

P4 CHAINSTAY INTEGRATED ROCKER BRAKE (CSIRB) INSTALLATION

cervélo

TOOLS REQUIRED

- 2, 2.5, 3, 5 mm allen keys
- 8, 9 mm open faced cone wrench
- Pliers
- Cable cutters
- Torque wrench

MATERIALS REQUIRED:

- 1 x P4 chainstay integrated rocker brake
- 1 x Carbon brake stiffener
- 1 x 5 mm allen key bolts
- 1 x preset length of flexi cable housing
- 1 x inline barrel adjuster
- 1 x brake cable

PROCESS:

1. Using the drop out barrel adjusters, first adjust the rear tire's distance to the cut out and center it in between the chain stays (Note: clinchers will have a larger wheel radius on average than tubular wheel. This distance also changes as the width of the tire changes.) If the wheel is not positioned correctly the pads will not contact the braking surface of the rim optimally. (Figure 1)
2. Once the drop out barrel adjusters have been set, remove the wheel to make the rear brake installation easier.
3. Install rocker pivot post using a deep 9 mm cone wrench and torque to 3 Nm. (Note: lube is not needed as the bolts are already coated with thread prep.) (Figure 2)
4. Place the rocker assembly on the rocker pivot post and torque the bolt to 3 Nm of torque with a 2.5 mm allen key (Figure 3)
5. Install the pivot bolt and non-drive side brake arm with a 5 mm allen key, ensuring that the spring is seated on the vertical landings on the frame. When the pivot bolt is tight (3 Nm) , the lower washer should spin freely. If it does not spin freely, loosen the pivot bolt and reposition the lower washer before retightening the pivot bolt. (Figure 4)
6. Repeat step 5 with the drive side brake arm. (Figure 5)
7. Insert slave link sleeve into the slave link (Figure 6), rotate non drive side brake arm into the rocker assembly. Install screw through the rocker and sleeve. Torque to 1 Nm with and 2.5 mm allen key. (Figure 7)
8. Rotate brake arms and rockers; they should move freely through their ranges without noticeable binding.
9. With the drive side crank arm removed, insert the rear wheel and set brake pads against the braking surfaces on the wheel. Torque the brake pad bolts to 5 Nm with a 5 mm allen key. (Figure 8)
10. Install the upper portion of the P4 cable system as outlined in P4 cabling service manual.
11. Install the inline barrel cable adjuster onto the rear brake line. The location of this barrel adjuster should be approximately 3 to 4 inches from the top tube entry hole.
12. Set inline cable adjuster to roughly the middle of its travel.
13. Run the rear brake cable until it exits the frame at the bottom bracket area.
14. Install the flexi brake housing over the rear brake cable where it exits the frame and seat it in the rear brake cable BB cable stop. (Note: the flexi brake housing is a preset length. Using other housing or lengths that are longer or shorter will compromise brake function.)
15. Thread the rear brake cable through the plastic cable housing seat on the rocker assembly.
16. Continue to thread the cable between the two washers and through the cable clamp bolt on the drive side brake arm.
17. Set the quick release on the non-drive side brake arm to the closed position.
18. Compress the brake pads against the wheel with your fingers and pull the rear brake cable tight with a pair of pliers, removing any slack.
19. Clamp the cable tight with a 5 mm allen key. (Figure 9)
20. Secure the lower part of the cable fixing bolt with an 8 mm open faced wrench and continue to tighten the cable fixing bolt to 6 Nm of torque using a 5 mm allen key,. (Figure 10)
21. Cut cable to desired length and install cable crimp.

22. Loop cable over the hook and under the spring on drive side brake arm so it does not come into contact with the crank's chain ring bolts. (Figure 11)
23. Adjust (shorten) the inline cable adjuster as required to move the pads away from the rim and give the desired engagement point on the brake lever travel. (Figure 12)
24. Balance the spring tensions on the drive side and non-drive side brake arms with the 2 mm grub screws to ensure that the brake arms are centered over the rim. Squeeze the brake lever a few times between each adjustment. Spring tension will be higher on the non-drive side brake arm. (Figure 12)
25. To install brake stiffener rotate quick release so that it is perpendicular to the wheel. Insert the BB tab of the brake stiffener into the hole at the front of the cable trench. (Figure 13)
26. Fit the stiffener over the brake arms, squeezing the brake arms together to fit the quick release through the slot in the stiffener. (Figure 13)
27. Install the two M5 button head screws with a 3 mm allen key and torque to 3 Nm. (Figure 13)
28. Close the quick release and squeeze brake lever a few times and inspect the installation to ensure that the stiffener does not interfere with the brake operation.
29. Install crank arm ensuring that the rear brake cable does not make contact with the chain ring bolts.



