

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Body Repair**
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Body Lock Pillar Reinforcement Replacement (Fuel Neck Bracket)

Materials

- Structural Adhesive Aluminum Panel Bonding
- Flow Drill Screw [FDC (M5) 2X] Fastener Specifications

Removal Procedure

1. [Click here for full size](#)
2. **Warning:**

Refer to Approved Equipment for Collision Repair Warning
3. **Warning:**

Refer to Collision Sectioning Warning
4. **Warning:**

Refer to Glass and Sheet Metal Handling Warning
5. **Note:**

The body lock pillar reinforcement is 6000 series aluminum extrusion. Aluminum
6. Disable the SIR system. SIR Disabling and Enabling
7. Remove all related panels and components.
8. Remove the sealers and anti-corrosion materials from the repair area as necessary. Anti-Corrosion Treatment and Repair
9. [Click here for full size](#)
10. Remove flow drill screws (1). [2X]
11. [Click here for full size](#)
12. **Note:**

Do not damage or cut attaching panels and reinforcements.
13. **Note:**

Record the number and location of spot welds for installation of flow drill screws.
14. Remove spot welds (1). [2X]
15. [Click here for full size](#)
16. **Warning:**

When separating the aluminum panels during collision repair, be sure to adhere to the following precautions:

- Do not use an open flame
- Focus heat onto panel being replaced and do not exceed 200°C (392°F) for 3 consecutive minutes
- Use care not to damage adjacent panel while prying the panels apart

Failure to follow the precautions may lead to vehicle damage or personal injury.

17. Apply heat to release adhesive (1).

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

19. Note:

Excessive prying force may damage attaching panels.

20. Remove body lock pillar reinforcement (1) from vehicle.

21. Note:

Do not damage body structure when removing adhesive.

22. Remove remaining adhesive from body structure.

Installation Procedure

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

2. Note:

Temporarily install replacement part.

3. Position body lock pillar reinforcement (1) on vehicle using three-dimensional measuring equipment.

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

5. Note:

In order ensure a proper electrical ground allow structural adhesive to fully cured before installing inside flow drill screws.

6. Note:

Drill holes in the original spot weld location as noted in removal.

7. Drill 4.0 mm (5/32) pilot holes (1). [2X] Fastener Specifications

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

9. Remove body lock pillar reinforcement (1) from vehicle.

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

11. Drill 7 mm (9/32) clearance holes on body lock pillar reinforcement at marked locations (1). [2X]

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

13. Note:

Ensure structural adhesive (1) is 30mm from the edge (2) where a MIG stitch weld will be added.

14. Note:

Accurate and timely assembly methods must be used in order to meet proper bonding requirements.

15. Note:

Dry fit all parts with proper clamping devices prior to final assembly to ensure full understanding of the assembly process.

16. Note:

When using adhesive, ensure all necessary tools and materials are in place prior to final assembly.

17. Note:

Only remove E-coat where adhesive will be applied.

18. Note:

Ensure all bare metal is covered.

19. Clean and prepare mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations.
Aluminum Panel Bonding.

20. Apply structural adhesive (1) to mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding

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

22. Install body lock pillar reinforcement (1) on vehicle and clamp into place.

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

24. Note:

Ensure screw is fully seated with a minimum torque of 5N-m (4 lb ft) and not stripped.

25. Install flow drill screws (1). [4X] Fastener Specifications

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

27. Note:

In order to ensure a proper electrical ground a MIG stitch weld will need to be added.

28. Install MIG stitch weld (1) using Pulse MIG welder [1X]. Aluminum

29. Apply the sealers and anti-corrosion materials to the repair area as necessary. Anti-Corrosion Treatment and Repair

30. Paint the repaired area. Basecoat/Clearcoat Paint Systems

31. Install all related panels and components.

32. Enable the SIR System. SIR Disabling and Enabling

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