

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Brakes**

2. **Disc Brakes**

3. **Repair Instructions**

- 4.

Front Brake Caliper Overhaul

Warning:

Refer to Brake Fluid Irritant Warning

Caution:

Refer to Brake Fluid Effects on Paint and Electrical Components Caution

Caution:

This brake caliper is coated with a specialized paint. Use care when handling and servicing to ensure the paint does not get chipped or scratched. Clean any brake fluid from painted surfaces with denatured alcohol, or equivalent, as soon as possible.

Note:

- Replace all the components included in the repair kits used to service this brake caliper.
- Lubricate the rubber parts with GM approved brake fluid from a clean, sealed brake fluid container.
- If any hydraulic component is removed or disconnected, it may be necessary to bleed all or part of the brake system.
- The torque values specified are for dry, non-lubricated fasteners.
- Perform the service operations on a clean bench, free from all mineral oil materials.

Disassembly Procedure

Warning:

Do not place fingers in front of the caliper piston(s) in an attempt to catch or protect it when applying compressed air. The piston(s) can fly out with force and could result in serious bodily injury.

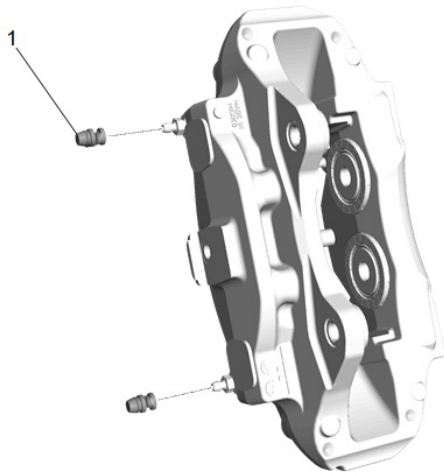
Caution:

Use clean cloths to pad interior of caliper housing during piston removal. Use just enough air to ease the pistons out of the bores. If the pistons are blown out, even with the padding provided, it may be damaged.

Note:

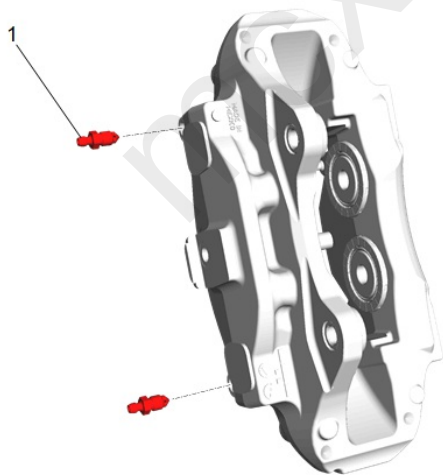
It will be necessary to fabricate one or more blocks of wood to the following dimensions to be used during this procedure:

- Must fabricate 1 block: 19 mm ($\frac{3}{4}$ in) X 72 mm (3 in) X 72 mm (3 in)
 - Optional to fabricate 1 block, rather than using an old brake pad: 19 mm ($\frac{3}{4}$ in) X 72 mm (3 in) X 131 mm (5 in)
 - Optional to fabricate 1 block to cushion piston removal: 19 mm ($\frac{3}{4}$ in) X 72 mm (3 in) X 131 mm (5 in)
1. Remove the brake caliper from the vehicle. Front Brake Caliper Replacement
 2. Drain and properly dispose the brake fluid from the brake caliper.
 3. Place the caliper in a vise using plastic vise caps or suitable material to protect the caliper mounting bosses from the vise jaws.



4.
[Click here for full size](#)

5. Remove the brake caliper bleeder caps (1).

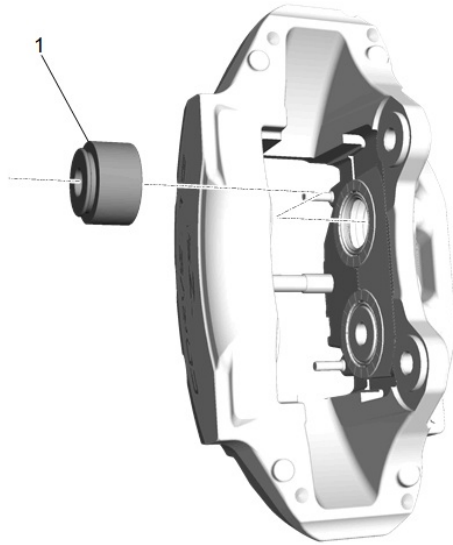


6.
[Click here for full size](#)