Figure 1

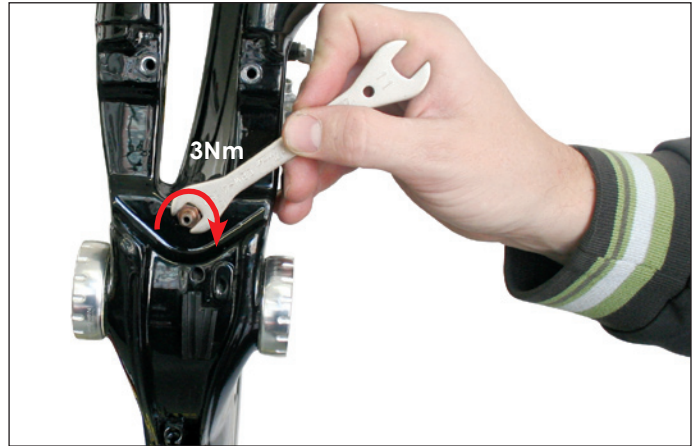


Figure 2

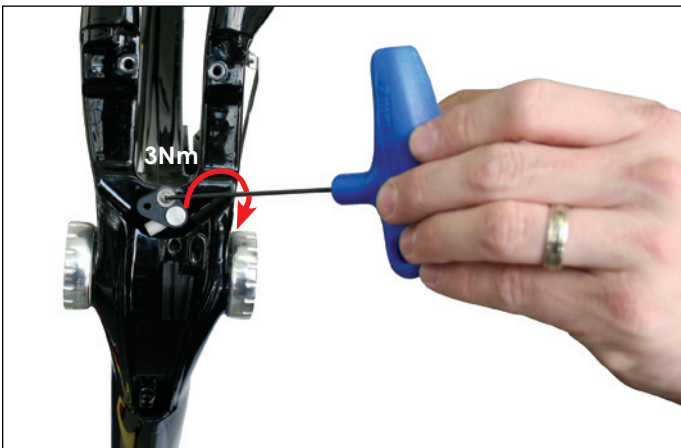


Figure 3

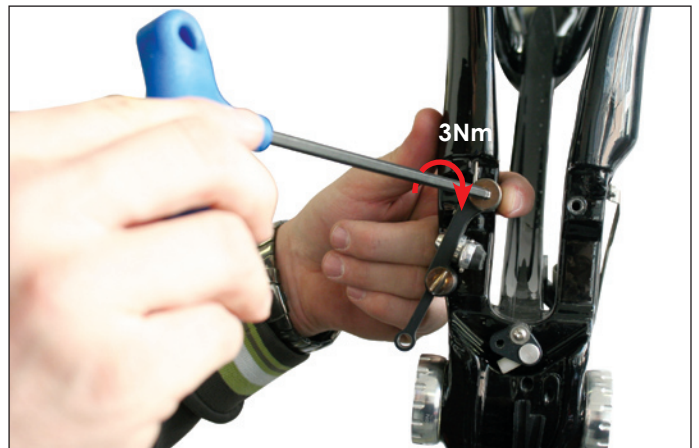


Figure 4

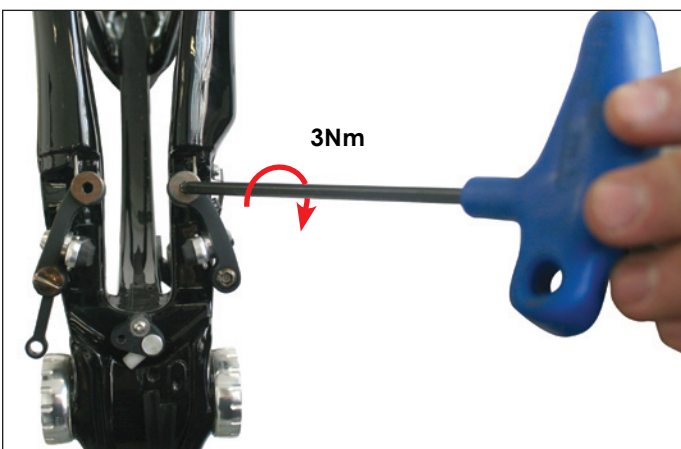


Figure 5

