

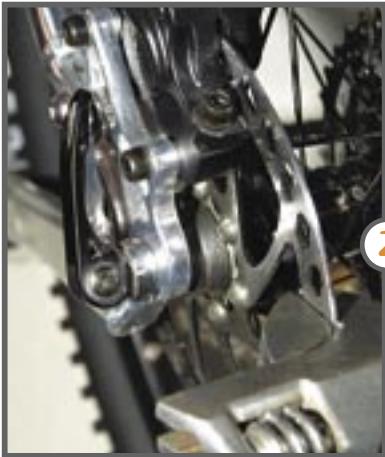
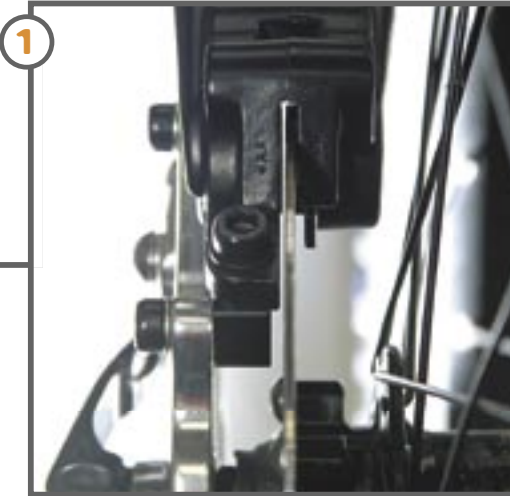
THE RUB ON DISC BRAKES

Probably the most common complaint with disc brakes is that they sometimes drag or rub. This can usually be traced to a few different causes; misalignment of the caliper/rotor, sticking pistons, or the master cylinder/caliper being reset too

much can all contribute to that annoying rubbing noise that threatens to drive you insane out on the trail. We've listed some of the possible causes and how to correct them, but if in doubt get in to your local bike shop for a proper service.

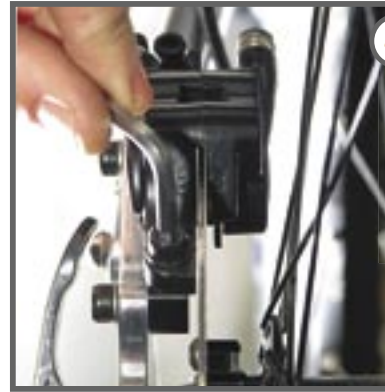
1 caliper not centred

In this photo you can clearly see the caliper is not centred over the disc as the right pad is in contact with the rotor. In extreme cases the rotor can rub the caliper body causing expensive damage. However spin the wheel first, you may find that the rotor is not running true.



2 straightening the disc If your rotor is not running true it is possible to get it straight using a large crescent to bend it. Patience and caution are the keywords when using this technique and "a little goes a long way" should be your motto.

3 resetting the pads If your brake pads are worn and the lever comes in toward the grip too far, reset the master cylinder/caliper by pulling the brake lever once whilst the wheel is out of the bike. Now check the gap between the pads, if the disc can't quite fit between them insert a flat, clean blade and gently prise them apart until the disc just fits in without rubbing. This method can also correct accidental resetting when the wheels are out of the bike and the lever is depressed. (Note – this applies to hydraulic brakes only.)



4 hayes caliper mount If your bike has the Hayes/Manitou type post mount it is easier to set the caliper evenly over the rotor. There are two ways to align the caliper: if the pads are new, loosen the two securing Allen bolts, hold the brake on then retighten the bolts. If the pads are worn unevenly, it is best to align the caliper visually by ensuring you can see daylight either side of the rotor. The brakes may lack a little power whilst the pads wear in to their new setting.

5 shimming the caliper If your bike has an international mount the caliper will often need shimming to position it correctly over the rotor. Super thin shimming washers allow you to make small adjustments in order to centre the caliper over the rotor.



6 what it should look like When your caliper is centred you will see a small amount of daylight between the pads and disc rotor on both sides, hopefully giving drag-free performance!



7 spot facing the mounts

Sometimes the mounting brackets can have excess paint on them or they're misaligned from the factory – if this is the case they will need spot facing with a special tool. This will allow a clean, smooth and square surface to mount the caliper. If you've tried correcting your disc rub without success and suspect that your caliper mounts are not square then you can get the mounts faced by your local bike shop.



when all else fails Every brand of brake has its idiosyncracies, some worse than others. One common problem is sticky pistons causing pad rubbing and wear. It is fairly tricky to get in and clean the surface of the pistons where the grunge builds up and pad contamination can easily occur from cleaning fluid residue. Check with your local workshop if this is occurring as sometimes the caliper will require an overhaul.

Another common complaint is squealing or squawking brakes. There can be one contributing factor or a combination of several. Pad contamination, pad compound, and misalignment can all cause your brakes to squeal. Ensure they're aligned properly first. Cleaning the pads and disc rotor with a product such as White Lightening Clean Streak, Brakleen or isopropyl alcohol can remove contamination and as a last resort try a different compound or brand of brake pad.

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