

# P4 EVO CHAINSTAY INTEGRATED ROCKER BRAKE (CSIRB) INSTALLATION

#### **TOOLS REQUIRED**

- 2, 2.5, 3, 5 mm hex keys
- 8 mm open end wrench
- 9 mm deep hex socket
- Pliers or cable pulling device
- Cable cutters
- · Torque wrench
- · Small flathead screwdriver

### **MATERIALS INCLUDED**

- 1 x P4 Evo chainstay integrated rocker brake consisting of:
  - 1 x Non-drive side arm assembly (with quick release attached)
  - 1 x Drive side arm assembly (with link attached)
  - 1 x pre-cut 130 mm length of flexi cable housing
  - 2 x Brake pads (marked L and R)
  - 1 x Rocker pivot post
  - 1 x M4X12 mm slave link mounting screw (2.5 mm hex drive)
  - 1 x Slave link sleeve
  - 1 x M3X8 mm rocker mounting screw (3 mm hex drive)
- 1 x Carbon brake stiffener
- 1 x Jagwire Rocket barrel adjuster
- · 1 x Brake cable
- 1 x Brake cable end crimp
- · Rear race wheel
- · Rear training wheel

## **IDENTIFICATION**

P4 brakes can be identified by the serial number located on the non-drive side arm. All P4 Evo brakes have a serial number of CS611XXXX or higher.

## **PREPARATION**

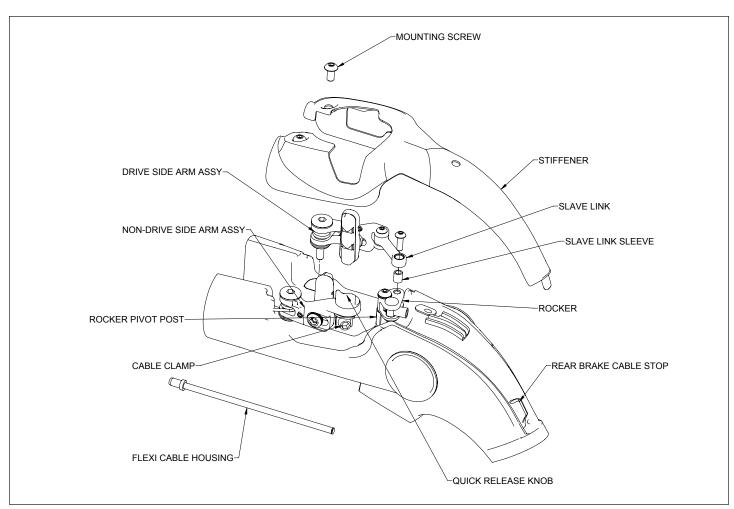
- 1. Remove all brake parts from their individual packages.
- 2. Remove the M5 button head cap screws from the pivot posts in both brake arm assemblies (larger ends) using an M3 hex key; set aside. These are used for mounting the structural cover later in the assembly.
- 3. Remove the tape from the threaded end of the pivot posts on both brake arm assemblies.
- 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 enough 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.

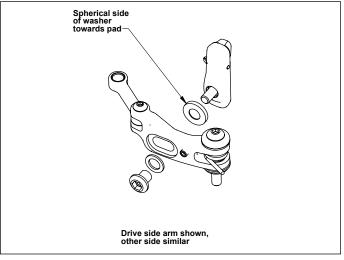
#### **PROCESS**

- 1. Ensure both wheels are true and properly dished.
- 2. Of the two wheels, select the wheel that has the largest diameter to the edge of the tire.
- 3. Using the drop out screws, adjust the distance of the rear tire to the seat tube. The optimal position will centre the wheel between the chain stays and have the tire as close to the seat tube as possible without touching. Once the position of the drop out screws has been set, remove the wheel for brake installation.
- 4. Remove crank arms from the bike.
- 5. Using a deep 9 mm hex socket, install rocker pivot post; torque to 3 Nm. (Figure 2)
  - Note: Lube is not needed as the bolts are already coated with thread prep.
- 6. 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 the rear and the cable stop facing the non-drive side. (Figure 2)
  - Note: Do not lube the rocker pivot post. Lube will attract dirt and increase friction. The plastic bushings on the rocker assembly are self lubricating.
- 7. With a 5 mm hex key, install the pivot bolt and drive side brake arm. Ensure that the spring is seated on the vertical landings of the chain stay and that the

lower pivot washer fits around the bottom of the pivot post. The natural tendency will be for the washer to get pinched off center. Using a flathead screwdriver, push the washer until it is no longer pinched. When this is done, torque the pivot bolt 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)

