

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Suspension**
2. **Suspension Controls**
3. **Repair Instructions**
- 4.

Front Hydraulic Suspension Bleeding

Special Tools

- CH-29532-AA, Pressure Brake Bleeder
- CH-44894-AA, Brake Bleeder Adapter

For equivalent regional tools. Special Tools

Warning:

Brake Fluid Irritant Warning.

Caution:

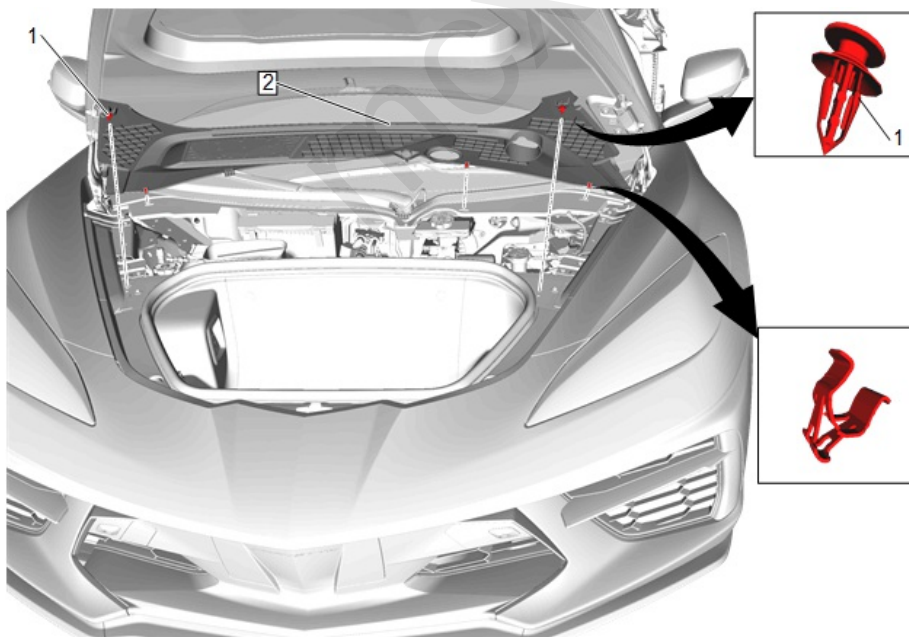
Brake Fluid Effects on Paint and Electrical Components Caution.

Caution:

Only use products that comply with GM specifications and check manufacturer information respectively. We recommend the use of GM genuine products. Instructions must be followed at all times. The use of any type of fluid other than the recommended type of brake fluid, may cause contamination which could result in damage to the internal rubber seals and/or rubber linings of hydraulic brake system components.

Note:

If the Front Hydraulic Suspension system is opened at any given time, the Front Hydraulic Suspension Bleeding is necessary.



1.
Click here for full size
2. Front Compartment Rear Access Cover (2) >>> Remove - Front Compartment Rear Access Cover Replacement
3. Manually depress the front hood latch to the second detent of the hood latch.
4. Note:

Both doors must be closed and windows open after depressing the front hood latch.

5. Note:

Once procedure is started, DO NOT open either door or the procedure will stop.

6. Lower both door window  to access the vehicle lift button in the center console.

7. Place a clean shop cloth beneath the hydraulic suspension fluid reservoir to prevent brake fluid spills.

8. Note:

The pressure bleeding equipment must be the diaphragm type. The rubber diaphragm between the air supply and the brake fluid prevents air, moisture, oil, and other contaminants from entering the hydraulic system.

9. Clean the outside of the hydraulic suspension fluid reservoir on and around the reservoir cap prior to removing the cap and diaphragm.

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

11. Note:

Inspect the hydraulic suspension fluid reservoir cap and diaphragm for damage and replace as necessary.

12. Hydraulic Suspension Fluid Reservoir Cap (1) >> Remove

13. Note:

Leave the hydraulic suspension fluid reservoir cap OFF during the bleed procedure.

