

2013 ACCESSORIES & EQUIPMENT**Collision Repair - Cruze****SPECIFICATIONS****DIMENSIONS - BODY****Point-to-Point Measurements**

Point-to-point measurements are for reference only. All measurements are given in millimeters. Use these measurements for diagnosing and estimating. Point-to-point measurements are duplicated with tram bar pointers set at equal lengths. All die marks, holes, slots, and fasteners are measured to the center. All dimensions are symmetrical unless otherwise specified

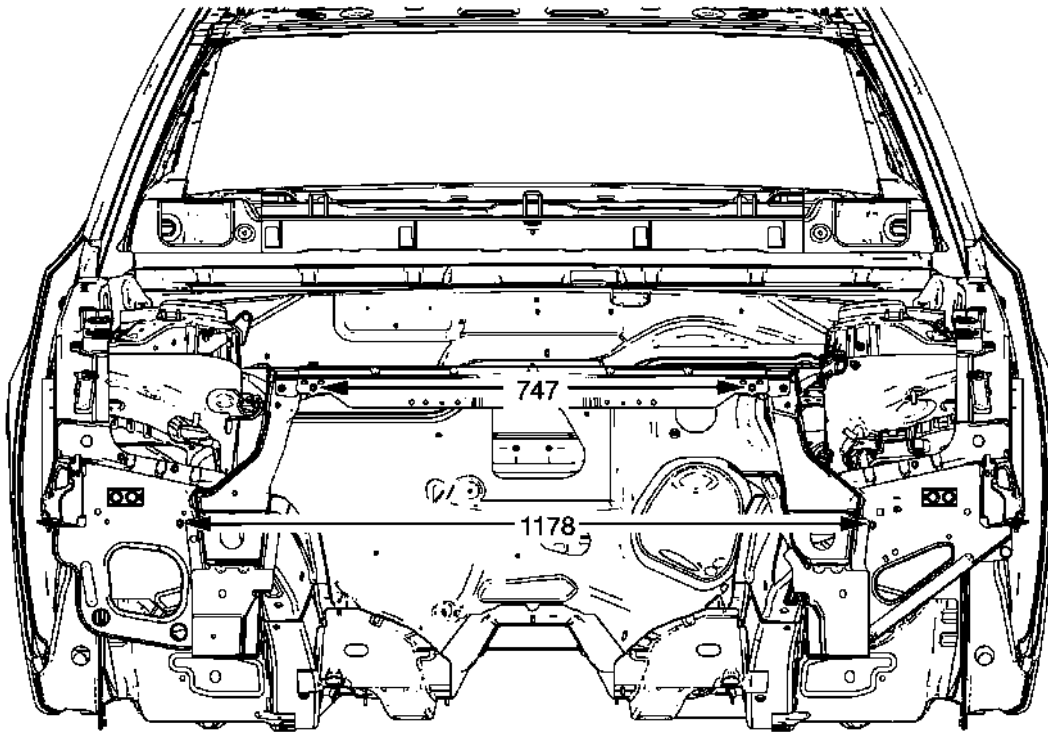
Front End - Part 1

Fig. 1: Front End Body Dimensions - Part 1
Courtesy of GENERAL MOTORS COMPANY

Front End - Part 2

2013 Chevrolet Cruze

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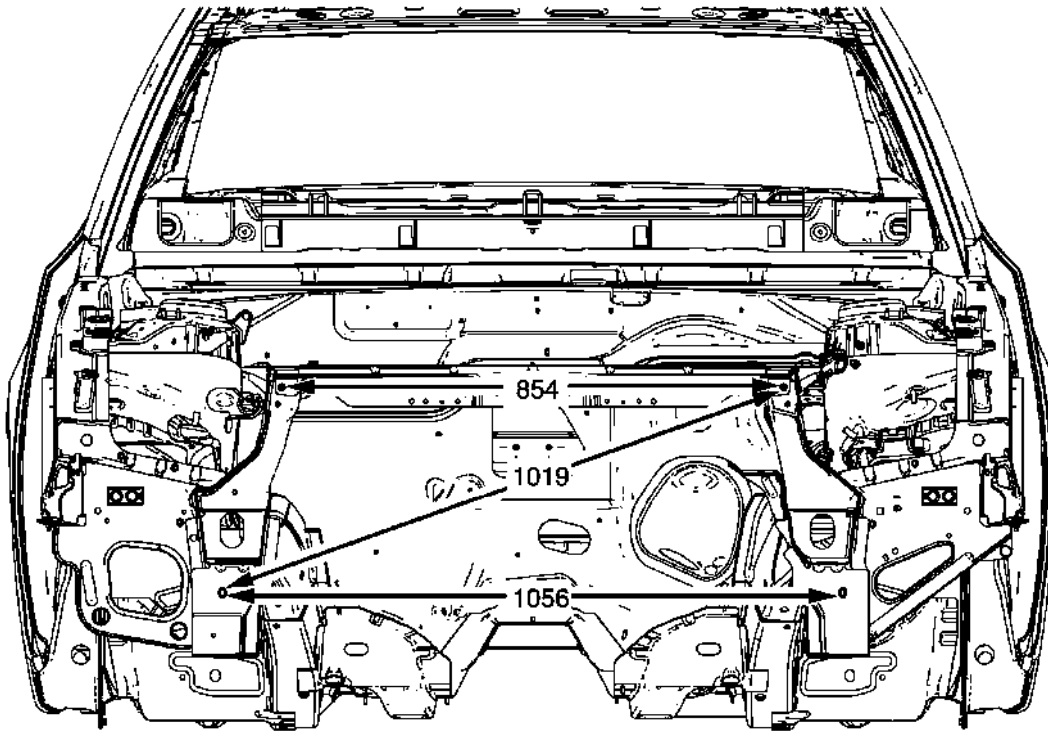


Fig. 2: Front End Body Dimensions - Part 2
Courtesy of GENERAL MOTORS COMPANY

Engine Compartment - Part 1

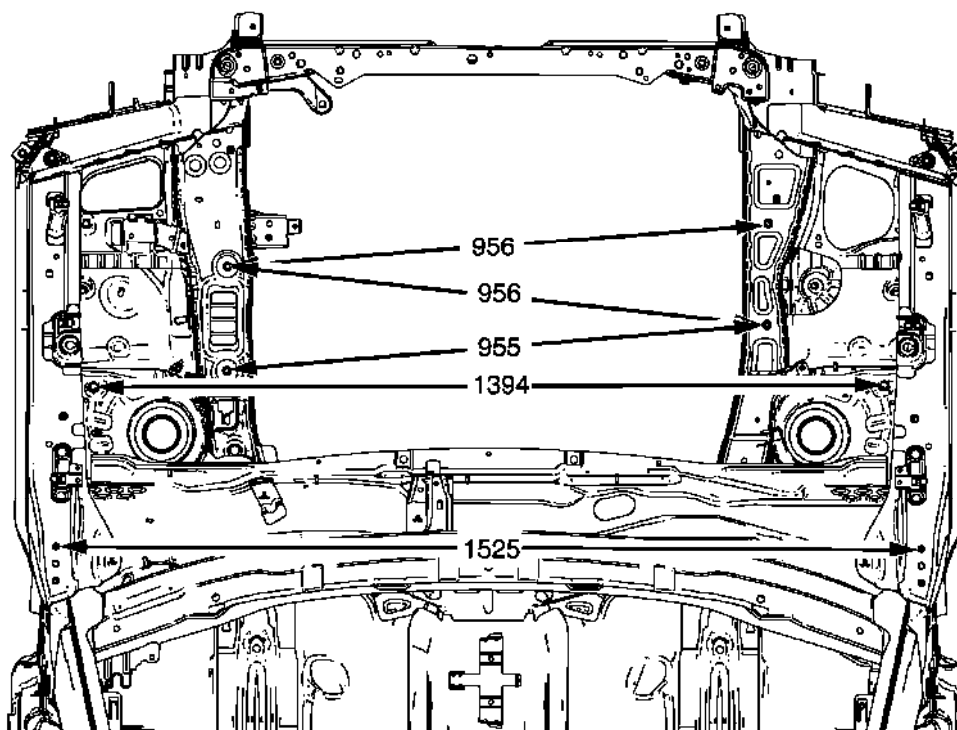


Fig. 3: Engine Compartment Dimensions - Part 1

Courtesy of GENERAL MOTORS COMPANY

Engine Compartment - Part 2

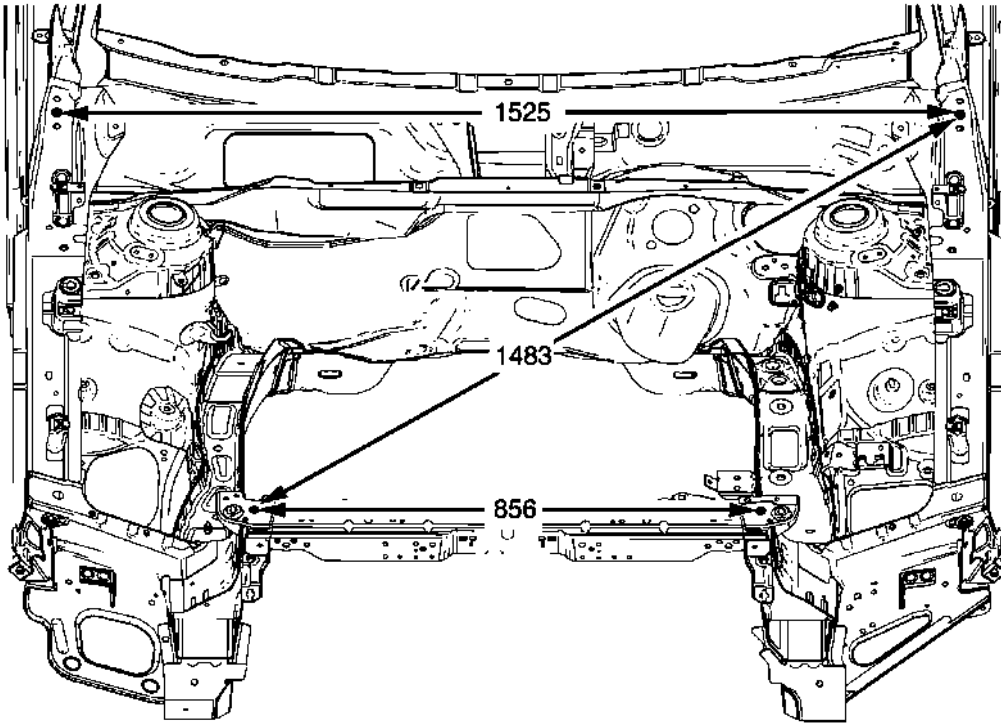


Fig. 4: Engine Compartment Dimensions - Part 2

Courtesy of GENERAL MOTORS COMPANY

Front End Lower

2013 Chevrolet Cruze

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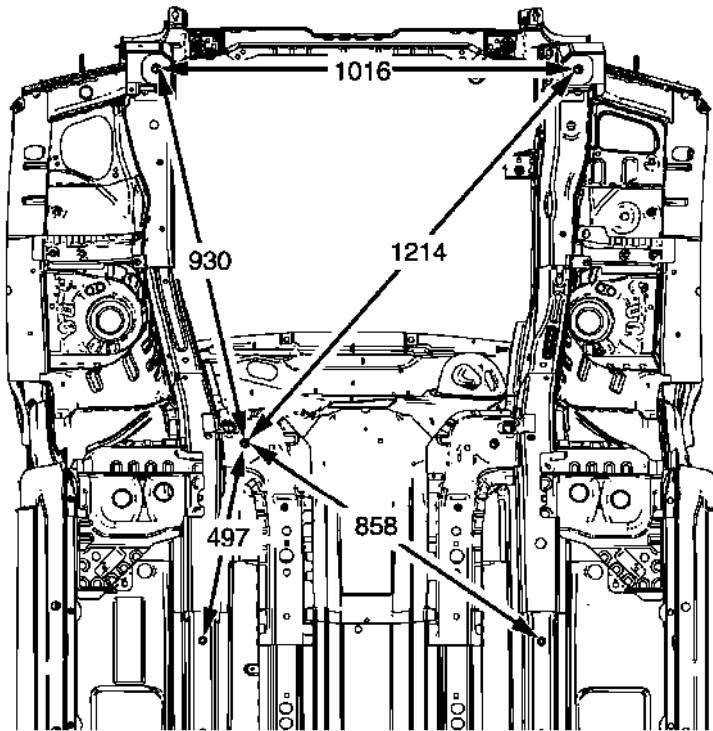
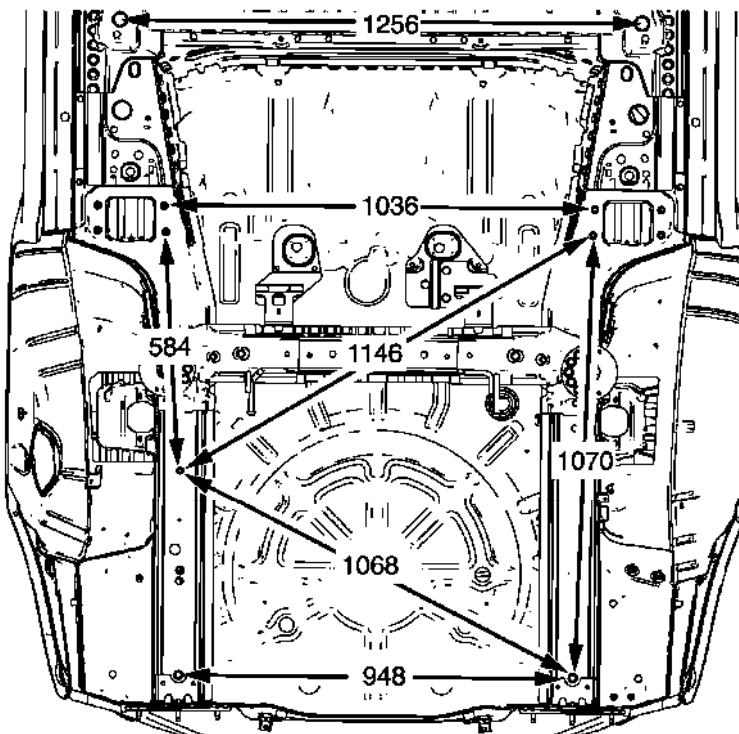


Fig. 5: Front End Lower Dimensions
Courtesy of GENERAL MOTORS COMPANY

Rear End Lower



2013 Chevrolet Cruze

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Fig. 6: Rear End Lower Dimensions

Courtesy of GENERAL MOTORS COMPANY

Rear End

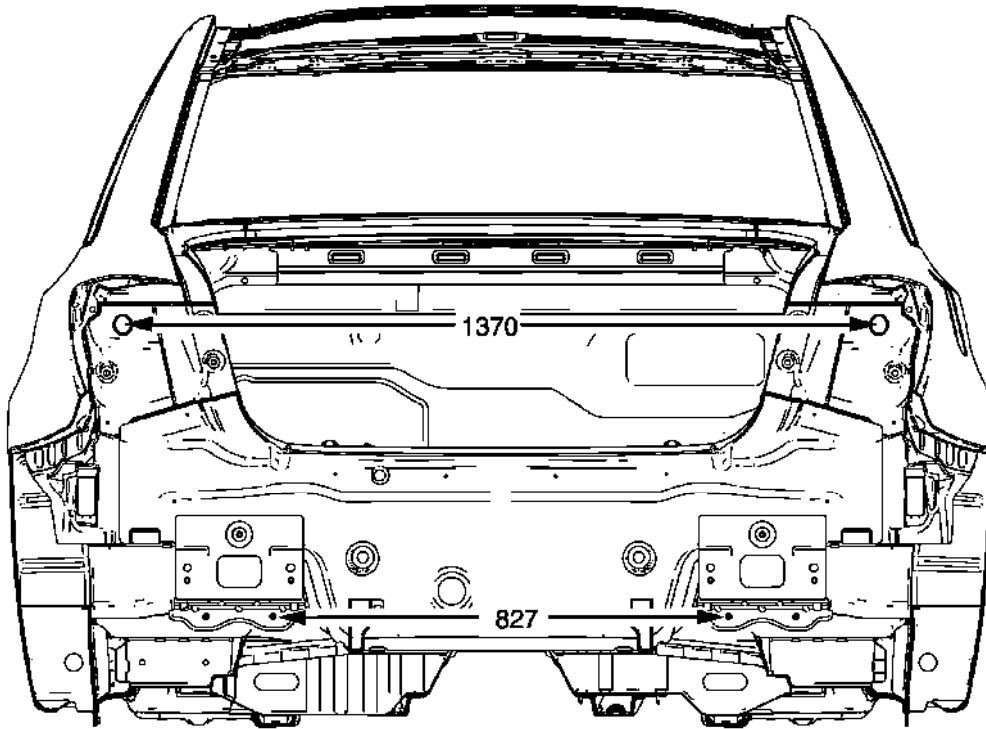


Fig. 7: Rear End Dimensions

Courtesy of GENERAL MOTORS COMPANY

Side

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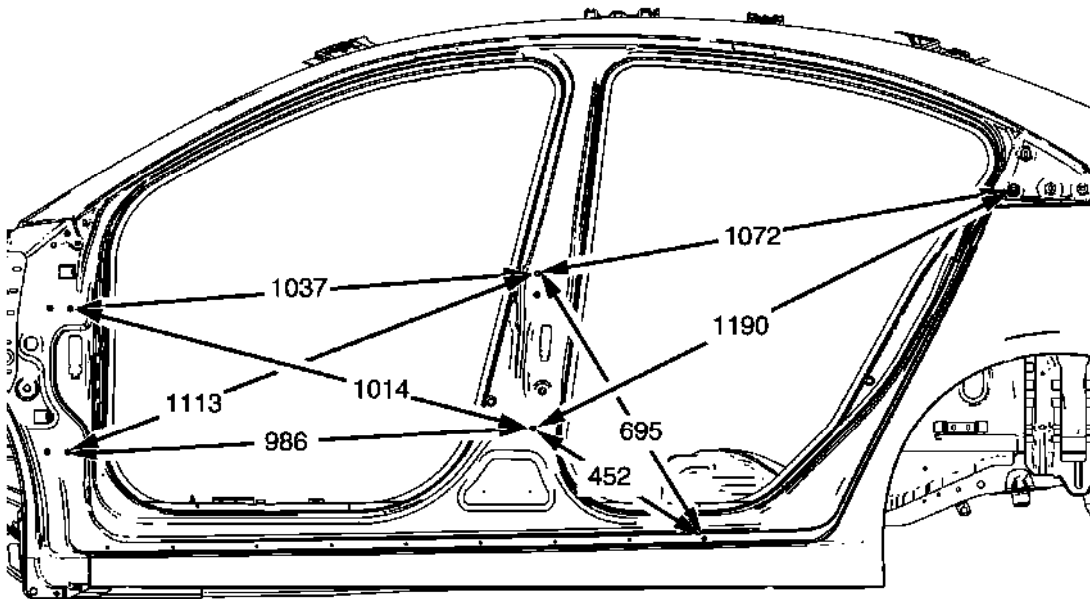


Fig. 8: Side Dimensions

Courtesy of GENERAL MOTORS COMPANY

Front Seat Mounting Points

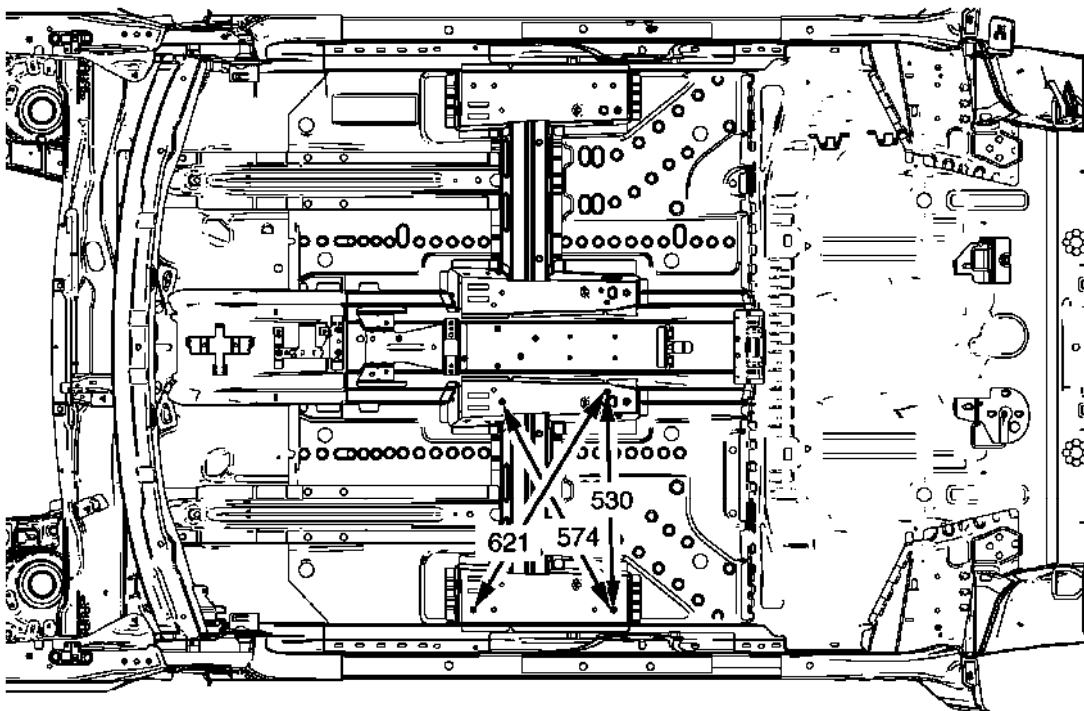


Fig. 9: Front Seat Mounting Points

Courtesy of GENERAL MOTORS COMPANY

VISUAL IDENTIFICATION

STRUCTURE IDENTIFICATION

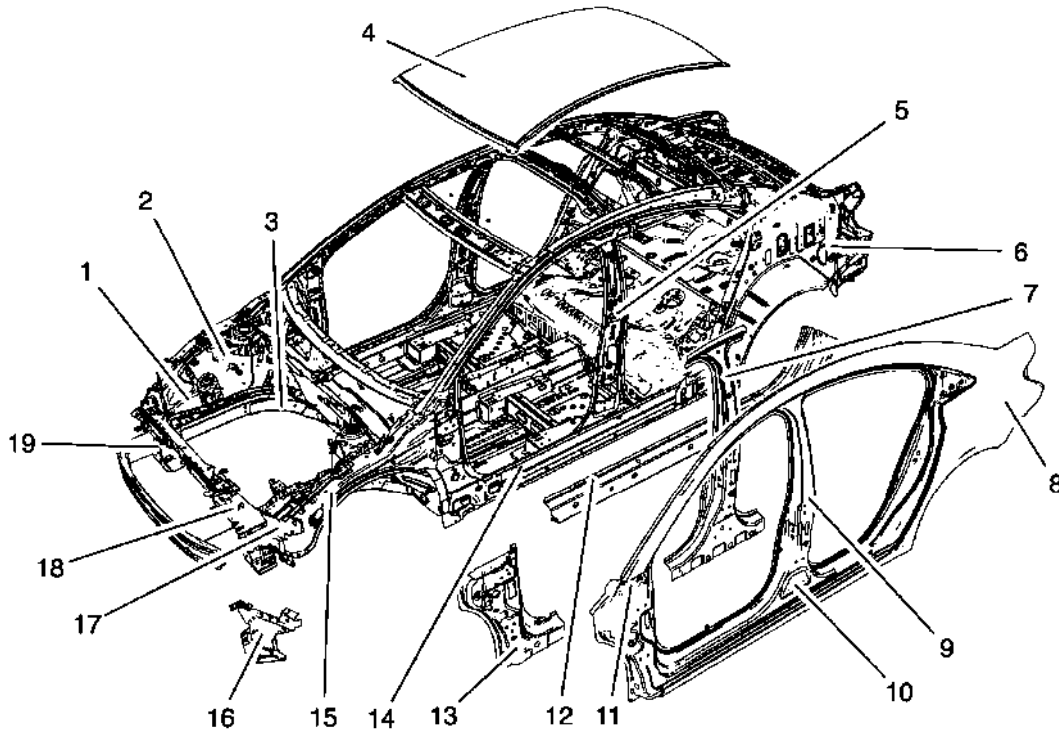


Fig. 10: Body Panel System Component Identification (Front)

Courtesy of GENERAL MOTORS COMPANY

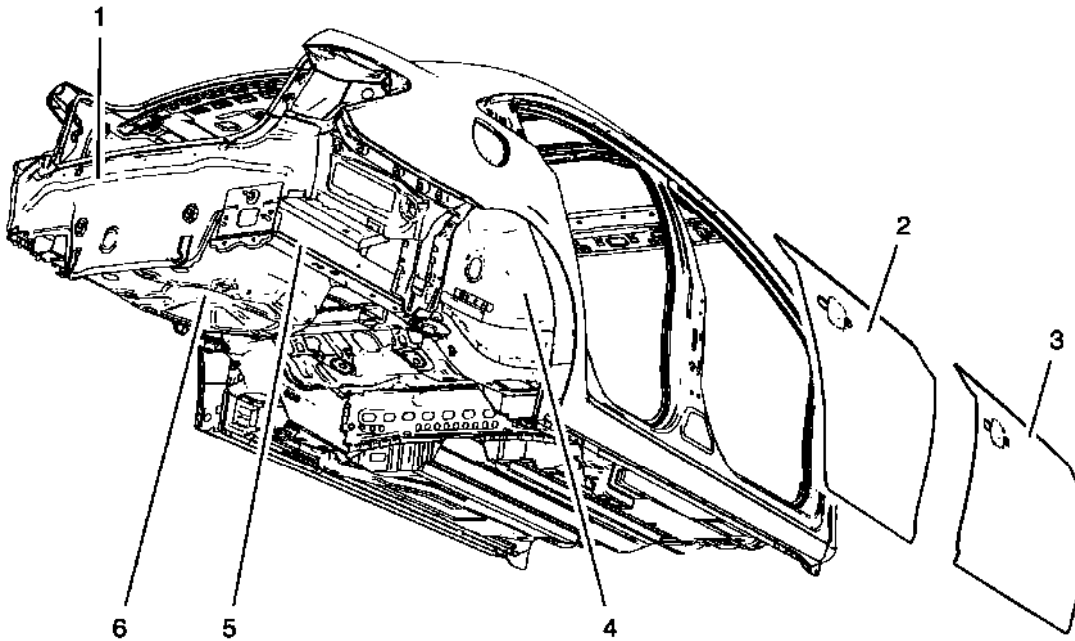
View Front

Number	Description	Material	Procedure
1	Front Wheelhouse Front Panel	<u>High Strength Low Alloy Steel</u>	<u>Front Wheelhouse Front Panel Replacement</u>
2	Front Wheelhouse Panel	<u>Mild Steel</u>	<u>Front Wheelhouse Panel Replacement</u>
3	Front Rail	• <u>Mild Steel</u> • <u>High Strength Low Alloy Steel</u>	<u>Front Rail Replacement</u>
4	Roof Outer Panel	<u>Mild Steel</u>	<u>Roof Outer Panel Replacement</u>
5	Center Pillar Inner Panel	<u>Dual Phase Steel</u>	<u>Center Pillar Inner Panel Replacement</u>
			<u>Body Side Inner Panel</u>

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6	Body Side Inner Panel	<u>Mild Steel</u>	<u>Sectioning</u>
7	Center Pillar Reinforcement	- Outer Panel Reinforcement Mild Steel - <u>Mild Steel</u> - Center Pillar Stiffener Dual Phase Steel - <u>Dual Phase Steel</u>	<u>Center Pillar Reinforcement Replacement</u>
8	Quarter Outer Panel	<u>Mild Steel</u>	<u>Quarter Outer Panel Sectioning</u>
9	Center Pillar - Outer	<u>Mild Steel</u>	<u>Center Pillar Sectioning - Outer</u>
10	Rocker Outer Panel	<u>Mild Steel</u>	<u>Rocker Outer Panel Replacement</u>
11	Front Hinge Pillar Body	<u>Mild Steel</u>	<u>Front Hinge Pillar Body Sectioning</u>
12	Body Side Outer Panel Reinforcement	<u>Dual Phase Steel</u>	<u>Body Side Outer Panel Reinforcement Replacement</u>
13	Body Hinge Pillar Lower Reinforcement	<u>Mild Steel</u>	<u>Body Hinge Pillar Lower Reinforcement Replacement</u>
14	Rocker Inner Panel	<u>Ultra High Strength Dual Phase Steel</u>	<u>Rocker Inner Panel Replacement</u>
15	Front Compartment Upper Side Rail	<u>High Strength Low Alloy Steel</u>	<u>Front Compartment Upper Side Rail Replacement</u>
16	Headlamp Mount Panel	<u>Mild Steel</u>	<u>Headlamp Mount Panel Replacement</u>
17	Front Wheelhouse Panel Rear Reinforcement	<u>Mild Steel</u>	<u>Front Wheelhouse Panel Rear Reinforcement Replacement</u>
18	Front End Upper Tie Bar Support	<u>Mild Steel</u>	<u>Front End Upper Tie Bar Support Replacement</u>
19	Front Bumper Impact Bar	<u>Mild Steel</u>	<u>Front Bumper Impact Bar Replacement</u>

**Fig. 11: Body Panel System Component Identification (Rear)**

Courtesy of GENERAL MOTORS COMPANY

View Rear

Number	Description	Material	Procedure
1	Body Rear End Panel	<u>Mild Steel</u>	<u>Body Rear End Panel Replacement</u>
2	Rear Side Door Outer Panel	<u>Mild Steel</u>	<u>Rear Side Door Outer Panel Replacement</u>
3	Front Side Door Outer Panel	<u>Mild Steel</u>	<u>Front Side Door Outer Panel Replacement</u>
4	Rear Wheelhouse Panel	<u>Mild Steel</u>	<u>Rear Wheelhouse Panel Replacement</u>
5	Rear Rail	<u>High Strength Low Alloy Steel</u>	<u>Rear Rail Sectioning</u>
6	Rear Compartment Floor Panel	<u>Mild Steel</u>	<u>Rear Compartment Floor Panel Sectioning</u>

REPAIR INSTRUCTIONS**HEADLAMP MOUNT PANEL REPLACEMENT****Removal Procedure**

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

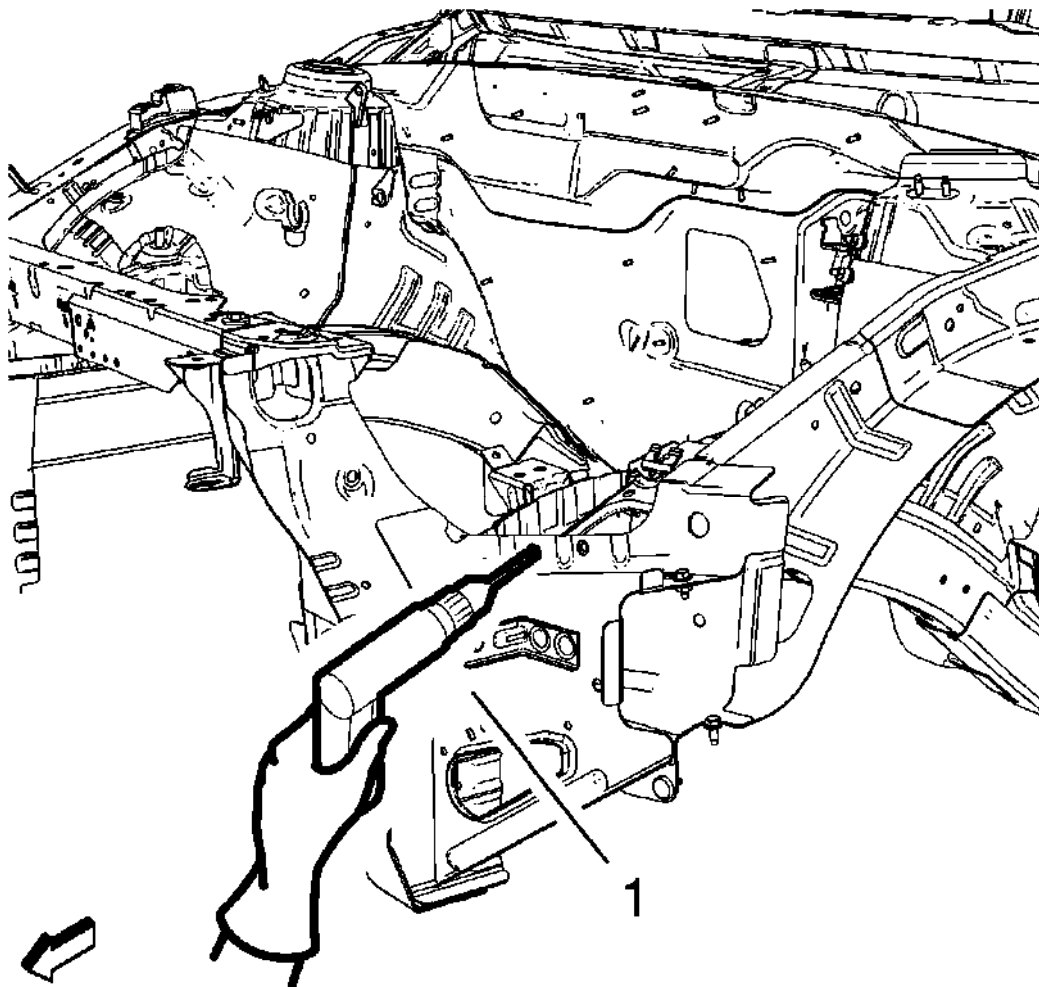


Fig. 12: Drilling Out Factory Welds On Headlamp Mount Panel
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the headlamp mount panel (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

