

2022 CHEVROLET CORVETTE SERVICE MANUAL

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Body Hinge Pillar Reinforcement Replacement

Materials

- Structural Adhesive Aluminum Panel Bonding
- Countersunk Structural Rivet (CR3 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 hinge pillar reinforcement is 5000 series stamped aluminum sheet. Aluminum
6. Note:

Three dimensional measuring equipment required for installation.
7. Note:

Left shown, right similar.
8. Disable the SIR system. SIR Disabling and Enabling.
9. Remove all related panels and components.
10. Remove the sealers and anti-corrosion materials from the repair area as necessary. Anti-Corrosion Treatment and Repair
11. Click here for full size
12. Note:

Record the number and location of spot welds for installation of structural rivets.
13. Note:

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

Drill through top layer only.
15. Remove spot welds (1). [2X]
16. Click here for full size
17. 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.

18. Apply heat to release adhesive (1).

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

20. Note:

Excessive prying force may damage surrounding structure.

21. Remove body hinge pillar reinforcement (1) from vehicle.

22. Note:

Do not damage body structure when removing adhesive.

23. Remove remaining adhesive from body structure.

Installation Procedure

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

2. Note:

Temporarily install replacement part.

3. Position body hinge pillar reinforcement (1) on vehicle using three-dimensional measuring equipment and clamp into place.

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

5. Note:

6.7 mm (1/64") hole used for rivet installation.

6. Note:

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

7. Drill 6.7 mm (1/64") holes (1). [2X]

8. Note:

Prepare rivet holes for countersunk structural rivet.

9. Using countersink cutting tool, countersink the holes (1). [2X] Special Tools

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

11. Remove body hinge pillar reinforcement (1) from vehicle.

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

13. Note:

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

14. Note:

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

15. Note:

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

16. Note:

Only remove E-coat where adhesive will be applied.

17. Note:

Ensure all bare metal is covered.

18. Clean and prepare mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
19. Apply structural adhesive (1) to mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
20. [Click here for full size](#)
21. Note:

Temporarily install replacement part.

22. Install body hinge pillar reinforcement (1) on vehicle using three-dimensional measuring equipment and clamp into place.
23. [Click here for full size](#)
24. Install countersunk structural rivets (1). [CR3 2X]
25. Remove excess adhesive.
26. Seal tops of countersunk rivets with seam sealer. Anti-Corrosion Treatment and Repair
27. Apply the sealers and anti-corrosion materials to the repair area as necessary. Anti-Corrosion Treatment and Repair
28. Paint the repaired area. Basecoat/Clearcoat Paint Systems
29. Install all related panels and components.
30. Enable the SIR System. SIR Disabling and Enabling