14. Fill the hydraulic suspension fluid reservoir with GM approved brake fluid from a clean, sealed brake fluid container. Ensure that the hydraulic suspension fluid reservoir remains at least half-full during this bleeding procedure. Add fluid as needed to maintain the proper level.
Hydraulic Suspension Fluid Reservoir Filling

15. Check the brake fluid level in the *CH-29532-A* Pressure Brake Bleeder. Add GM approved brake fluid from a clean, sealed brake fluid container as necessary to bring the level to approximately the half-full point. Adhesives, Fluids, Lubricants, and Sealers

16. Install the *CH-29532-A* Pressure Brake Bleeder to the hydraulic suspension fluid reservoir.

17. Connect the *CH-29532-A* Pressure Brake Bleeder to the *CH-44894-A* Brake Bleeder Adapter.

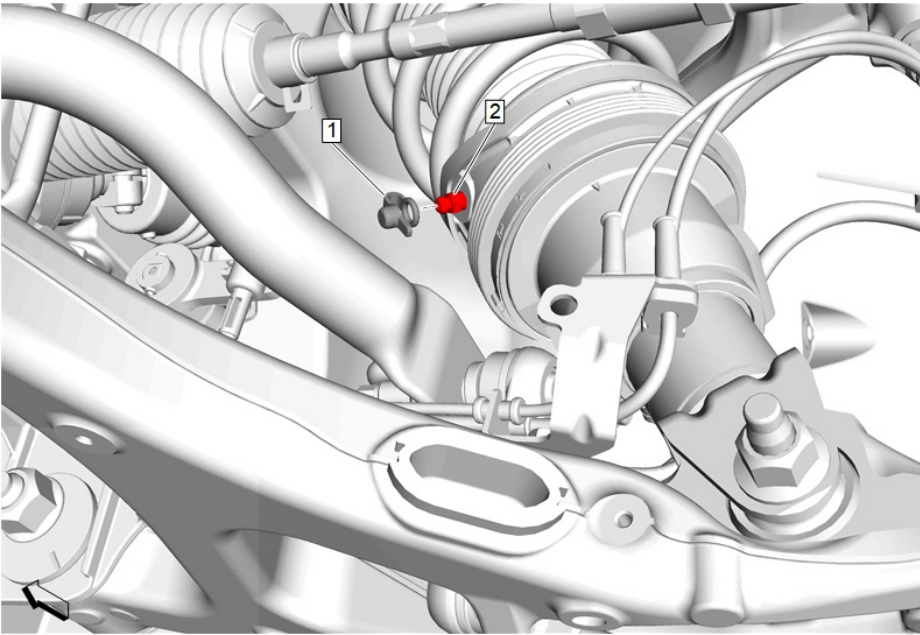
18. Charge the *CH-29532-A* Pressure Brake Bleeder air tank to **207 - 310 kPa (30 - 45 psi)**.

19. Open the *CH-29532-A* Pressure Brake Bleeder fluid tank valve to allow pressurized brake fluid to enter the hydraulic suspension system.

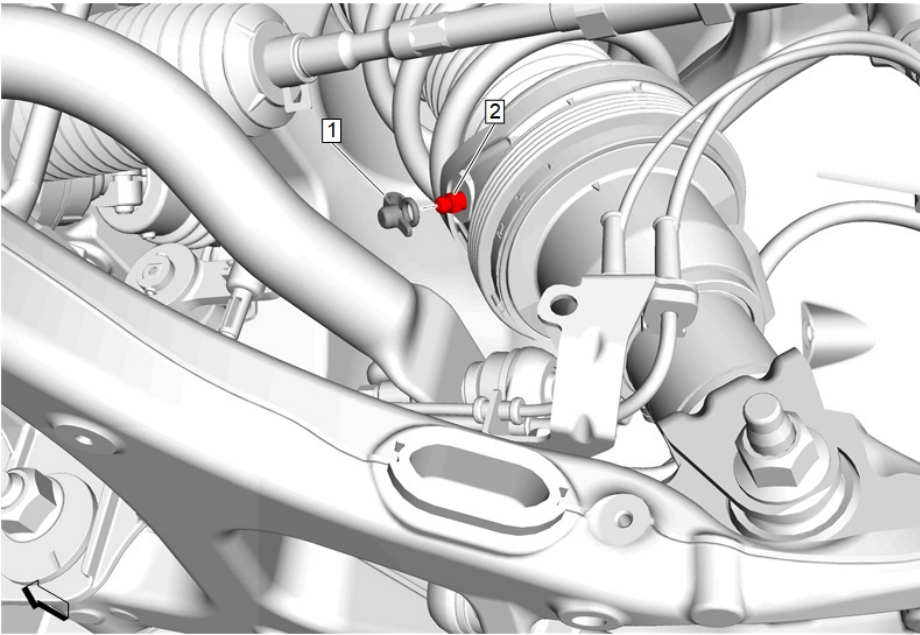
20. Wait approximately 30 seconds, then inspect the entire hydraulic suspension system in order to ensure that there are no existing external brake fluid leaks. Any brake fluid leaks identified require repair prior to completing this procedure. Hydraulic Suspension Fluid System External Leak Inspection

