

Disc Brake Bedding In and Maintenance Guide – A Helpful Guide

Disc brakes are a relatively complex piece of equipment and need special attention to ensure they perform well throughout their life. This guide will help you bed your brake(s) in correctly, providing good performance as quickly as possible, and give tips about how to keep them working well.

The "golden rules" of disc brakes:

1. They take time to bed in - do not expect them to work perfectly 'out of the box'. Disc brakes work on a different principle to rim brakes with a ground rim. The rotor surface 'burnishes' with use and only once it is perfectly shiny, like a mirror, will it give the best performance. During manufacture, rotors are ground and sanded to make sure they are flat and an even thickness, which produces a slightly textured surface. The bedding in process is what scrubs the rotor surface to remove the brushed texture - more on that in a moment.
2. Do not allow any oils or other contaminants to come into contact with the rotor or pads. It goes without saying that you shouldn't get spray lubricants or chain oil on the brake components, but what most people don't realise is that this includes 'disc brake safe' bike cleaners and even your fingers. Touching the rotor with your hands will transfer oils from your skin, and the residue left over from cleaning products will contaminate the pads and rotor too. They are ok on mountain bikes because the higher speeds produce higher brake temperatures which do burn off contaminants, but trials bike brakes are ruined by these cleaners because they never get hot enough.
3. Once the brake is set up, don't mess with it. The pads should be set parallel to the rotor, an equal distance from the rotor and the rotor straight. When pulling the brake lever slowly, the rotor should not visibly bend, twist or move to the side. Once the brake has been set up then there is no reason to change this unless you need to remove the brake for some reason. Disc brakes like to have consistency because of the way the pads and rotor bed in together. Every time you adjust the setup the brake has to bed in again, which takes a long time because the pads have to wear at a different angle, and during this time the brake will not work as well as it should.
4. If you contaminate the brake, you need to change the pads AND rotor. If the brake gets contaminated, both the pads and rotor get dirty because they are constantly rubbing against each other. Changing just the pads or just the rotor will mean the existing part immediately contaminates the new part, and you are back to square one. We understand the temptation is to try and do the job as cheaply as possible, but you will end up spending more in the long run by double-buying one of the parts! On this note, if you have purchased just a new rotor, or a new brake, please ensure any existing items are free from contaminants before fitting your new parts.

How to bed in a disc brake:

Searching the internet will reveal many different suggestions, but here is how we do it. It does the job every time and will make your brake function well enough for trials use within 15 minutes or so.

- If you have just a **new brake, or new brake pads, and are using an existing rotor**, follow step 2 a few times without wetting the disc.
 - If you have a **new rotor and new brake pads**, follow all 6 steps below for best performance and fastest bedding in. You can let the brake bed in naturally without following this procedure, but it will take a lot longer.
1. Pour plenty of cold, fresh, clean water on the disc rotor. The whole braking surface needs to be wet.
 2. Ride the bike around at fast walking pace, pulsing the brake on for around a second, then off for the same amount of time, with medium lever pressure. At this point it may start to make a slight grating or scrubbing noise - don't worry, this is normal.
 3. As the rotor starts to dry up you will notice a grey-ish paste on the rotor surface. This is the top layer of the brake pads wearing off and combining with the water and top layer of the brake rotor. It is this paste which helps the burnishing process, scrubbing the brushing marks off the rotor and making it shiny.
 4. Don't let the brake dry up completely at this stage, so apply more water and repeat the whole process 4 or 5 times.
 5. Take a close look at the braking surface and you will see that it is now more shiny than the rest of the rotor. Only once the braking surface is completely shiny, with no brushing marks visible, is the brake fully bedded in. This can take many months however, so there's no need to go that far. Just get most of the brushing marks scrubbed off and the brake will work well.
 6. Keep riding around pulsing the brake and let it dry up on the final time. You should then be ready to ride!

Should you have any questions about any of the above then please don't hesitate to contact us. We have years of experience with disc brake use on trials bikes and are very happy to pass this knowledge on to you! Thanks again for your purchase.