

### Made in USA

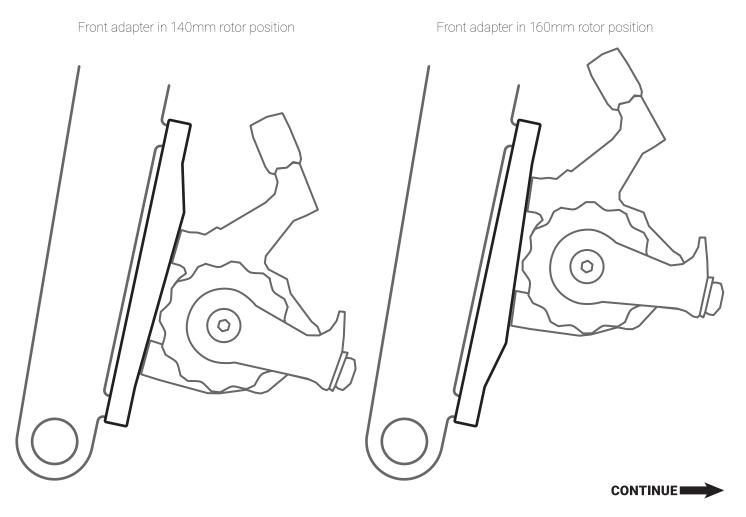
## NICE PARTS SINCE 1989

# Thank you for purchasing the PAUL Component Engineering Flat Mount Klamper Disc Brake Caliper!

Make sure to follow these instructions for safe effective performance. Failure to do so could result in serious injury. We highly recommend installation by a qualified bicycle mechanic.

## FLAT MOUNT KLAMPER SETUP INSTRUCTIONS

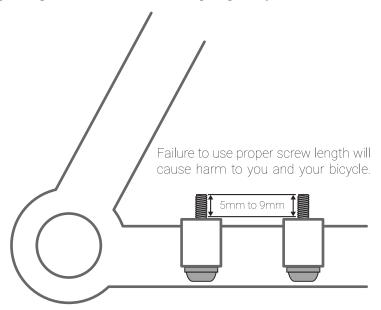
- 1. Install the disc rotor to the hub. We do not make or sell rotors.
- 2. Install the pads in the caliper. First remove the pad retention screw. Then place the pad spreader around the friction material on each pad and insert all three into the caliper. Reinstall the pad retention screw making sure it goes through the holes in both pads and the pad spreader. *Note: The grey colored material goes towards the rotor.*
- **3a.** Front brake: Attach the reversible 140/160 front adaptor to the brake. This will need to be purchased separately. Now attach the brake to the fork tightening the attachment screws finger tight only. *Note: front brake adaptor kits are available from Paul Component Engineering.*



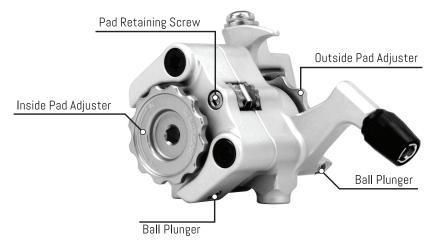
#### **WARNING:**

Remember: All bicycle disc brakes need a break in period to "bed" in the pads. We've found the best way to do this is to go on a couple of short, easy rides. Don't do any steep hills or routes that require extensive braking until your pads are bedded.

**3b.** Rear brake: First, you will need to determine the length of attaching screws your frame will require. Unfortunately there is wide variation on this frame to frame. The protruding length of thread **MUST** fall between 5mm and 9mm. See picture below for clarification. **Note:** Rear mounting screw kits in various lengths are available from Paul Component Engineering. Now attach the brake to the frame, tightening the attachment screws finger tight only.



- 4. Check that the caliper is roughly centered with equal distance on either side between the rotor and the brake pads.
- **5.** Tighten the pad adjusters until the pads contact the rotor. (Your pad adjusters should come assembled such that they can be turned by hand but will not move during a ride. If you find this is not the case turn the ball plunger screw 1/8th of a turn to either add or reduce the tension keeping the adjusters in place) . **Tighten the mounting screws to 5.5Nm using a T25 wrench.**
- **6.** Install your cables and housing. Be sure both are clean and free of burrs. Be sure to sand/grind/file the housing ends so they are flat and burr free. Make sure the cable exits the housing without dragging on a burr. Use a high-quality lube inside the housing. **Torque the cable clamp screw to 5.5Nm.**
- 7. Use the barrel adjuster to remove any slack in the cable.
- 8. Back off the inside pad adjuster 2 notches.
- 9. Back off the outside pad adjuster until there is 1 inch of throw in the actuating arm.
- **10.** Check to make sure all screws are tightened to their correct torque spec and take a spin. Remember the Klampers will require a couple of good rides to break in the mechanism and bed the pads. It is important to bed the pads before riding down any steep hills. You will notice a considerable increase in power once this happens. Adjust pads as necessary.



**Notes on return spring pressure:** The farther the outside adjuster is screwed in the higher the spring pressure. This may require you to reposition the caliper in its mounting slots. We also use a lot of grease in the mechanism to ensure a long life as well as machine all the parts to very tight tolerances. If you feel your return pressure is not strong enough go for a ride. Seriously. The use will break-in or "lap" the parts together as well as displace any grease that may be causing drag