

# P4 CHAINSTAY INTEGRATED ROCKER BRAKE (CSIRB) INSTALLATION

**cervélo**

## TOOLS REQUIRED

- 2, 2.5, 3, 5 mm hex keys
- 8 mm open end wrench
- 9 mm hex socket, deep
- Pliers
- Cable cutters
- Torque wrench

## MATERIALS INCLUDED

- 1 x P4 chainstay integrated rocker brake consisting of:
- 1 x Non-Drive Side Arm assembly (with quick release and link attached)
- 1 x Drive Side Arm Assembly
- 1 x pre-cut 125mm length of flexi cable housing
- 2 x Brake pads (marked L and R)
- 1 x Rocker Pivot Post
- 1 x M4X12mm slave link mounting screw (2.5mm hex drive)
- 1 x Slave Link Sleeve
- 1 x M3X8mm Rocker mounting screw (3mm hex drive)
- 1 x Carbon brake stiffener
- 1 x inline barrel adjuster
- 1 x brake cable
- 1 x brake cable end crimp

## PREPARATION

1. Remove all brake parts from their individual bags.
2. Remove the M5 button head cap screws from the pivot posts in both brake arm assemblies (larger ends) using an M3 hex key and set aside. These are used for mounting the structural cover later.
3. Remove the tape from the threaded end of the pivot posts on both brake arm assemblies. Do not lose the washers on the posts, which will now be loose.
4. Install the left brake pad holder (marked L) on the non-drive side brake arm. The large spherical washer must be next to the pad holder on the inside of the brake arm. The small flat washer and hex cap must be on the outside of the arm. Tighten the hex cap loosely for now to hold the pad in place. (Figure 1)
5. Repeat step 4 with the drive side (R) brake pad holder on the drive side arm.

## PROCESS

1. Use the drop out adjuster screws to adjust the rear tire's distance to the frame and center the rim between the chain stays. Then remove the wheel. This makes the rear brake installation easier.
2. Install rocker pivot post using a deep 9 mm hex socket and torque to 3 Nm. (Note: lube is not needed as the bolts are already coated with thread prep.) (Figure 2)
3. Place the rocker assembly on the rocker pivot post, add the rocker mounting screw and torque to 3 Nm with a 2.5 mm hex key. The rocker should be aligned with the point of the triangle facing rearwards and the empty hole towards the non-drive side. (Figure 2)
4. Install the pivot bolt and drive side brake arm with a 5 mm hex key, ensuring that the spring is seated on the vertical landings on the frame. Also ensure that the lower pivot washer is located concentrically with the step on the bottom of the pivot post. When the pivot bolt is torqued to 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. Repeat with the other brake arm. (Figure 3)
5. Insert the slave link sleeve into the slave link. (Figure 4)
6. Install the slave link screw through the rocker and sleeve. Torque to 1 Nm with a 2.5 mm hex key. (Figure 5)
7. With the drive side crank arm removed, install the rear wheel and adjust brake pads to the braking surfaces on the wheel. Torque the brake pad nuts to 5 Nm with a 5 mm hex key. (Figure 6)
8. Install the upper portion of the P4 cable system as outlined in the "P4 Front Cable Installation Guide", found here: <http://www.cervelo.com/content.aspx?t=Company&i=Manuals>

