
Brake Caliper Rebuild by Greg Gorniak

Just when I thought I had all my work done on the Red Vette this spring I noticed one of my front brake calipers was leaking. Just what you want to see when the weather was warming up and the rain was not making its daily appearance.

Well have no fear; the fix is not that bad. The problem is that one or more of the brake pistons is leaking. My brakes had the ever popular conversion to stainless steel cylinders done over 8 years ago so the calipers did not need to be swapped out but just rebuilt. If you still have the non converted type the procedure should work for you as long as the cylinders walls are not too far gone. The pictures and procedure are for a 1965, but apply to all early style C2 and C3 disc brakes.

First thing that must be done is to remove the offending caliper. In other words get the car off the ground, the wheel (s) off, and the caliper removed from axle. You will have to disconnect the brake line that attaches to the back of the caliper. You will not be able to unscrew it from the back of the brake but must remove it first from the steel line that enters the wheel well. Once it is disconnected from the steel line you can now unscrew the brake hose from the back of the caliper. Be careful not to round off the nut that attaches it to the steel brake line. Plug the line or use a drip pan to catch the fluid that will run from the lines. If it is old or has never been off you might consider replacing it with a new rubber line.

Remove the pin that runs through

the disk pads, compress the pistons (fluid will squirt from the back of the caliper) and remove the disc pads. Unbolt the caliper from the wheel. The caliper is now off the car and can be split by removing the 2 bolts that hold the halves together



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When you split the calipers the only thing to watch for is an O-ring that seals the fluid passage between the halves. The O-ring may be discarded as it will be replaced with a new one. Just note its location and fit. You may now continue with disassembly or clean the split caliper.

Next step is to remove the pistons. Pry the rubber boots from the cylinder bore.



Now work the piston out of the bore. Be careful not to damage the cylinder walls.



Inside will be a spring, save it, they are not normally in a rebuild kit Repeat the disassembly for the remaining pistons. If you haven't cleaned the calipers do so now. Mineral sprits will work fine.

Next step is to inspect the bores. Look for pitting or scratches. If stainless steel, chances are things should look fine and may not need to be honed.



If you are unsure of or have pitting ,use a brake hone to dress the cylinder.



Use a lubricant (brake fluid is ok) and do not hone any more than you need. Keep the hone moving to keep things even. After honing is complete, clean the bores one more time and blow out with compressed air.

Re assembly is in reverse order. Start by replacing the O-ring on the piston.



Place the spring in the piston.



Lube the O-ring with brake fluid and work it back in the bore. Start by angling the piston in the bore and working it with an awl or similar tool. Be careful not to pinch the ring. Work it in. Do not force it.



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Once the piston is evenly in the bore, replace the rubber boot and make sure it is fully set in the groove.



You may need to lightly tap the boot flush with the caliper housing.

Repeat this procedure for the remaining pistons. Take your time,

do not force things.

Now replace the O-ring and bolt the caliper back together. Reattach the caliper to the wheel, install brake pads, attach brake hose and bleed the brakes.

You are now done!