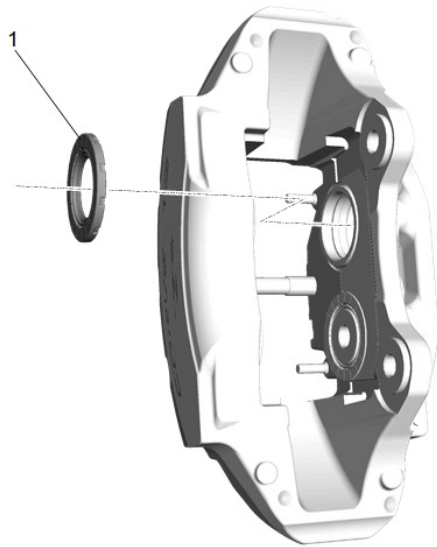
7. Remove the brake caliper bleeders (1).

8. Place a discarded brake pad or the fabricated 131 mm (5 in) long block of wood over 2 adjoining caliper piston bores and secure in place with a non-marring C-clamp.

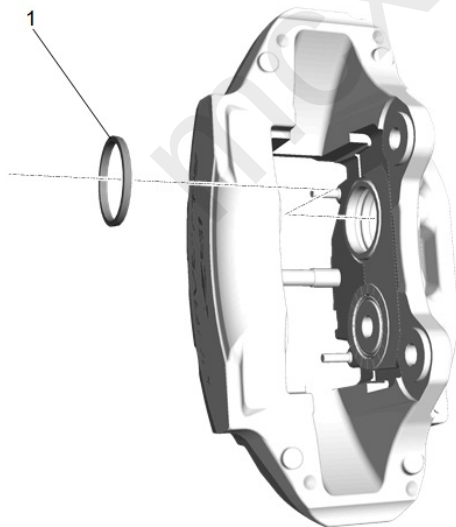
9. Place the fabricated 72 mm (3 in) long block of wood over one of the opposing caliper piston bores and secure it in place with a non-marring C-clamp.
10. Use clean cloths or the other fabricated 131 mm (5 in) long block of wood to cushion the interior of caliper housing during removal of the caliper piston.



11. [Click here for full size](#)
12. Carefully remove the brake caliper piston (1) by directing low pressure compressed air into the brake hose fitting inlet.
13. Move the fabricated 72 mm (3 in) long block of wood over the emptied caliper piston bore and secure it in place with a non-marring C-clamp.
14. Move the clean cloths or the other fabricated 131 mm (5 in) long block of wood to cushion the interior of caliper housing during the removal of the piston.
15. Carefully remove the brake caliper piston by directing low pressure compressed air into the brake hose fitting inlet.



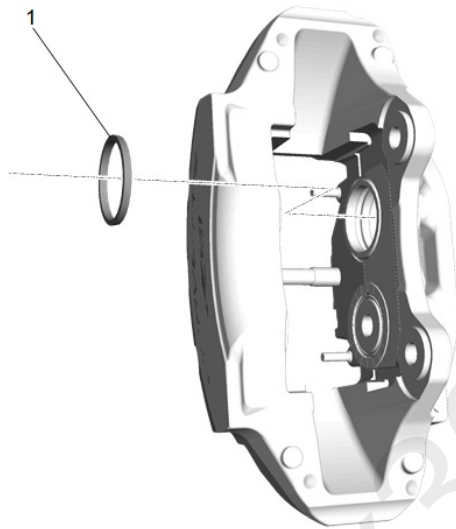
16. [Click here for full size](#)
17. Using care to not scratch or mar the painted surfaces or piston bore, remove the dust boot seal (1) using a flat-bladed tool. Discard the front brake caliper piston boot.



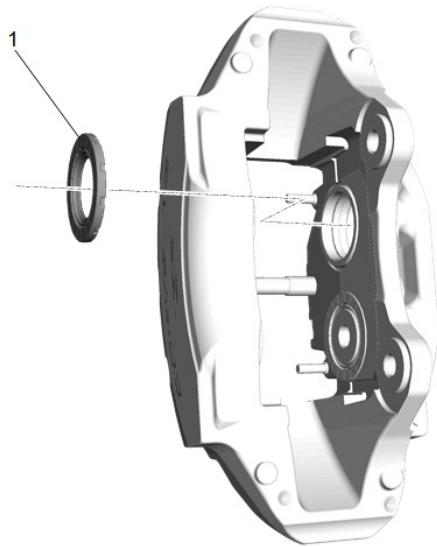
18. [Click here for full size](#)
19. Using wooden or plastic tool, remove the caliper piston seal (1) from the brake caliper bore. Discard the front brake caliper piston seal.
20. Repeat steps 6 through 14 for the opposite side of the caliper.

