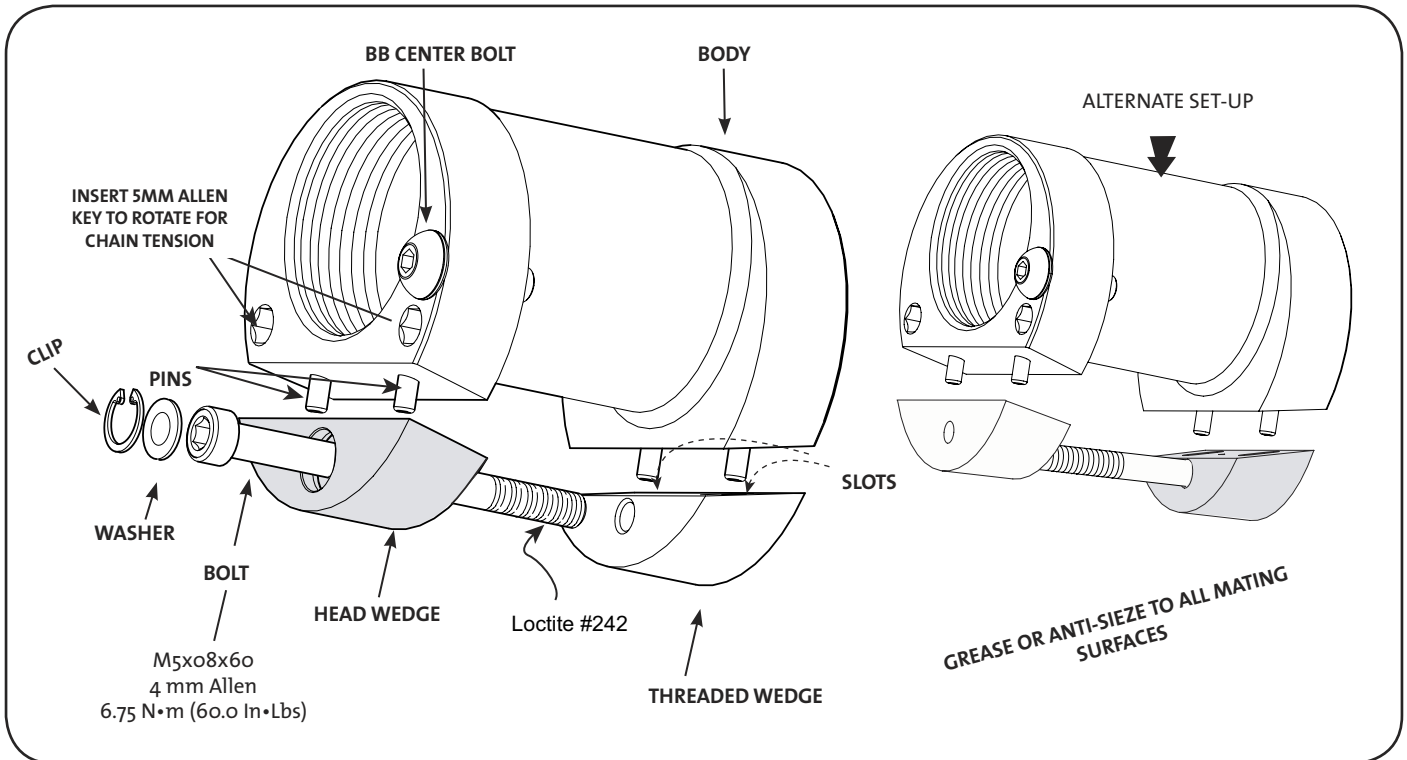


Double Wedge Bottom Bracket Eccentric Owner's Manual Supplement

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English



FEATURES & BENEFITS

- FOR USE WITH - Cannondale TANDEM, RECUMBENT, and SINGLE SPEED bicycles.
- DIRECT REPLACEMENT PART - Direct replacement part for the single wedge type 1 eccentric (Cannondale kit - A181/).
- WEIGHT REDUCTION - 122 grams. 60 grams lighter than the single wedge eccentric!
- CHAIN TENSION ADJUSTMENT - Change arrangement of the head and threaded wedge for access to the wedge bolt from either side of the bottom bracket. It is not necessary to remove the eccentric fixing bolt to reconfigure the wedges. Its is shown above left as an exploded assembly.

THINGS TO NOTE

- When loosening the wedge bolt, it pushes the wedges a part, it all ways frees one wedge before the other, but you need to keep unthreading the bolt as the loose wedge will stop on the 2 pins, then push the 2nd wedge free.
- Clean all parts and threads before installation. Grease or apply anti-sieze to the faces and outside surfaces of the wedges as well as the eccentric body and inside the bottom bracket shell before inserting the wedge assembly.

