

Rebuilding a Norton-Lockheed Caliper

In the decades as a Norton parts man I have seen many a caliper body butchered by amateurs and self-appointed „specialists“.

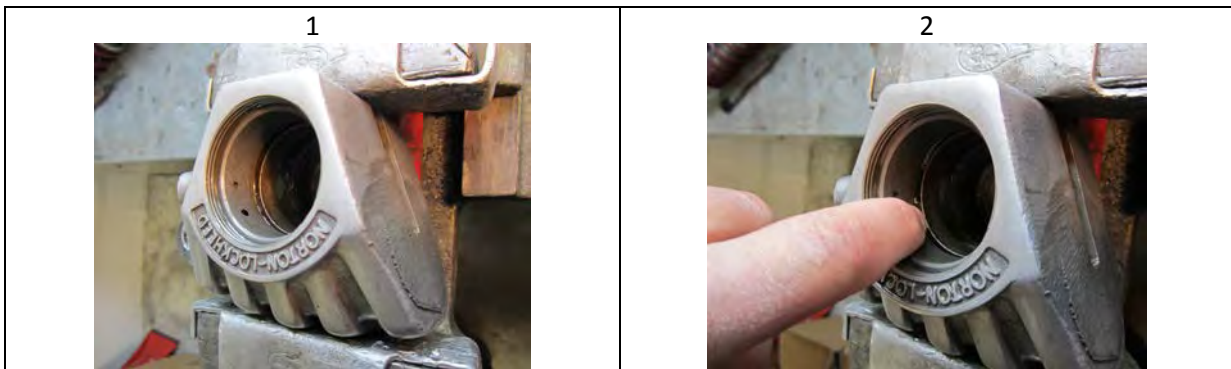
Rebuilding the Norton caliper is not as easy as others because the inner piston sits in a blind hole. When calipers have been unused or badly maintained these pistons- originally steel with a chromed surface- corrode and get stuck.

The bodgers common answer is to drill a hole through the rear wall of the caliper, tap it, and then screw a bolt through it thus pressing the stuck piston out. At one time I had about half a dozen butchered caliper bodies from a dealer's inventory I bought which I then got welded up, pressure-checked, polished over and then rebuilt.

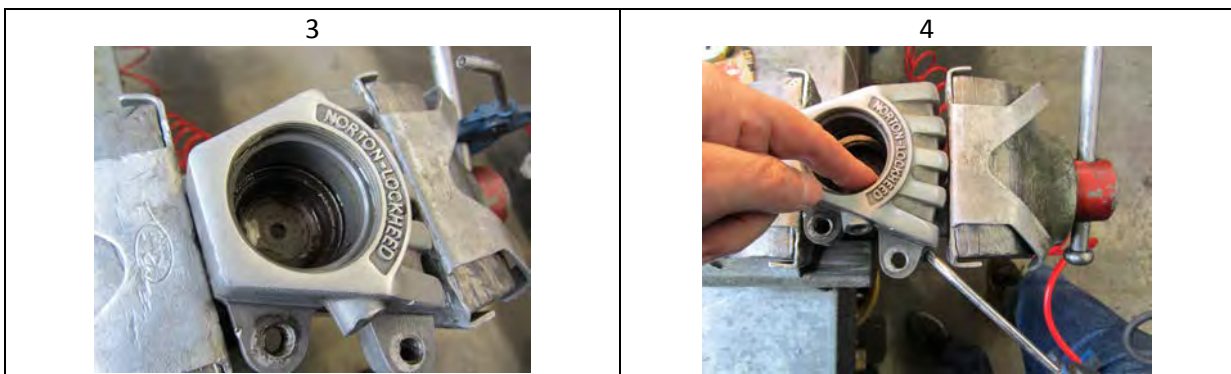
Rebuilding a caliper for a friend I took the opportunity to show how I do it. Prerequisite is a vice and peg spanner 06-3965. I put the caliper in the vice, heat it up (important!) so the aluminium body expands more than the steel caliper end plug, and unscrew the end plug. The outer piston can now be levered out through the slot in the body for brake pads and disc.



Now comes the tricky bit- getting the inner piston out. It sits deeply in the caliper body with no way to mechanically get it out you can see two holes under the name "Lockheed" (1).



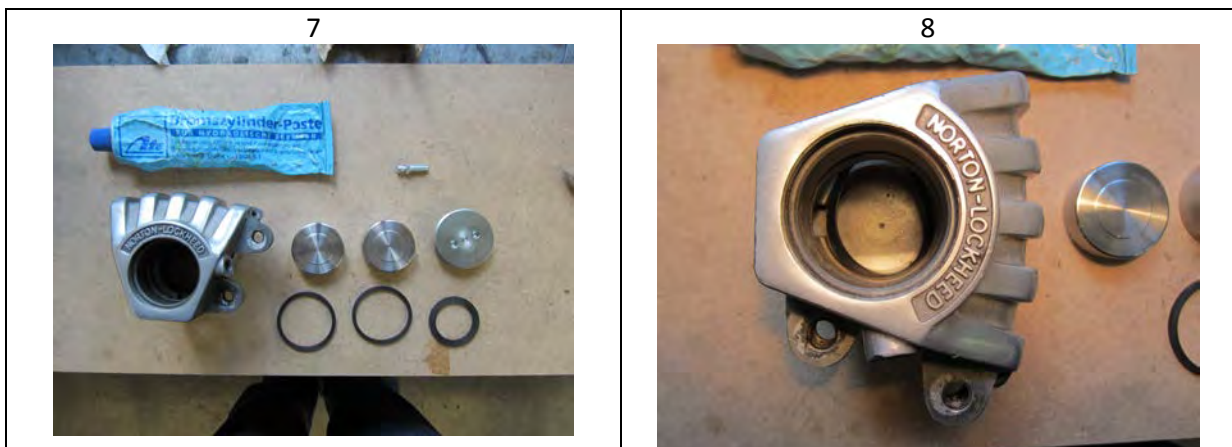
I block one hole by pressing my finger on it thus blocking the air I will shortly press into the hole for the caliper bleed screw (4). Picture 3 shows the state of the caliper piston that is stuck AFTER cleaning the assembly.



I have yet to experience a caliper piston that resists the pressure of our air hose fed by a small compressor that is normally used for cleaning parts or pumping up tires. In this as in all other cases the piston- though after longer than usual resistance- came out (5). The parts laid out show you the sorry state of the components (6).



I now clean the body thoroughly before I lay out the new components on paper- new pistons (06-1896), new caliper seal kit (06-4243), new end plug (06-2185) and new bleed screw (06-1929) (7). I also have some brake cylinder grease which I then apply to seals and pistons. First step is to put the rear piston seal in and apply grease to seal and piston (8).



As soon as the rear piston is pressed home I put the front piston in **BUT NOT THE SEAL** yet.



The front seal will be butchered by the sharp open lip of the caliper piston. Hence always put the pistons into the seals with the closed end first, which means the outer piston must be put into the body first, then the seal (11), and then be levered into the seal from the middle of the caliper (12).



Now the new end plug gets its seal and is screwed home with tool 06-3965 (13), the bleed screw fitted, and the caliper should now be as good as new and can be put back on the bike (14).

