

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Body Repair**
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Rear Bumper Impact Bar Replacement (With Tub Replacement)

Materials

- Structural Adhesive Aluminum Panel Bonding

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 rear bumper impact bar replacement is carbon fiber.
6. Disable the SIR system. SIR Disabling and Enabling
7. Remove all related panels and components.
8. Remove rear compartment panel frame. Rear Compartment Panel Frame Replacement
9. Remove rear compartment panel. Rear Compartment Panel Replacement
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). [8x] Fastener Specifications
13. Click here for full size
14. Note:

Left shown, right similar.
15. Remove flow drill screws (1). [7X] 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 apartFailure to follow the precautions may lead to vehicle damage or personal injury.
18. Note:

Left shown, right similar.

19. Apply heat to release adhesive (1).
20. [Click here for full size](#)
21. Note:

Left shown, right similar.

22. Apply heat to release adhesive (1).
23. [Click here for full size](#)
24. Note:

Excessive prying force may damage attaching panels.

25. Remove rear impact bar from vehicle.
26. Note:

Do not damage body structure when removing adhesive.

27. Remove remaining adhesive from body structure.

Installation Procedure

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

Temporarily install replacement part.

3. Position rear bumper impact bar on vehicle using three-dimensional measuring equipment and clamp into place.
4. [Click here for full size](#)
5. Note:

Left shown, right similar.

6. Note:

Locate pilot holes for flow drill screws at center of hole on attaching panels.

7. Drill 4.0 mm (5/32) pilot holes (1). [9X] Fastener Specifications
8. [Click here for full size](#)
9. Note:

Drill top layer only.

10. Drill 7.0 mm (9/32) clearance holes (1). [2X] Fastener Specifications
11. [Click here for full size](#)
12. Remove rear bumper impact bar from vehicle.
13. [Click here for full size](#)
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. Note:

Left shown, right similar.

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

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

22. Click here for full size

23. Install rear bumper impact bar on vehicle and clamp into place.

24. Click here for full size

25. Note:

Left shown, right similar.

26. Note:

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

27. Install flow drill screws (1). [7X] Fastener Specifications

28. Click here for full size

29. Note:

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

30. Install flow drill screws (1). [8X] Fastener Specifications

31. Remove excess adhesive.

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

33. Seal structural rivets with seam sealer. Anti-Corrosion Treatment and Repair

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

35. Install rear compartment panel. Rear Compartment Panel Replacement

36. Install rear compartment panel frame. Rear Compartment Panel Frame Replacement

37. Install all related panels and components.

38. Enable the SIR System. SIR Disabling and Enabling