21. Raise and support the vehicle. Lifting and Jacking the Vehicle

22. Remove the front tire and wheel assemblies. Tire and Wheel Removal and Installation



23. [Click here for full size](#)
24. Note:
- Left side shown, right side similar.
25. Remove the front hydraulic suspension actuator bleeder valve cap (1).
26. Install a transparent hose over the end of the bleeder valve (2).
27. Submerge the open end of the transparent hose into a transparent container partially filled with GM approved brake fluid from a clean, sealed brake fluid container. Adhesives, Fluids, Lubricants, and Sealers
28. Lower vehicle to working height.
29. Install Scan Tool to vehicle. With the scan tool establish communication with the Front Suspension Leveling/Lifting Hydraulic Power Pack Module. Select Automatic Level Control System Bleed from the control functions menu.
30. Follow GDS2 tool instructions.

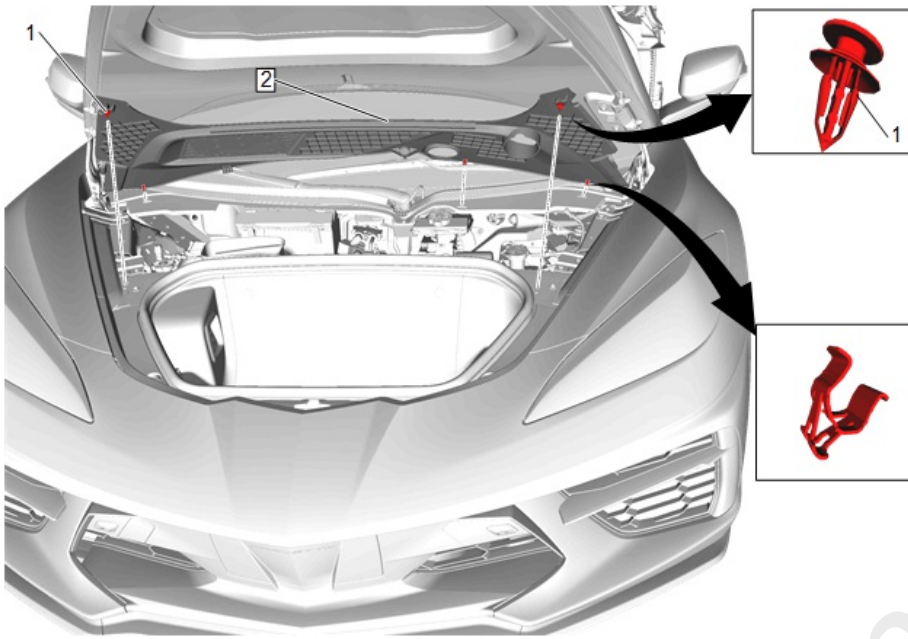


31. [Click here for full size](#)
32. Note:

Left side shown, right side similar.
33. Caution:

Refer to Fastener Caution.
34. After all air has been purged from the hydraulic system, tighten the front hydraulic suspension actuator bleeder valve (2) to 11 N-m (97 lb in).
35. Install the front hydraulic suspension actuator bleeder valve cap (1).
36. Repeat steps 16 through 23 for the opposing side front shock absorber.
37. Remove Scan tool
38. Raise and support the vehicle. [Lifting and Jacking the Vehicle](#)
39. Install the front tire and wheel assemblies. [Tire and Wheel Removal and Installation](#)
40. Remove the support and lower the vehicle.
41. Close the *CH-29532-AA*, $\hat{\wedge}$ Pressure Brake Bleeder fluid tank valve and then disconnect the *CH-29532-AA*, $\hat{\wedge}$ Pressure Brake Bleeder, from the *CH-44894-AA*, $\hat{\wedge}$ Brake Bleeder Adapter.
42. Remove the *CH-44894-AA*, $\hat{\wedge}$ Brake Bleeder Adapter from the hydraulic suspension fluid reservoir.
43. Fill the hydraulic suspension fluid reservoir to the maximum-fill level with GM approved brake fluid from a clean, sealed brake fluid container. [Adhesives, Fluids, Lubricants, and Sealers](#)
44. [Click here for full size](#)
45. [Hydraulic Suspension Fluid Reservoir Cap \(1\) >> Install](#)
46. Inspect the hydraulic suspension system for external leaks. [Hydraulic Suspension Fluid Reservoir Filling](#)
47. In vehicle with engine running, cycle the front suspension leveling/lifting hydraulic power pack module raising and lowering the suspension 4 times.

48. If the vehicle raises in LESS than 3.6 seconds and the pump noise is not excessive, bleeding is complete.
49. Release the hood latch.



50.
[Click here for full size](#)
51. Front Compartment Rear Access Cover (2) >> Install - Front Compartment Rear Access Cover Replacement