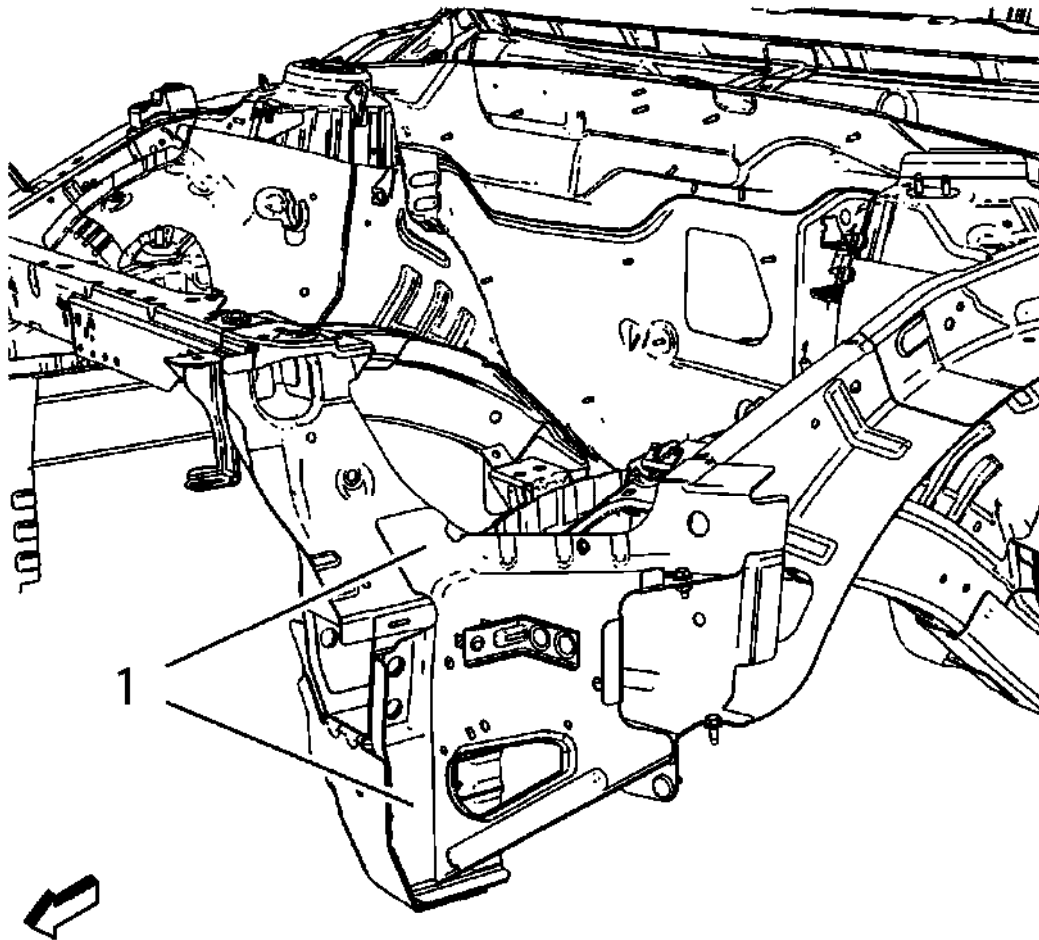


Fig. 13: Adhesive Cutting Points

Courtesy of GENERAL MOTORS COMPANY

8. Cut the adhesive (1) with an appropriate tool.

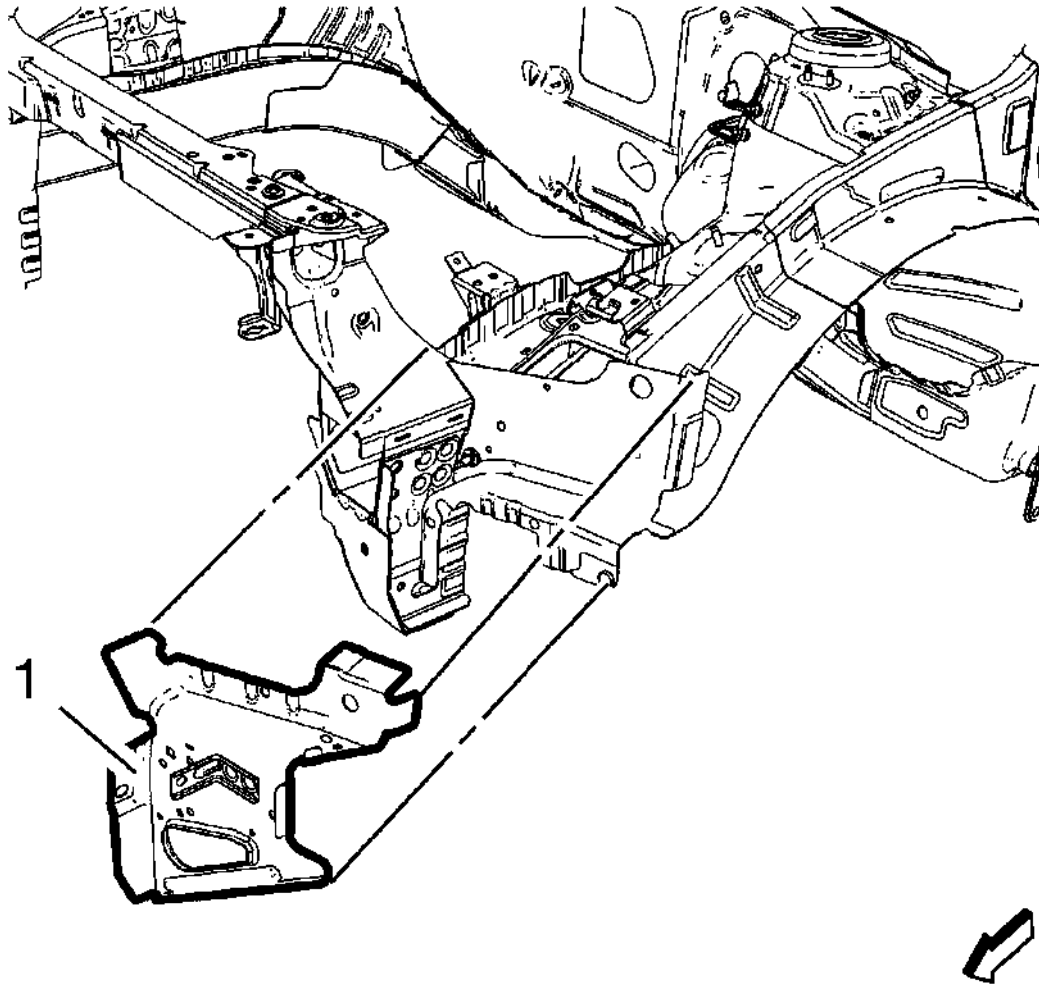


Fig. 14: Headlamp Mount Panel

Courtesy of GENERAL MOTORS COMPANY

9. Remove the headlamp mount panel (1).

Installation Procedure

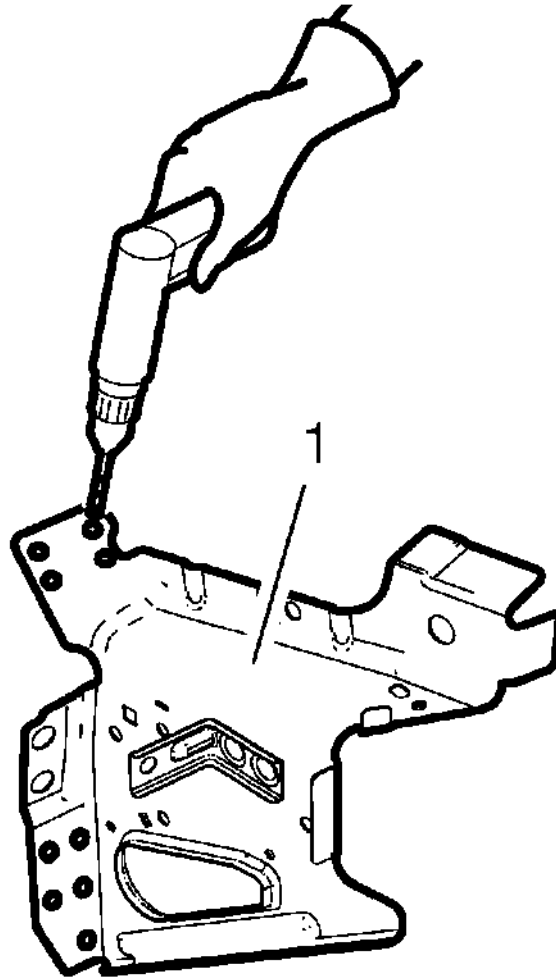


Fig. 15: Drilling Holes For Plug Welding Headlamp Mount Panel

Courtesy of GENERAL MOTORS COMPANY

1. Drill 8 mm (5/16 in) for plug welding instead of the adhesive noted from the original panel.
2. Drill 8 mm (5/16 in) for plug welding along the edges of the headlamp mount panel (1) as noted from the original panel.
3. Clean and prepare the attaching surfaces for welding.

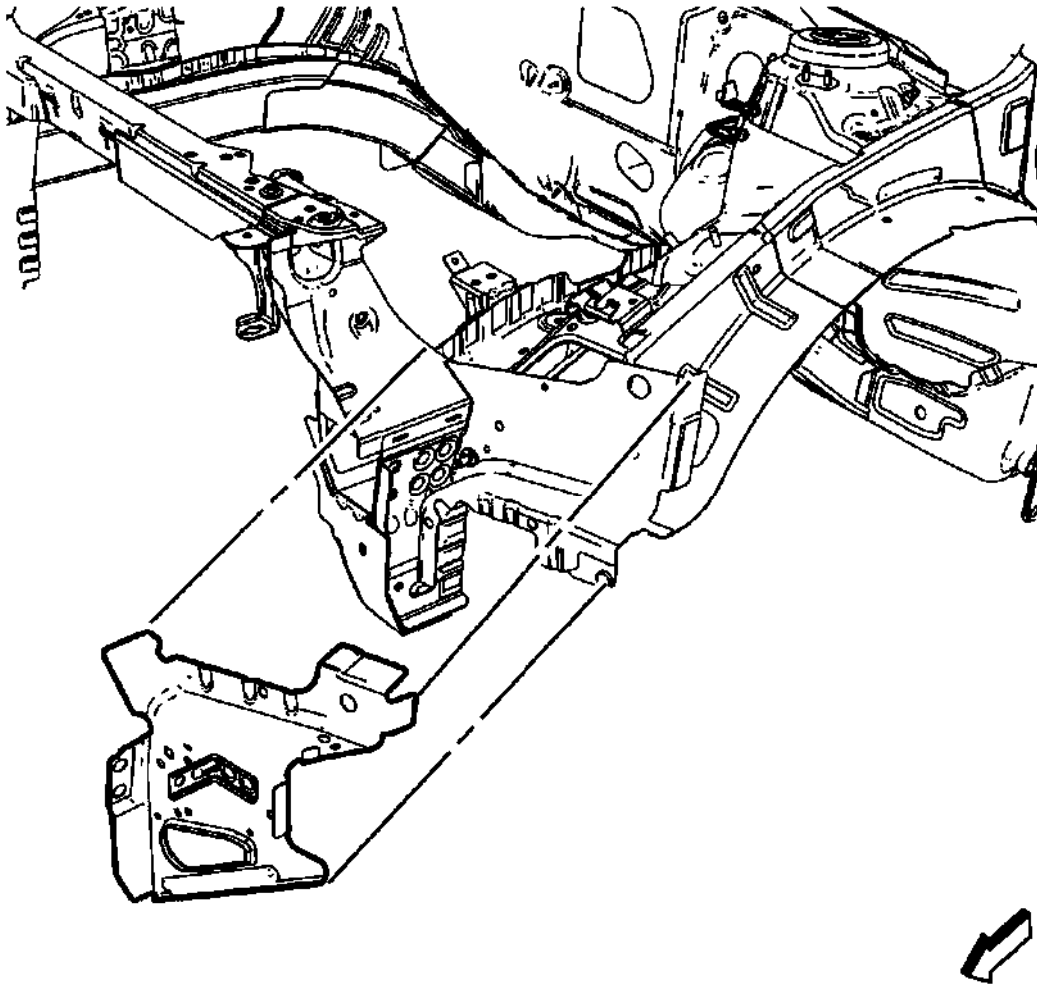


Fig. 16: Headlamp Mount Panel

Courtesy of GENERAL MOTORS COMPANY

4. Position the headlamp mount panel (1) on the vehicle.
5. Verify the fit of the headlamp mount panel.
6. Clamp the headlamp mount panel into position.

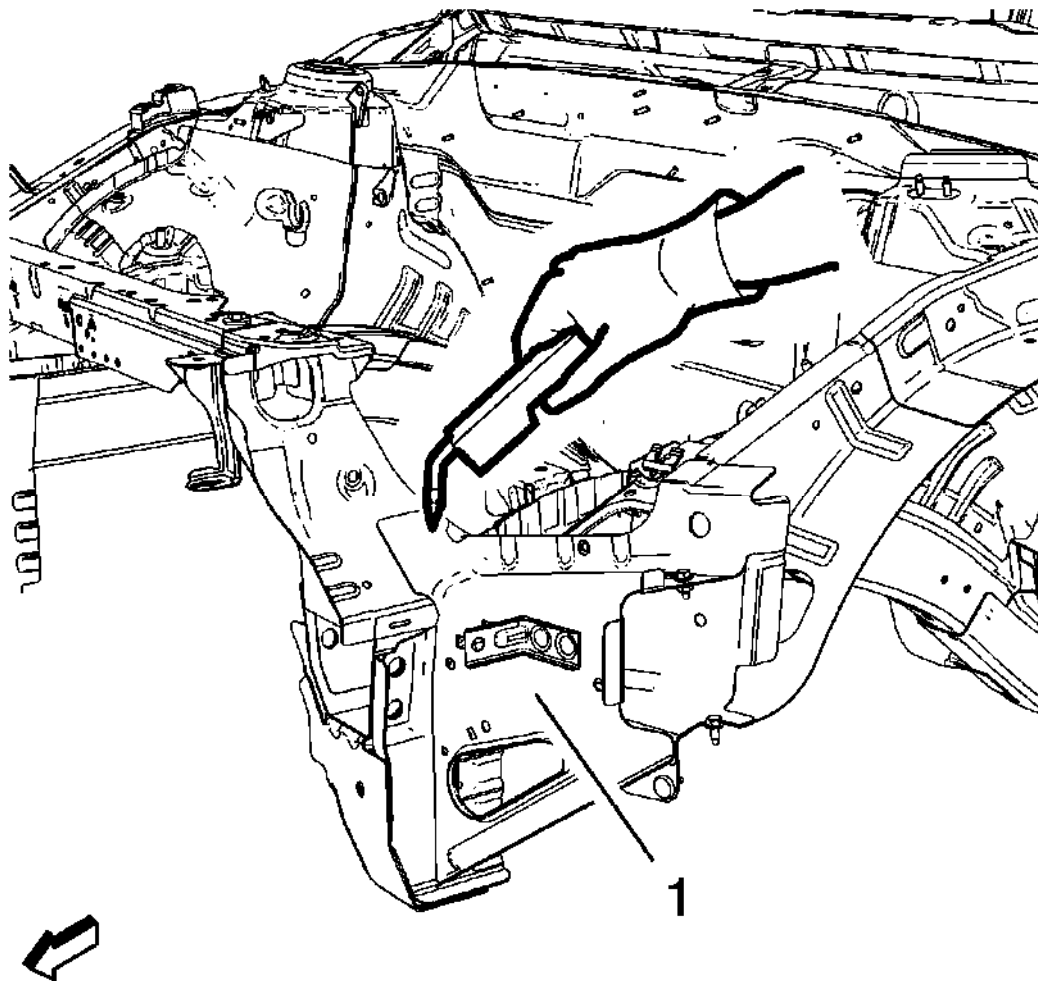


Fig. 17: Welding Headlamp Mount Panel
Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the headlamp mount panel (1) accordingly.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
9. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
10. Install all related panels and components.
11. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
12. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT END UPPER TIE BAR SUPPORT REPLACEMENT

NOTE: According to different corrosion warranties, only the regional mandatory joining methods are allowed.

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning

WARNING: Refer to Glass and Sheet Metal Handling Warning

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. Refer to Anti-Corrosion Treatment and Repair

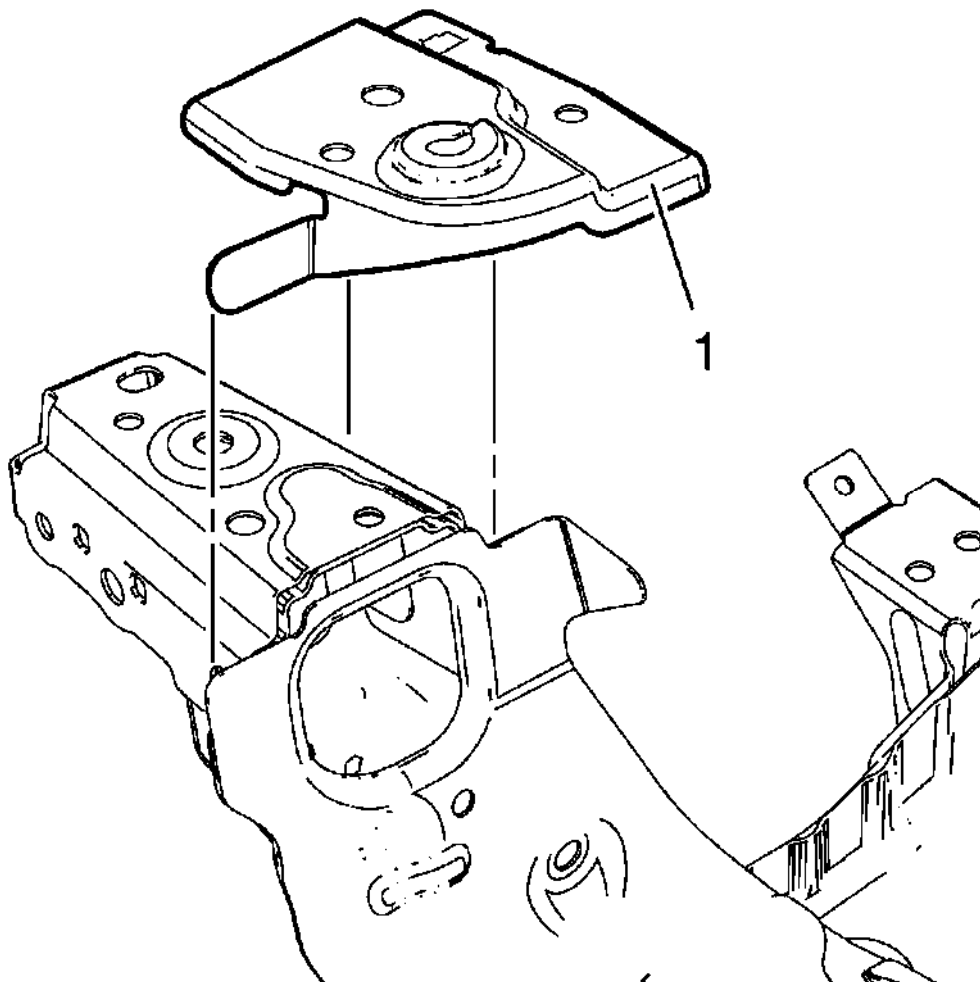


Fig. 18: Hood Front Bumper Bracket

Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the hood front bumper bracket (1).

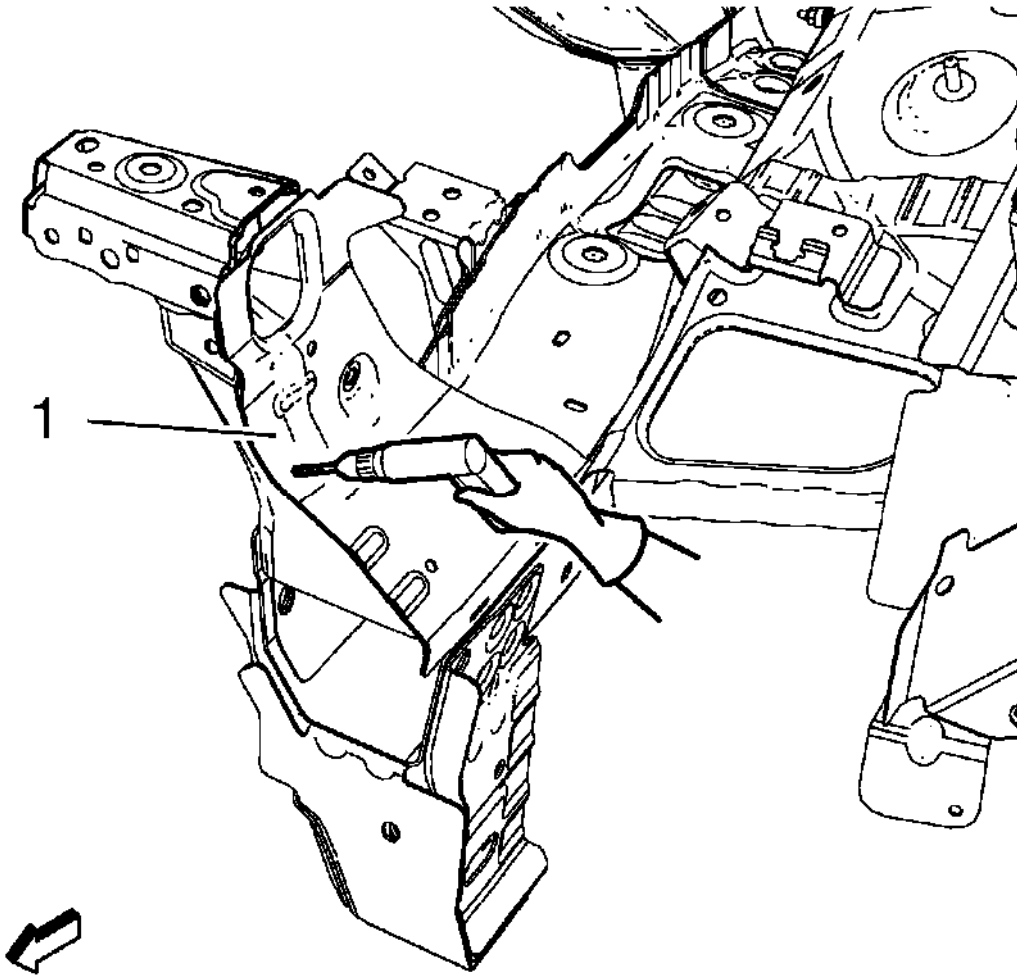


Fig. 19: Drilling Factory Welds On Front End Sheet Metal Cross Panel Reinforcement

Courtesy of GENERAL MOTORS COMPANY

7. Locate and mark all the necessary factory welds of the front end sheet metal cross panel reinforcement (1).
8. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

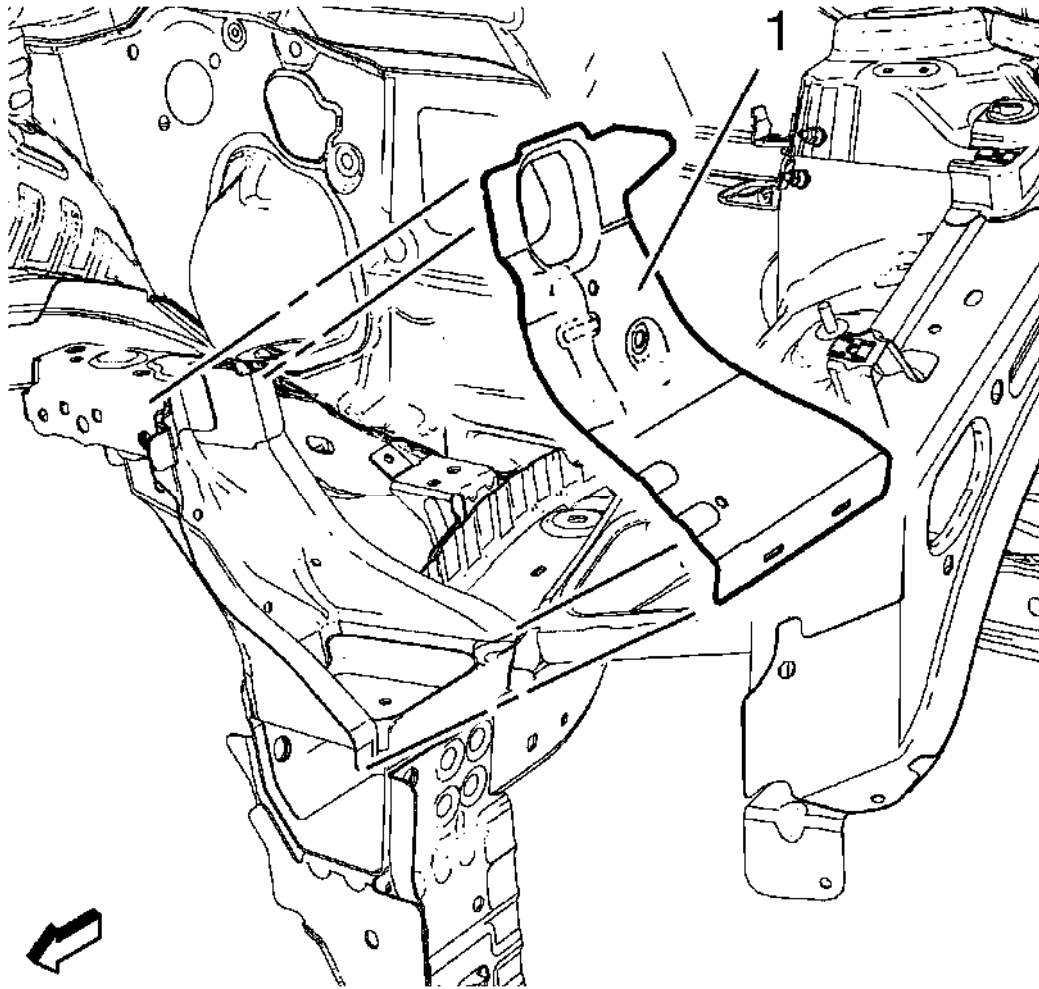


Fig. 20: Front End Sheet Metal Cross Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

9. Remove the front end sheet metal cross panel reinforcement (1).
10. Drill all factory welds.

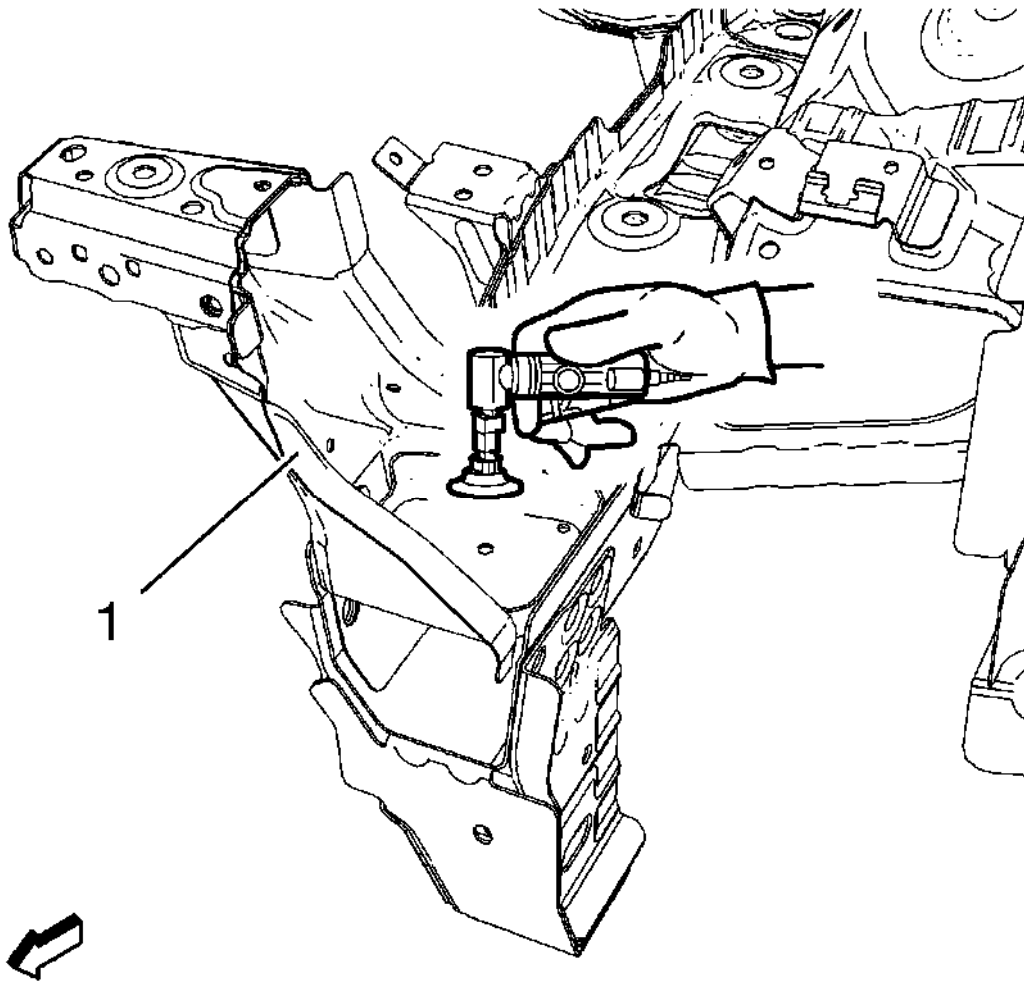


Fig. 21: Grinding Factory Welds At Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

11. Grind factory welds of the front end upper tie bar support (1).

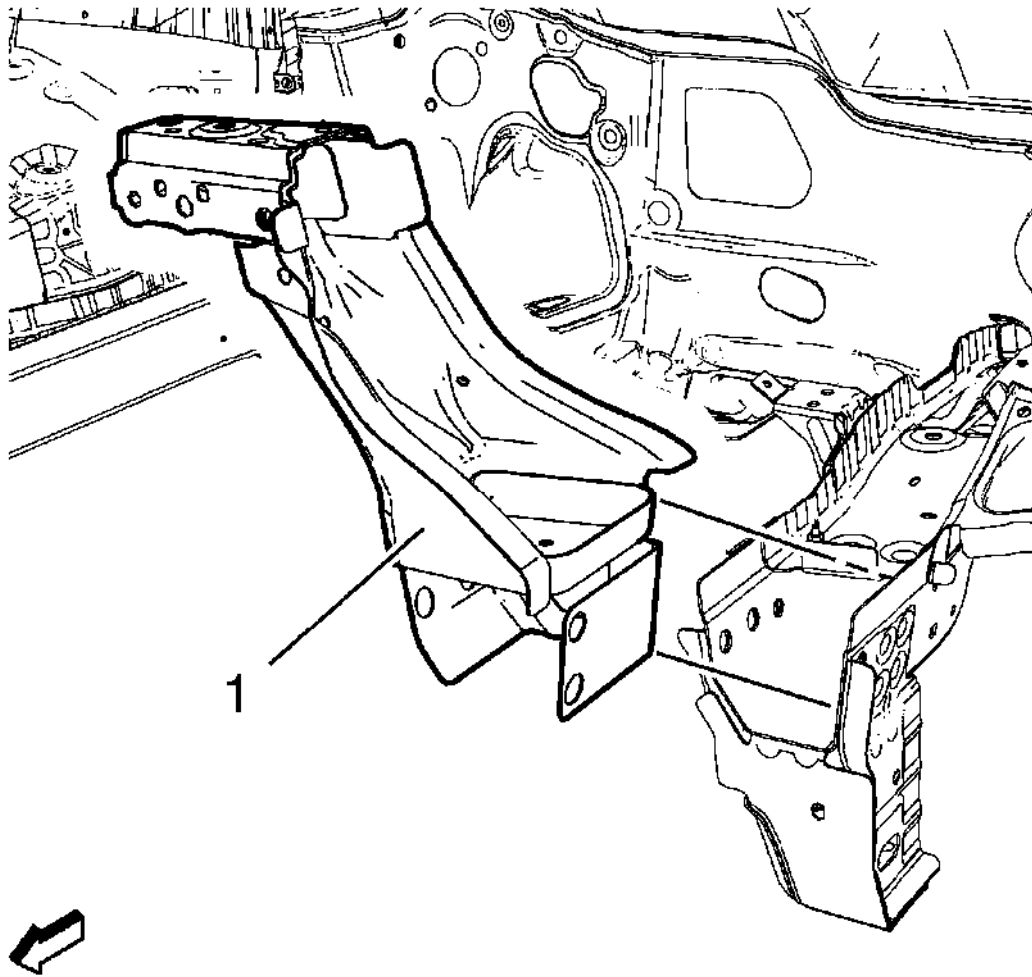


Fig. 22: Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

12. Remove the front end upper tie bar support (1).

Installation Procedure

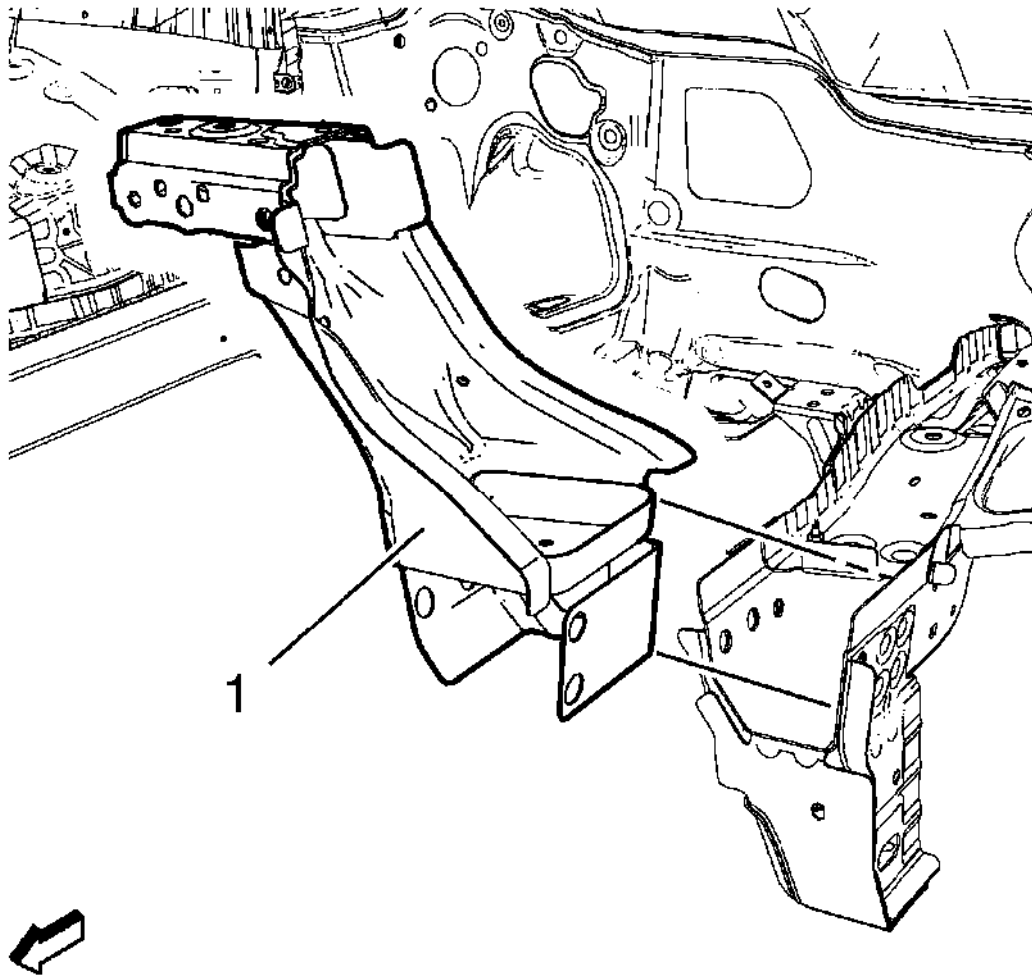


Fig. 23: Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

1. Position the front end upper tie bar support (1) on the vehicle.
2. Verify the fit of the front end upper tie bar support.
3. Clamp the front end upper tie bar support into position.

