2012 Chevrolet Cruze Structural Analysis (Rocker Panel)
• Problem Statement
• Goals
• The Rocker Panel Assembly
• The NAAA Structural Damage Policy
• Recommended Solution
• References
• Contact Information
• On a NAAA Standards Committee call, a concern was raised about the proper interpretation of rocker damage on the new Chevy Cruze.

• Apparently the LT and LTZ versions have a metal rocker outer panel that sounds like an extension of the floor pan. There is no inner rocker panel, just the outer.

• Auctions out there are confused as to how to call damage to the rocker.
• Analyze the 2012 Chevy Cruze structure
• Identify any variances between NAAA recognized structural components vs. Chevy Cruze Structure
• Recommend balanced disclosure strategies for all stakeholders
Vehicle Specifics

- Structure type is unitized (Unibody)
- Structural design does not differ across various trim packages.
- Area of concern no different than majority of unitized structures.
- Rocker panel assembly consists of both ‘inner’ and ‘outer’ sheet metal.
Right Outer rocker panel

Right Inner rocker panel

Pinch weld (connects rocker panels)

Floor Pan Assembly

LT model pictured (courtesy of Hendrick Chevrolet of Gwinnett)
Inner Rocker Remove and Replace

1. Disable the SIR System. Refer to [SIR Disabling and Enabling](#).
2. Disconnect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
3. Remove all related panels and components.
4. Visually inspect the damage. Repair as much of the damage as possible.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
6. Create cut lines on the body side inner panel (1).

**Note:** Do not damage any inner panels or reinforcements.

7. Cut the body side inner panel (1) where sectioning is to be performed.

8. Locate and mark all the necessary factory welds of the body side inner panel (1).

9. Drill all factory welds. Note the number and location of welds for installation of the service assembly.
10. Remove the body side inner panel (1).

11. Locate and mark all the necessary factory welds of the rocker inner panel (1).

12. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

13. Remove the damaged rocker inner panel (1).
Inner Rocker Remove and Replace (continued)

1. Align the rocker inner panel.

2. Drill 8 mm (5/16 in) for plug welding along the edges of the rocker inner panel (1) as noted from the original panel.
3. Clean and prepare the attaching surfaces for welding.
4. Position the rocker inner panel on the vehicle.
5. Verify the fit of the quarter outer panel.
6. Clamp the rocker inner panel into position.

7. Plug weld the rocker inner panel (1) accordingly.

8. Plug weld the body side inner panel (1) accordingly.

9. To create a solid weld with minimum heat distortion, make 25 mm (1 in) stitch welds along the seam with 25 mm (1 in) gaps between them. Then go back and complete the stitch weld.

10. Apply the sealers and anti-corrosion materials to the repair area, as necessary. After repair and/or replacement parts are installed, all accessible bare metal surfaces must be treated with metal conditioner and reprimed.

11. Paint the repaired area. Refer to Basecoat/Clearcoat Paint Systems.

12. Install all related panels and components.

13. Connect the negative battery cable.

14. Enable the SIR system. Refer to SIR Disabling and Enabling.
Outer Rocker Remove and Replace

1. Disable the SIR System. Refer to [SIR Disabling and Enabling](#).
2. Disconnect the negative battery cable. Refer to [Battery Negative Cable Disconnection and Connection](#).
3. Remove all related panels and components.
4. Visually inspect the damage. Repair as much of the damage as possible.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
Outer Rocker Remove and Replace (continued)

6. Create cut lines on the rocker outer panel (1).

Note: Do not damage any inner panels or reinforcements.

7. Cut the rocker outer panel (1) where sectioning is to be performed.

8. Locate and mark all the necessary factory welds of the rocker outer panel (1).

9. Drill all factory welds.

10. Remove the damaged rocker outer panel (1).
1. Cut the rocker outer panel (1) in corresponding locations to fit the remaining original panel. The sectioning joint should be trimmed to allow a gap of one-and-one-half-times the metal thickness at the sectioning joint.