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- The bottom bracket centering bolt must always be positioned so that it is on the right (drive) side of the bicycle. If it is positioned on the wrong side, the installed bottom bracket may loosen under pedaling. The bolt is not an adjustment; so, do not remove it.
- When the eccentric is removed, inspect condition of the eccentric pins and wedge slots. Pins are pressed into the body; do not remove them. Slots should not be deformed.
- Turn fixing bolt clockwise to tighten; turn counter-clockwise slowly to loosen.
- The 5 mm Allen key holes are present to allow turning of the eccentric with the end of a 5mm Allen key. The eccentric can also be rotated with a pin spanner.

HOW TO MEASURE AND ADJUST CHAIN TENSION

The chain must be in good condition and lubricated before the tension is measured or adjusted. The adjustment procedure requires mechanical skill. If you doubt your ability to perform it correctly, please have the chain tension adjusted by your Cannondale Dealer.

1. On the upper length of the chain in the middle of the front and rear sprocket, move the chain up and down. You should be able to lift it up 1/4" and move it down 1/4" easily. This total movement is called vertical deflection and it should be 1/2." Turn the crank to rotate the wheel so you can check tension at different links of the chain. The amount of deflection should be the same. If the chain seems tighter in some places, it may be an indication of chain damage or some other problem. Have the chain replaced or the damage repaired before attempting any adjustment. If the chain is in good condition continue to step 2.
2. Insert a 4 mm Allen key into the wedge bolt and turn it counter-clockwise to loosen the wedge. See Fig 2.

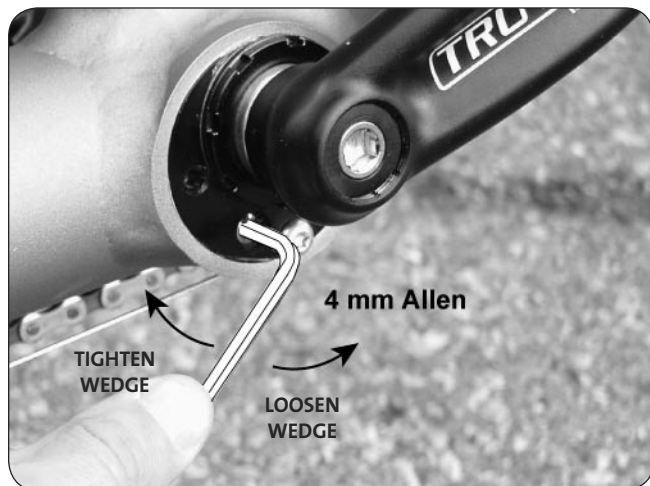


FIGURE 2

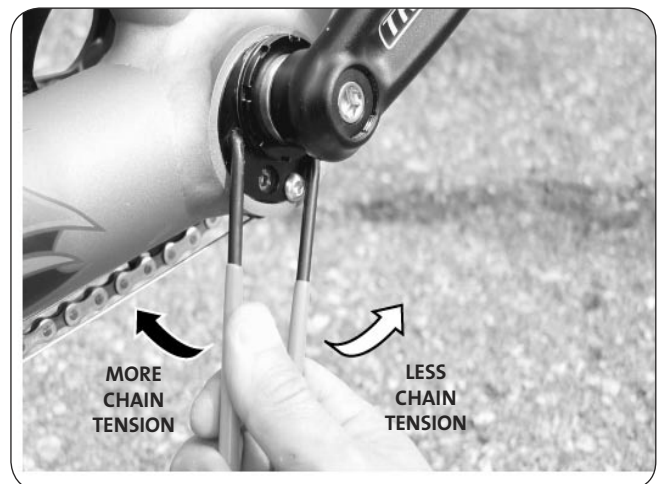


FIGURE 3

3. When the wedge is loose and the eccentric assembly is free to rotate, insert the ends of a pin spanner tool (or a 5 mm Allen key) into the eccentric holes and rotate it until the correct vertical chain deflection is reached. See Fig 3.

SPECIAL NOTE: You should never turn the bolt if the resistance felt in the tool is high; the threads of the wedge can suffer damage. The wedge may be stuck in the bottom bracket shell due to the lack of grease or corrosion. It may be helpful to loosen a "sticky" wedge by very lightly taping the head of the wedge bolt after it is loosened a turn or two. To do this, insert the 4 mm key of an Allen tool set (or T-handle). Never strike the eccentric or bike frame or use hard force.

4. When the chain tension is set, tighten the wedge bolt clockwise to 6.75 N•m (5.0 Ft•Lbs).
5. Now, make a check the chain tension as before.