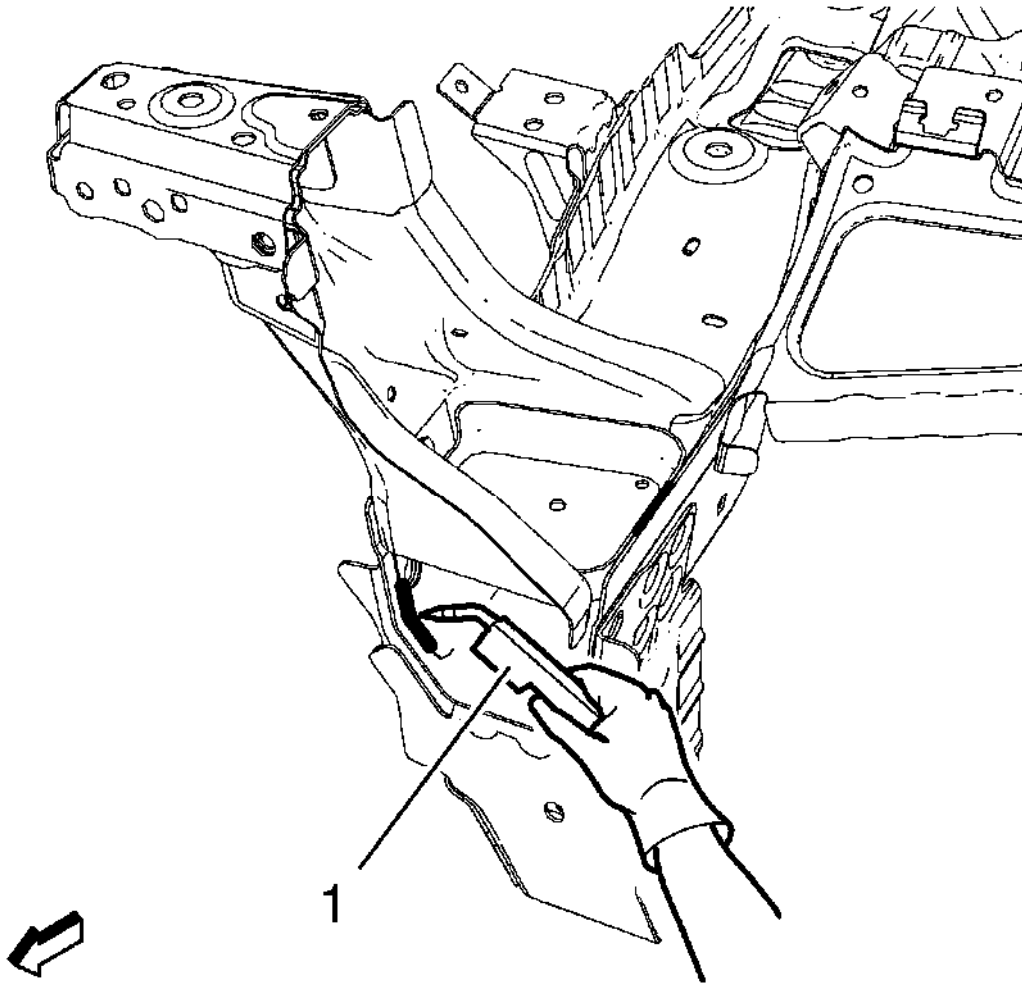


Fig. 24: Welding Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

4. Weld accordingly (1).

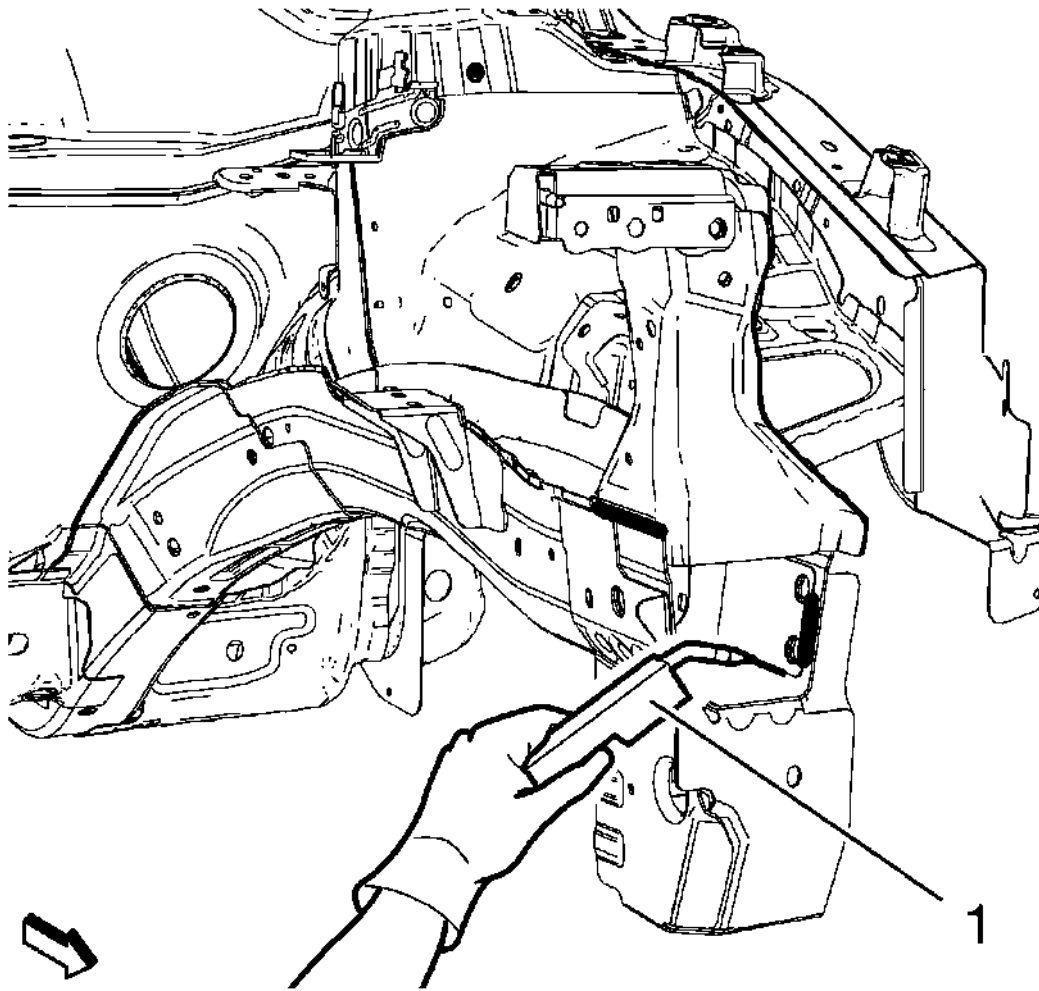


Fig. 25: Welding Front End Upper Tie Bar Support
Courtesy of GENERAL MOTORS COMPANY

5. Weld accordingly (1).
6. Grind down weld seams as needed for related panels and components.

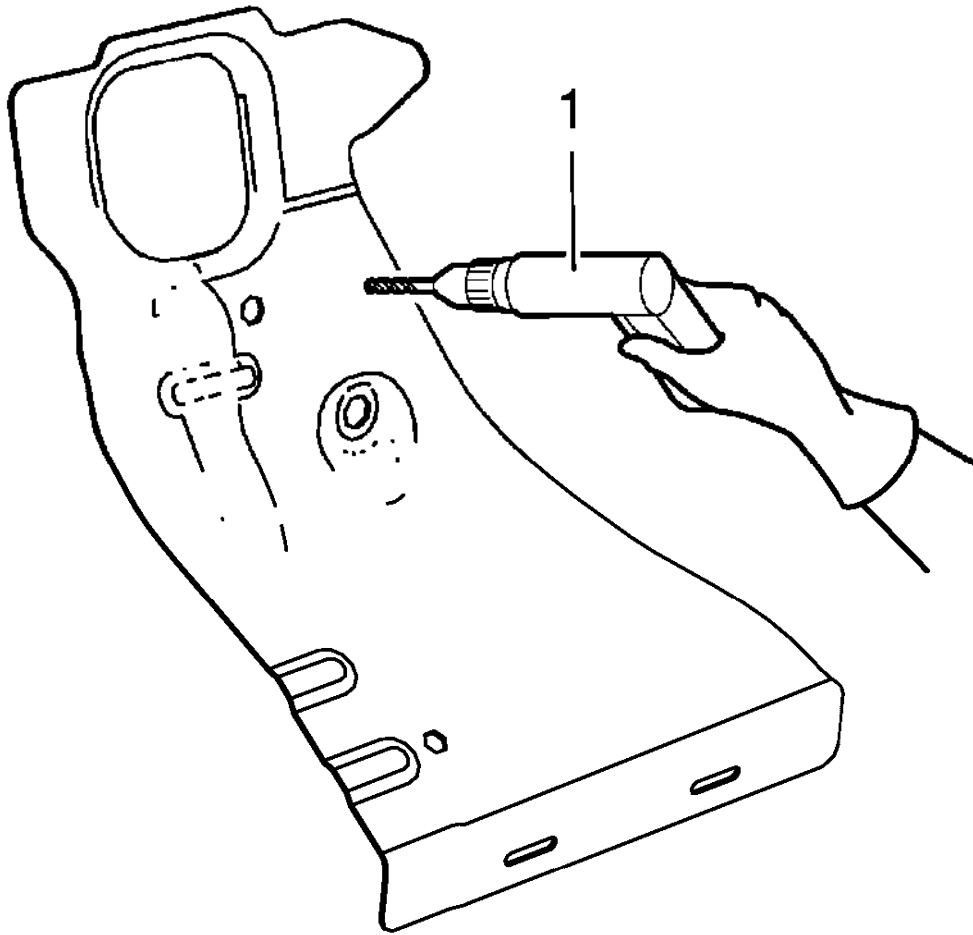


Fig. 26: Drilling Holes For Plug Welding Front End Sheet Metal Cross Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

7. Drill 8 mm (5/16 in) holes for plug welding along the edges of the front end sheet metal cross panel reinforcement as noted from the original panel (1).
8. Clean and prepare the attaching surfaces for welding.

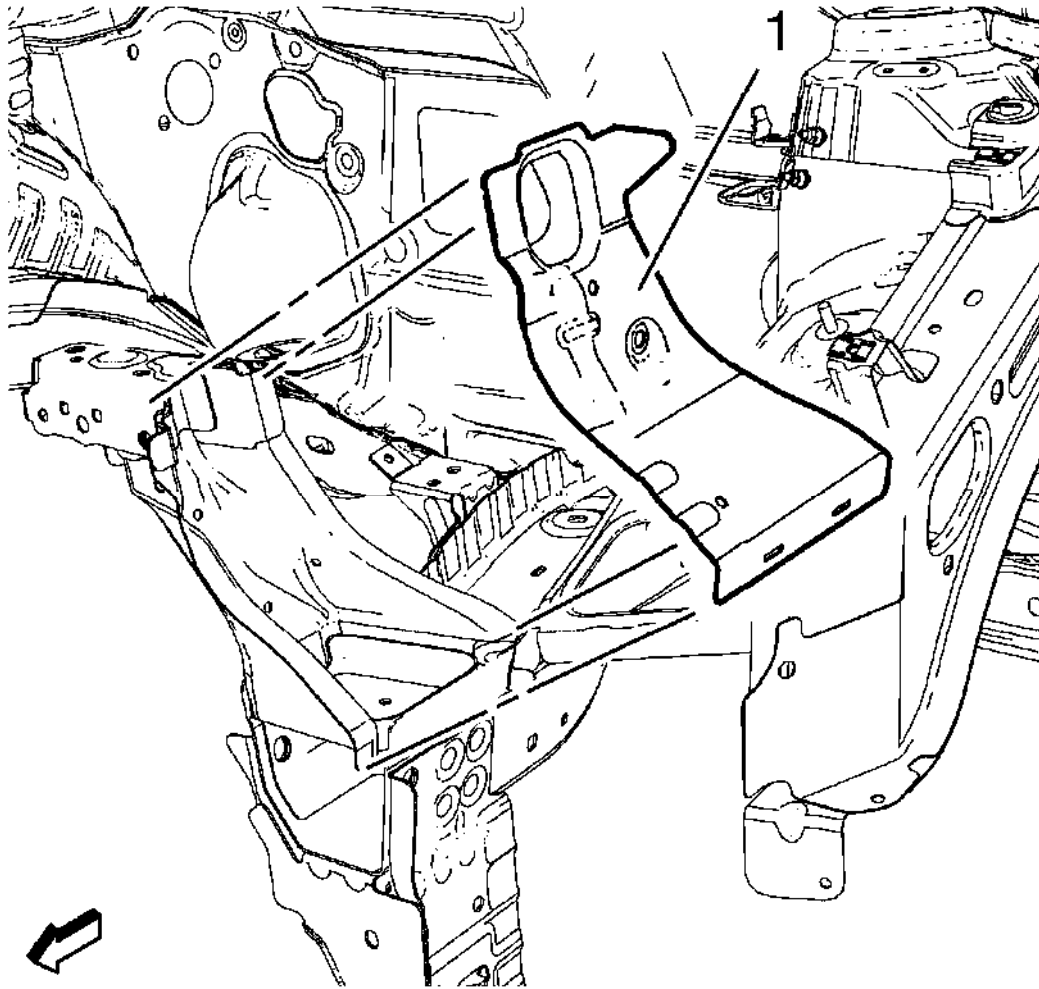


Fig. 27: Front End Sheet Metal Cross Panel Reinforcement

Courtesy of GENERAL MOTORS COMPANY

9. Position the front end sheet metal cross panel reinforcement (1) on the vehicle.
10. Verify the fit of the front end upper tie bar.
11. Clamp the front end sheet metal cross panel reinforcement into position.

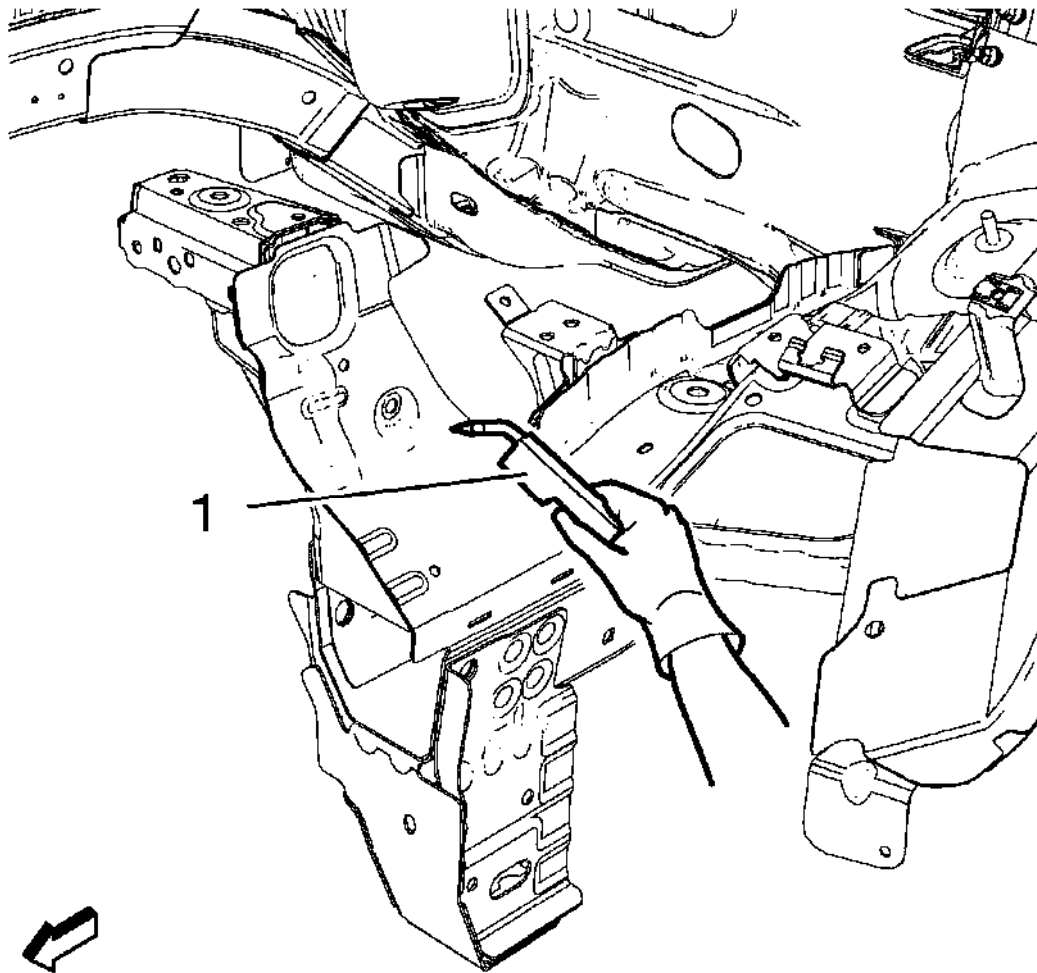


Fig. 28: Welding Front End Sheet Metal Cross Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

12. Plug weld accordingly (1).
13. Use factory slots for slot brazing.

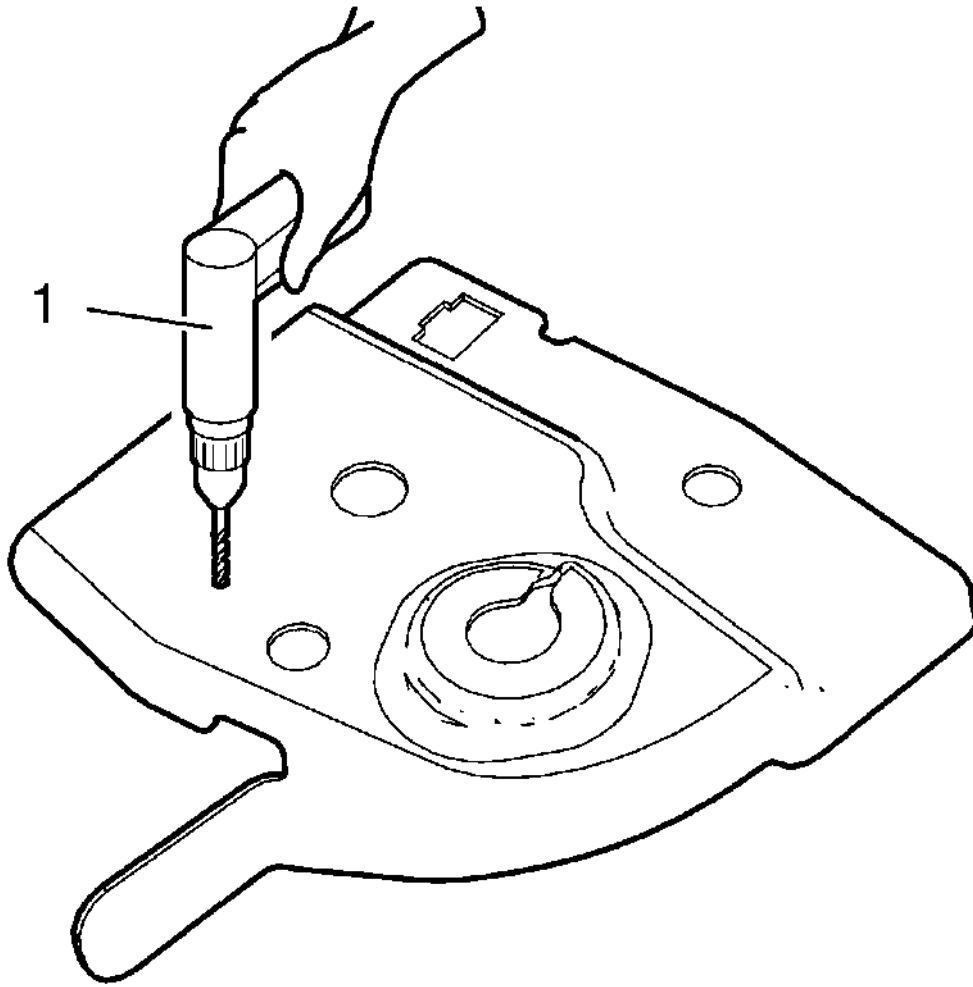


Fig. 29: Drilling Holes For Plug Welding Panel
Courtesy of GENERAL MOTORS COMPANY

14. Drill 8 mm (5/16 in) holes for plug welding as noted from the original panel (1).

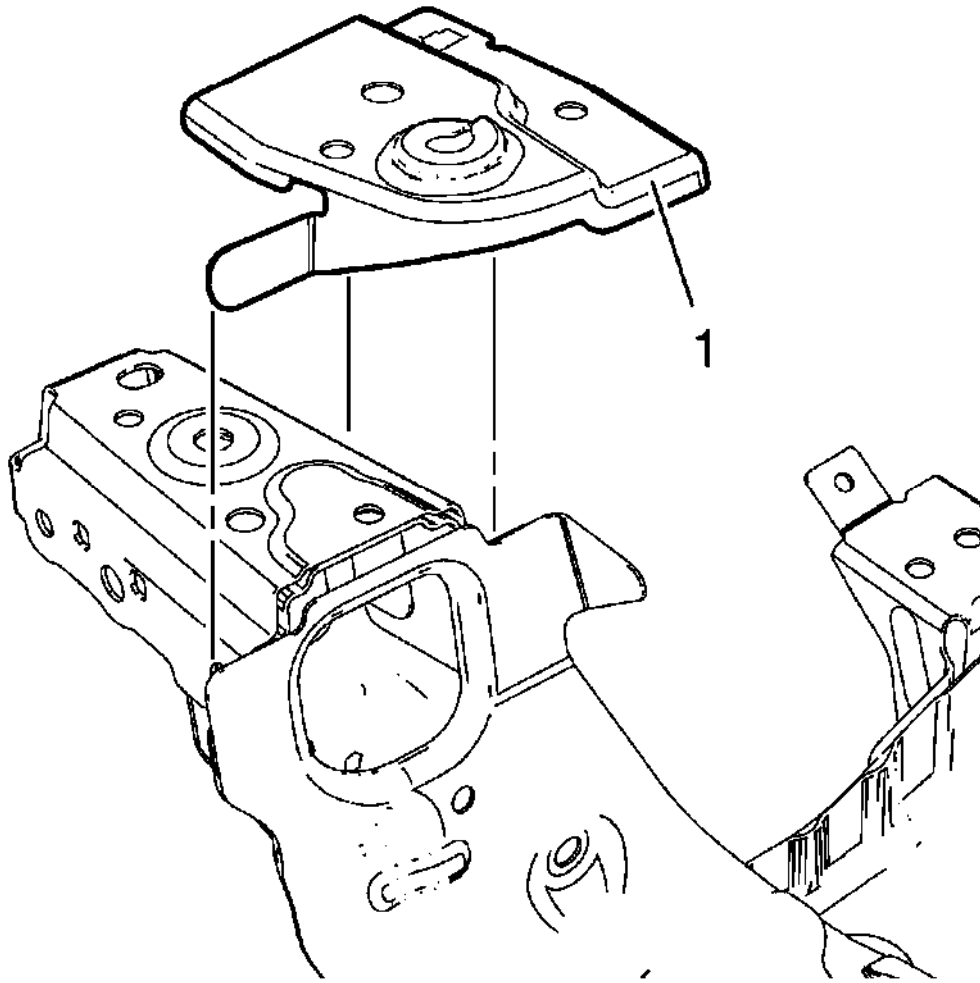


Fig. 30: Hood Front Bumper Bracket

Courtesy of GENERAL MOTORS COMPANY

15. Position the hood front bumper bracket (1) on the vehicle.
16. Clamp the hood front bumper bracket into position.

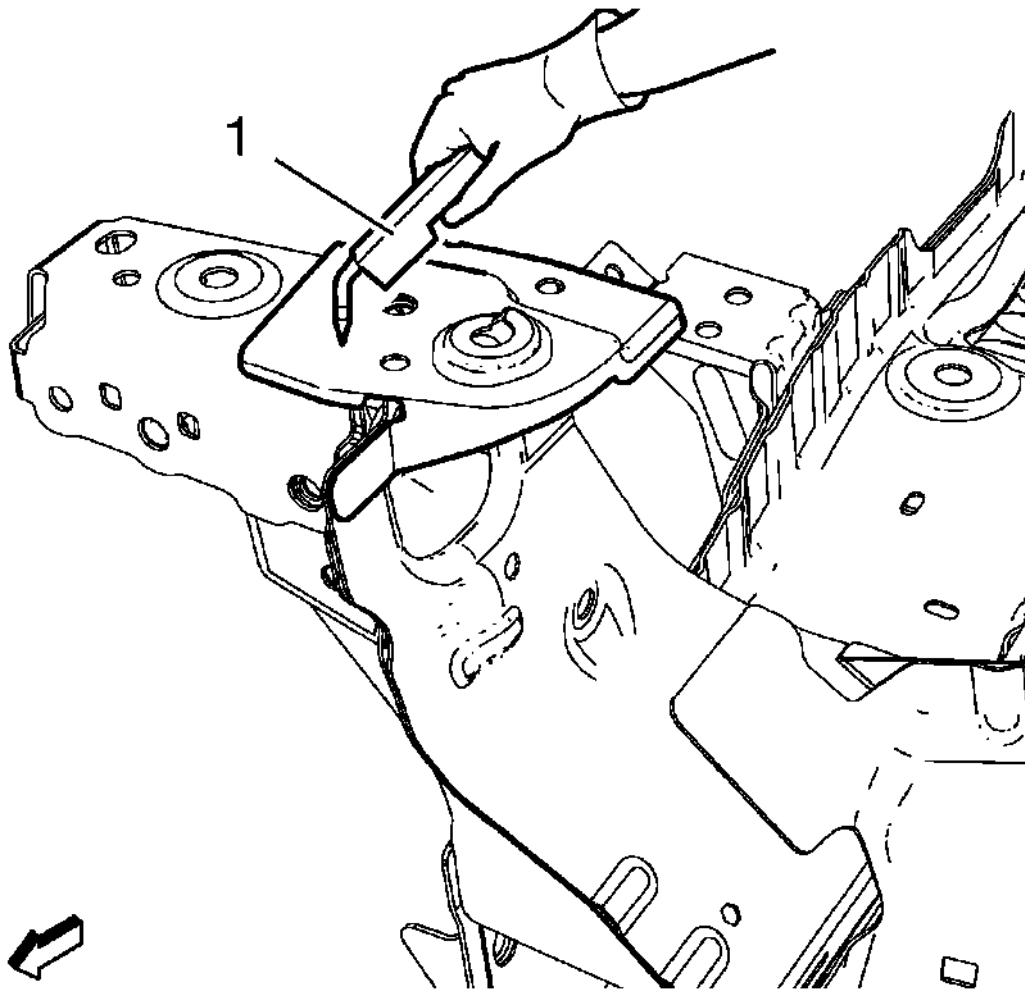


Fig. 31: Welding Hood Front Bumper Bracket
Courtesy of GENERAL MOTORS COMPANY

17. Plug weld accordingly (1).
18. Install front bumper impact bar before applying the sealers and anti-corrosion materials. Refer to **Front Bumper Impact Bar Replacement**
19. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair**
20. Paint the repaired area.
21. Install all related panels and components.
22. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection**
23. Enable the SIR system. Refer to **SIR Disabling and Enabling**