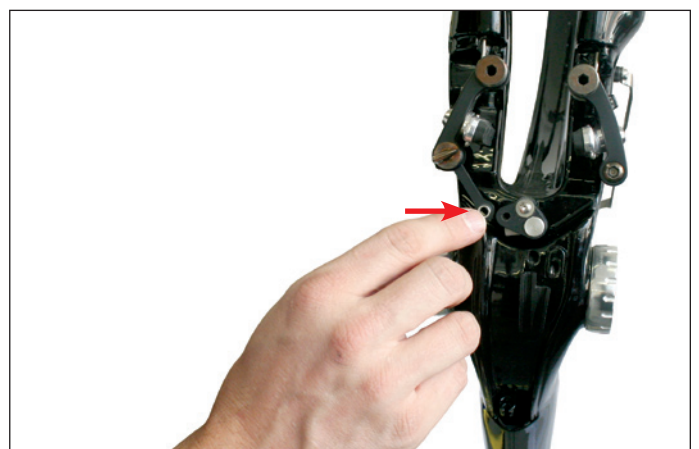


Figure 6

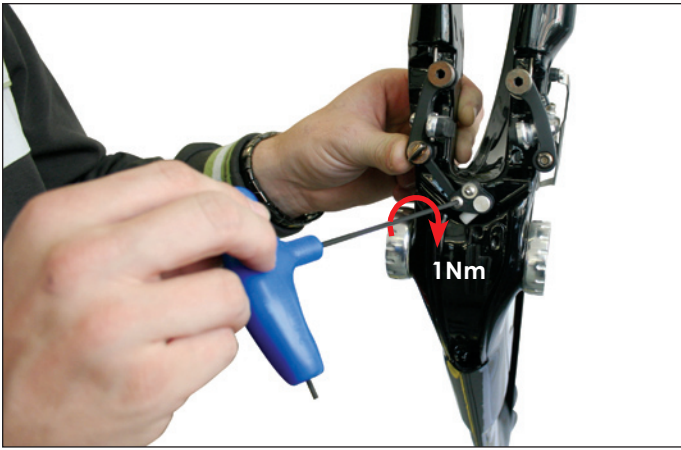


Figure 7



Figure 8

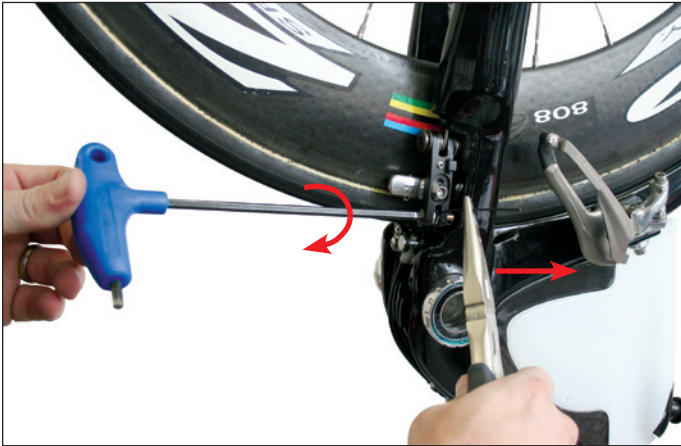


Figure 9



Figure 10



Figure 11



Figure 12

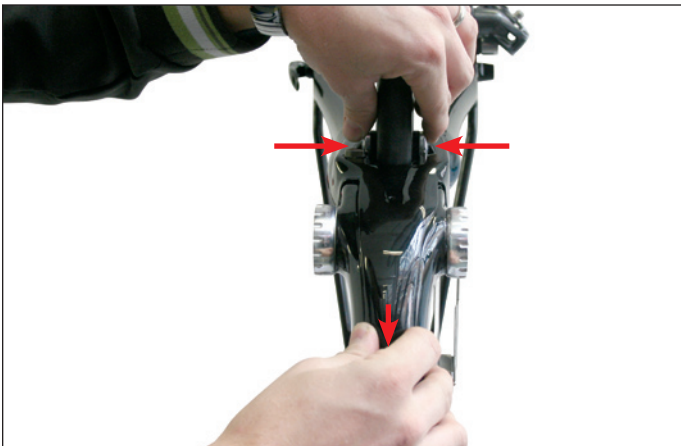


Figure 13