

2022 CHEVROLET CORVETTE SERVICE MANUAL

- **SEARCH**

1. **Body Repair**
2. **Collision Repair**
3. **Repair Instructions**
- 4.

Rear Crossmember Replacement

Materials

- Structure 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 crossmember is a 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). [4X] Fastener Specifications
11. [Click here for full size](#)
12. Remove flow drill screws (1). [4X] Fastener Specifications
13. [Click here for full size](#)
14. **Note:**

Do not damage or cut attaching panels and reinforcements.
15. Mark two cuts lines (1) on rear crossmember.
16. Using reciprocating saw or equivalent tool cut through rear crossmember at marked locations (1).
17. [Click here for full size](#)
18. **Note:**

Left shown, right similar.
19. Mark two cuts lines (1) on rear crossmember.
20. Using reciprocating saw or equivalent tool cut through rear crossmember at marked locations (1).
21. [Click here for full size](#)
22. **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.

23. Note:

Left shown, right similar.

24. Apply heat to release adhesive (1).

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

26. Note:

Excessive prying force may damage attaching panels.

27. Note:

Left shown, right similar.

28. Separate remaining sections of rear crossmember from casting by drawing walls of panel (1) toward each other.

29. Remove remaining adhesive from body structure.

30. Note:

Do not damage body structure when removing adhesive.

31. Remove remaining adhesive from body structure.

Installation Procedure

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

2. Note:

Temporarily install replacement part.

3. Position rear crossmember (1) on vehicle using 3-dimensional measuring equipment and clamp into place.

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

5. Note:

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

6. Drill 4.0 mm (5/32) pilot holes (1). [4X] Fastener Specifications

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

8. Note:

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

9. Drill 4.0 mm (5/32) pilot holes (1). [4X] Fastener Specifications

10. Remove rear crossmember (1) from vehicle.

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

12. Note:

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

13. Note:

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

14. Note:

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

15. Note:

Only remove E-coat where adhesive will be applied.

16. Note:

Ensure all bare metal is covered.

17. Note:

Left shown, right similar.

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. Install rear crossmember (1) on vehicle and clamp into place.

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

23. Note:

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

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

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

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). [4X] Fastener Specifications

28. Remove excess adhesive.

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