FRONT WHEELHOUSE FRONT PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

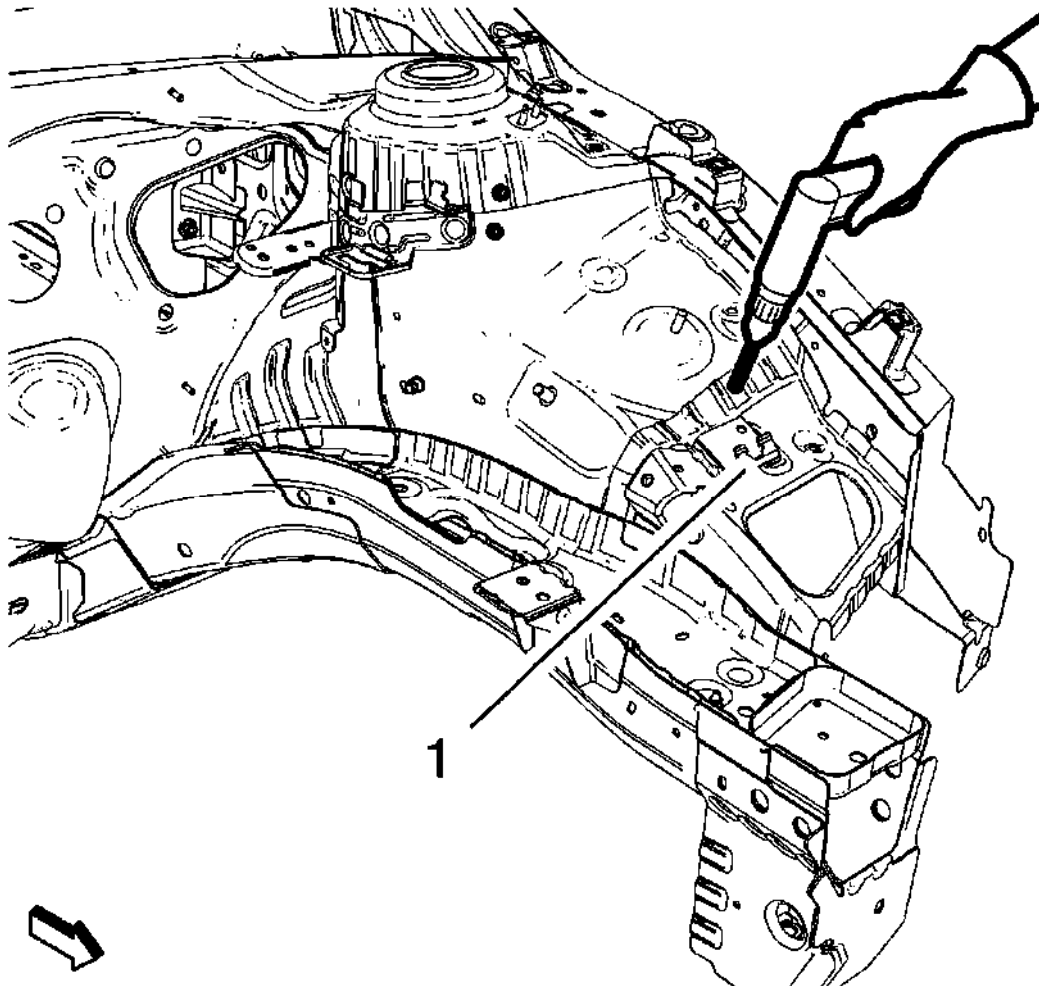


Fig. 32: Drilling Factory Welds At Front Wheelhouse Front Panel

Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the front wheelhouse front panel (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

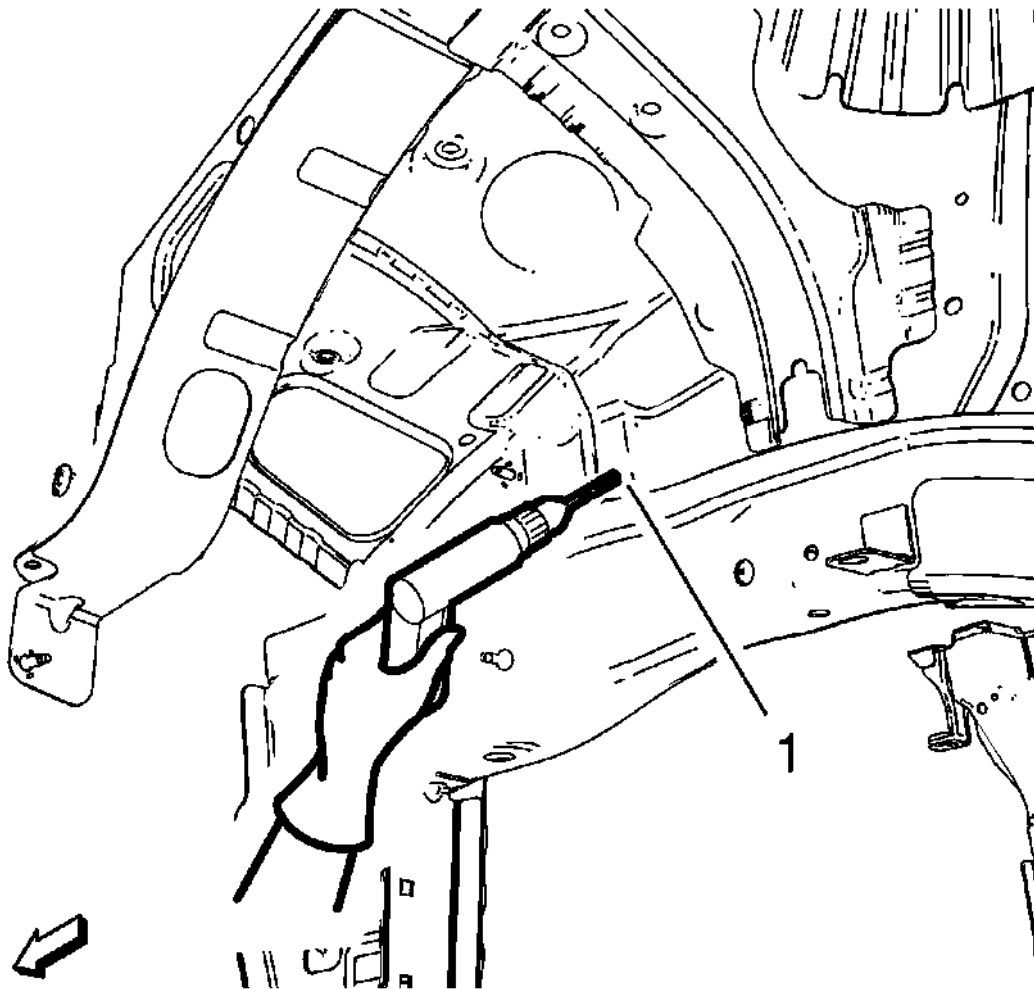


Fig. 33: Drilling Hidden Factory Weld Where Front Wheelhouse Front Panel And Front Wheelhouse Overlap

Courtesy of GENERAL MOTORS COMPANY

8. Drill hidden factory weld (1) where front wheelhouse front panel and front wheelhouse overlap.

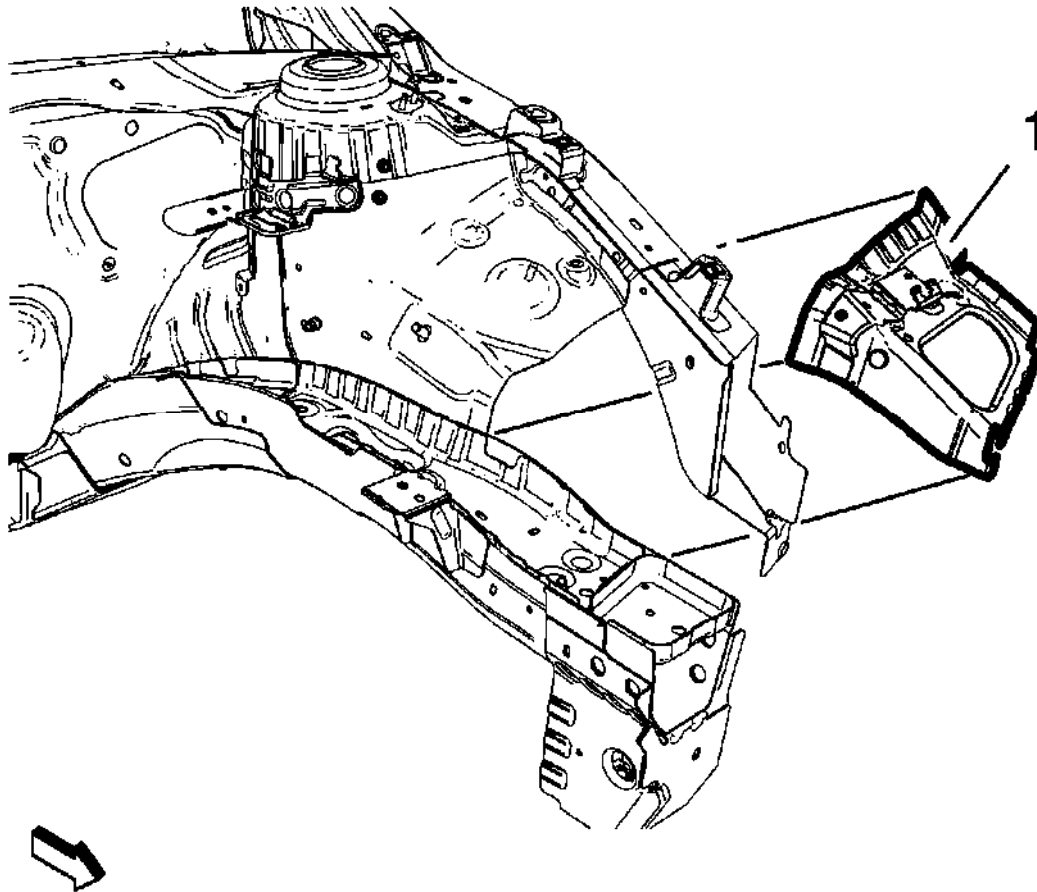


Fig. 34: Front Wheelhouse Front Panel

Courtesy of GENERAL MOTORS COMPANY

9. Remove the front wheelhouse front panel (1).

Installation Procedure

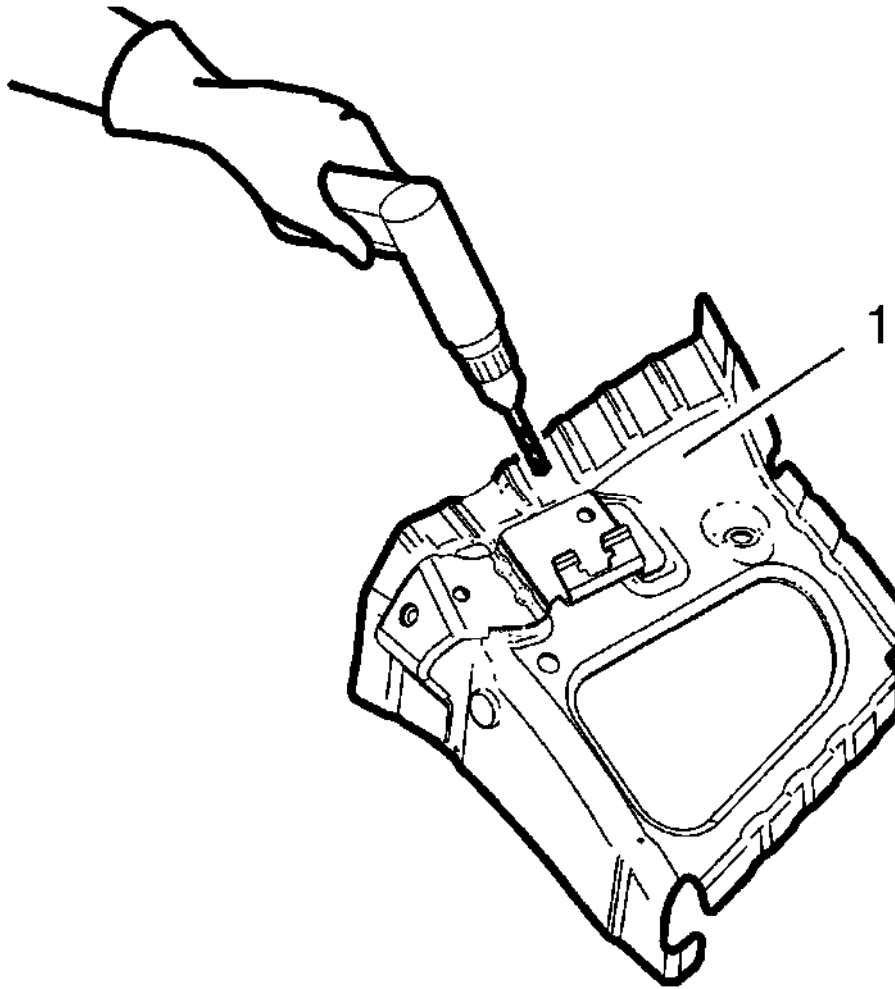


Fig. 35: Drilling 8 mm (5/16 in) Hole For Plug Welding New Front Wheelhouse Front Panel
Courtesy of GENERAL MOTORS COMPANY

1. Drill 8 mm (5/16 in) for plug welding along the edges of the front wheelhouse front panel (1) as noted from the original panel.

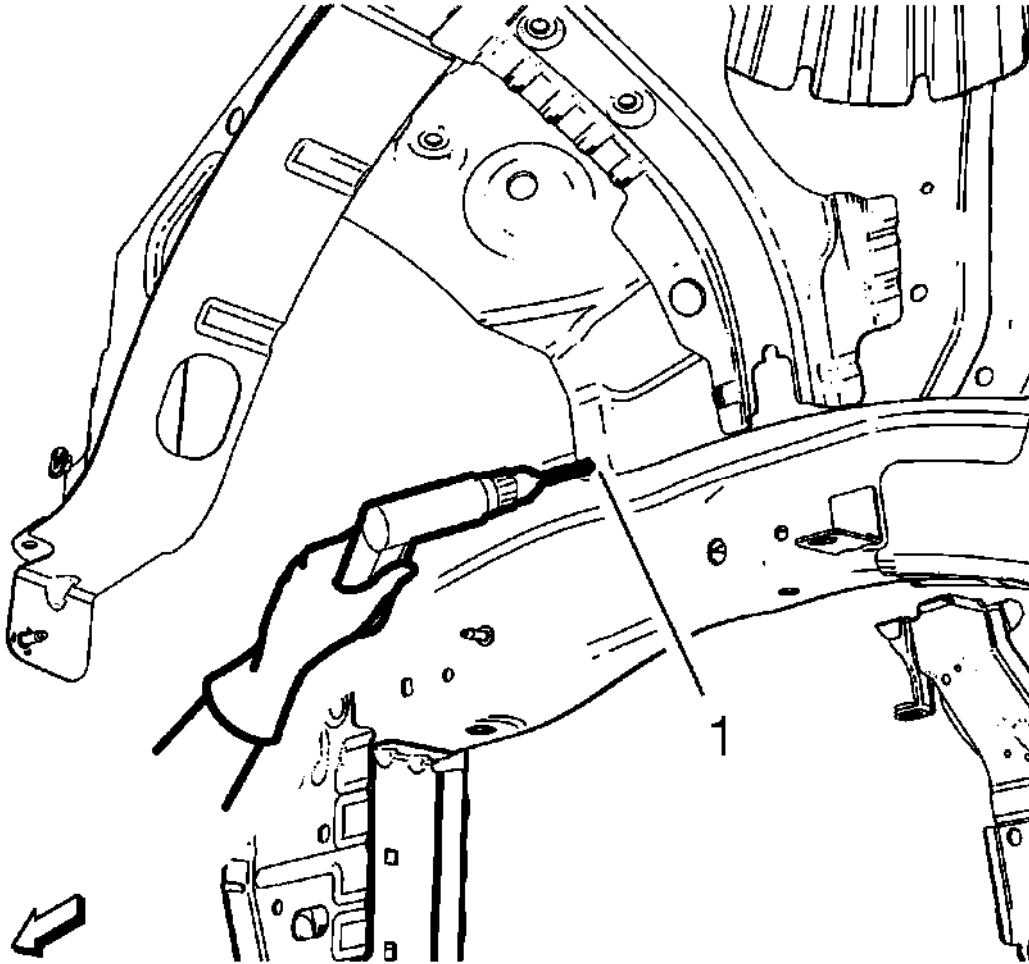


Fig. 36: Drilling Hole For Welding Where Front Wheelhouse Front Panel And Front Wheelhouse Overlap

Courtesy of GENERAL MOTORS COMPANY

2. Drill 8 mm (5/16 in) for plug welding (1) where front wheelhouse front panel and front wheelhouse overlap.
3. Clean and prepare the attaching surfaces for welding.

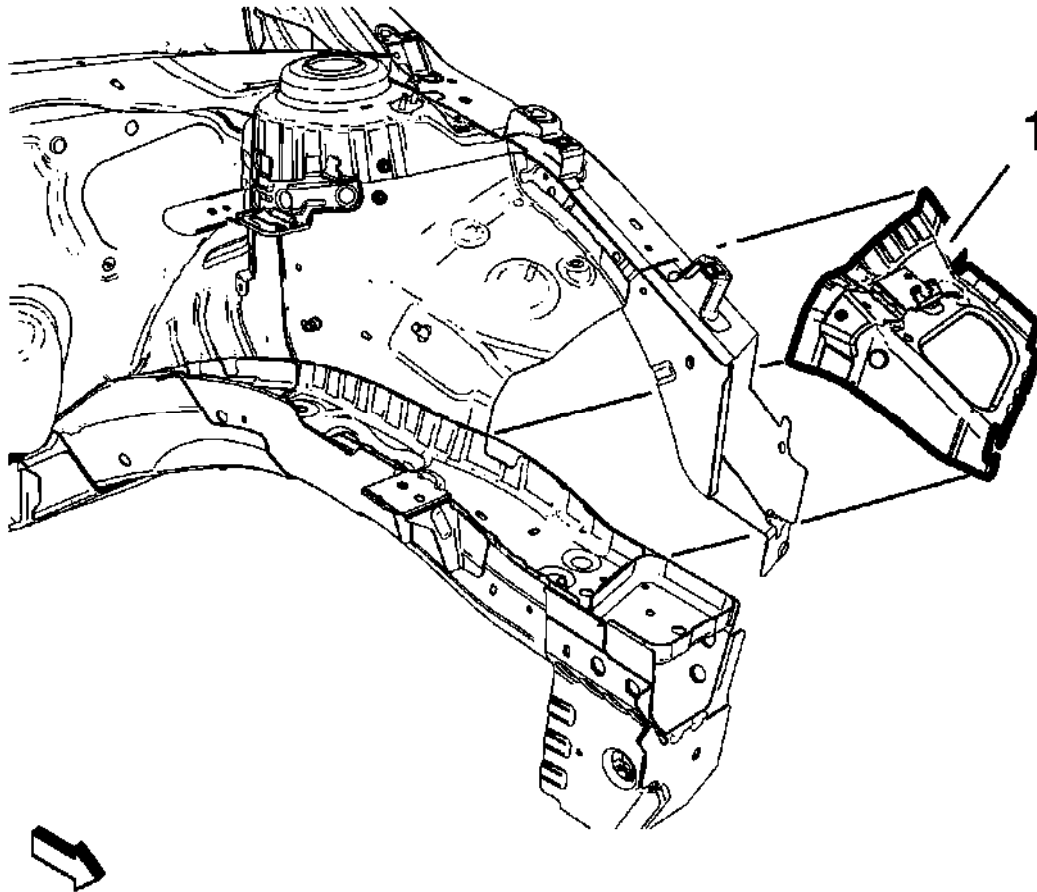


Fig. 37: Front Wheelhouse Front Panel

Courtesy of GENERAL MOTORS COMPANY

4. Position the front wheelhouse front panel (1) on the vehicle.
5. Verify the fit of the front wheelhouse front panel.
6. Clamp the front wheelhouse front panel into position.

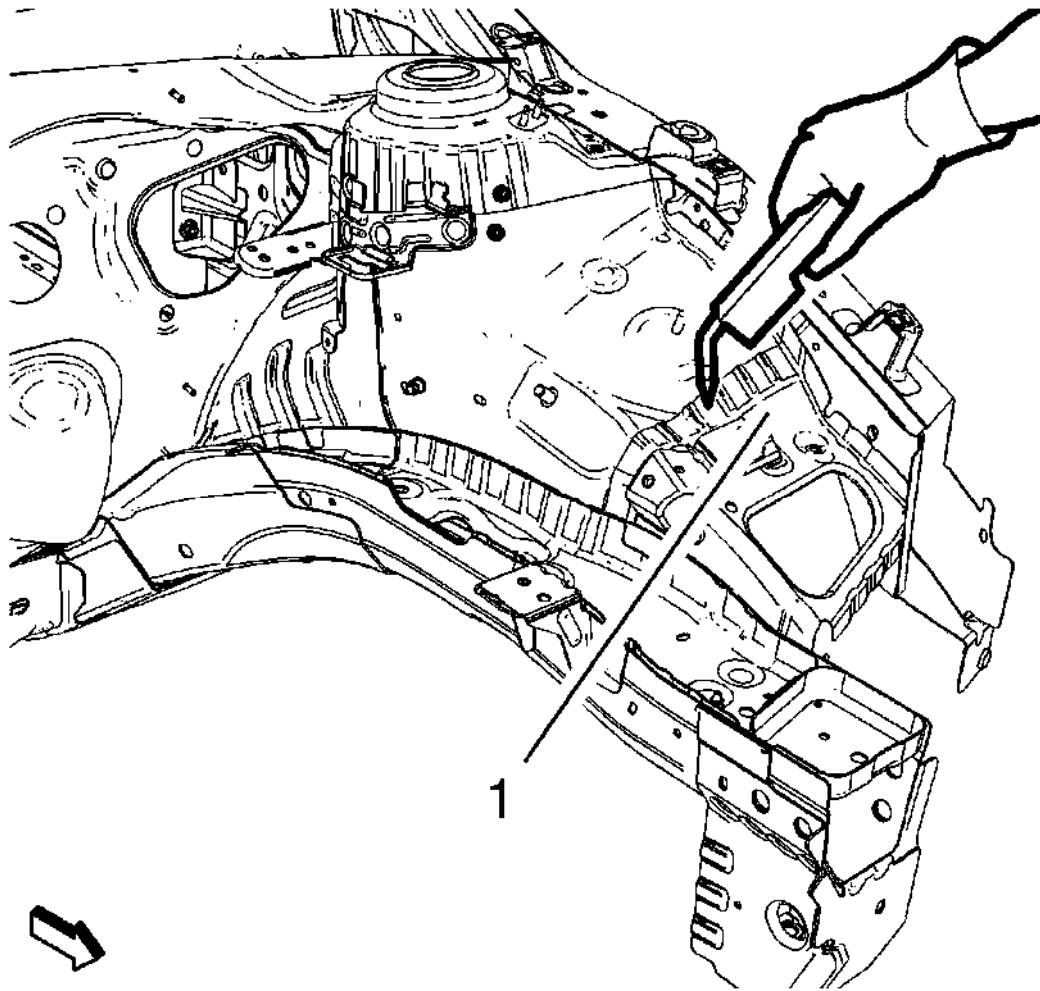


Fig. 38: Welding Front Wheelhouse Front Panel
Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the front wheelhouse front panel (1) accordingly.

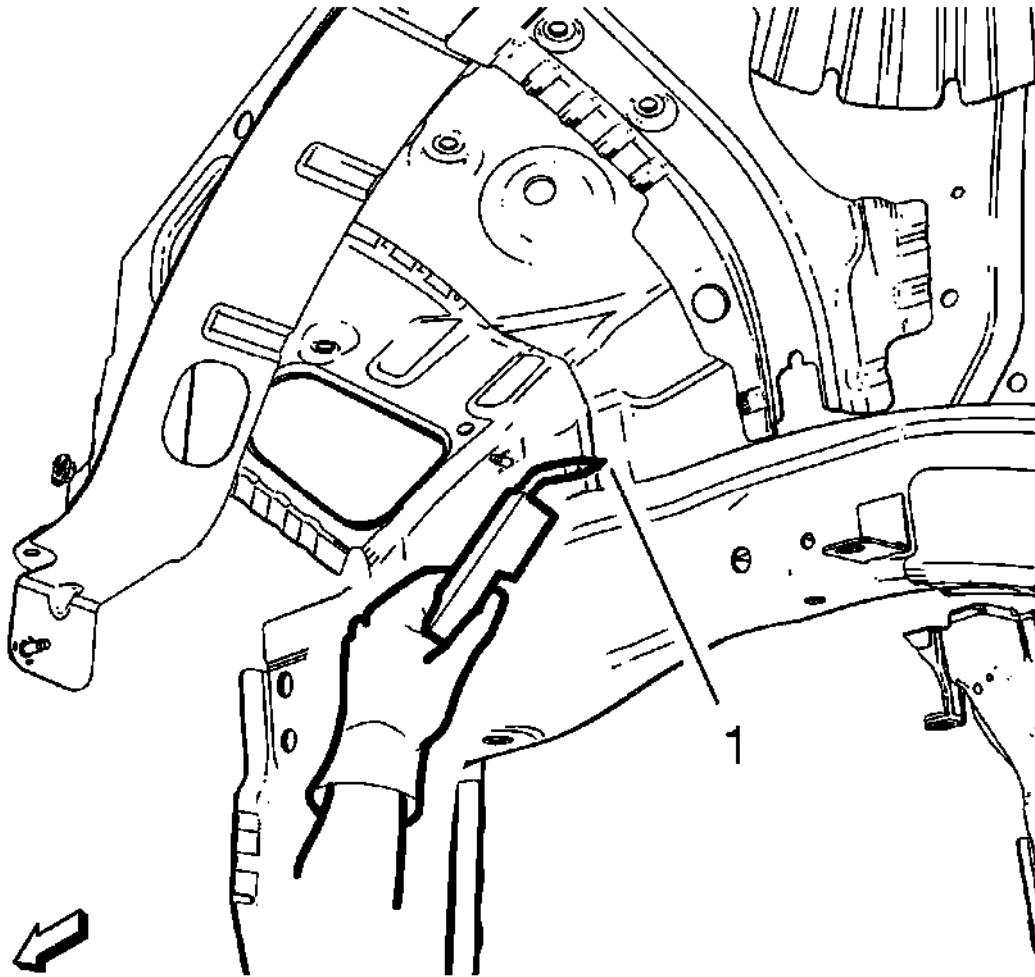


Fig. 39: Welding Joint From Front Wheelhouse Front Panel To Front Wheelhouse
Courtesy of GENERAL MOTORS COMPANY

8. Plug weld (1) the joint from front wheelhouse front panel to front wheelhouse accordingly.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
10. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
11. Install all related panels and components.
12. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
13. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT WHEELHOUSE PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

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. Refer to **Anti-Corrosion Treatment and Repair** .

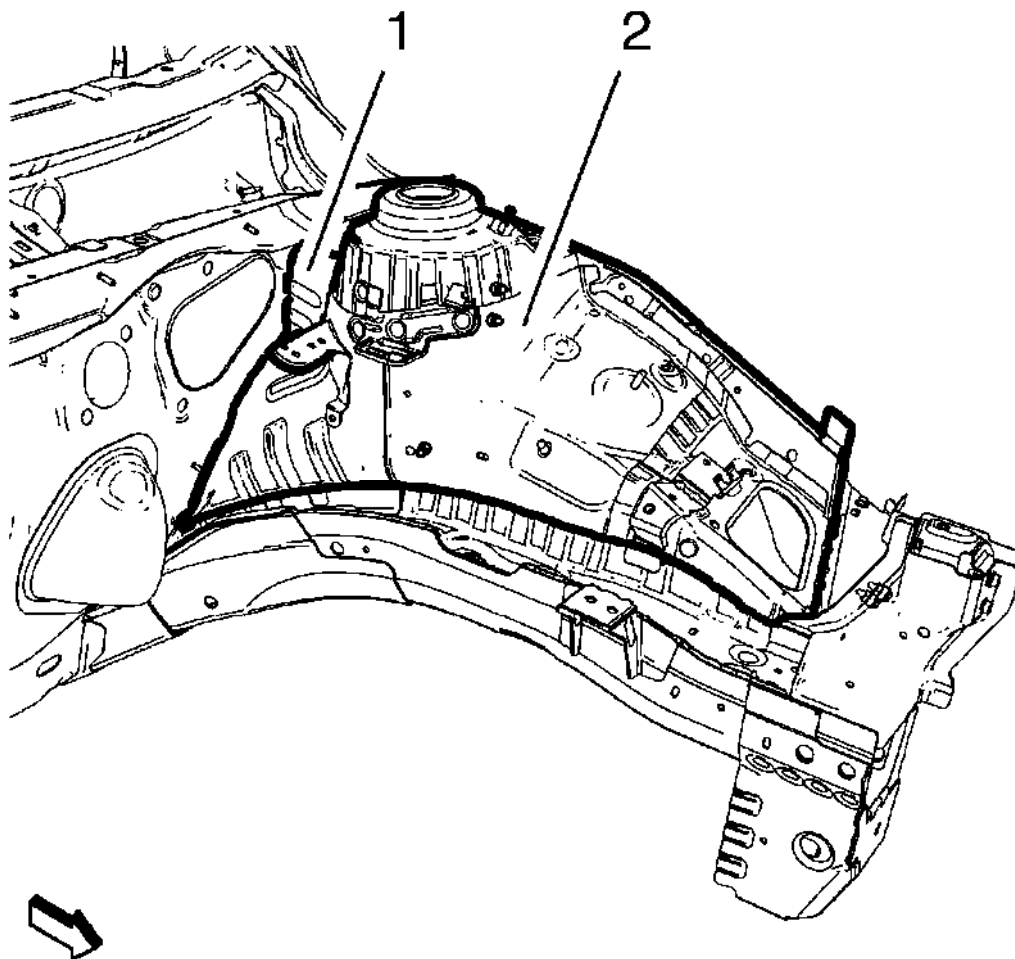


Fig. 40: Front Wheelhouse Rear Panel Brace
Courtesy of GENERAL MOTORS COMPANY

NOTE: Front wheelhouse rear panel brace (1) remains to the body.

6. Locate and mark all the necessary factory welds of the front wheelhouse panel (2).

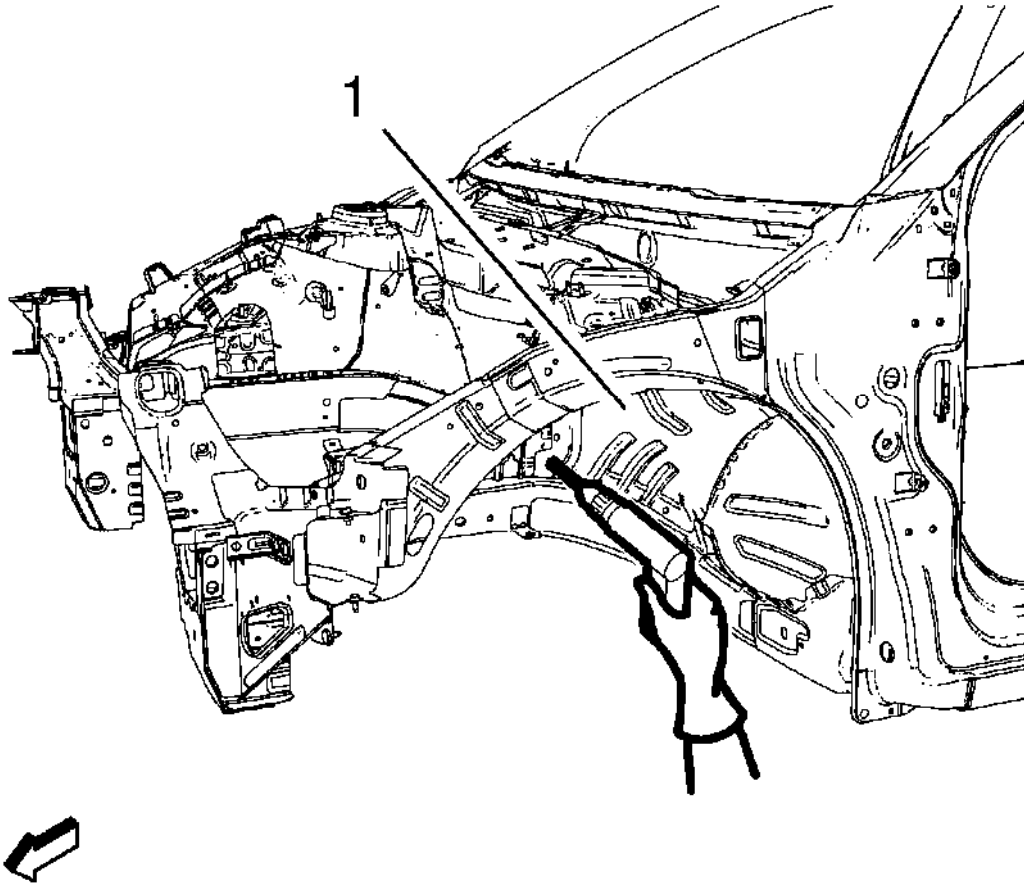


Fig. 41: Drilling All Factory Welds At Front Wheelhouse Panel
Courtesy of GENERAL MOTORS COMPANY

7. Drill all factory welds of the front wheelhouse panel (1). Note the number and location of welds for installation of the service assembly.

