



#GPS #FINDVICTORY

StopTech Racing Caliper Rebuild Procedure

TOOLS AND SUPPLIES REQUIRED

- Clean cloth
- StopTech caliper assembly fluid – Part # **HB-03002**
- Pick set
- Compressed air w/blow gun
- Gorsuch Performance Caliper Rebuild Station – optional, but recommended
 - Part # **HG-13013** (for C42 calipers) or # **HG-13014** (for C43 calipers)
- Gorsuch Performance Pad Spacer Block – recommended
 - Part # **HG-13015**

Notes:

This guide is designed to help you rebuild or freshen your high performance StopTech Racing calipers. Periodic rebuilding will ensure your calipers operate at their highest potential, can reduce brake drag, and can lead to lower brake temperatures. Take extra care in regards to cleanliness when rebuilding your calipers as they are a high-pressure system and sensitive to dirt/debris/contaminants.

*Want to see a video on how to rebuild a caliper?
Search Gorsuch Performance Solutions on YouTube!*

Disassembly

1. Secure your Gorsuch Performance Solutions (GPS) caliper rebuild station in a bench vice or clamp to a workbench/table.
2. Remove the brake pads from the caliper.
3. Remove the brake fluid inlet fitting from the caliper, but leave the bleed screw in place.
4. Place the caliper onto the GPS caliper rebuild station.
5. Place a pad spacer block into the brake pad cavity – this lets the pistons extend out of their bore once the caliper is pressurized, but not so far that pressure cannot be built behind the pistons. Suggested width is ~.700". GPS offers a plastic block that is the correct width via part number **HG-13015**.
6. Using an air blow gun with compressed air, slowly add air pressure to the inlet port on the caliper. **DO NOT put your fingers near the pistons as they can pop out of their bore with considerable force.**
 - a. This will cause the pistons to pop out of their bore and up against the pad spacer block that was previously put in place.
7. Once the pistons are slightly popped out, remove the spacer block, use a rag for grip and slowly twist/pull each piston until they are removed from the caliper.
8. If one of the pistons is sticking and won't seem to pop out but some of them did, you may remove the seals from the bores of the pistons that did come out. Then, re-install the pistons into the caliper bores

without seals, then clamp them in place with small clamps. This will keep them from moving as you add additional air pressure to build more pressure to pop the sticky piston out. Once the stuck piston is removed, the other pistons are easy to remove by hand without seals.

9. Wipe each piston down with a rag and closely inspect each piston for any nicks, dings, burrs, or other damage. If there is damage, the piston should be replaced.
10. If there is grime stuck to the pistons, using soap/water or a mild solvent can help remove it along with a Scotchbrite pad – however we are not looking to scratch the piston in any way so use care.
11. Using a pick, carefully remove each pressure seal from the piston bore on the caliper.
 - a. Ensure you do not scratch behind the seal or anywhere in the piston bore with the pick – this can cause a fluid leak under pressure.
12. Thoroughly clean and inspect each piston bore in the caliper to ensure it is free of dirt or contaminants.
13. Measure the outside diameter of the pistons and verify the seals to be installed are correct for this application as seals cannot be returned once installed. Standard pistons typically have the piston O.D. in MM marked on the inside of the piston. (IE “34” is a 34MM piston)

Reassembly

1. Add StopTech assembly fluid to all surfaces of each new seal.
2. Using a finger, lather assembly fluid inside each caliper piston bore.
3. Install a new pressure seal into the piston bores – the seal can be put into place by hand and should pop into a machined groove in each caliper piston bore.
4. Place assembly fluid onto each piston and lather it onto all surfaces.
5. Slowly fit each piston into its respective caliper bore. Ensure you are placing the correct diameter piston in the correct bore on the caliper as there are normally two sizes of pistons per caliper – (2) small, (2) larger.
6. Do not force the pistons past the seal, but slowly push/wiggle the piston as it encounters the seal and it should slowly compress into the caliper. You may need to rock the piston from side to side slightly to help work it past the seal.
7. Re-install your caliper inlet fitting.
8. Always be sure to test the rebuilt brake system to ensure they are operating properly in a safe environment.
9. Go Race, and Win!

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