

## Bikes and Equipment for PAC Tour

During the past 35 years bicycle equipment has made a lot of improvements. Even considering the prices of inflation it could be argued that a basic 18 pound \$2,000 bicycle today is better than a state of the art 20 pound \$2,000 bicycle 35 years ago.

Today a basic bike with Shimano 105 components and light wheels still shifts better and is more durable than the best Campagnolo Super Record bike we won the Race Across America on in 1982.

PAC Tour has been ridden by hundreds of riders with basic bikes that have been maintenance free. So with all the improvements, why do some riders still want to use the latest and greatest untested and unproven equipment?

### Wheels

Wheels with low spokes counts of 14 or 20 spokes have proven to be very durable for long tours. A lot of the improvement comes from heavier and stiffer rims. When choosing wheels for PAC Tour, look for spokes with exposed spoke nipples that can be trued without removing the tire and rim strip. Bring spare spokes for all three lengths (front wheel and left and right on the rear wheel).

Bring a spoke wrench for your size spoke nipples. We have a dozen different kinds of wrenches but there are always a few more invented each year.

### Carbon Rims

There are dozens of good basic wheels available for \$600 a pair with great bearings, reliable spokes and lightweight aluminum rims. Carbon rims with deep cross sections could have problems in the 30 mph cross winds we will encounter during a tour. Make sure you have long stem inner tubes or valve extenders for valve stems over 60 mm. Avoid using wheels that have spokes that can only be repaired or replaced at the factory.

### Shifters

STI style shift levers have become standard during the past 25 years. However the internal shift cables still break. You should

know how to change your cables as well as you can change a tire.

All cables fray and break at the wrong time. Make sure your bike has external cables that do not run inside the frame or bottom bracket. Those are very difficult to change on the road. Replace your cables every 3,000 miles or when you change your front tire. Be sure to change your cables the week before a tour even if your bike is shifting well.

### Electronic Shifting

We have seen a lot of bike shops selling electronic shifting to new riders because there are no cables to adjust and "there is nothing to go wrong". WRONG! Wire connections still fail, batteries go dead and derailleurs get bent and go out of adjustment. If you are using electronic shifting you should have a working knowledge of how to maintain it. We have seen that the electronic shifting that has worked the best is because it is maintained by a rider who is also a good mechanic that notices small problems before something fails.

### Gearing

Some of our days will have grades of 10% to 12%. Most riders will need a low gear with a "One to One" ratio. That is a 30 tooth chainring and a 30 tooth rear cog. If you have a 34 x 50 front compact crankset you should bring a 11 x 34 rear cassette.

### Tires

The best road tires for PAC Tour are 25mm to 28mm wide with moderate tread. The Continental Gatorskin tire is a good all around tire. Although most of the roads are excellent, expect to ride some sections of rough chip seal roads with occasional sections of road construction with fresh gravel.

### Tubeless Tires

The new trend is tubeless tires. Similar to the logic of bike shops selling electronic shifting as low maintenance, tubeless tires still need to be maintained. The most maintenance free tubeless tires are ridden by good mechanics who take care of them by adding fluid and carefully checking them everyday. If you are using tubeless tires you should be able to repair them on the road with the normal pump and tools you carry on your bike. Don't expect

the PAC Tour van to be nearby to bring you the super pressurized floor pump when you can't get your tire seated on the rim.

### Fragile Derailleur Hangers

If you are riding a carbon or aluminum frame it probably has a replaceable derailleur hanger (where the rear derailleur screws into). This piece is made to break off in a crash before bending the frame or rear derailleur. Because it is made to break off, it is very fragile. You should always carry a spare for your brand of frame. There are over 200 different styles and they are not interchangeable between frames. Ask your bike shop to order you the correct one for your frame. They cost about \$25. You might never need it, but during our past 2018 Northern Transcontinental we had three hangers break during that cross country tour. It usually takes about a week to get a spare hanger shipped to a motel up the road. You can ride a team bike while you wait for your frame to get repaired.

### Disc Brakes

More road bikes are using disc brakes. They work great except when the rotors get bent in shipping and the brake pads rub or they leak fluid. If you are using disc brakes you should know how to align the rotors and change the brake pads. If you have hydraulic brakes you should know how to maintain the fluid levels. Our spare team wheels do not have disc brakes or "Through Axles".

### Chains and Cassettes

Most 10 and 11 speed chains are expected to last 2,500 to 4,000 miles. We have seen that most riders cross the country with the same chain if they clean their chain a few times per week. It is best to start the tour with a new chain and cassette. Be sure to test ride your new chain at least 100 miles to be sure the cog will not jump and the shifting is adjusted for the new chain.

### Saddles

Be sure to test your saddle on training rides over 150 miles if you are preparing for a long tour. The narrow lightweight saddles that feels fine on 50 mile rides can be painful after several days over 100 miles in a row. You can bring a spare saddle of a different

style that you like. You can mount your spare saddle to a seatpost that fits your frame. You can easily change saddles every few days "before" saddle problem develop from pressure points or abrasion.

### Lights

There are many good rechargeable rear lights available on the market. A flashing rear tail light is helpful during rainy or foggy conditions. We have found that the Cygo-Lite 100 is bright light that last flashes for 8 hours and cost about \$40. It can be charged with a USB plug in about 4 hours.

### The Best Bike

Your bike should be comfortable to sit on eight hours per day. Choose a frame that absorbs road shock and fits you well. After a long day of riding it is nice to only need to oil your chain and wash your bike to be ready for the next day. Our mechanics are eager to help with repairs and problems but you can save everyone a lot of worries if you bring equipment that has been tested and proven for cross country use.