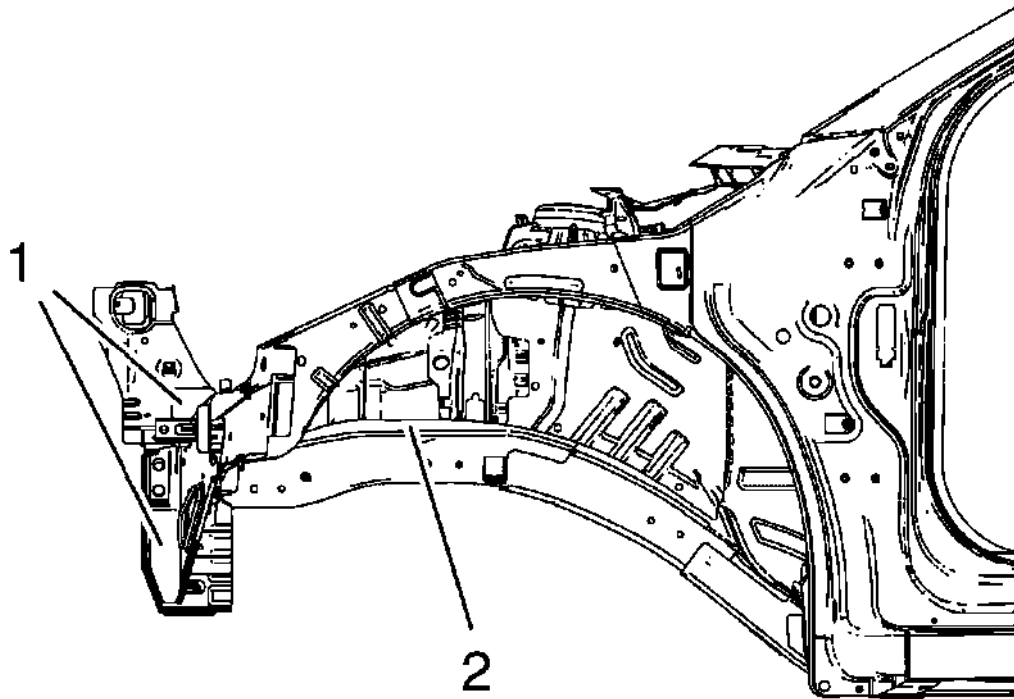


Fig. 42: Adhesive Cutting Area Where Front Wheelhouse And Front Compartment Side Rail Overlap

Courtesy of GENERAL MOTORS COMPANY

8. Cut the adhesive in the front area (1) and where the front wheelhouse and the front compartment side rail overlap (2) with an appropriate tool.

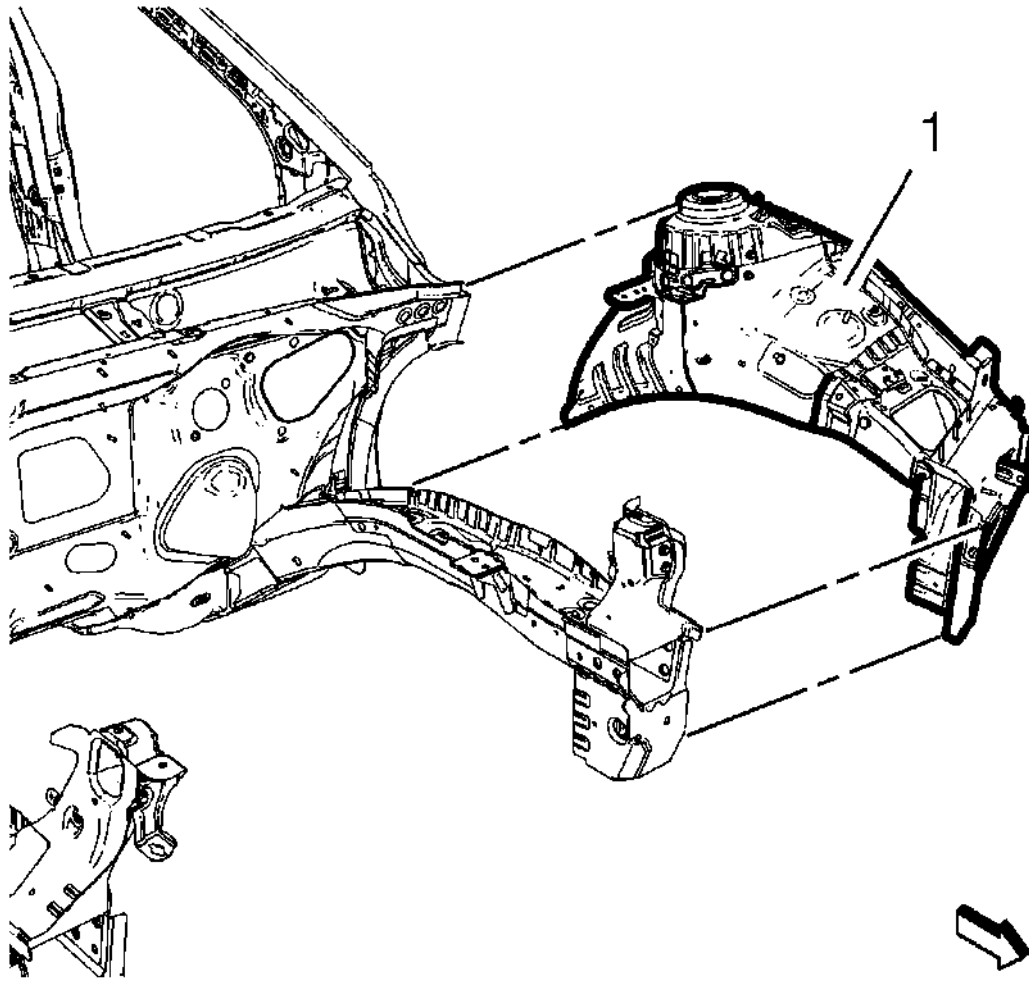


Fig. 43: Front Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

9. Remove the front wheelhouse panel (1).

Installation Procedure

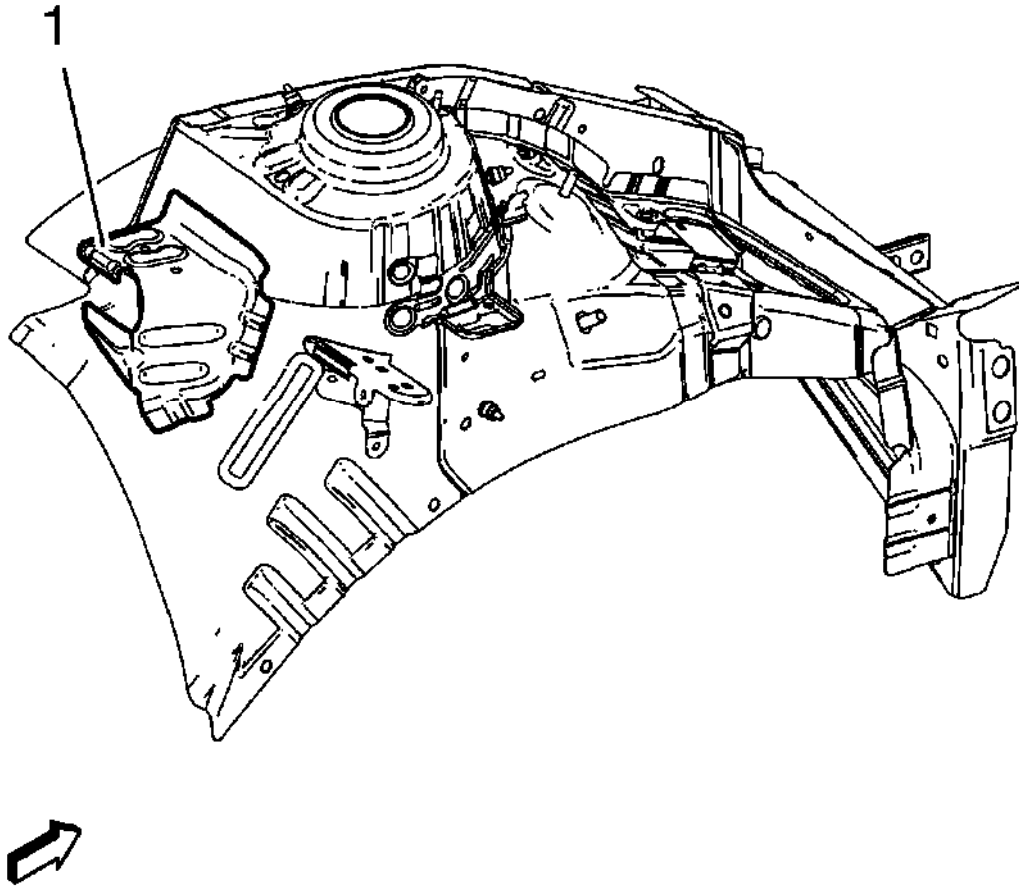


Fig. 44: Front Wheelhouse Rear Panel Brace
Courtesy of GENERAL MOTORS COMPANY

1. Remove the front wheelhouse rear panel brace (1) from service panel.

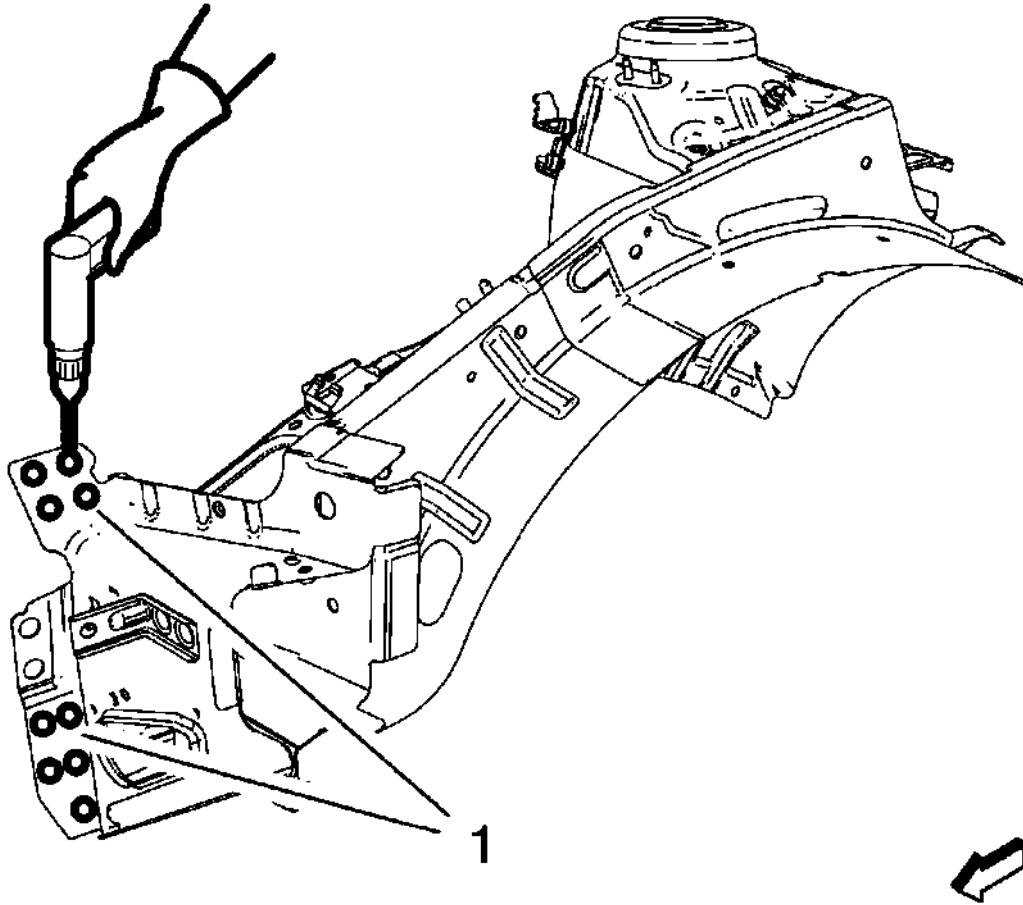


Fig. 45: Drilling 8 mm (5/16 in) Hole For Plug Welding
Courtesy of GENERAL MOTORS COMPANY

2. Drill 8 mm (5/16 in) for plug welding (1) instead of the adhesive noted from the front area of the original panel.

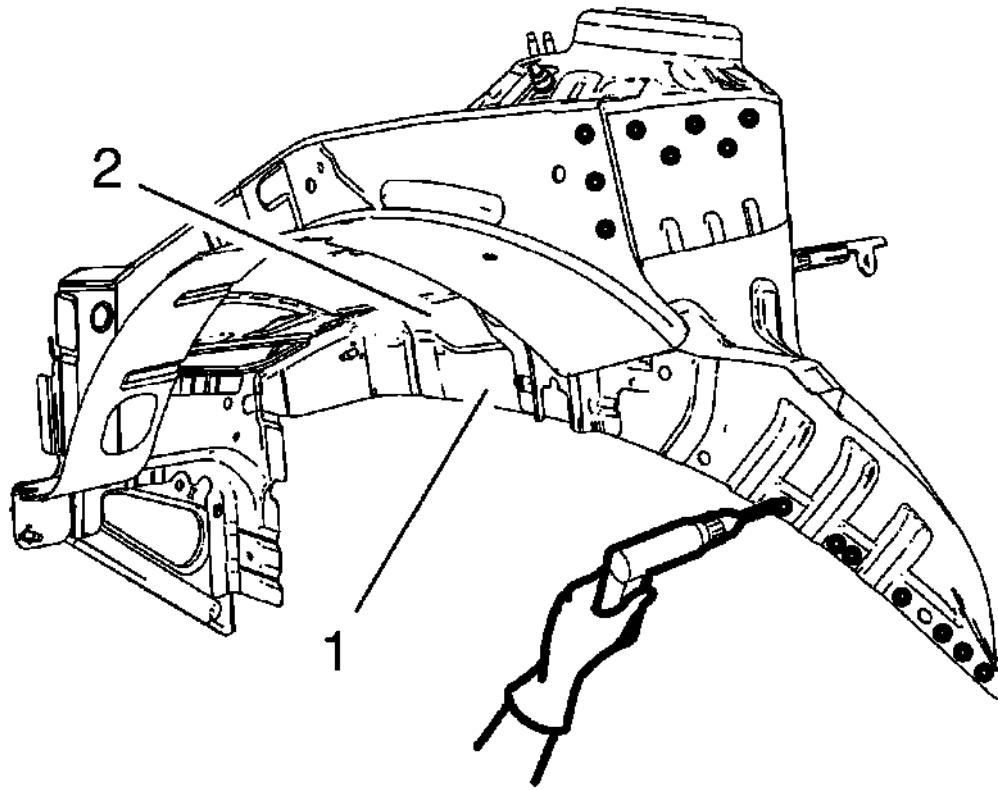


Fig. 46: Drilling Hole For Plug Welding Front Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: Double the number of drills at the flange where front wheelhouse panel and front compartment side rail overlap (1).

3. Drill 8 mm (5/16 in) for plug welding along the edges of the front wheelhouse panel (2) as noted from the original panel.
4. Clean and prepare the attaching surfaces for welding.

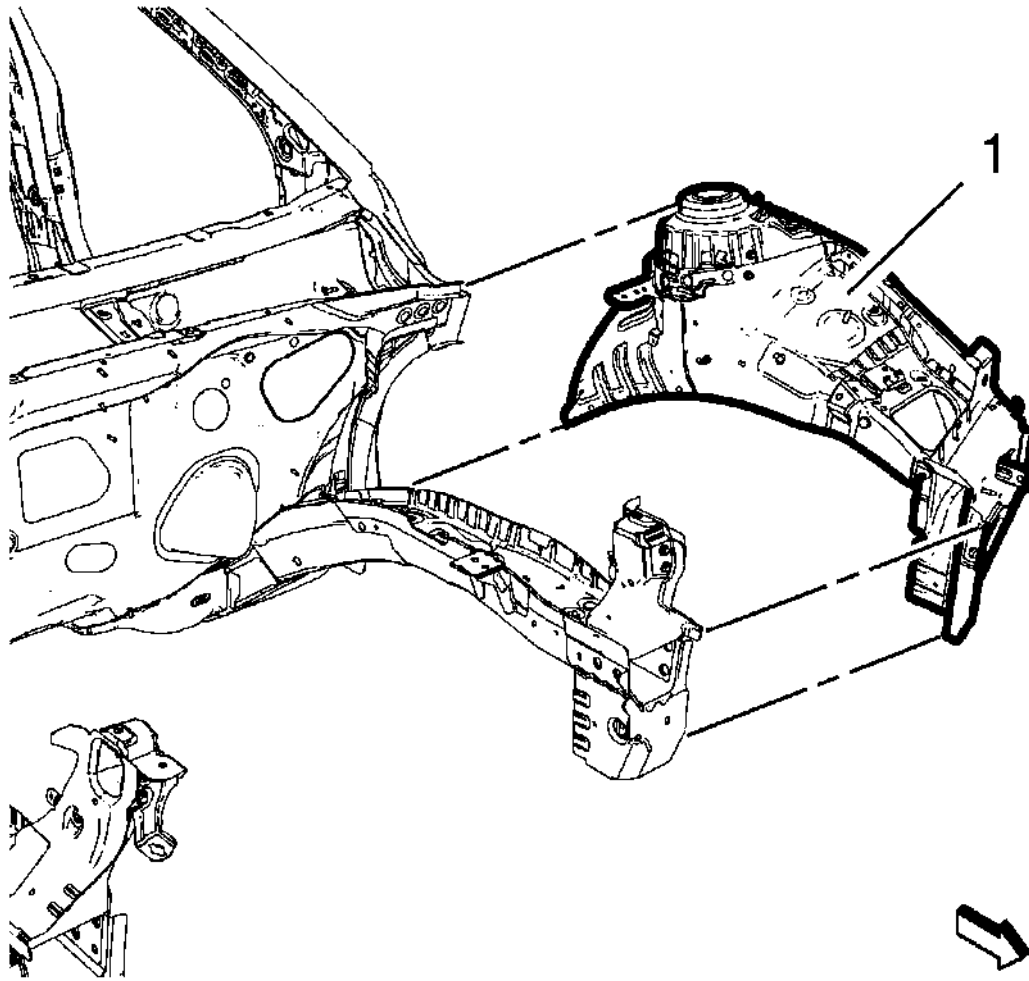


Fig. 47: Front Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

5. Position the front wheelhouse panel (1) on the vehicle.
6. Verify the fit of the front wheelhouse.
7. Clamp the front wheelhouse into position.

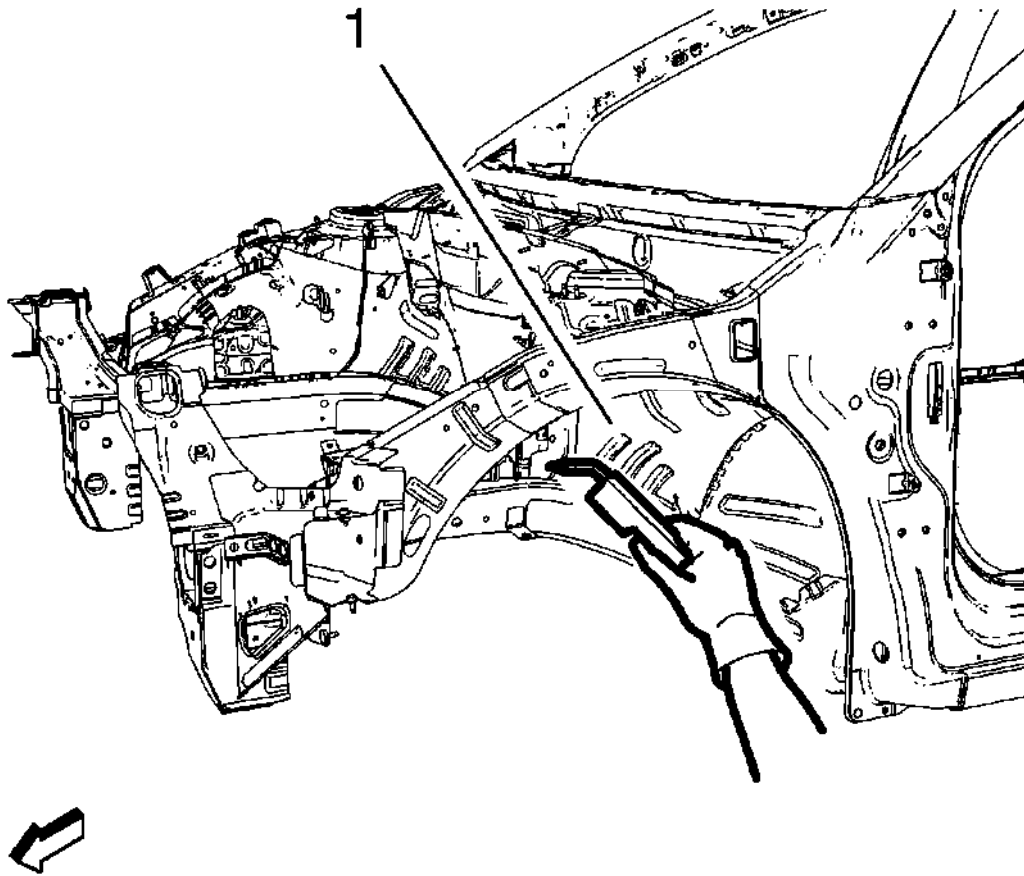


Fig. 48: Welding Front Wheelhouse Panel
Courtesy of GENERAL MOTORS COMPANY

8. Plug weld the front wheelhouse panel (1) accordingly.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
10. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
11. Install all related panels and components.
12. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
13. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT WHEELHOUSE PANEL REAR REINFORCEMENT REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

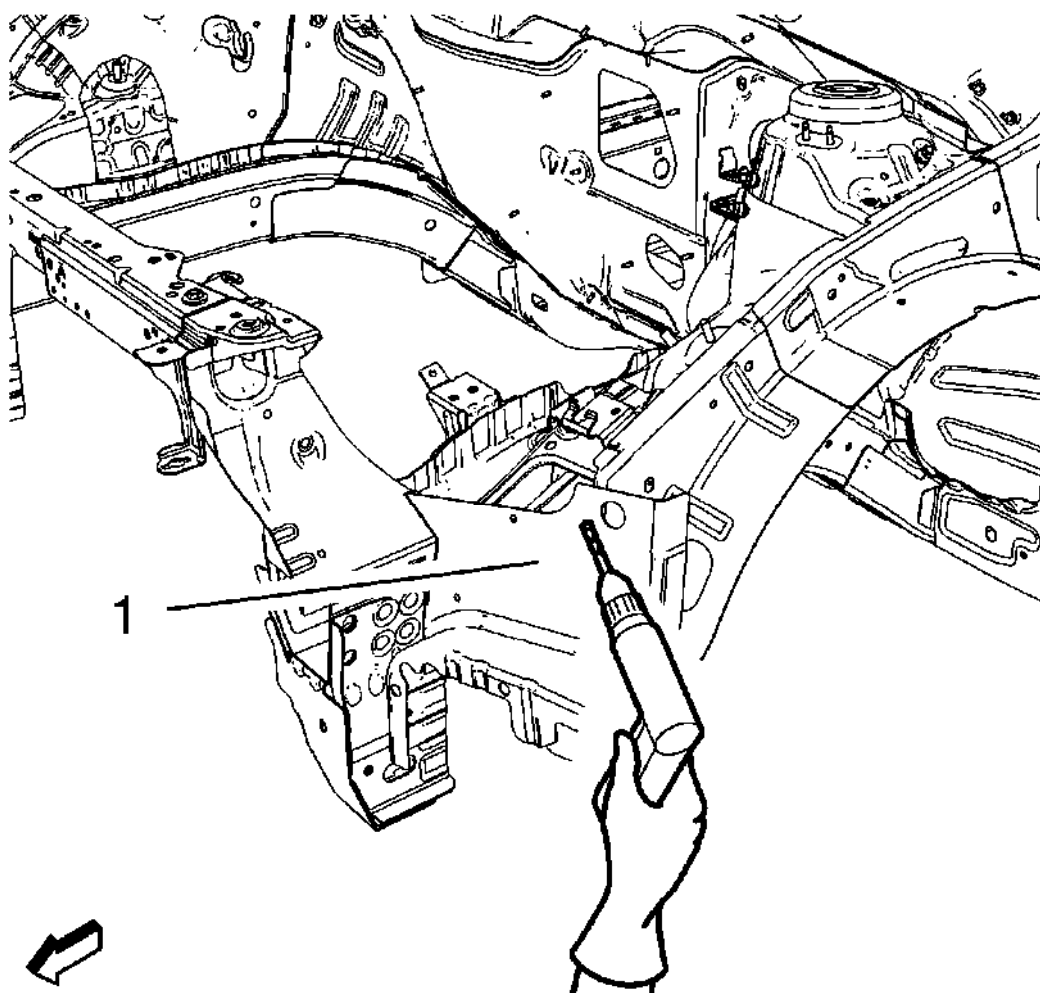


Fig. 49: Drilling Factory Welds At Front Wheelhouse Panel Rear Reinforcement
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the front wheelhouse panel rear reinforcement (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

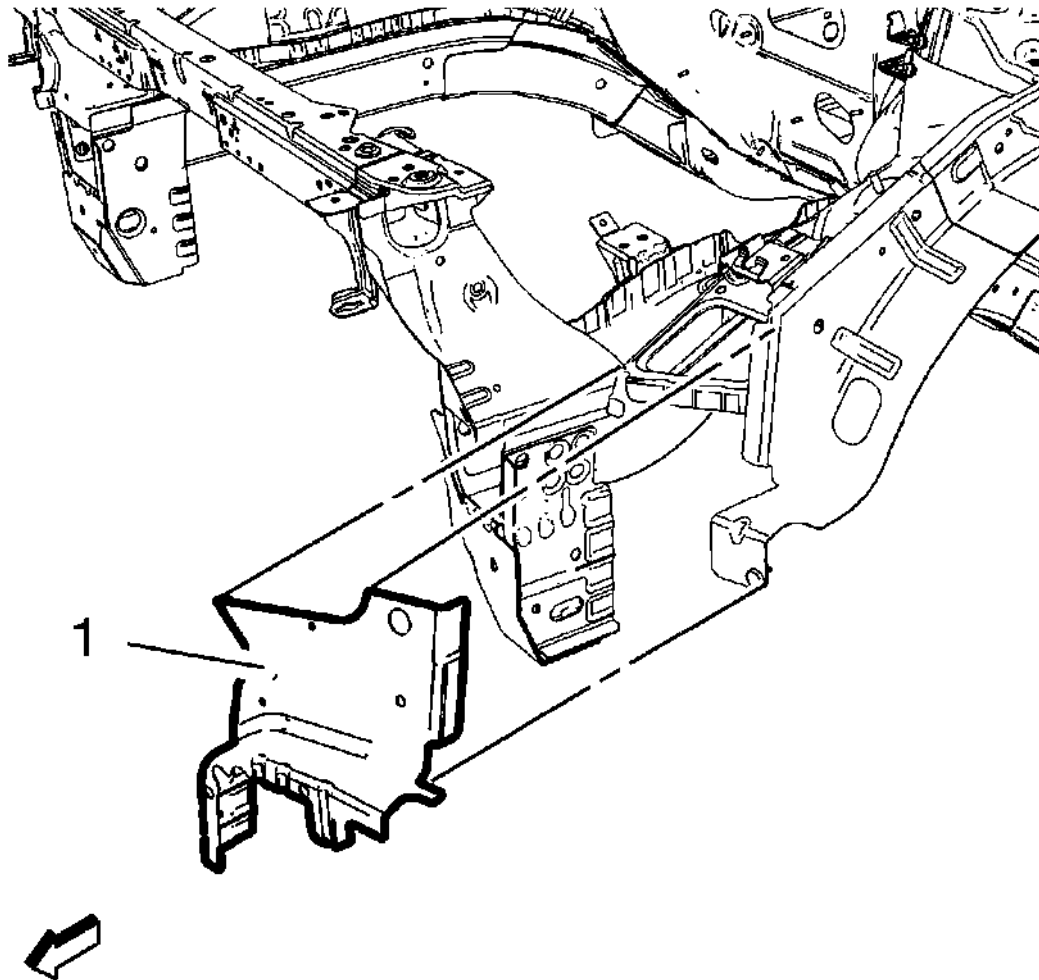


Fig. 50: Front Wheelhouse Panel Rear Reinforcement
Courtesy of GENERAL MOTORS COMPANY

8. Remove the front wheelhouse panel rear reinforcement (1).

Installation Procedure

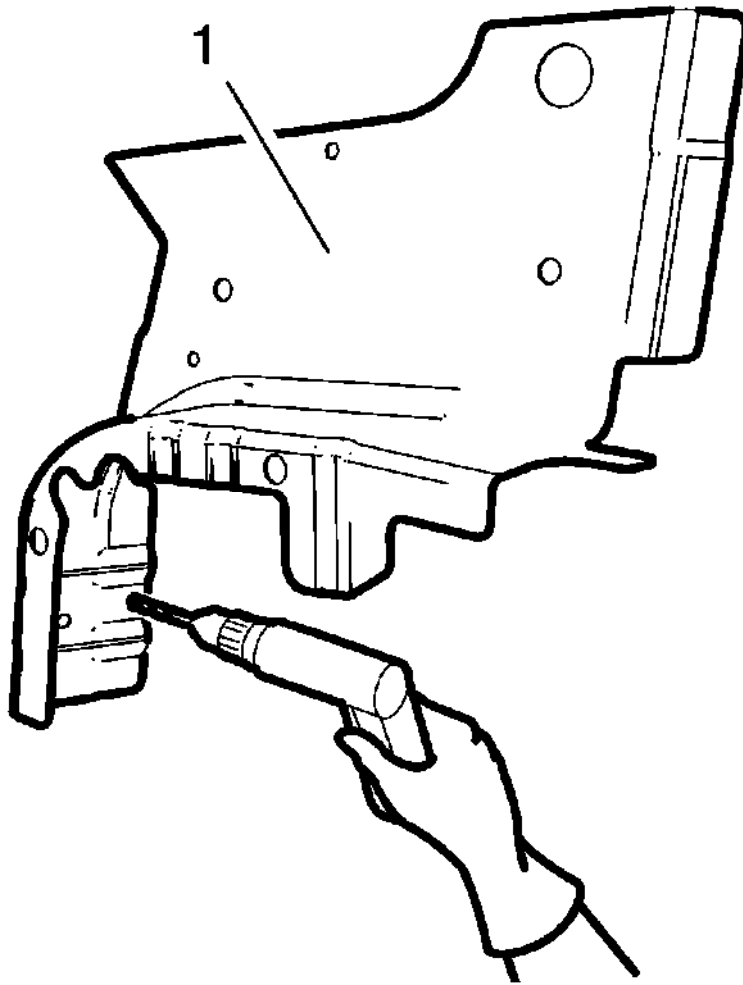


Fig. 51: Drilling Hole For Plug Welding New Front Wheelhouse Panel Rear Reinforcement
Courtesy of GENERAL MOTORS COMPANY

1. Drill 8 mm (5/16 in) for plug welding along the edges of the front wheelhouse panel rear reinforcement (1) as noted from the original panel.

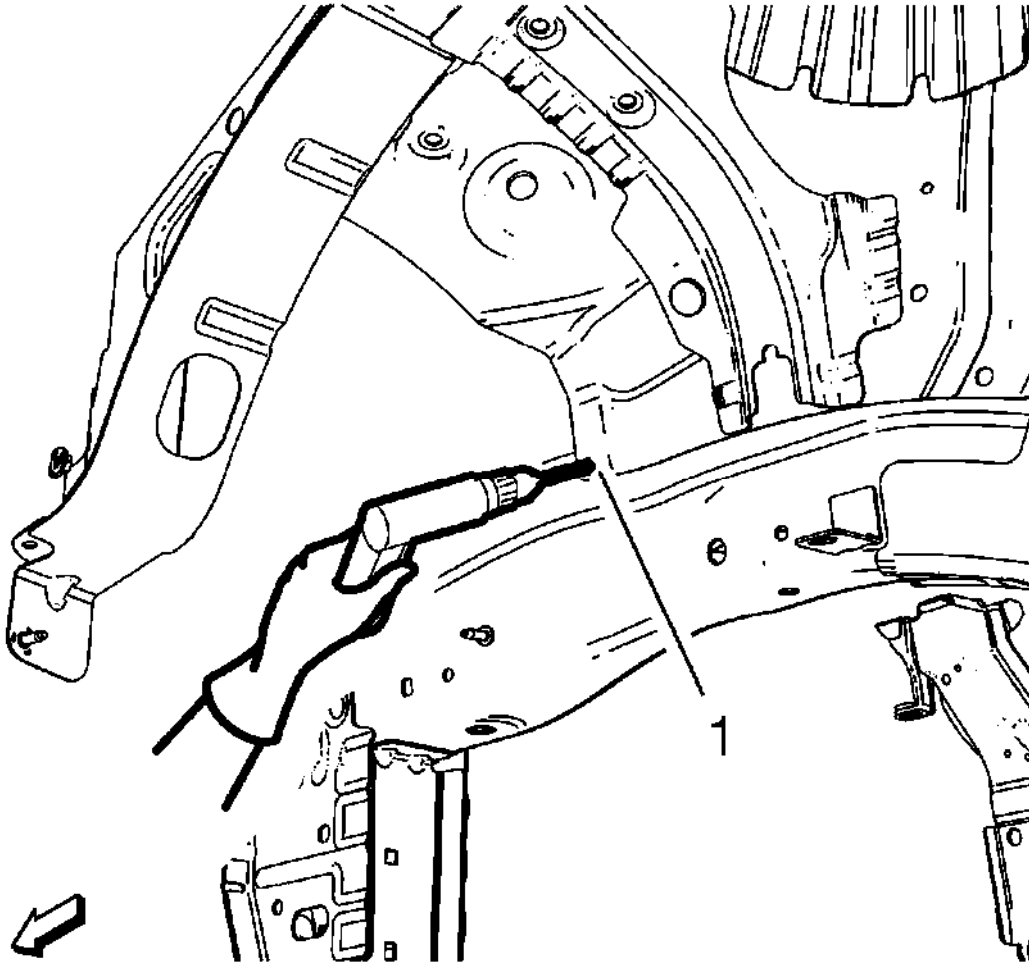


Fig. 52: Drilling Hole For Welding Where Front Wheelhouse Front Panel And Front Wheelhouse Overlap

Courtesy of GENERAL MOTORS COMPANY

2. Drill 8 mm (5/16 in) for plug welding (1) where front wheelhouse front panel and front wheelhouse panel rear reinforcement overlap.
3. Clean and prepare the attaching surfaces for welding.

