



OWNER'S MANUAL

Pantour Bicycle Suspension Hub

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Pantour® Suspension Hubs

Pantour Delite
front suspension hub
1/2 inch travel, 74 mm axle



Pantour Prolite
front suspension hub
1/2 inch travel, 100 mm axle



Pantour Rocklite
front suspension disc hub
1 inch travel, 100 mm axle
Rohloff 4 bolt rotor



This manual contains important safety, performance and maintenance information.

The Pantour front hubs are 74 mm and 100 mm axle. Bicycling can be a hazardous activity even under the best circumstances. Disregard of our instructions can change the characteristics of our product, which may cause loss of control and injury.

Wheel Building and Installation.

Wheel building is a skill that requires proper training and specialized tools. We recommend using your bike dealer. Pantour suspension hubs are designed to be used with quick release and for lacing with 14 or 15 gauge spokes. Pantour Delite and Prolite may be laced all heads out radial or cross, Pantour Rocklite is recommended to be laced double or triple cross.

The way the spokes are installed and the tension applied to the spokes have a great effect on the strength of the wheel and also on the force applied to the area around the spoke holes in the flange of the hub. Wheels must be true and round for the brakes to work effectively. Spin the wheel and check clearance. The brake shoes must contact the wheel rim within an inch of brake lever movement.

To install the FRONT WHEEL make sure the dust cap screw (one side only) is at the back facing straight up, which is the median trajectory position. Fit the wheel into the dropouts. To fasten the wheel use only skewers with correct length. Turn release lever outward until it is at least at a right angle to the bike. Tighten adjusting nut as much as possible by hand. Turn release lever to the closed position, after closure, the release lever should be parallel to the drop out. If the release lever can be closed relatively easily, the tension force is inadequate. Open release lever, tighten adjusting nut slightly and close release lever.

Adjusting the Brakes.

The brake shoes should be set so that without the rider on bike the brake pad are set slightly above the outer edge of the rim. We recommend rims with 10 - 12 mm braking surface, narrower should not be used. Riding with improperly adjusted brakes or worn brake pad is dangerous and can result in serious injury.

Installation of the rotor for the Pantour Rocklite disc suspension hub.

Pantour suspension hub is designed for 4 bolt rotors in standard sizes 160, 165, 180, 185 and 203 mm. If the rotor is not already installed, place the adaptor onto the flange. Line up the threaded holes, install and tighten evenly the socket screws. Rotor mounting bolts must be thread 10 - 13 mm into the hub flange.

Troubleshooting.

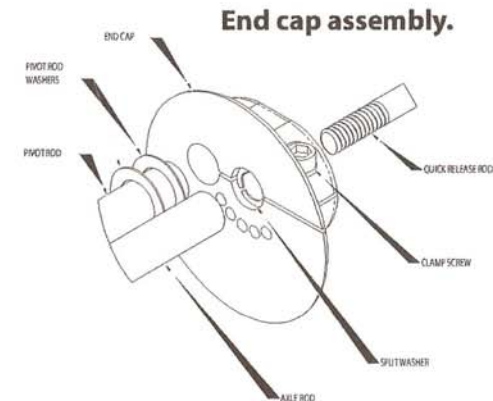
The suspension is locking up.

Step 1. Check if the pivot rod has 2 washers on each side.

Step 2. If they are missing please order the washers from Pantour or your local bike shop.

Step 3. If washers are not missing, please call Pantour to order split washers.

You will install the split washers in axle rod hole located on the end cap.



The suspension is bottomed out.

Step 1. Check the elastomer and replace it as described in the instructions on page 3 of our Manual.

Bearings replacement.

Step 1. Call Pantour or your local bike shop to order new bearings. Replace the bearings as described in the instructions on page 3 of our Manual.

Loosed bearing.

Step 1. Remove the bearing from hub shell bearing pocket. Spread a lactate around the bearing and bearing pocket and press fit the bearing in as described in the instructions on page 3 of our Manual (bearing installation).

Hub wobble.

Step 1. Check if the bearings are not loose.

Step 2. Check if the bushings (part No. 12 on pg. 4) are not loose. Use lactate around the bushing and press fit it into the center tube until flush.

Step 3. If the bushings are wear out, please call Pantour or your local bike shop for new parts. Follow step 2. for installation.

Elastomer replacement.

Step 1. Call Pantour or your local bike shop to order new elastomer. Replace the elastomer as described in the instructions on page 3 of our Manual.

Bushing replacement.

Step 1. Follow our instructions under Hub wobble.

Missing part.

Step 1. Call Pantour or your local bike shop to order the part you need.



PANTOUR SUSPENSION HUB DISASSEMBLY

Elastomer replacement.

