Wilderness Trail Bikes

GREASE GUARD®

Bearing Lubrication System

The patented and patents-pending Wilderness Trail Bikes GREASE GUARD® System is the only low-friction, super convenient method of bearing lubrication. With reasonable care, GREASE GUARD virtually eliminates the need for bearing component overhauls. Maintenance takes seconds per bearing without the extra weight of excess grease and added friction from "grease shear" found in less sophisticated systems. Each GREASE GUARD Grease Port leads to only one bearing to guarantee complete removal of contaminants and replacement with fresh Grease from the inside out.

Purging of the bearings is recommended immediately after returning from a ride where you have encountered mud, rain, trail or road grit, or after washing with water or transporting on a roof rack in the rain. In dry conditions, lubricate as necessary to keep the Grease in the bearings clean. Use the color of the purged Grease as an indicator.

For best performance, use only Wilderness Trail Bikes or Finish Line Certified GREASE GUARD Grease. Certified GREASE GUARD Grease is specifically developed for use with the GREASE GUARD System components. It will not cause GREASE GUARD Seals to swell or crack as other greases can. Certified Grease also retains correct viscosity at high and low temperatures, preventing GREASE GUARD Seal damage. Use only Certified Wilderness Trail Bikes or Finish Line GREASE GUARD Grease Guns. Certified Grease Guns have a patented extra-long tip for easy access to the Grease Ports and release the Grease at the correct rate to prevent Seal damage.

WILDERNESS TRAIL BIKES, INC. • 475 Miller Avenue • Mill Valley • California • 94941 • USA
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WTB NEW PARADIGM THREADLESS HEADSET

The WTB NEW PARADIGM THREADLESS HEADSET is designed and machined to provide absolutely the best performance money can buy. Equipped with GREASE GUARD®, the WTB NEW PARADIGM THREADLESS HEADSET will provide many years and miles of superb function and service.

TOOLS NEEDED: headset press, crown race installation tool, 5mm allen wrench, star nut installation tool

WARNING: The New Paradigm Threadless Headset is designed for use with unthreaded, full-thickness bicycle fork steerer tubes. Use of the New Paradigm Threadless Headset with a threaded steerer tube or a steerer tube with a reduced wall thickness can result in cracking or breaking of the steerer tube, causing damage to the bike and possible injury or death to the rider.

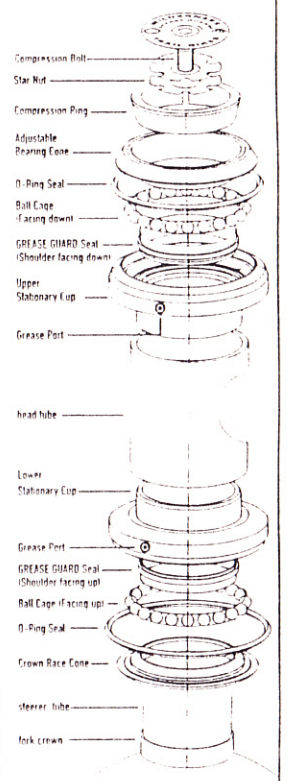
ASSEMBLY INSTRUCTIONS NOTE

Before proceeding, it is very important that you determine:

1. The exact sizes of the inside diameter of the head tube.
2. The outside diameter of the steerer tube.
3. The headset stack height. (Headset stack height is the steerer tube length minus head tube length)

After these measurements have been made and the proper size headset parts have been acquired, assembly can begin. (Use of calipers for measuring is highly recommended.)

REVIEW INSTRUCTIONS & ILLUSTRATION BEFORE BEGINNING



Stack Height
26.5mm or 1.04"

1. INSTALL UPPER STATIONARY CUP AND LOWER STATIONARY CUP

To ensure proper fit the head tube may have to be reamed using a head tube reamer. The head tube should be faced properly using a good quality headset milling tool. Align both Upper Stationary Cup and Lower Stationary Cup and insert into the head tube using a headset press (refer to drawing for correct positioning). Position Grease Port(s) in Upper and Lower Stationary Cup(s) for convenient access. A pressure of 250-1500 kg-cm2 is recommended to press the Upper Stationary Cup and Lower Stationary Cup onto the head tube. Placing the O-Ring Seal(s) onto the head tube after pressing the Upper and Lower Stationary Cup(s) allows the O-Ring Seal(s) to easily slip into the groove(s) in the Upper and Lower Stationary Cups after assembly.

2. INSTALL CROWN RACE CONE ONTO THE FORK STEERER TUBE

Using a crown race installation tool, insert the Crown Race Cone onto the steerer tube with the Race up. If necessary, mill the fork crown to fit the inside diameter of the Crown Race Cone. A pressure of 250-1500 kg-cm2 is recommended to compress the Crown Race Cone onto the fork crown. Installation tool should maintain 360° contact with the Crown Race.

3. ASSEMBLY OF FORK TO HEAD TUBE

a. Apply sufficient Grease to the Upper Stationary Cup, Crown Race Cone, Adjustable Bearing Cone, Lower Stationary Cup and Ball Cage(s).

b. Refer to the drawing for proper Ball Cage and GREASE GUARD Seal positioning in Lower Stationary Cup. Install as shown on the fork steerer tube.

c. Insert the fork steerer tube into the head tube.

d. Assemble the GREASE GUARD Seal and Ball Cage in Upper Stationary Cup (as shown) and install on the fork steerer tube. Then put the Adjustable Bearing Cone and Compression Ring onto the fork steerer tube. Refer to the drawing for correct positioning. Make sure the Ball Cage(s) and GREASE GUARD Seal(s) are always inserted as shown.

4. ADJUSTMENT

Make sure the top of the steerer tube is 3mm below the top of the stem. If the steerer tube is too long, sufficient compression may not be possible and the Headset may remain loose. If the steerer tube is too short, the stem may not have sufficient clamping force against the steerer tube to be used safely. Install the handlebar stem loosely. Press the Star Nut into the steerer tube to a point 15mm below the top of the steerer tube. This can be done with a star nut installation tool. If no tool is available, thread the 5mm Compression Bolt into the Star Nut and lightly tap the assembly into position with a dead weight mallet or similar tool. Tighten the Compression Bolt with a 5mm allen wrench, tightening the Star Nut down to a point where the fork can be turned lightly without play. Take care to ensure the Cups and Ball Cages are always in uniform contact with the Adjustable Bearing Cone securely in position. Tighten the handlebar stem to the manufacturer's recommended torque. Adjustment is correct when the Bearings turn smoothly with no play. Be sure Bearings are not compressed excessively. Pull O-Ring Seals into the grooves in Upper and Lower Stationary Cups.

5. GREASE HEADSET BEFORE USE

Remove O-Ring Seals from the grooves in the Upper and Lower Stationary Cups before greasing to facilitate even flow of Grease through the Bearings. Place tip of Certified Grease Gun into opening(s) of Grease Port(s). Pump Certified GREASE GUARD Grease until clean Grease appears around Headset. Grease both Upper and Lower Stationary Cups. Clean all excess Grease.

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