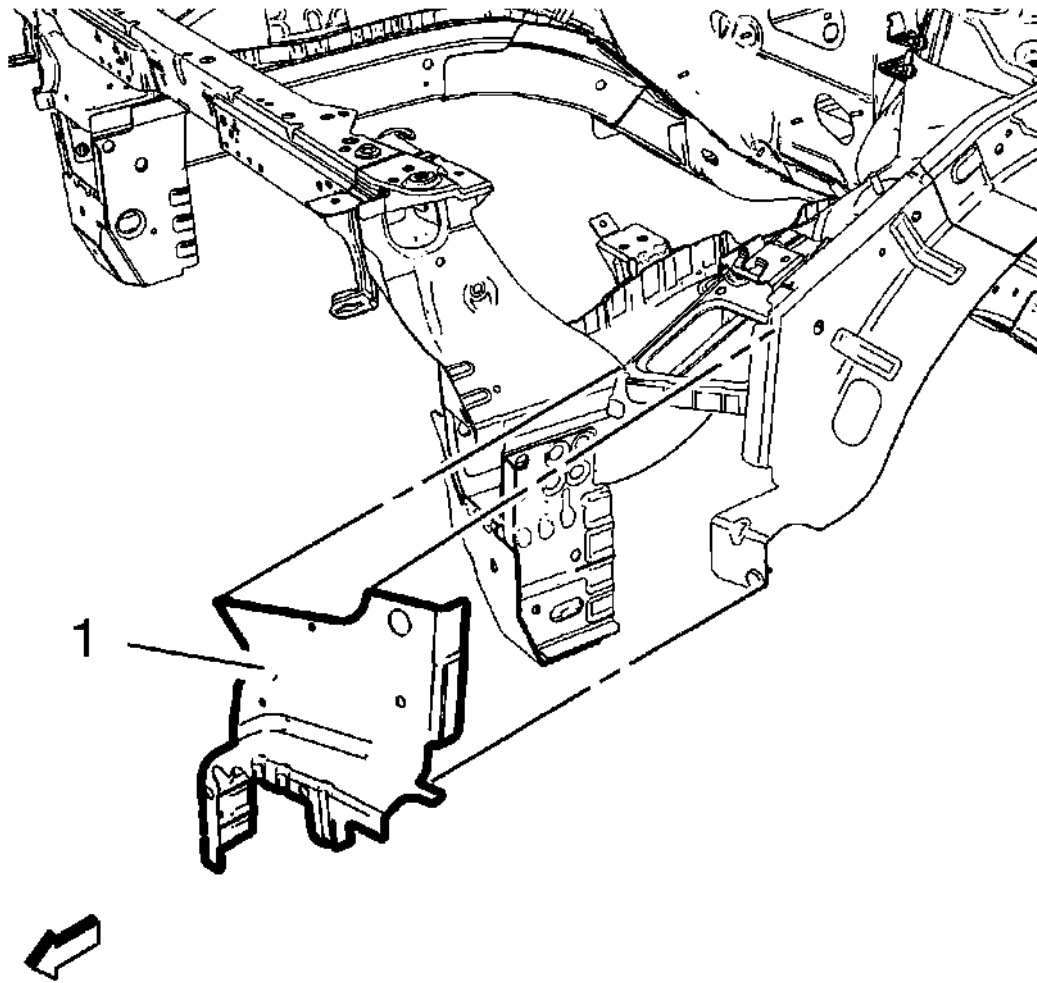


Fig. 53: Front Wheelhouse Panel Rear Reinforcement

Courtesy of GENERAL MOTORS COMPANY

4. Position the front wheelhouse panel rear reinforcement (1) on the vehicle.
5. Verify the fit of the front wheelhouse panel rear reinforcement.
6. Clamp the front wheelhouse panel rear reinforcement into position.

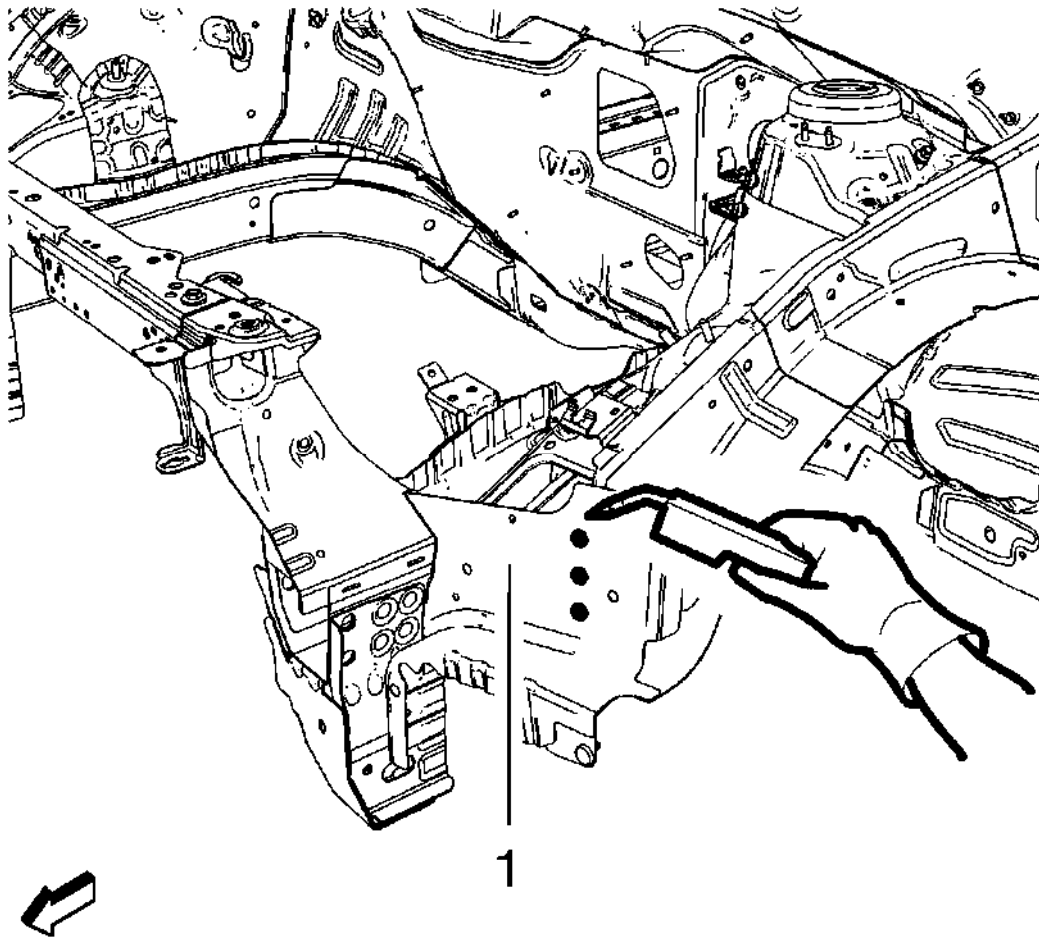


Fig. 54: Welding Front Wheelhouse Panel Rear Reinforcement
Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the front wheelhouse panel rear reinforcement (1) accordingly.

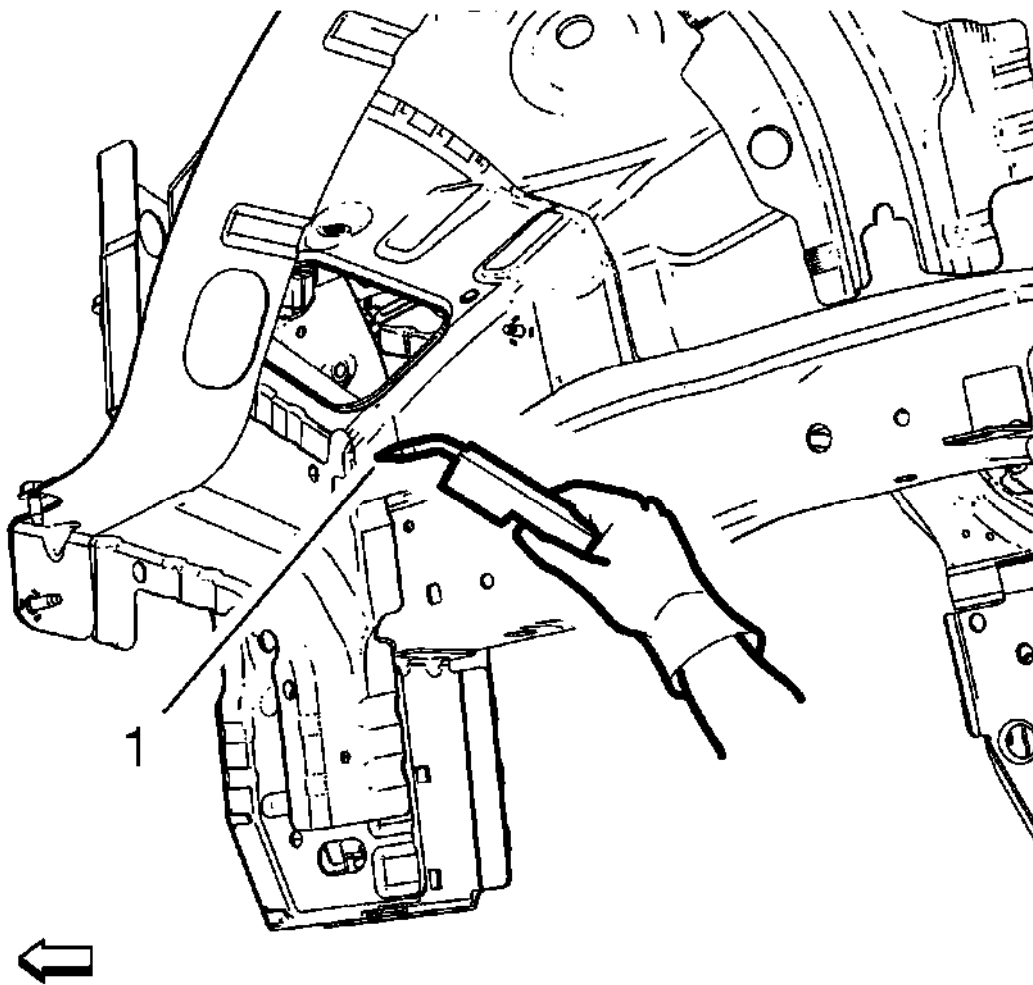


Fig. 55: Welding Joint From Front Wheelhouse Panel Rear Reinforcement To Front Wheelhouse Front Panel

Courtesy of GENERAL MOTORS COMPANY

8. Plug weld (1) the joint from front wheelhouse panel rear reinforcement to front wheelhouse front panel accordingly.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
10. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
11. Install all related panels and components.
12. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
13. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT COMPARTMENT UPPER SIDE RAIL REPLACEMENT

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

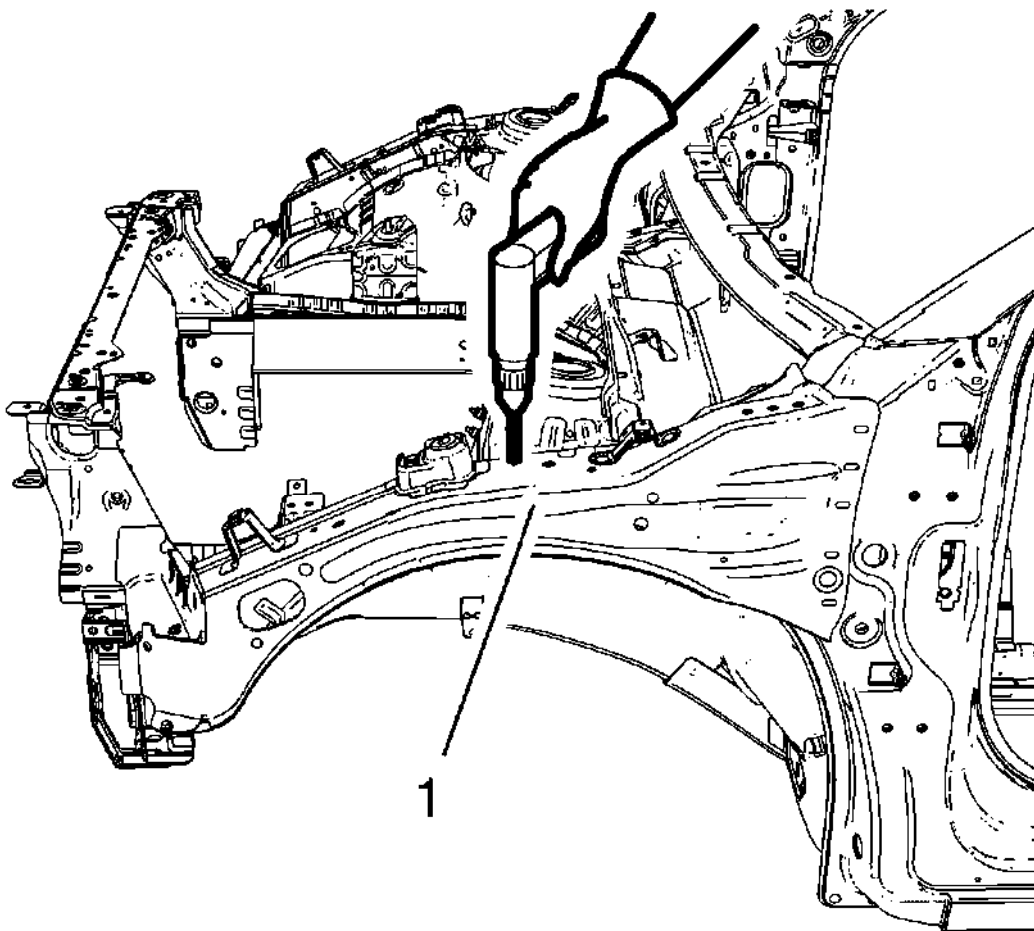


Fig. 56: Drilling Factory Welds And Weld Seams Of Front Compartment Upper Side Rail

Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds and weld seams of the front compartment upper side rail (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

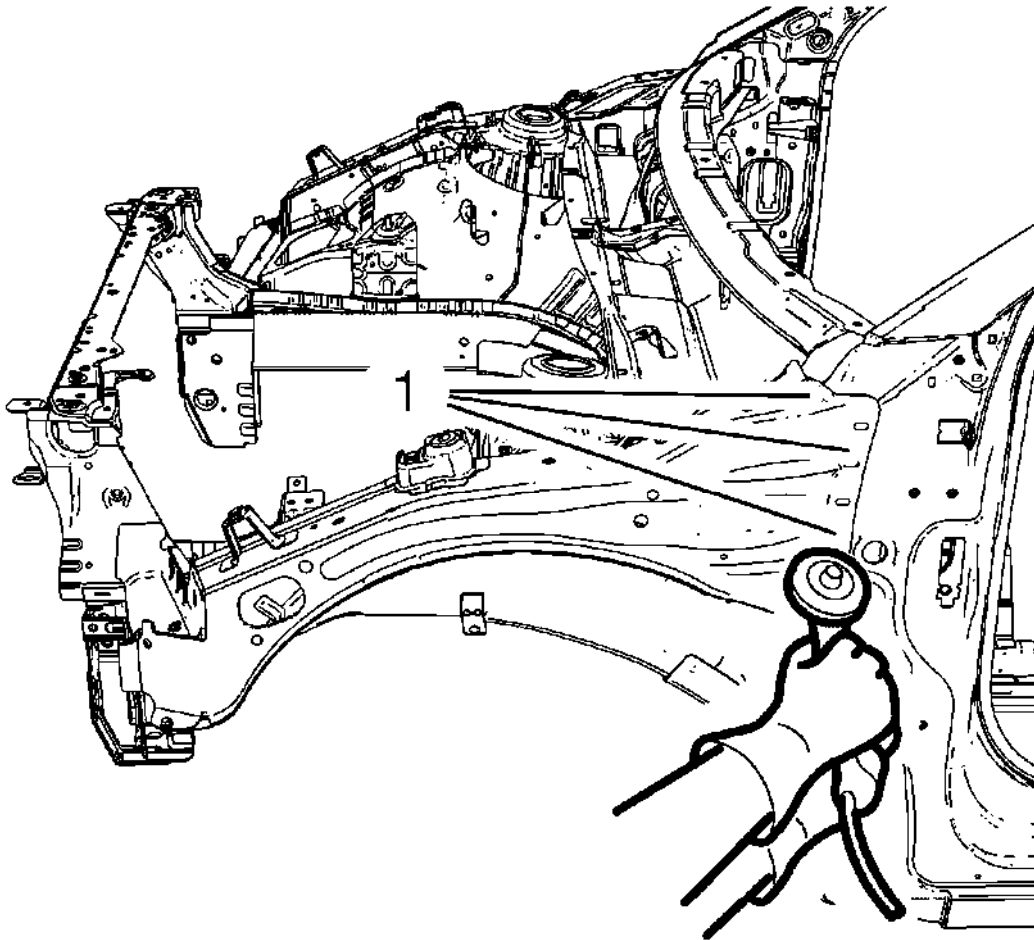


Fig. 57: Grinding Factory Weld Seams Of Front Compartment Upper Side Rail
Courtesy of GENERAL MOTORS COMPANY

8. Grind factory weld seams (1) of the front compartment upper side rail.

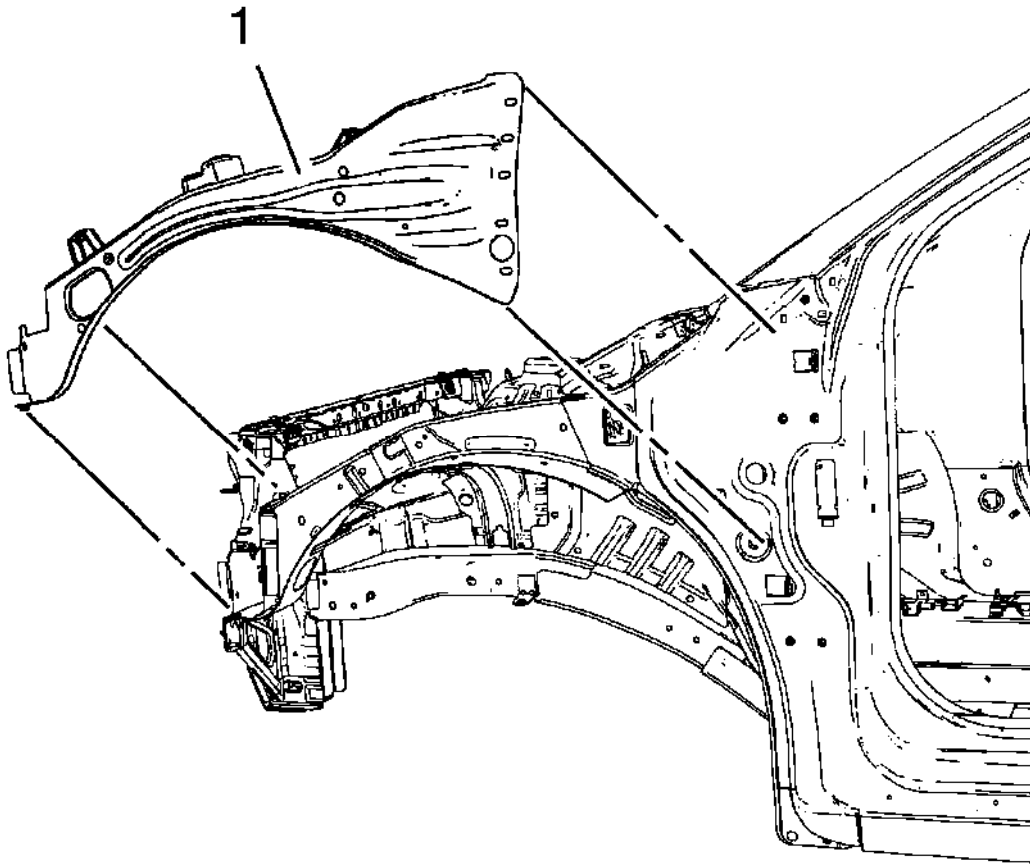


Fig. 58: Front Compartment Upper Side Rail
Courtesy of GENERAL MOTORS COMPANY

9. Remove the front compartment upper side rail (1).

Installation Procedure

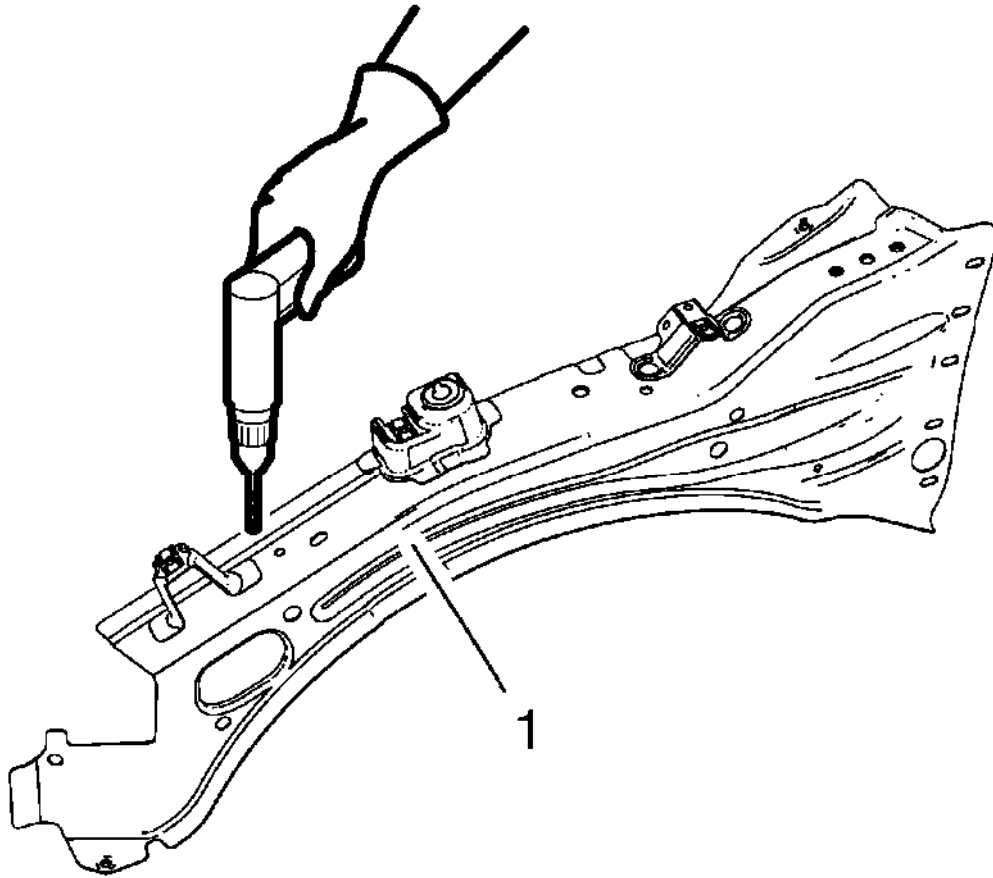


Fig. 59: Drilling Hole For Plug Welding New Front Compartment Upper Side Rail
Courtesy of GENERAL MOTORS COMPANY

1. Drill 8 mm (5/16 in) for plug welding along the edges of the front compartment upper side rail (1) as noted from the original panel.
2. Clean and prepare the attaching surfaces for welding.
3. Position the front compartment upper side rail on the vehicle.
4. Verify the fit of the front compartment upper side rail.
5. Clamp the front compartment upper side rail into position.

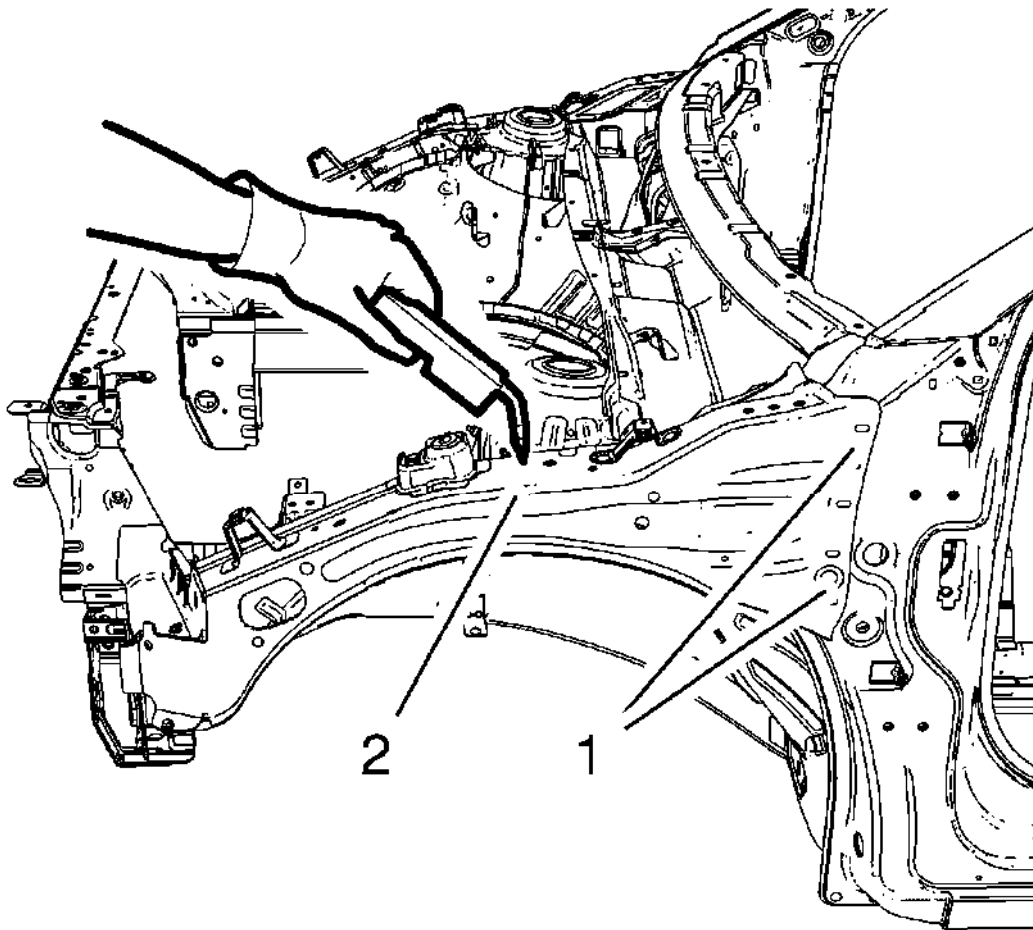


Fig. 60: Welding Front Compartment Upper Side Rail

Courtesy of GENERAL MOTORS COMPANY

NOTE: Plug weld factory slots in the front hinge pillar body area (1) as noted from the original panel.

6. Plug weld the front compartment upper side rail (2) accordingly.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
8. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
9. Install all related panels and components.
10. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
11. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT HINGE PILLAR BODY SECTIONING

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

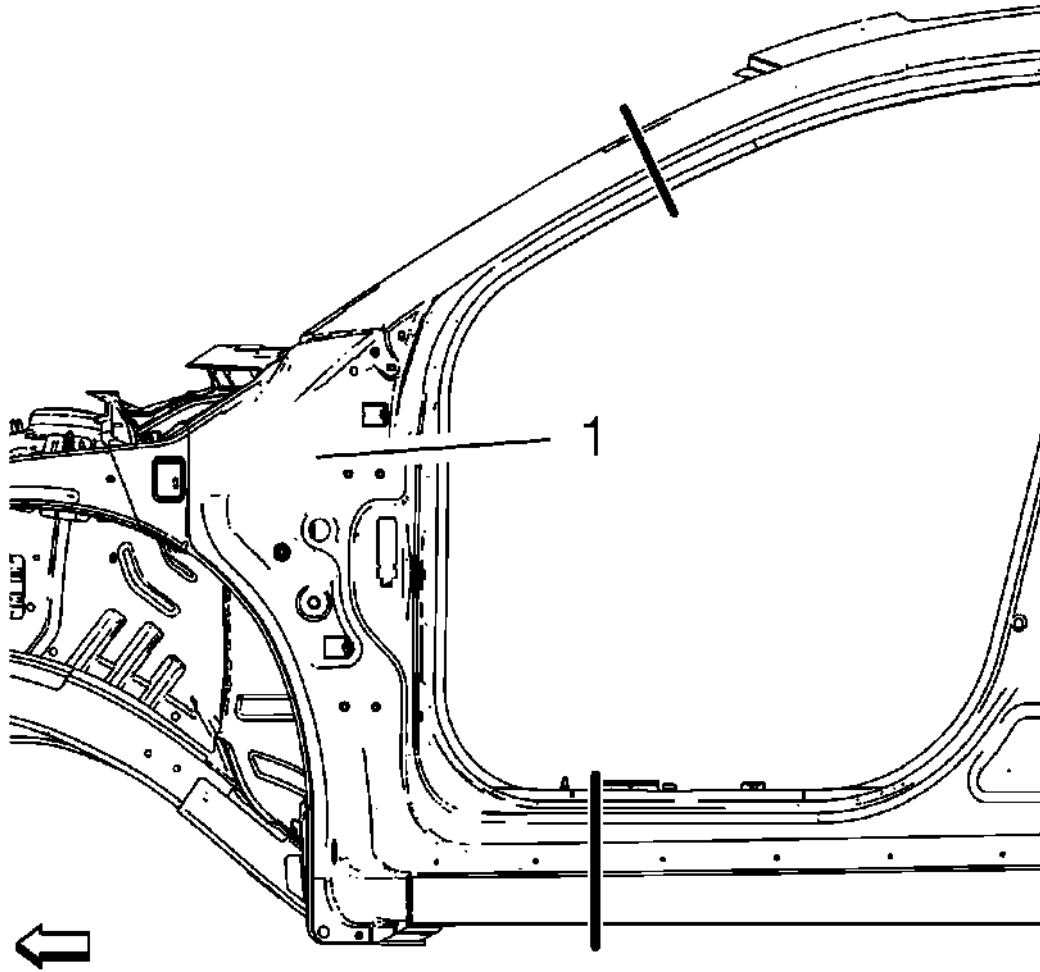


Fig. 61: Identifying Cut Lines On Front Hinge Pillar Body
Courtesy of GENERAL MOTORS COMPANY

6. Create cut lines on the front hinge pillar body (1).

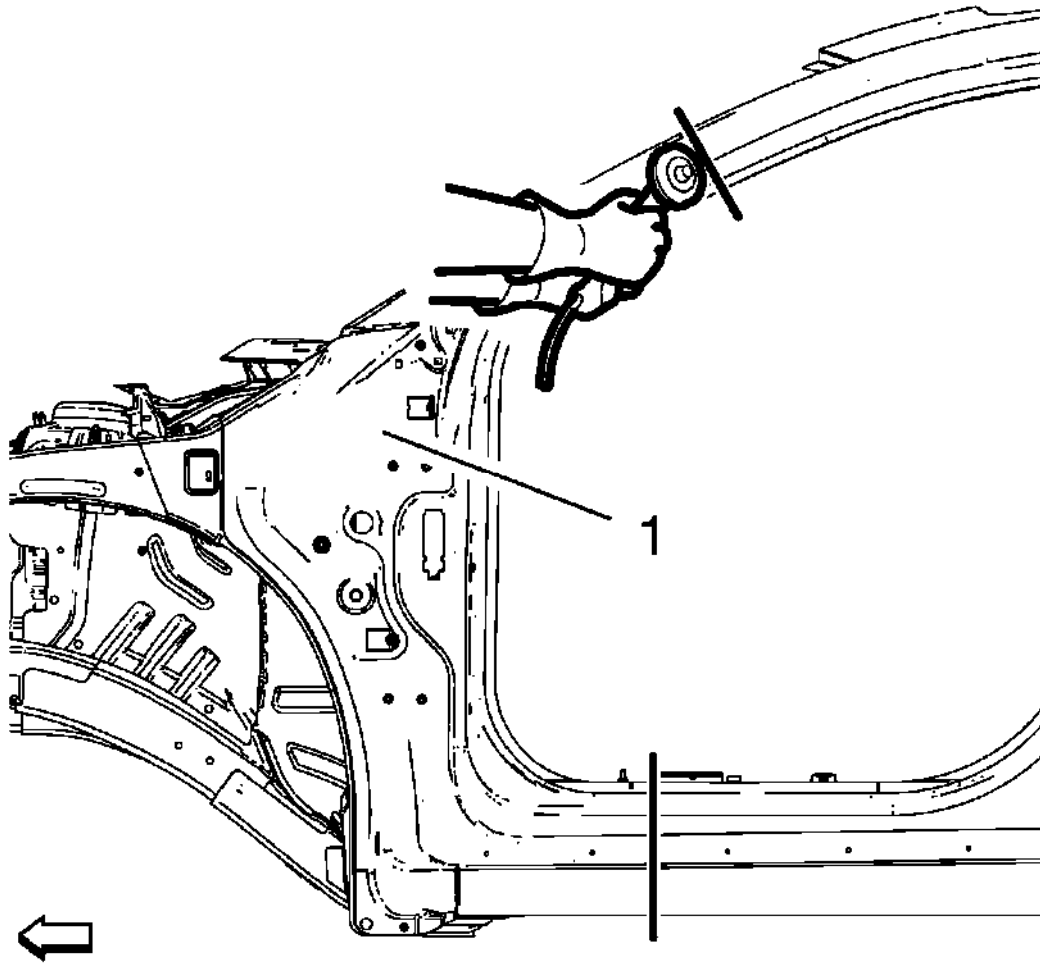


Fig. 62: Cutting Front Hinge Pillar Body
Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