Loosen end cap (with slit) screw using 2.5 mm Allen wrench (Rocklite thicker end cap). Remove end cap and washers from pivot rod. Make sure to keep them separate for reassembly. Pull end cap assembly (end cap and axle rods) out of center tube. Do not disassemble the rod assembly any further! Remove elastomer and rebound (negative) spring (round or square) from center tube. If you are replacing the elastomer or rebound springs do not disassemble the hub any further. To continue go to assembly §*.

Bearing replacement.

Delite and Prolite hub - use A) socket, tube or round object less than 30 mm diameter, Rocklite 35 mm diameter. Delite and Prolite hub - use B) a hollow round object with an inside diameter between 45 - 55 mm, Rocklite 50 - 65 mm. Place the hub between these two tools and press center tube (with bearing) out of hub shell as shown in the picture. Set center tube in the vise. IMPORTANT! The jaws of the vise should not be clamped tight, but just slightly touching the center tube. Use round object 32 mm diameter to remove the second bearing from hub shell.

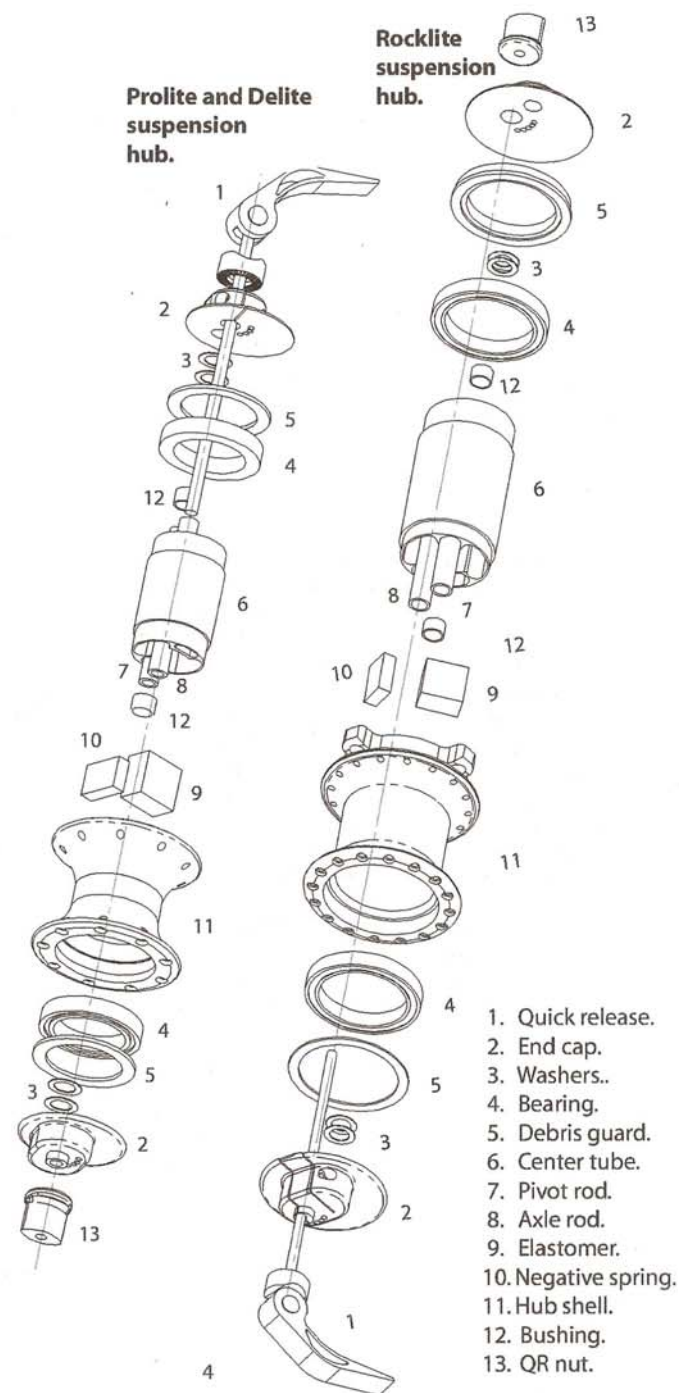
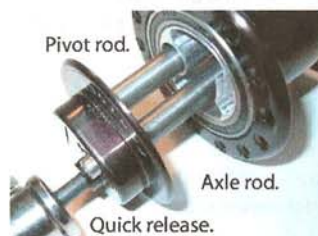
Bushing replacement.

Loosen end cap (with slit) screw using 2.5 mm Allen wrench (Rocklite thicker end cap). Remove end cap and washers from pivot rod. Make sure to keep them separate for reassembly. Pull end cap assembly (end cap and axle rods) out of center tube. Do not disassemble the rod assembly any further! Use a hollow round object to remove the bushing. Place new bushing between the hub shell and vise and press the bushing into the hole until flush. Continue with the hub assembly instruction below, if the replacement bushings have a flange, washers are not required.

