewalls.

### Uncommon Mechanical Failures:

- Brand new rack mounting bolt sheared off.
- Front derailleur came loose, was pulled into the chain and bent
- Rear derailleur was bent when two loaded touring bikes fall over

### Moral of the Story:

- Have the scouts look over each and every bike personally in pairs. Do not let them delegate this job to a bike mechanic.
- When they tighten hardware have them put tools they use in a pile. Have your Mechanic keep track of what's used. Tools are heavy, bring just what you need.
- Be careful about substituting vice grips or crescent wrenches for the correct open end wrench.
- Think twice before bringing cheap (Walmart) bikes. Some are not field maintainable.
- Be Prepared!
- Bring wire, duct tape, spares of essential bolts.