

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Body Repair**
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- 4.

Front Inner Hinge Pillar Body Replacement

Materials

- Structural Adhesive Aluminum Panel Bonding
- Countersunk Structural Rivet (CR1 1X) Fastener Specifications
- Countersunk Structural Rivet (CR2 5X) Fastener Specifications
- Countersunk Structural Rivet (CR3 1X) Fastener Specifications
- Structural Rivet (SR2 3X) Fastener Specifications
- Structural Rivet (SR3 3X) 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 front inner hinge pillar body assembly contains cast aluminum, stamped 6000 series aluminum and extruded 6000 series aluminum. Aluminum
6. **Note:**

Three dimensional fixturing 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. Remove flow drill screws (1). [5X]
13. [Click here for full size](#)
14. **Note:**

Drill through first layer only as shown.
15. Remove spot welds (1). [6X] Fastener Specifications

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. Note:

excessive prying force may damage surrounding structure.

19. Apply heat to release adhesive (1).

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

21. Apply heat to release adhesive (1).

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

23. Remove windshield pillar assembly (1).

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

25. Note:

Drill through first layer only as shown.

26. Remove spot welds (1). [16X] Fastener Specifications

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

28. Note:

Drill through first layer only as shown.

29. Remove spot welds (1). [2X] Fastener Specifications

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

31. Note:

excessive prying force may damage surrounding structure.

32. Apply heat to release adhesive (1).

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

34. Note:

excessive prying force may damage surrounding structure.

35. Apply heat to release adhesive (1).

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

37. Remove inner hinge pillar reinforcement.

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

39. Remove flow drill screws (1). [8X] Fastener Specifications

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

41. Note:

excessive prying force may damage surrounding structure.

42. Apply heat to release adhesive (1).

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

44. Note:

Drill through top layer only.

45. Remove hinge pillar lower reinforcement (1).

46. Note:

Do not damage body structure when removing adhesive.

47. Remove remaining adhesive from mating surfaces on body structure.

Installation Procedure

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

2. Note:

Temporarily install replacement part.

3. Position front inner hinge pillar body (1) on vehicle using three dimensional fixturing equipment and clamp into place.

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

5. Note:

Drill pilot holes (1) at locations of previous spot welds.

6. Note:

Drill rivet holes (2 & 3) at locations of previous spot welds.

7.

8.

9. Drill 5.4 mm pilot holes (1) for service flow drill screws (M6). [8X]

10. Drill 6.7 mm holes (2) for countersunk structural blind rivets. [2X]

11. Drill 6.7 mm holes (3) for structural blind rivets. [2X]

12. Note:

Prepare rivet holes for countersunk structural rivets.

13. Using countersink cutting tool, countersink holes (2). [2X]

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

15. Note:

Use existing threaded holes from production screws if attaching to original rocker panel assembly.

16. Note:

Drill pilot holes at locations of clearance holes if attaching to new rocker panel assembly.

17. Drill 4 mm pilot holes (1) for flow drill screws. [10X] Fastener Specifications

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

19. Note:

Use existing threaded holes (2) from production screws if attaching to original rocker panel assembly.

20. Note:

Drill pilot holes (2) at locations of clearance holes if attaching to new rocker panel assembly.

21. Drill 6.7 mm holes (1) for structural blind rivets. [3X] Fastener Specifications

22. Drill 4 mm pilot holes (2) for flow drill screws. [2X] Fastener Specifications

23. Note:

Ensure pilot holes for flow drill screws go through windshield pillar.

- 24. Drill 5.4 mm pilot holes (3) for service flow drill screws (M6). Fastener Specifications
- 25. [Click here for full size](#)
- 26. Drill 6.7 mm holes (2) for structural blind rivets. [6X]
- 27. [Click here for full size](#)
- 28. Note:

Prepare rivet holes for countersunk structural rivets.

- 29. Using countersink cutting tool, countersink holes (1). [5X]
- 30. Remove front inner hinge pillar.
- 31. [Click here for full size](#)
- 32. Note:

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

- 33. Note:

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

- 34. Note:

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

- 35. Note:

Only remove E-coat where adhesive will be applied.

- 36. Note:

Ensure all bare metal is covered.

- 37. Clean and prepare mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
- 38. Apply structural adhesive (1) to mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
- 39. [Click here for full size](#)
- 40. Apply structural adhesive (1) to mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
- 41. [Click here for full size](#)
- 42. Apply structural adhesive (1) to mating surfaces on structure and replacement part according to adhesive manufacturer's recommendations. Aluminum Panel Bonding
- 43. [Click here for full size](#)
- 44. Position front inner hinge pillar assembly (1) on vehicle.
- 45. [Click here for full size](#)
- 46. Note:

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

- 47. Install flow drill screws (1). [8X] Fastener Specifications
- 48. Install countersunk structural blind rivets (2). [CR2 2X] Fastener Specifications
- 49. Install structural blind rivets (3). [SR2 2X] Fastener Specifications
- 50. [Click here for full size](#)
- 51. Note:

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

52. Install flow drill screws (1). [2X] Fastener Specifications
53. Install structural blind rivets (2). [SR3 3X] Fastener Specifications
54. Remove excess adhesive.
55. [Click here for full size](#)
56. Note:

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

57. Install flow drill screws. [8X]
58. [Click here for full size](#)
59. Install countersunk structural blind rivets (1). [CR2 3X] Fastener Specifications
60. Install countersunk structural blind rivet (2). [CR3 1X] Fastener Specifications
61. Install countersunk structural blind rivet (3). [CR1 1X] Fastener Specifications
62. [Click here for full size](#)
63. Install structural blind rivet (1). [SR2 1X]
64. Remove excess adhesive.
65. Apply the sealers and anti-corrosion materials to the repair area as necessary. Anti-Corrosion Treatment and Repair
66. Seal countersunk and structural rivets with seam sealer. Anti-Corrosion Treatment and Repair
67. Paint the repaired area. Basecoat/Clearcoat Paint Systems
68. Install all related panels and components.
69. Enable the SIR System. SIR Disabling and Enabling