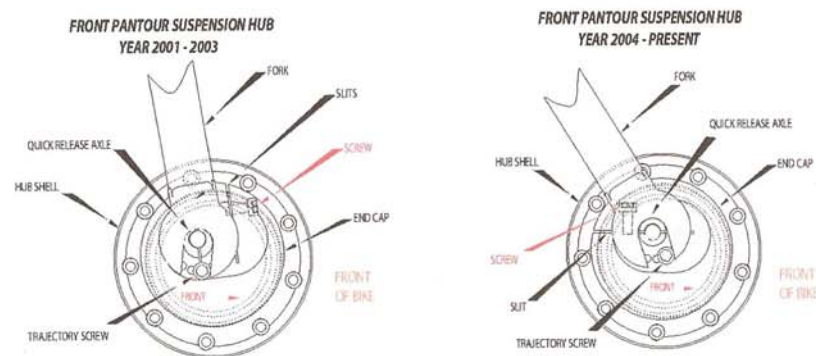
ASSEMBLY

Using a vise press the first bearing into hub shell until flush. Align center tube with second bearing. Insert center tube with bearing into hub shell. Important! Center tube and bearings must be centered. Press together until flush.

§* Slide a rebound (negative) spring into left pocket of center tube and center it. Slide a rebound spring into right pocket of center tube, push it almost to the end of center tube. Insert rod assembly into center tube as shown on picture. Insert cube elastomer into center tube under quick release axle rod. It must be centered in the hub. Axle rod should be between negative spring and elastomer. Press in the elastomer. It must be centered in the hub. Notice the correct position of quick release axle rod. It must be resting on negative spring. Place remaining washers on pivot axle rod. Slide end cap onto axle rods as far as possible. Using vise, clamp the hub. Tighten end cap screw.



Bike fork positioning and Pantour end cap alignment.



Maintenance of Pantour suspension hubs:

The front hubs are essentially maintenance free. Riding conditions will determine how often to maintain your hub. In wet or muddy conditions maintain the hub every 3 - 6 months. To remove dirt from inside of the hub shell you may need to disassemble the hub, please follow our assembly and disassembly instructions. We have engineered the shape and material of the elastomer to bring the best performance. We will not be liable for any changes made to the elastomers. If you notice a change in performance it may be caused by elastomer wear and should be replaced. Life expectancy of the elastomer is 1 year. The sealed cart-ridge bearings life will vary depending on conditions. In normal dry conditions the bearings should last for at least 5 years. The seal bearing debris guard is greatly increasing the life of bearings. Bearing noise will signal that replacement is needed. Ask your bike dealer for part replacement.

PANTOUR WARRANTY & RETURN POLICY.

Warranty for Pantour hub is 2 years from the original date of purchase. Eligibility for warranty is determined at the factory by the Pantour returns personnel. If a manufacturing problem is determined the policy is to repair or replace the product at no charge. The warranty does not cover damage from misuse, abuse, reasonable wear and tear, crash or failure to perform routine maintenance as instructed, or use other than that for which the product was intended. We will not be liable for any changes made to the product or incorrect hub assembly damage. If you notice a change in performance, please inspect the hub and do not continue riding if service is needed. Spare elastomers, negative (rebound) springs, bearings, washers or other replacement can be purchased from your bike dealer.

CONTACT in USA.

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Pantour® Trajectory Feature.

All models are sold with a trajectory feature, adjustable to every fork drop out angle on the market. This influences the spring rate of the suspension in relation to the rider. Different screw positions change how the hub is held in the dropouts and results in more vertical or horizontal travel. For natural bump absorption the best set up is with a rearward position of the screws. The location of the trajectory screws on both end caps must be consistent.

Forward position of screw. Middle position of screw. Rearward position of screw.



Travel is vertical. 1/2 Vertical travel and 1/2 horizontal. Horizontal travel.



Fork drop out alignment.

When assembled, the hub should be rotated slightly to ensure that the trajectory screw heads are held fully forward to the front of the dropout. This ensures that the suspension works properly. Before the QR skewer is tightened on the fork, the wheel alignment must be straight.

Elastomer.

The Pantour suspension hub is assembled with replaceable elastomers, recommended for rider's weight 100 - 200 lb. For over 200 lb a special (harder) elastomer is recommended, please contact your bike dealer for having a harder elastomer installed.

We have engineered the shape and material of the elastomer to bring the best performance. We will not be liable for any changes made to the elastomers. If you notice a change in performance it may be caused by elastomer wear and it must be replaced.