9. Install the in-line cable adjuster into the rear brake cable about 4 inches (10cm) from the top tube entry hole. Set the in-line cable adjuster to about the middle of its range. Install the rear brake cable in the frame and out the hole near the bottom bracket. (Figure 7)
10. 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.
11. Thread the rear brake cable through the plastic cable housing seat on the rocker assembly, between the two washers and through the hole in the cable clamp bolt on the drive side brake arm.
12. Set the quick release on the non-drive side brake arm to the closed position. The closed position of the quick release is with the thicker end of quick release pointing towards the front of the bike. (Figure 8)
13. Press the brake pads against the wheel and pull the rear brake cable tight with a pair of pliers. Lightly clamp the cable with a 5 mm hex key... (Figure 9-1) ... then hold the cable fixing bolt with an 8 mm open end wrench and tighten the cable fixing bolt to 6 Nm of torque using the 5 mm hex key. (Figure 9-2)
14. Cut the cable and install the cable crimp, then put the cable under the hook and under the spring on drive side brake. Ensure the cable does not contact the crank's chain ring nuts. (Figure 10)
15. Adjust the in-line cable adjuster as required to adjust the brake lever travel.
16. Balance the spring tensions on the drive side and non-drive side brake arms with a 2 mm hex key to ensure that the brake arms are centered over the rim. Squeeze the brake lever a few times between each adjustment. (Figure 11)
17. Install the brake stiffener cover by rotating the quick release handle so it is perpendicular to the wheel. Insert the BB tab of the brake stiffener cover into the hole at the front of the cable trench. (Figure 12) Next fit the brake stiffener cover over the brake arms, squeezing the brake arms together to fit the quick release through the slot in the stiffener. Finally install the two M5 button head screws (removed from the pivot posts in the preparation phase) with a 3 mm hex key and torque to 3 Nm.
18. Close the quick release and squeeze brake lever a few times and inspect the installation to ensure that the brake stiffener cover does not interfere with the brake operation.
19. Install the cranks as usual, and ensure the brake cable does not contact the chain ring nuts.