- 8. Insert the slave link sleeve into the slave link. (Figure 4)
- 9. Install the slave link screw through the rocker and sleeve. Torque to 1 Nm with a 2.5 mm hex key. (Figure 5)
- 10. Install each rear wheel and adjust the brake pads to the braking surfaces on each wheel. Torque the brake pad nuts to 5 Nm with a 5 mm hex key.
- 11. Reinstall the wheel that has the widest rim at the braking surface.
- 12. Install the Jagwire Rocket cable adjuster into the rearmost ICS-3 top tube entry hole. Install the rear brake cable in the frame through the cable adjuster and out the hole at the bottom bracket.
- 13. Install the flexi brake housing over the rear brake cable where it exits the frame; position it in the rear brake cable BB cable stop.
- 14. Thread the rear brake cable through the plastic cable housing seat on the rocker assembly(between the flat washer and the cable clamp on the non-drive side brake arm).
- 15. 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 arrow pointing towards the front of the bike.
- 16. Press the brake pads against the wheel and pull the rear brake cable tight with a pair of pliers or a cable pulling tool.
- 17. Tighten the cable fixing bolt to 6 Nm of torque using the 5 mm hex key.
- 18. Cut the cable and install cable crimp. Tuck the excess cable around the brake post.
- 19. Squeeze the brake to take up the slack in the brake line. Tighten the Jagwire Rocket barrel adjuster to the desired brake lever travel.
- 20. Balance the spring tension 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.
- 21. Insert the front tab of the carbon brake stiffener into the hole at the down tube.
- 22. Fit the brake stiffener cover over the brake arms; squeeze the brake arms together if necessary.
- 23. Install the two M5 button head bolts (removed from the pivot posts in the preparation phase) with a 3 mm hex key and torque to 3 Nm.
- 24. Close the quick release and squeeze brake lever a few times; inspect the installation to ensure that the brake stiffener cover does not interfere with the brake operation.
- 25. Install the cranks as usual; ensure the brake cable does not contact the chain ring nuts.





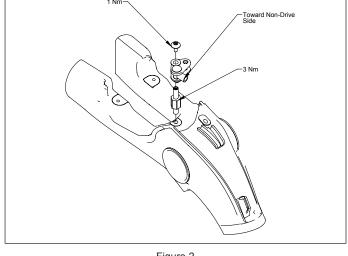
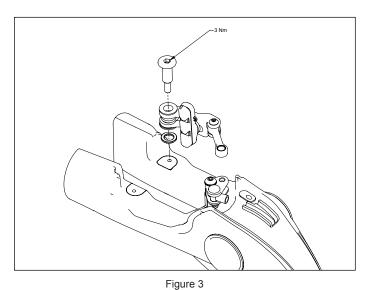


Figure 1 Figure 2



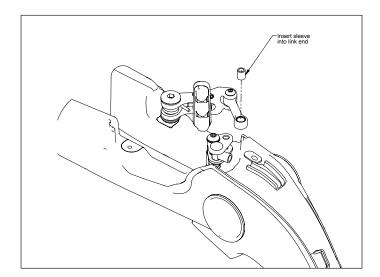


Figure 4

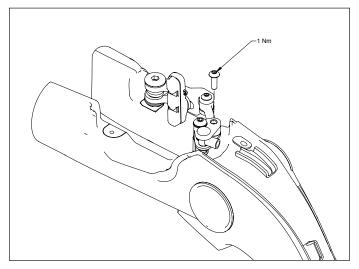


Figure 5