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# LEMOND<sup>®</sup> REVMASTER<sup>TM</sup> BOTTOM BRACKET ADJUSTMENT INSTRUCTIONS

#### Tools:

4 mm & 8 mm Hex Key Bottom Bracket Removal Tool Multipurpose Grease \_\_``Socket Drive Philips Screwdriver Torque Wrench (foot/lbs) Loctite<sup>®</sup> 242/243 (blue) Adjustable Wrench Bicycle Crank Puller Rubber Mallet Lock Ring Removal Tool





Shimano<sup>®</sup>-compatible Bottom Bracket Tool (cartridge style)



## **Procedure:**

## I. Remove the Right Side Cover and Belt

- 1. Remove right side cover. Use the 4-mm hex key to remove the four mounting screws on the right side cover. Use a philips screwdriver to remove the two philips screws on the left side cover. Lift the right side cover over the right crank and remove it from the frame.
- 2. Use a 4-mm hex key to loosen the tension adjustment screw located on top of the idler pulley. Loosen the idler pulley nut with an adjustable wrench. Slide the idler pulley up.
- 3. Remove the belt from the forward and rear pulleys.

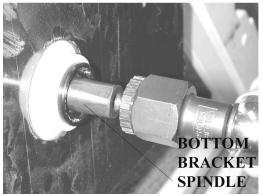
#### II. Remove each Crank Arm.

- 1. Use an 8-mm hex key to remove the pedal crank bolt.
- 2. Thread a bicycle crank arm puller onto the crank arm shaft.
- 3. As you tighten the crank arm puller on the shaft, the crank arm will pull off the crank arm shaft. Remove the crank arm from the frame.



### III. Inspect the Bottom Bracket Assembly for Looseness.

- 1. Verify that the right bearing cup is completely threaded in the frame. The bearing cup should fit flush against the frame.
- 2. Try to rotate the bearing cup by hand. *Note: the right bearing cup is reverse threaded!* If the bearing cup rotates freely by hand it is too loose, it needs to be glued in place with Loctite<sup>®</sup> 242/243 (blue). You must remove the lock ring prior to tightening the bearing cup.
- 3. Remove the lock ring on the left side of the bike using a lock ring removal tool.
- 4. Ensure that the right bearing cup is tight. If the bearing cup is loose remove it from the frame. Apply Locktite 242/243 to 2-3 threads 2/3 way around the bearing cup. Reinstall the bearing cup and tighten with the bottom bracket tool (see picture).
- 5. Check the left bearing cup. If the bearing cup is loose remove it from the frame. Apply Locktite 242/243 to 2-3 threads 2/3 way around the bearing



cup. Reinstall the bearing cup and tighten with the bottom bracket tool. Test the bottom bracket spindle installation by lightly tapping on the spindle with a rubber mallet in both directions to make sure there is no side play in the spindle. Turn the spindle by hand to ensure that the spindle rotates freely.

6. Apply Locktite 242/243 to the lock ring and use the lock ring removal tool to

tighten the lock ring. Note: Prevent the left bearing cup from spinning by stabilizing it with the bottom bracket removal tool.



## IV. Reassemble the bike.

- *1.* Apply a thin coat of grease on the left bottom bracket shaft and install the left crank on the bottom bracket shaft. *Note: use a rubber mallet to tap the crank onto the bottom bracket spindle.*
- 2. Apply 1-2 drops of Locktite<sup>®</sup> 242/243 on the left crank bolt threads. Install the crank bolt and tighten to secure the crank. Rotate the pedals a few revolutions and then tighten the crank arm bolt again to ensure that the crank arm is tightened to 22 foot/lbs.
- 3. Apply a thin coat of grease on the right bottom bracket shaft and align the right crank 180° from the left crank arm, and then install the right crank on the bottom bracket spindle.
- 4. Apply 1-2 drops of Locktite 242/243 on the right crank bolt threads. Install the crank bolt and tighten to secure the crank. Rotate the pedals a few revolutions and then tighten the crank arm bolt again to ensure that the crank arm is tightened to 22 foot/lbs.
- 5. Install the belt. Test the belt tension by standing on the pedals with the pedals horizontal to the floor. Pedal quickly and see if the belt slips. A *minimum* of slipping is okay, it is important not to overtighten the belt.

#### Note: Wrap the belt around the front pulley and under the belt tensioner bearings. Begin with the belt on the top of the rear pulley and rotate the pedals backward until the belt slips completely on the rear pulley. Install the belt and reinstall the idler pulley nut. Tighten the tension adjustment screw. Tighten the idler pulley nut. The belt tensioner bearings should be aligned with the belt.

6. Reinstall the right side cover.

#### Note: Inspect the pedal crank arm bolts again after 30 hours (approx. one week). If loose, remove the bolts; apply Loctite<sup>®</sup> 242/243 and reinstall. Tighten the bolts to 22 foot/lbs.