21. Remove the caliper from the vise and clean the entire caliper with denatured alcohol, or equivalent.
22. Dry the caliper piston bores with non-lubricated, filtered compressed air.
23. Inspect the caliper piston bores and piston seal counter-bores for scratches, cracks, pitting, and/or corrosion.
24. Note:
Do NOT clean the caliper piston bores by honing or cleaning with abrasives.
25. If the caliper piston bores are scratched, cracked, or pitted, or if corrosion cannot be cleaned with denatured alcohol, replace the caliper assembly.

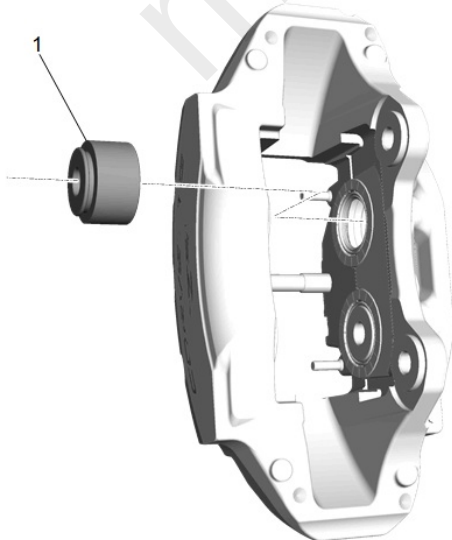
Assembly Procedure



1.
[Click here for full size](#)
2. Lubricate the new front brake caliper piston seals (1) with GM approved brake fluid from a clean, sealed brake fluid container. Adhesives, Fluids, Lubricants, and Sealers
3. Install the lubricated, new caliper piston seals into the brake caliper piston bore seal grooves. Ensure the seals are not twisted.

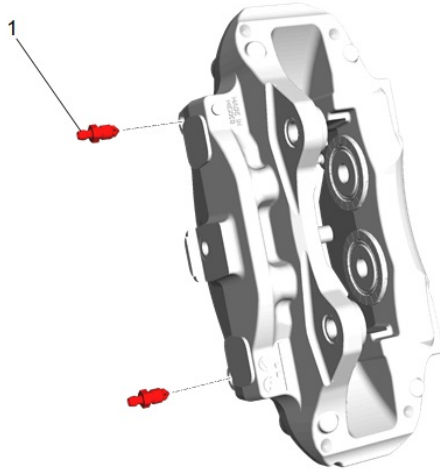


4. [Click here for full size](#)
5. Install the new front brake caliper piston boots (1) over adjoining brake caliper piston bores.
6. Place a clean discarded brake pad or the fabricated 131 mm (5 in) long block of wood over the 2 adjoining caliper piston bores and apply light pressure with non-marring C-clamp. This will ensure the dust boot seals are fully seated into the caliper.
7. Lightly lubricate the brake caliper piston bores and outer surface of the brake caliper pistons with GM approved brake fluid from a clean, sealed brake fluid container. **Adhesives, Fluids, Lubricants, and Sealers**



8. [Click here for full size](#)

9. Install the caliper pistons (1) into the caliper bores. Press the caliper pistons all the way in by hand.
10. Repeat step 6 for the opposite pistons.

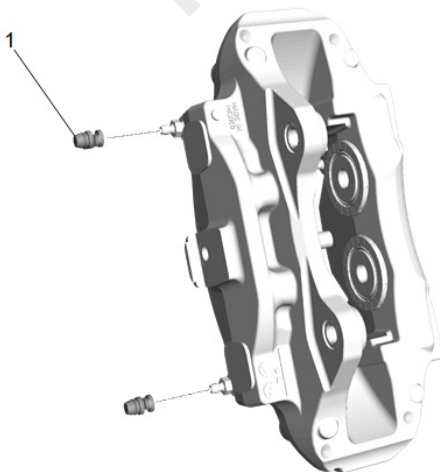


11. [Click here for full size](#)

12. **Caution:**

Refer to Fastener Caution

13. Front Brake Caliper Bleeder Valve (1) >>> Install and tighten - Front Brake Caliper Bleeder Valve Replacement



- 14.

[Click here for full size](#)

15. Install the brake caliper bleeder caps (1).
16. Install the caliper to the vehicle. Front Brake Caliper Replacement

mcx30.com