7. Cut the front hinge pillar body (1) where sectioning is to be performed.

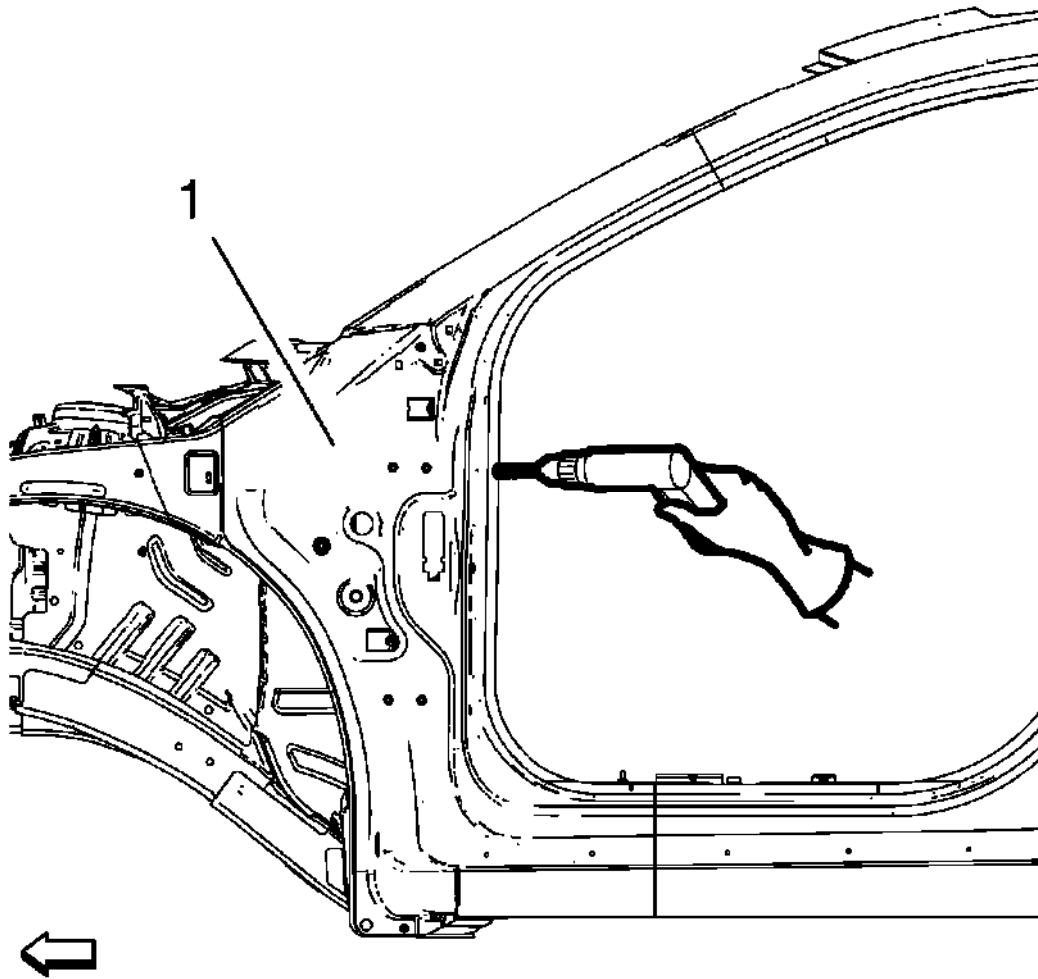


Fig. 63: Drilling Factory Welds From Front Hinge Pillar Body
Courtesy of GENERAL MOTORS COMPANY

8. Locate and mark all the necessary factory welds of the front hinge pillar body (1).
9. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

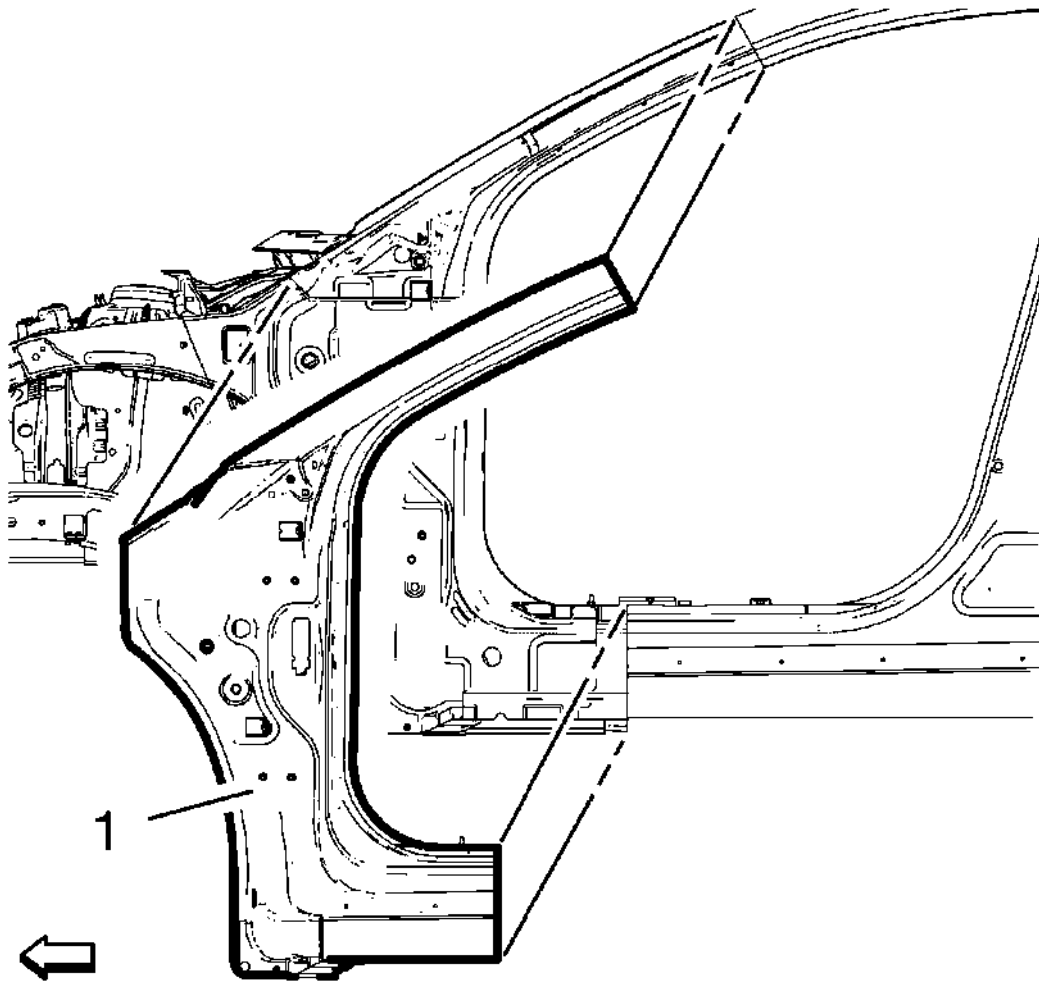


Fig. 64: Front Hinge Pillar Body

Courtesy of GENERAL MOTORS COMPANY

10. Remove the damaged front hinge pillar body (1).

Installation Procedure

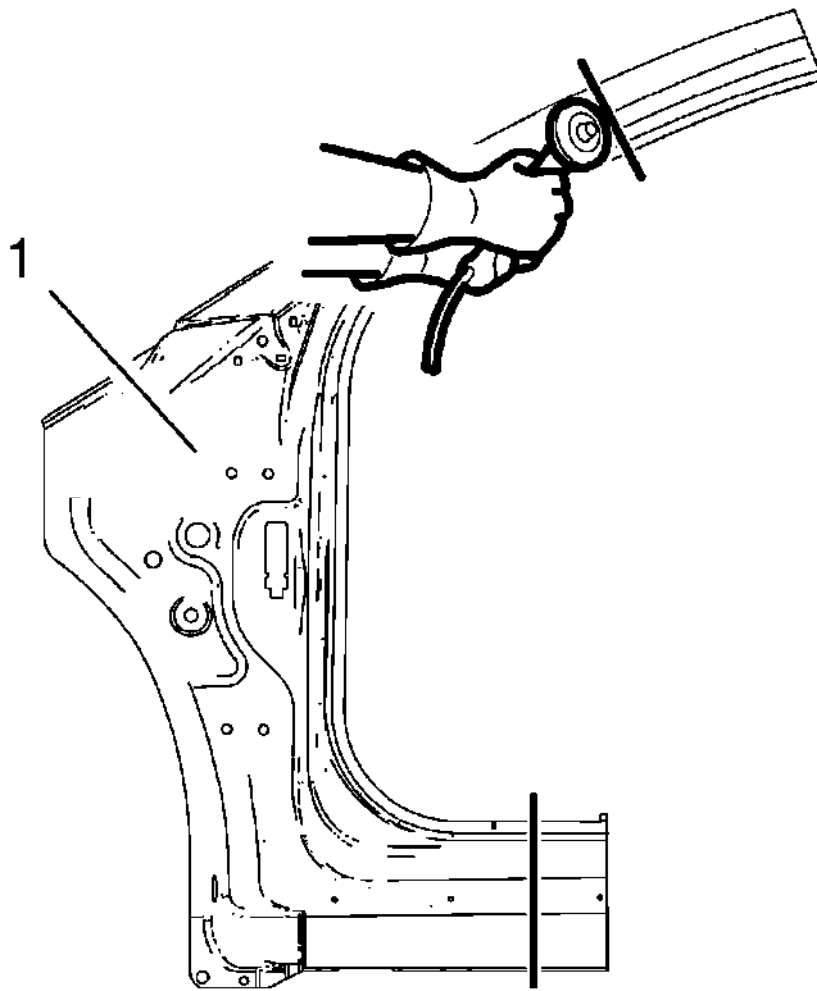


Fig. 65: Cutting New Front Hinge Pillar Body
Courtesy of GENERAL MOTORS COMPANY

1. Cut the front hinge pillar body (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 a 50 mm (2 in) backing plate from the unused portion of the service part.
3. Drill 8 mm (5/16 in) 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 (1 1/2 in) apart.
4. Prepare all mating surfaces as necessary.
5. Fit the backing plates halfway into the sectioning joints, clamp in place and plug weld to the vehicle.
6. Align the front hinge pillar body.

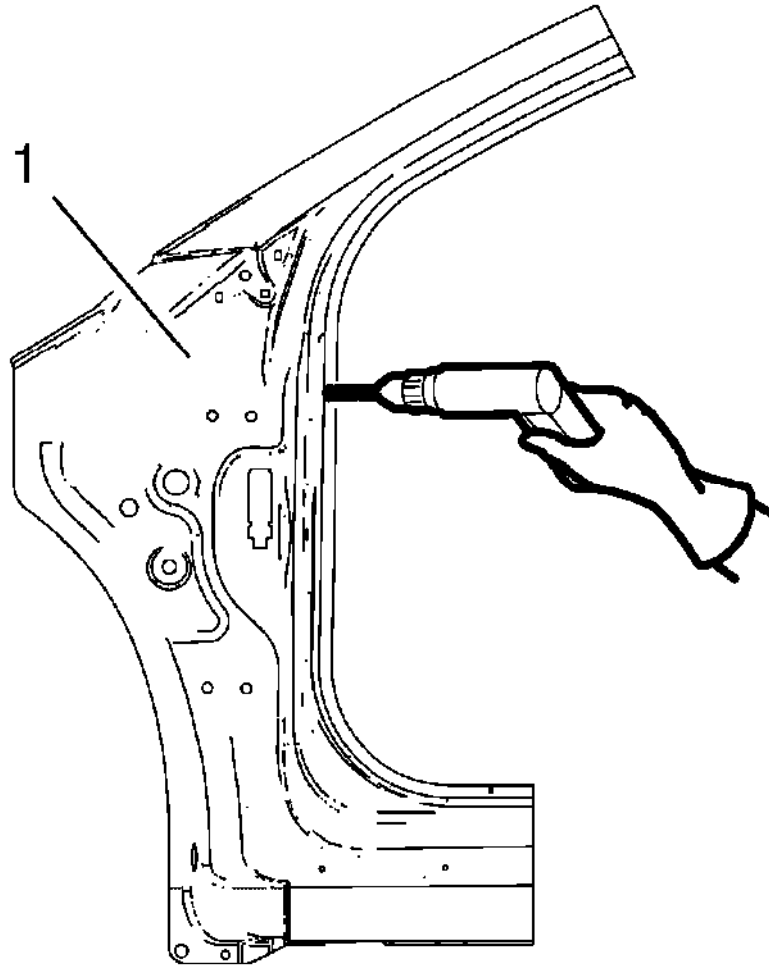


Fig. 66: Drilling Hole For Plug Welding New Front Hinge Pillar Body
Courtesy of GENERAL MOTORS COMPANY

7. Drill 8 mm (5/16 in) for plug welding along the edges of the front hinge pillar body (1) as noted from the original panel.
8. Clean and prepare the attaching surfaces for welding.
9. Position the front hinge pillar body on the vehicle.
10. Verify the fit of the front hinge pillar body.
11. Clamp the front hinge pillar body into position.

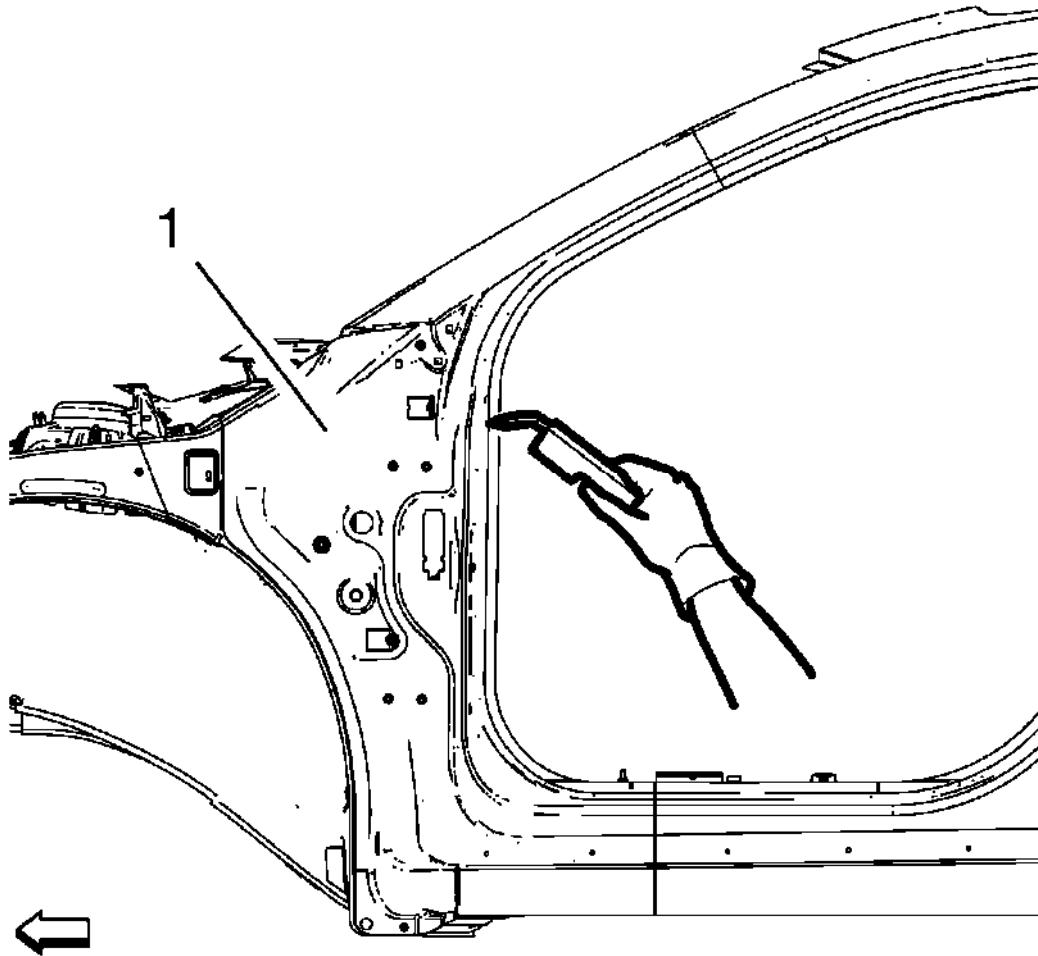


Fig. 67: Welding Front Hinge Pillar Body
 Courtesy of GENERAL MOTORS COMPANY

12. Plug weld the front hinge pillar body (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. Refer to **Anti-Corrosion Treatment and Repair** .
15. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
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** .

BODY HINGE PILLAR LOWER REINFORCEMENT REPLACEMENT

Removal Procedure

2013 Chevrolet Cruze

2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

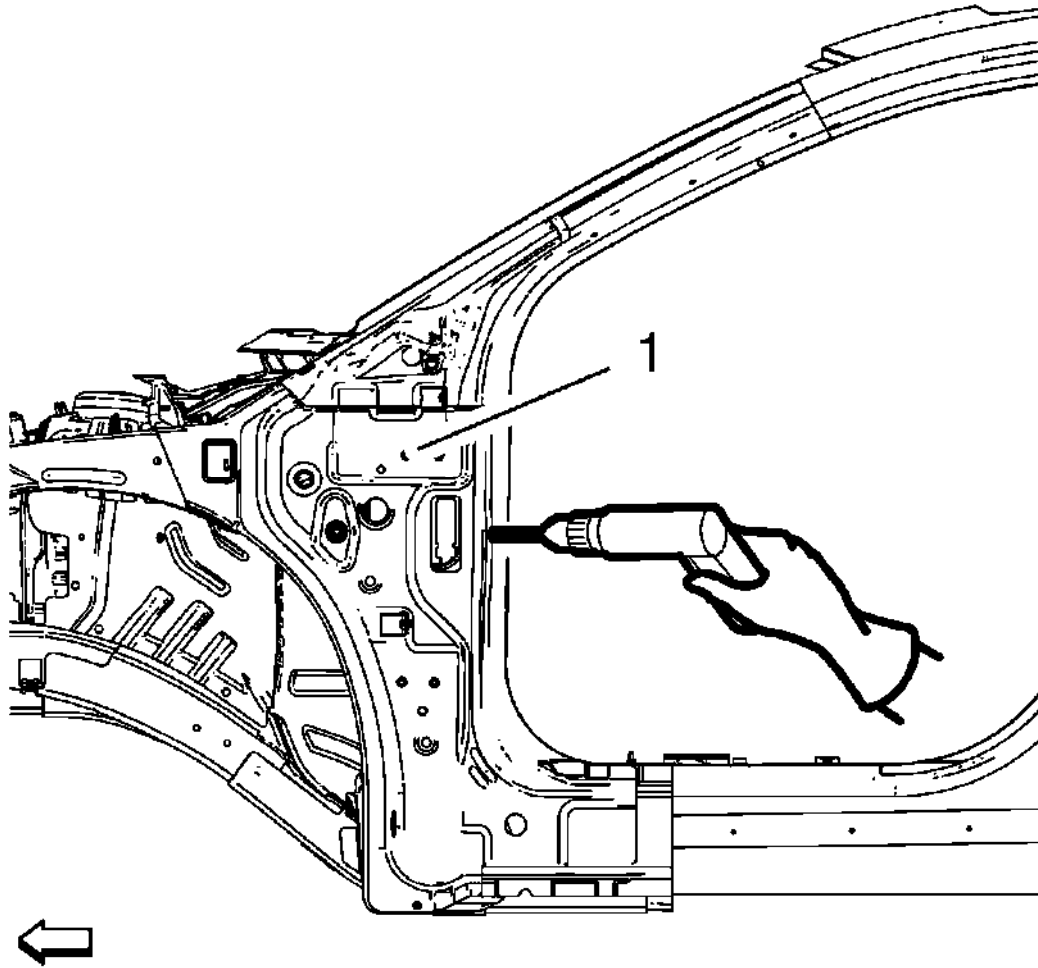


Fig. 68: Drilling Factory Welds Of Body Hinge Pillar Lower Reinforcement
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the body hinge pillar lower reinforcement (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

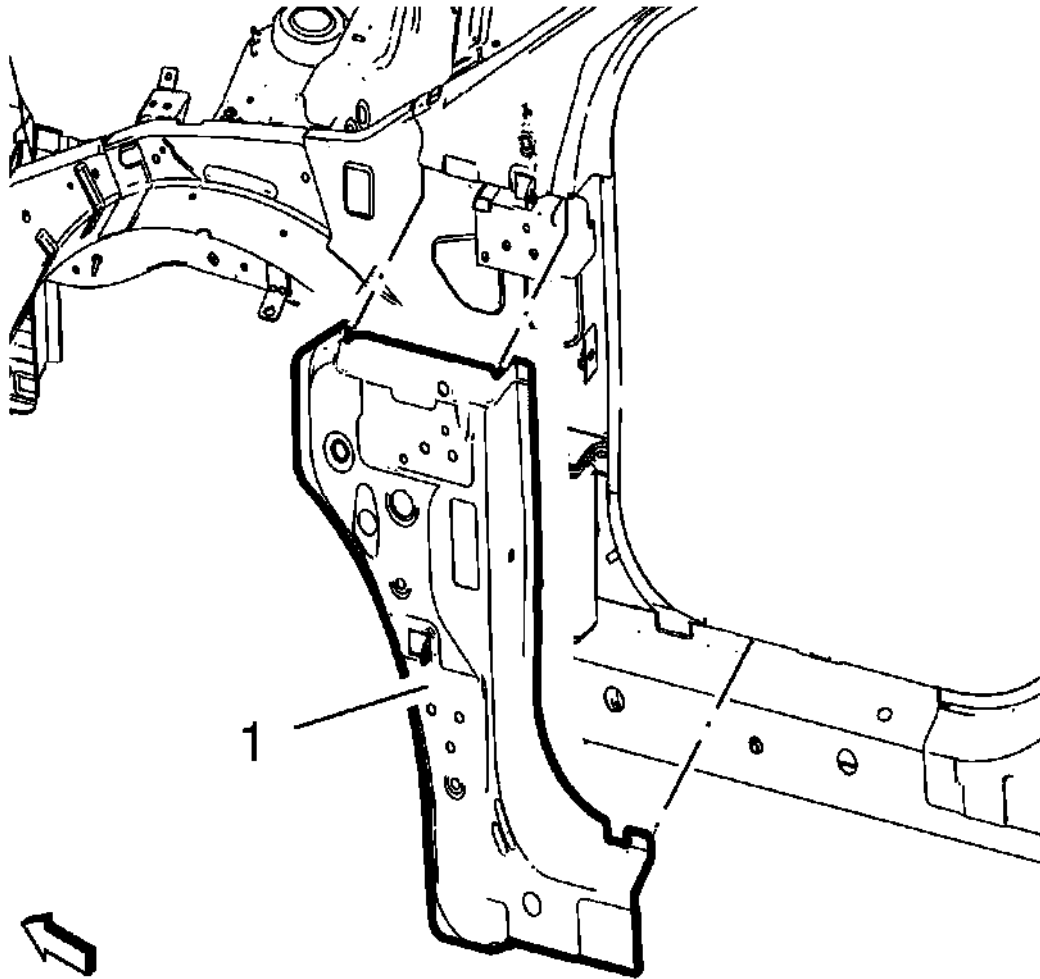


Fig. 69: Body Hinge Pillar Lower Reinforcement
Courtesy of GENERAL MOTORS COMPANY

8. Remove the damaged body hinge pillar lower reinforcement (1).

Installation Procedure

1. Prepare all mating surfaces as necessary.
2. Align the body hinge pillar lower reinforcement.

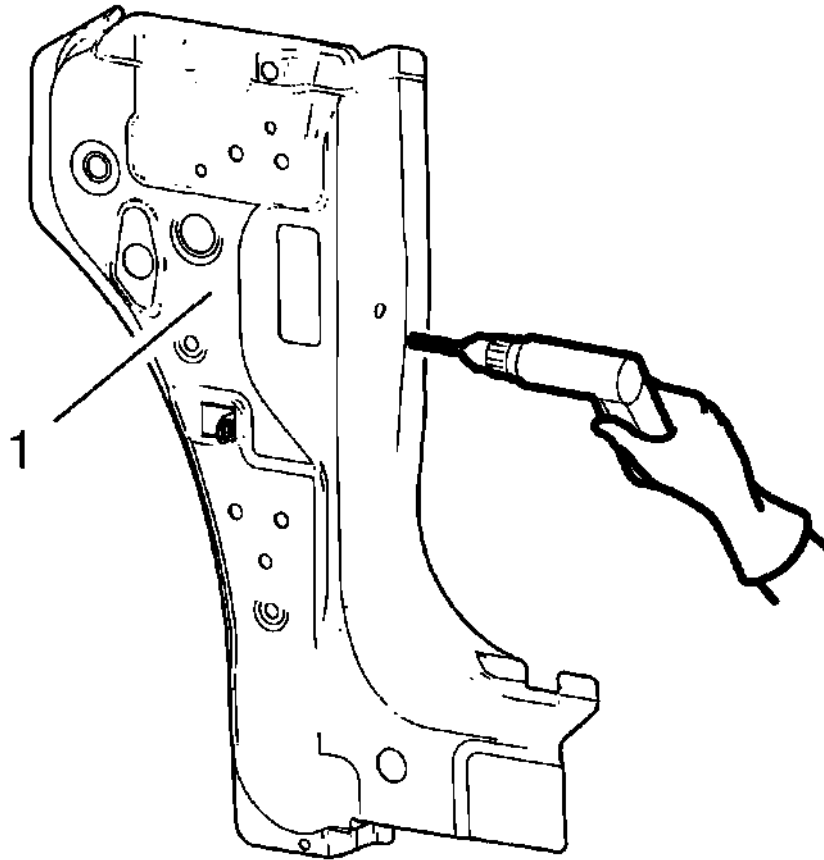


Fig. 70: Drilling Hole For Plug Welding Body Hinge Pillar Lower Reinforcement
Courtesy of GENERAL MOTORS COMPANY

3. Drill 8 mm (5/16 in) for plug welding along the edges of the body hinge pillar lower reinforcement (1) as noted from the original panel.
4. Clean and prepare the attaching surfaces for welding.

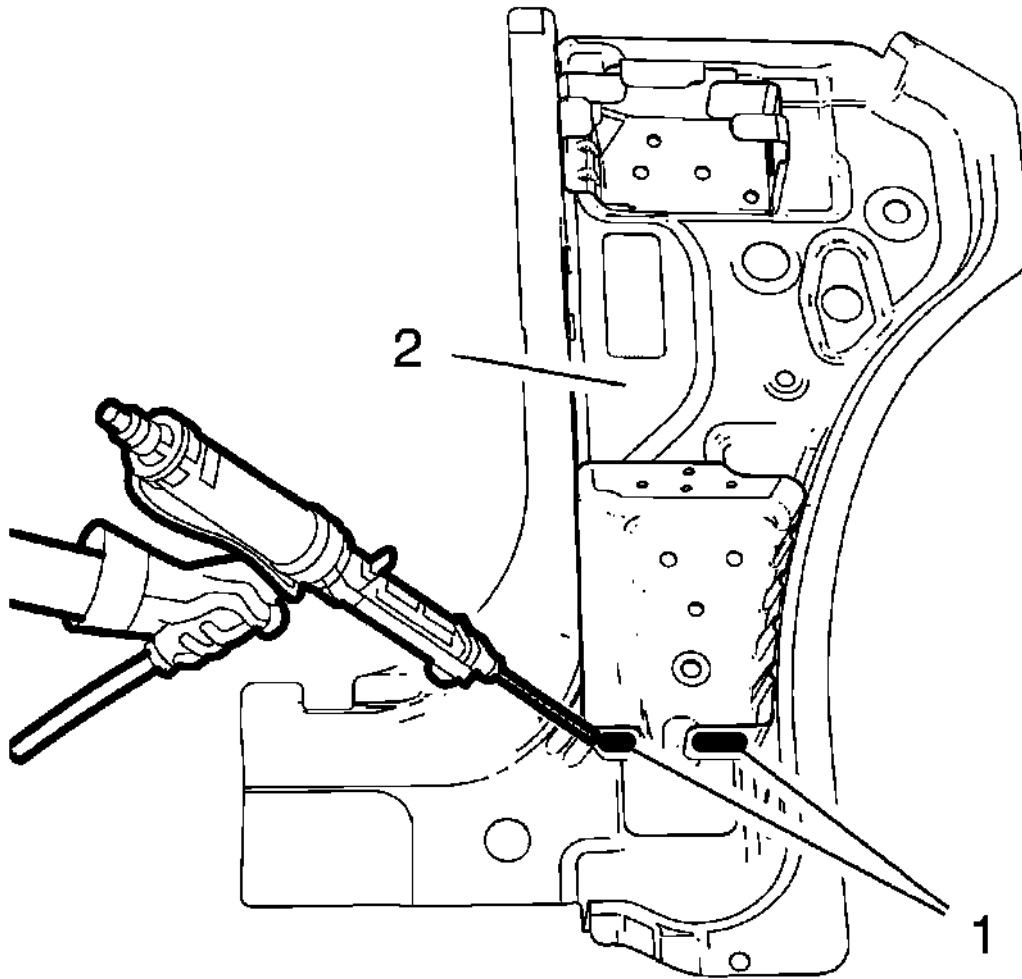


Fig. 71: Applying Adhesive To Body Hinge Pillar Lower Reinforcement
Courtesy of GENERAL MOTORS COMPANY

5. Apply adhesive (1) to body hinge pillar lower reinforcement (2).
6. Position the body hinge pillar lower reinforcement on the vehicle.
7. Verify the fit of the body hinge pillar lower reinforcement.
8. Clamp the body hinge pillar lower reinforcement into position.

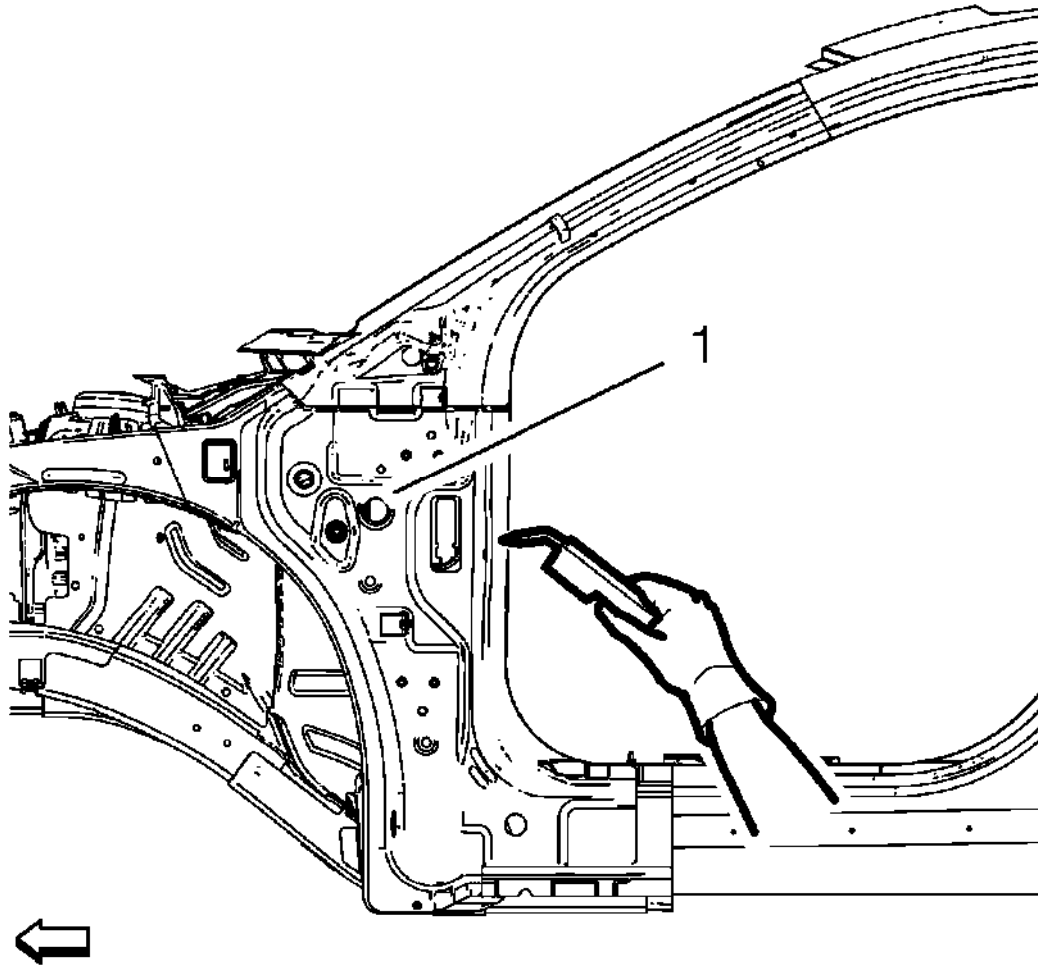


Fig. 72: Welding Body Hinge Pillar Lower Reinforcement

Courtesy of GENERAL MOTORS COMPANY

9. Plug weld the body hinge pillar lower reinforcement (1) accordingly.
10. 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.
11. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
12. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
13. Install all related panels and components.
14. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
15. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

ROOF OUTER PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

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. Refer to Anti-Corrosion Treatment and Repair .
6. Locate and mark all factory welds.

