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THE PATENTED WILDERNESS TRAIL BIKES SPEEDMASTER™ BRAKE

Congratulations on your choice of brakes!!

The original Wilderness Trail Bikes Speedmaster™ Brake has been acknowledged as the finest mountain bike brake available by virtually all of the riders that have used them. The Speedmaster has been refined and perfected for many years. It is a classic, simple, highly effective design.

This superb brake set is now available to the thousands of riders already owning bikes with Shimano "U Brakes" or Suntour "Power Cam" brakes.

Wilderness Trail Bikes has developed an adaptor cap for the existing metric brake studs to control the critical dimensions of length and diameter. The adaptor cap is both larger in diameter and longer - A definite improvement! Another bonus in this development is the shallow groove in the stud adaptor cap to facilitate fast and easy Grease Guard™ lubrication of the main pivot bushing. The stud adaptor cap may be fitted to the brake stud with Loctite or simply bolted in place with the main pivot bolt.

While Wilderness Trail Bikes can control the dimensional tolerances and quality of the "Speedmaster" Brake Set, the end result is up to you. The effectiveness of the brake is due in part to your diligence in assembly and set up. Some bicycles are bound to have brake studs welded on in less than perfect alignment. Almost any misalignment can and should be rectified.

It is essential to the feel of the brake that the rollers be parallel to each other and in the same plane. If the brake studs are not parallel, then the rollers will not be on the same plane. There are many ways to remedy this. Ideally, you would correct the misalignment of the brake studs. There are special tools made to check and set the alignment. This cold setting process should only be attempted by qualified, responsible individuals (like your uncle Bill with his big adjustable wrench).

Occasionally, brake studs are well aligned, but the stays or fork blades are twisted. This will cause the rollers to not be in the same plane. The easiest way to remedy this is by adding one or more flat washers between the roller and arm. Make sure to reinstall the supplied washer next to the roller otherwise it may not rotate easily.

If the brake cam is being pulled through the rollers at an angle, it will cause friction and wear the edges of the rollers and cam.

The brake cable bolts to a groove in one side of the cam. You can alter the alignment simply by reversing the position of the cam and brake cable. See Figure B for correct alignment. If you are unable to obtain the cam to roller alignment shown in Figure B, a slight bend in the narrowest part of the cam will help. See Figure B1. If, for any reason, you are unable to solve any misalignment problems, please call us.

You will notice that there is no toe-in adjustment. You don't need it. It is desirable, however, to lap the brake pads to the rim surface. This is done by using course emery (grit #60 to #120), minimum size 2" wide by 11" long. Face the abrasive against the brake shoe. Apply the brake lightly (or have a friend help.) Secure the emery paper against the rim and tire with the palm of your hand. Pull the wheel (and sandpaper) forward. Release the brake, re-apply lightly and pull forward again. Repeat this process for each of the four brake pads, until the complete surface of each pad contacts the rim. This process will mate the pad to the rim perfectly with a very slight toe-in. Use this method whenever you replace your brake pads.

Please note that there are two threaded roller mounting holes in each caliper arm. One of the two possible roller locations is chosen during brake set-up depending on rim width and stud spacing. See Figure A.