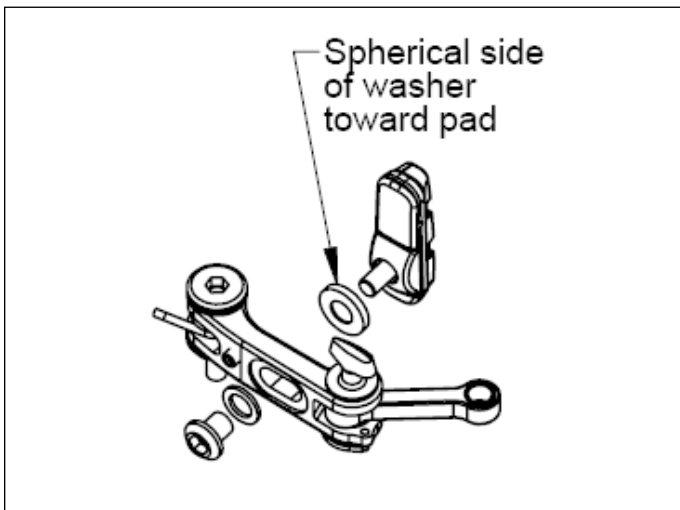


Figure 1

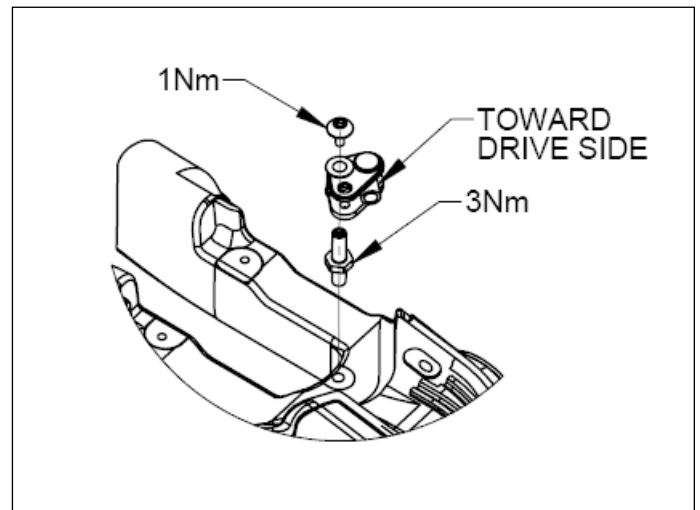


Figure 2

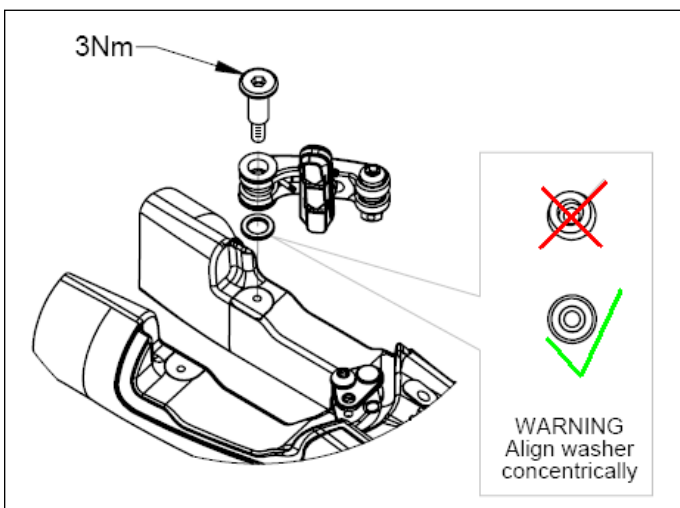


Figure 3



Figure 4

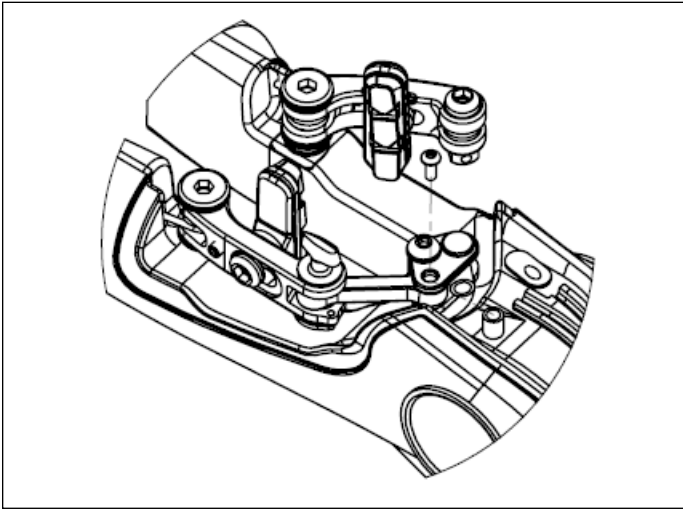


Figure 5



Figure 6

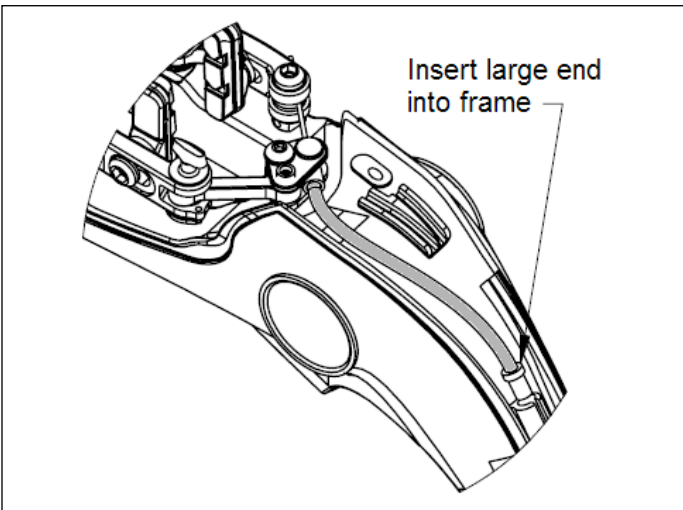


Figure 7

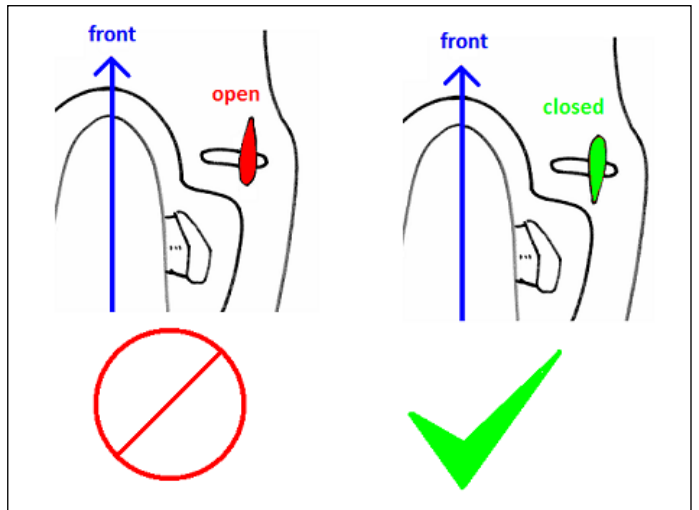


Figure 8



Figure 9-1



Figure 9-2



Figure 10



Figure 11



Figure 12