

Maintenance of DIA COMPE Roller Brakes

How does it work?

A roller brake consists out of two parts: the metal core and the brake case with metal brake shoes. The core is made out of hard metal and is robust enough to last forever. The Aluminium disc acts as a heat sink.



The brake shoes or fingers are tighten around the core by pulling the brake lever. As the core turns the brake shoes are getting dragged closer to the core, this means the brake is actually self-tightening.

For the same reason a Roller Brake works directional. No brake force can be produced when turning the wheel backwards.



Roller Brake Greasing Interval

Basic Greasing Interval (depending on circumstances) is every 2 Years or 5000km, with underneath exceptions:

- In hilly area and/or intensive usage, maintenance should be done every 6 months
- In case the Roller Brake is making noise during braking and/or braking force feels too strong additional maintenance should be done

Note: During greasing/maintenance always check good function of inner & outer cable used for the brake.

Re-greasing procedure

Re-lubricate your Roller Brake, using special brake grease (Hi-temp grease) - there's a screw at the top of the brake unit. You take the screw out, put the nozzle of the grease tube up against it, and squeeze. The typical amount of grease required is about 5ml. Do not



over-grease the brake as it will reduce the brake force. A grease gun with a short nozzle will not do the job well, because it does not fit into the small screw hole. We suggest to use a syringe to inject grease inside of the brake case.

Further service options

Mechanics who regularly service Roller Brakes recommend adding grease before first use, and partially disassembling the brake during periodic service to clean out the old grease. Internal drag can increase markedly as the grease becomes contaminated. The life cycle of a brake goes something like this: add small amount of grease (pea size amount) in addition to factory grease when installing a new brake. After some months, the grease is washed away by rain. The brake is now dry and has poor or non-existent modulation which locks the wheel with the slightest pressure on the lever. It will usually also create a high pitch squeaking noise. If it is being ridden dry for weeks, the drum and/or shoes are damaged beyond repair as they will start to rust. Re-greasing at this point can bring the brake modulation back to normal levels temporarily, but the brake will lose all stopping power within a few weeks or months depending on how much it is ridden.

How to service a Roller Brake when completely dry

Remove the rear wheel and the outer case of the Roller Brake. Clean out old grease with solvent and pack it with high-temperature grease before reassembling.

As the shoes of a Roller Brake wear, slack in the cable will increase, as with other brakes.

Readjust the cable using the adjusting barrel, and as necessary, by pulling more cable through the anchor bolt. The brake is worn out when the cable cannot be adjusted to apply the brake fully, or will not retract.

If a Roller Brake is worn out, the entire main assembly must be replaced.

Recommended grease options

Shimano Roller Brake grease

Volto Diacompe Grease (50g syringe)