2. Create 50 mm (2 in) backing plates from the unused portion of the service part.

3. Drill 8 mm (5/16 in) holes for plug welding along the sectioning cut on the remaining original part. Locate these holes 13 mm (1/2 in) from the edge of part and spaced 40 mm (1½ in) apart.
4. Prepare all mating surfaces as necessary.
5. Fit the backing plates halfway into the sectioning joints, clamp in place and weld to the vehicle.
6. Align the rocker outer panel.

7. Drill 8 mm (5/16 in) for plug welding along the edges of the rocker outer panel (1) as noted from the original panel.
8. Clean and prepare the attaching surfaces for welding.

9. Position the rocker outer panel (1) on the vehicle.
10. Verify the fit of the rocker outer panel.
11. Clamp the rocker outer panel into position.

12. Plug weld the rocker outer panel (1) accordingly.
13. To create a solid weld with minimum heat distortion, make 25 mm (1 in) stitch welds along the seam with 25 mm (1 in) gaps between them. Then go back and complete the stitch weld.
14. Apply the sealers and anti-corrosion materials to the repair area, as necessary. After repair and/or replacement parts are installed, all accessible bare metal surfaces must be treated with metal conditioner and reprimed.
15. Paint the repaired area.
16. Install all related panels and components.
17. Connect the negative battery cable. Refer to Battery Negative Cable Disconnection and Connection.
18. Enable the SIR system. Refer to SIR Disabling and Enabling.
## Arbitration Policy

**Effective Date:** January 1, 2011

### Structural Component

<table>
<thead>
<tr>
<th>Structural Component</th>
<th>Unibody</th>
<th>Unibody on Frame</th>
<th>Conventional Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Radiator Core Support – Including the upper and lower tie bars, center support or</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Frame Rails Extensions (Ears) – On frame vehicles that area at the end of the frame</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Frame Rails – Including front, center and rear rails</td>
<td>Existing or repaired damage, or</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>4. Spring Pod, and Torque Box or Stabilizer Mount</td>
<td>N/A</td>
<td>Existing or repaired damage, or</td>
<td>Replacement</td>
</tr>
<tr>
<td>5. Cross members (Except Bolt-Ons)</td>
<td>N/A</td>
<td>Existing or repaired damage, or</td>
<td>Replacement</td>
</tr>
<tr>
<td>6. Apron/Upper Reinforcement Rails</td>
<td>Existing or repaired damage, or</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>7. Strut Tower</td>
<td>Existing or repaired damage, or</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>8. Cowl Panel / Firewall – excluding cowl vent panel</td>
<td>Existing or repaired damage, or</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>9. Support Pillars – “A”, “B”, “C” or “D” Pillars</td>
<td>Existing or repaired damage, or</td>
<td>Replacement</td>
<td></td>
</tr>
<tr>
<td>10. Floor Hunk Panels</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Rocker Panel – Outer</td>
<td>Replacement</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>12. Rocker Panel – Inner</td>
<td>Existing or repaired damage, or</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>13. Quarter or Cab Panel</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Rear Body Panel</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Diagram:

- **C-Pillar**
- **D-Pillar**
- **Strut Tower Apron**
- **Front Rail**
- **Rear Rail**
- **Cowl Panel Firewall**
- **Rocker Panel**

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*Common on mission and SUVs*
• Policy clearly outlines both rocker panel disclosure requirements
  • Inner Rocker
    • *Disclose any existing or repaired damage including replacement.*
    • *Replacement may qualify for alternative (Certified Structural Repair) disclosure as per the policy.*
  • Outer Rocker
    • *Disclose replaced outer rocker panels only.*
    • *No disclosure required for existing or repaired damage.*
• Inspect the Chevrolet Cruze as any other Unibody frame
• The NAAA Structural Damage policy is sufficient for the frame type.
• Use the Remove and Replace specifics as guidelines for the inspection
  • Inspect exterior for irregular gaps in panels and paint or body repair defects.
  • Inspect interior for turned bolts and paint or body repair defects.


• Pictures courtesy of Hendrick Chevrolet of Gwinnett, Duluth, Georgia

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