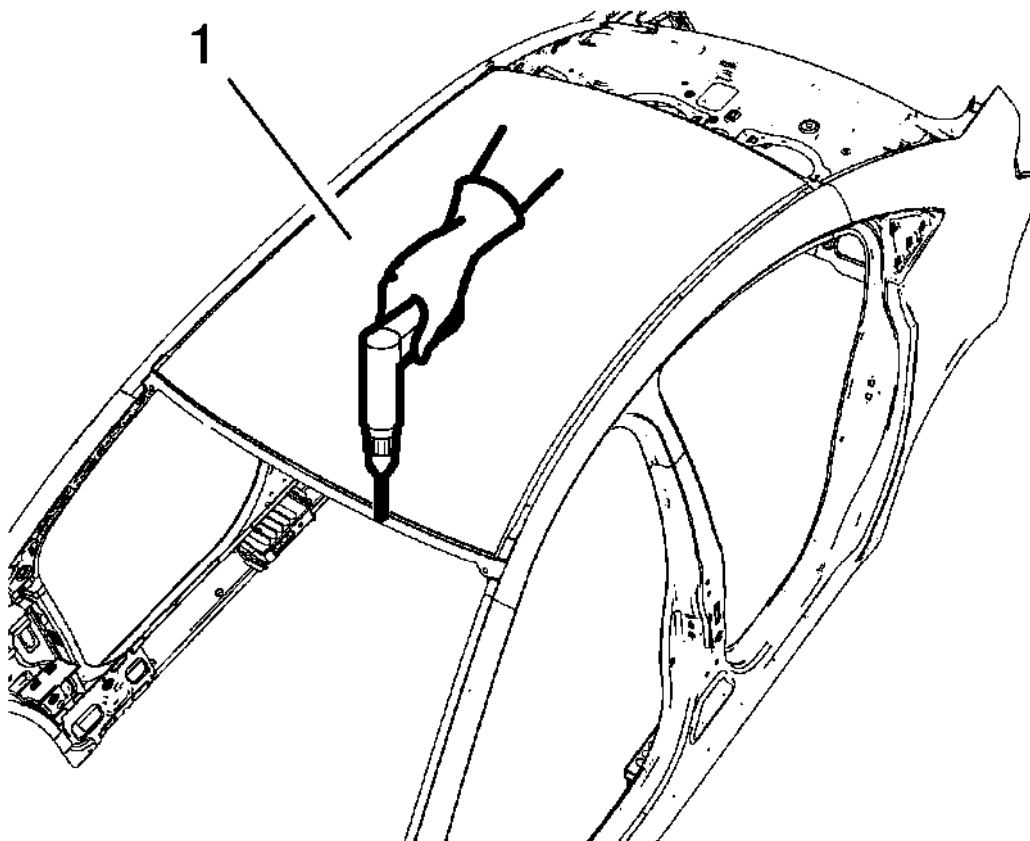


Fig. 73: Drill All Roof Outer Panel Factory Welds
Courtesy of GENERAL MOTORS COMPANY

7. Drill all factory welds (1). Note the number and location of welds for installation of the service assembly.
8. Cut the adhesive with an appropriate tool.

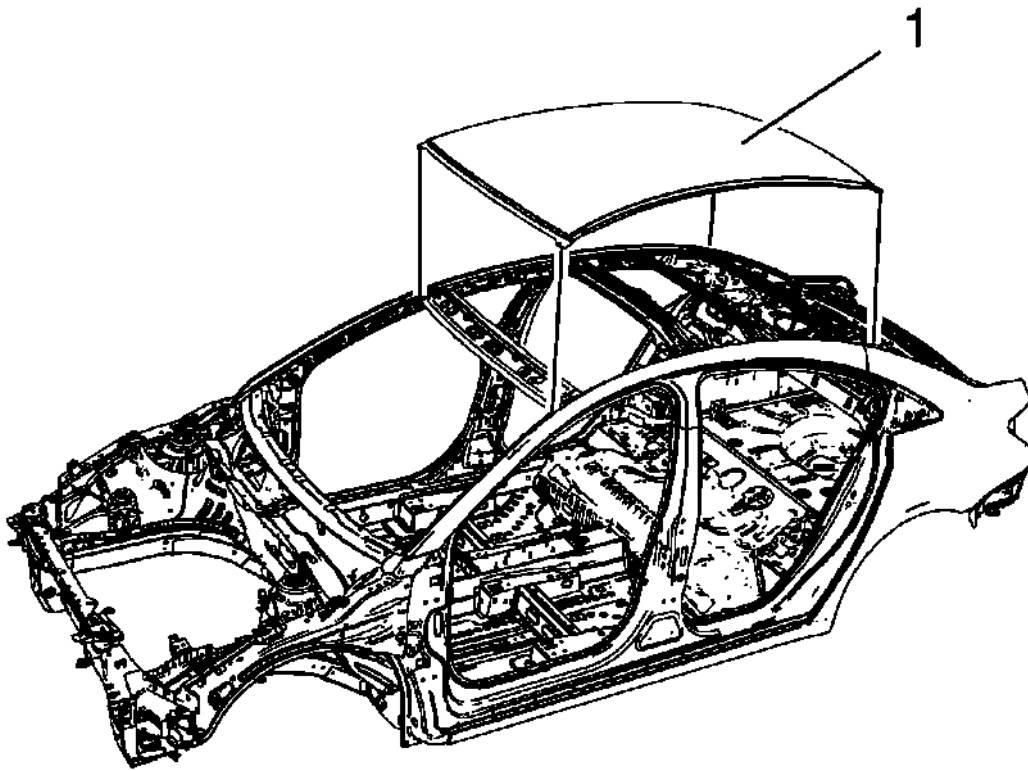


Fig. 74: Roof Panel

Courtesy of GENERAL MOTORS COMPANY

9. Remove the damaged roof panel (1).

Installation Procedure

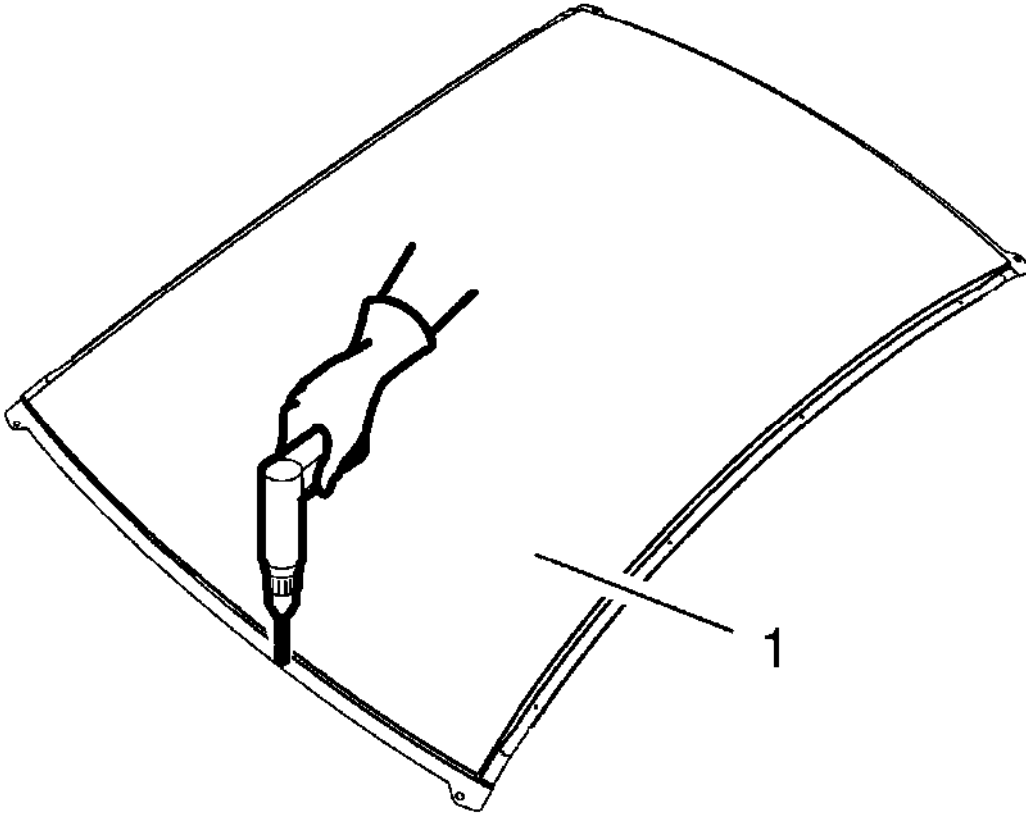


Fig. 75: Drilling New Roof Outer Panel For Welding

Courtesy of GENERAL MOTORS COMPANY

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

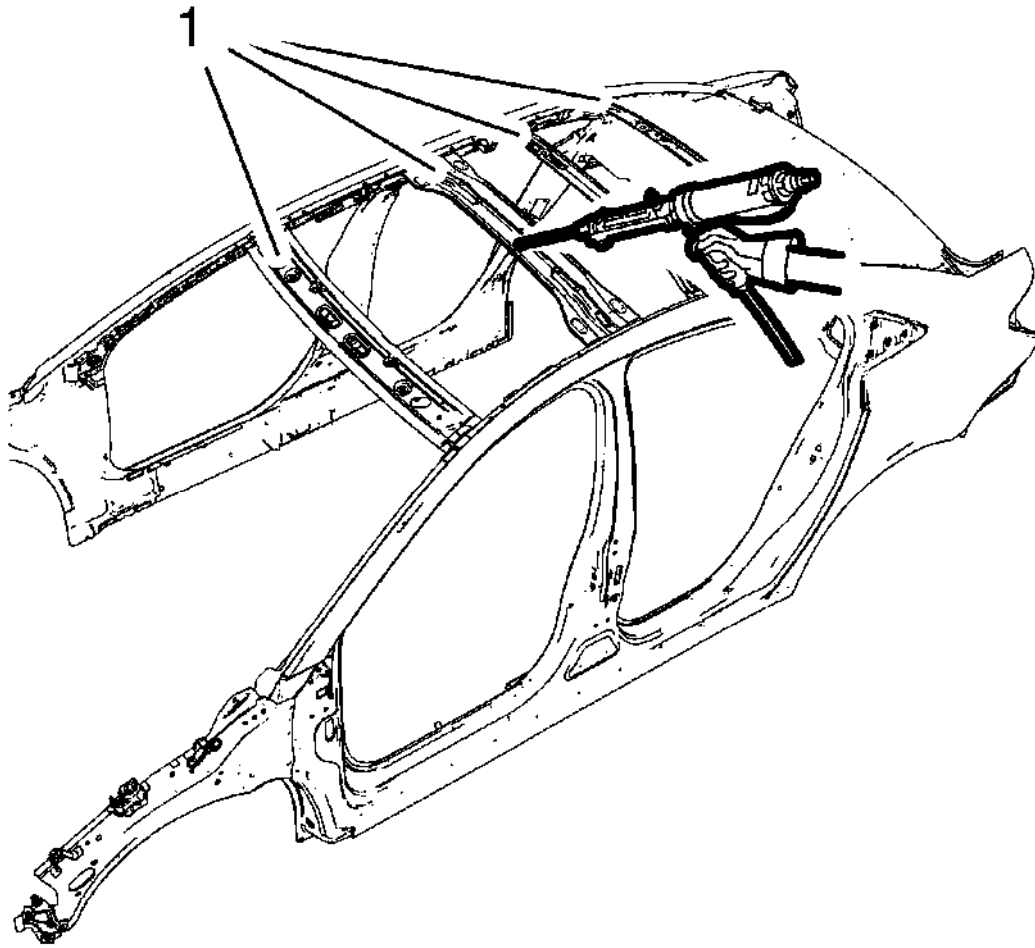


Fig. 76: Applying One-Part Windshield Urethane Adhesive
Courtesy of GENERAL MOTORS COMPANY

3. Apply one-part windshield urethane adhesive (1) as noted from the original panel.
4. Position the roof panel on the vehicle.
5. Verify the fit of the panel.
6. Clamp the panel into position.

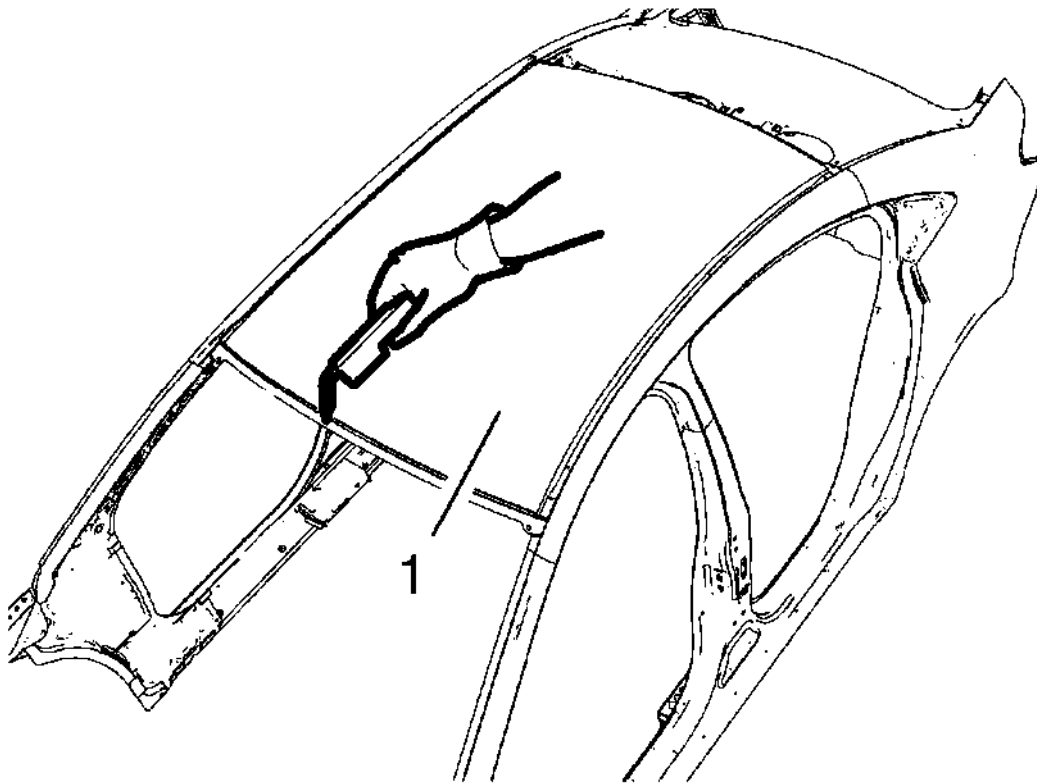


Fig. 77: Welding Roof Outer Panel

Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the roof outer panel (1) accordingly.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
9. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
10. Install all related panels and components.
11. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
12. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

ROCKER INNER PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

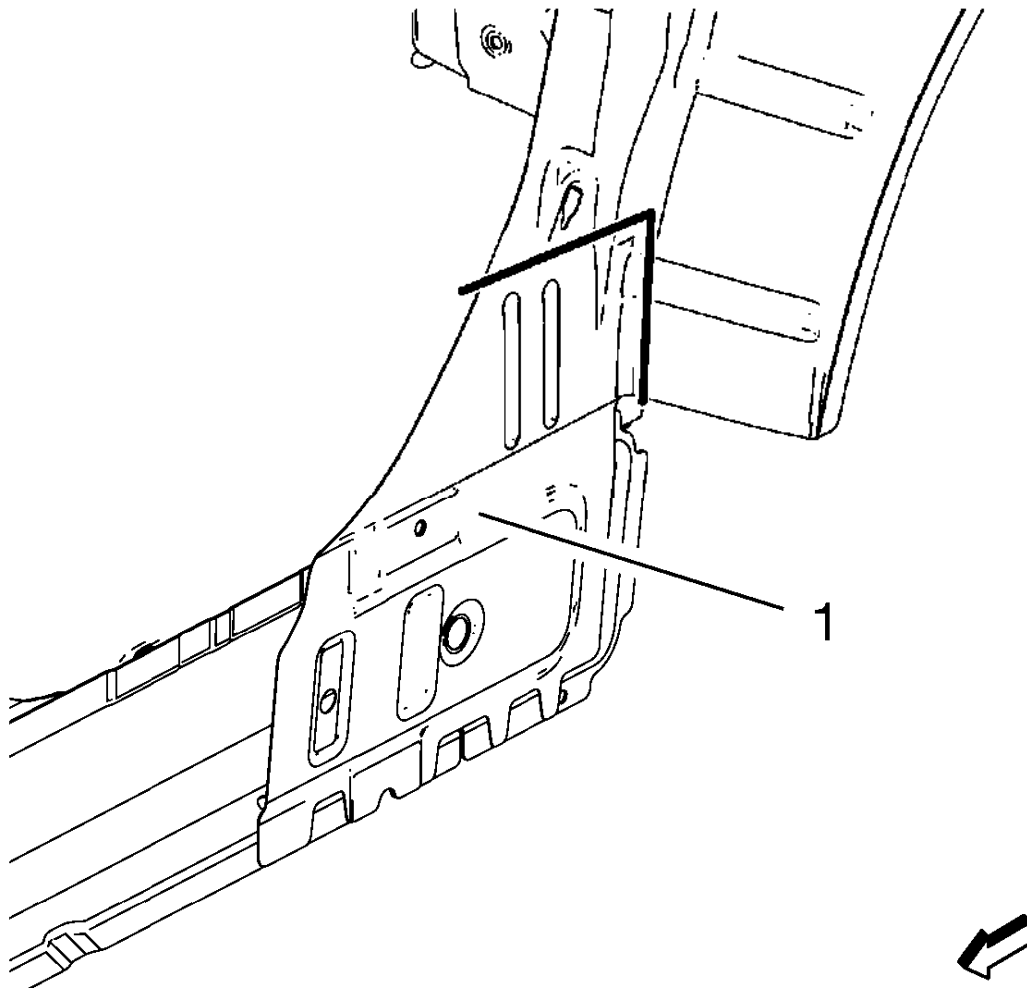


Fig. 78: Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

6. Create cut lines on the body side inner panel (1).

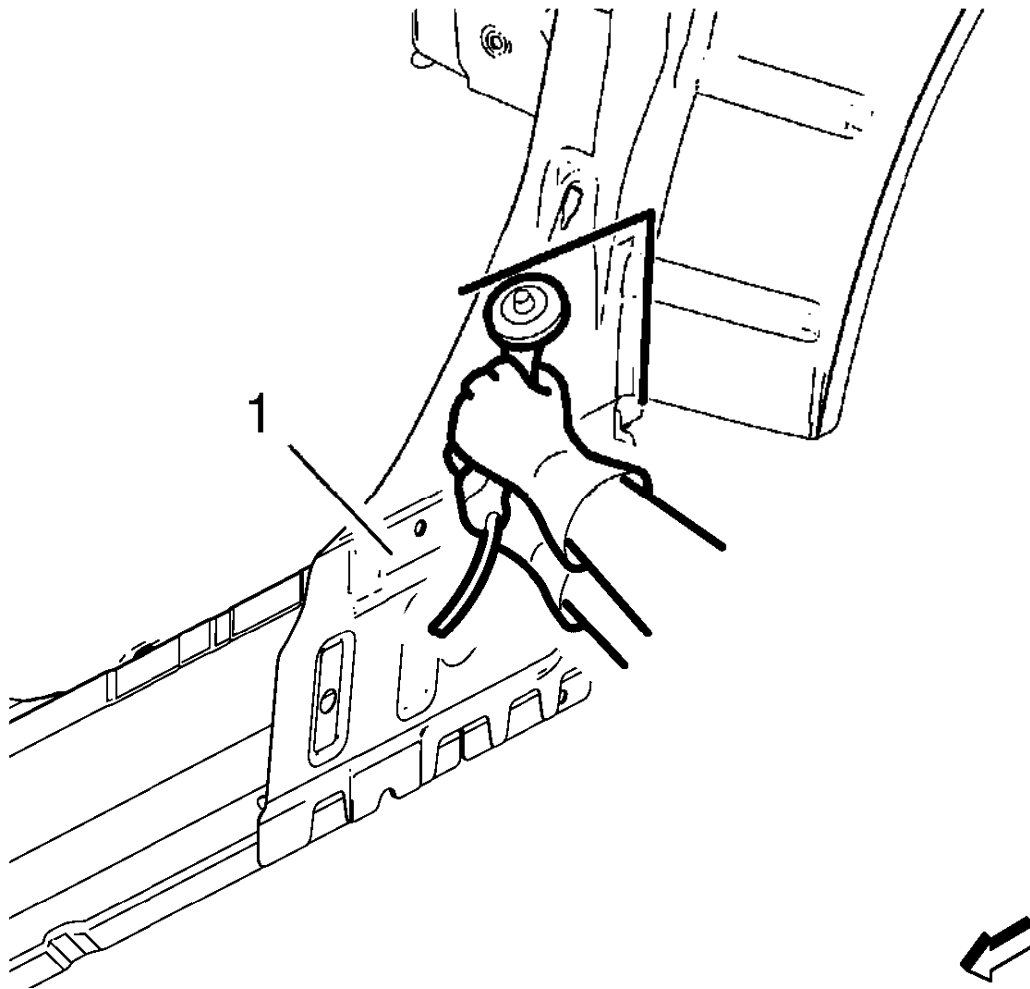


Fig. 79: Cutting Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

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

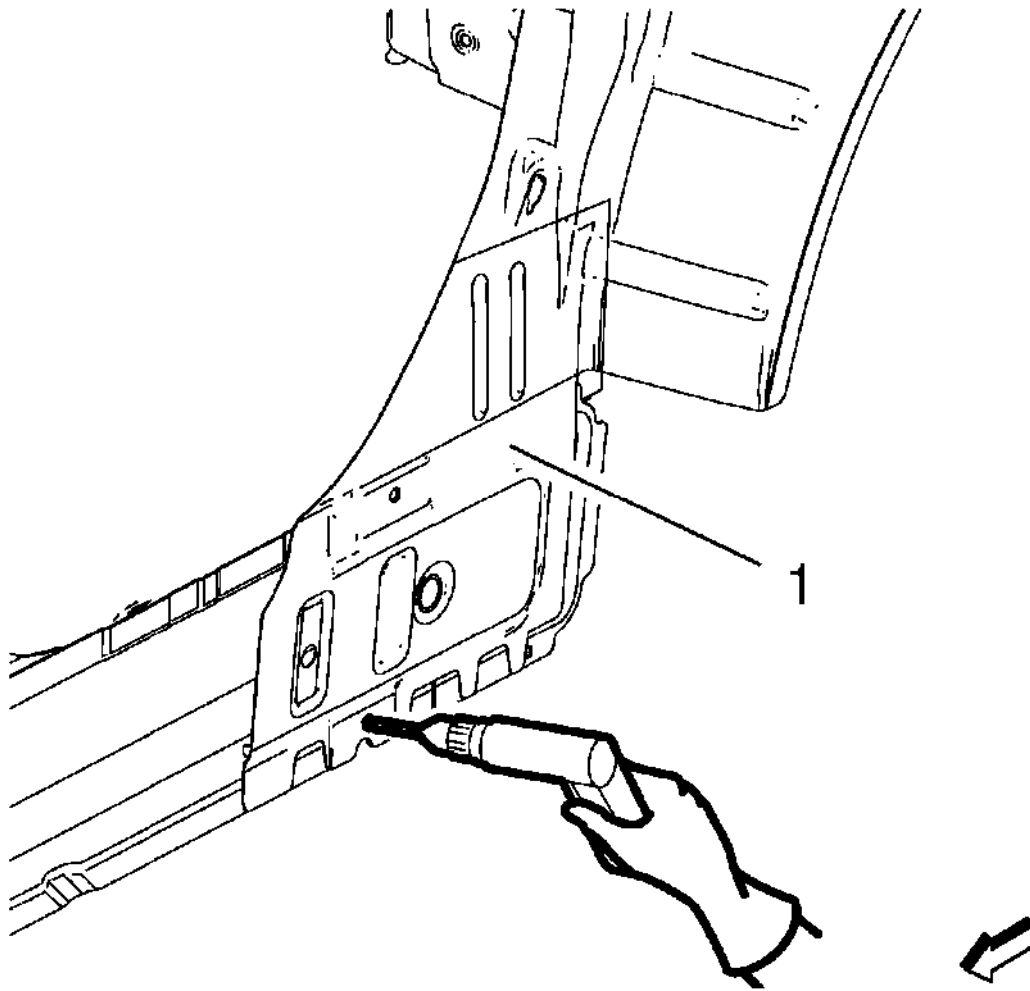


Fig. 80: Drilling Out Factory Welds Of Body Side Inner Panel
Courtesy of GENERAL MOTORS COMPANY

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.

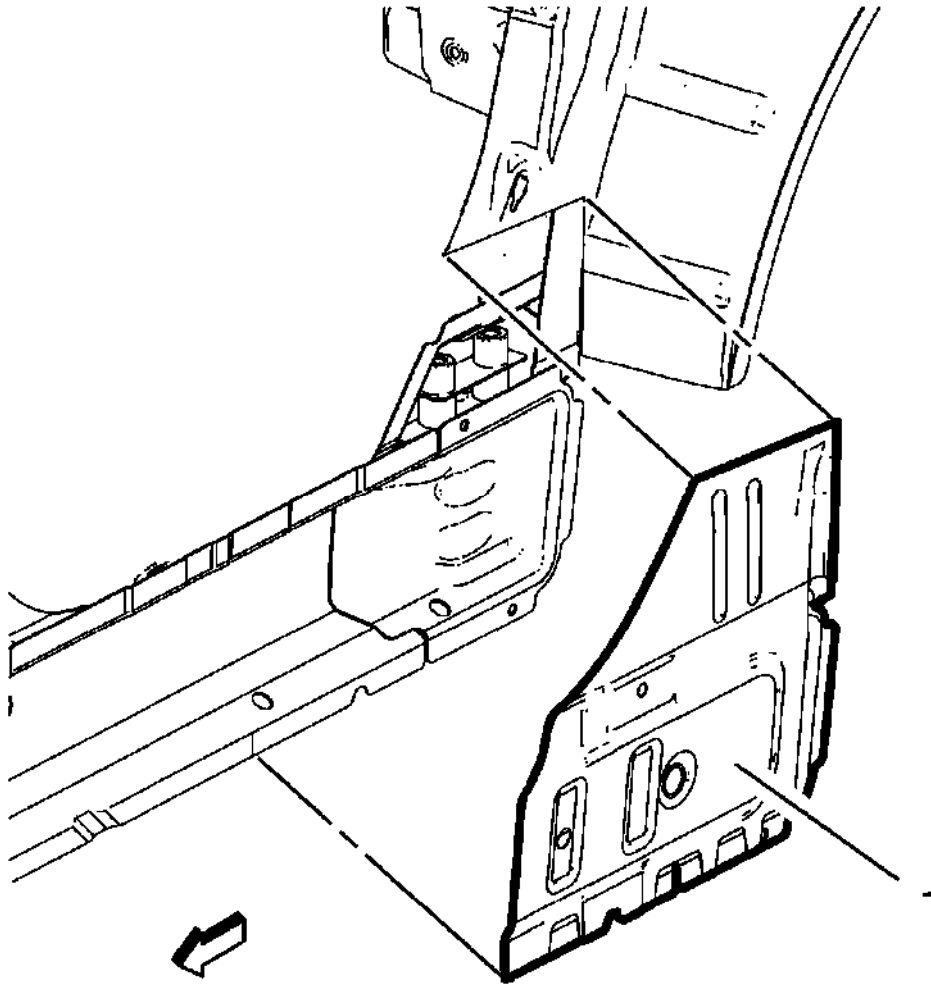


Fig. 81: body side inner panel

Courtesy of GENERAL MOTORS COMPANY

10. Remove the body side inner panel (1).

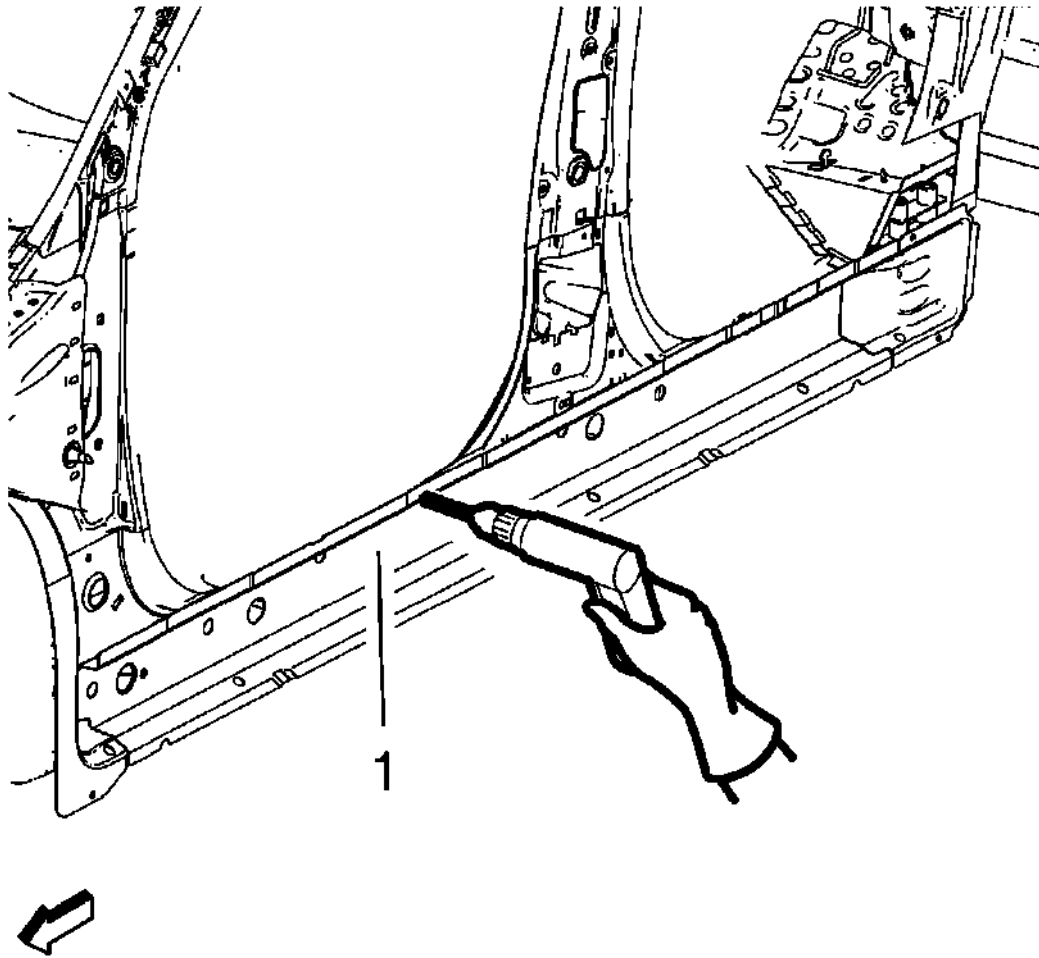


Fig. 82: Drilling Out Factory Welds Of Rocker Inner Panel

Courtesy of GENERAL MOTORS COMPANY

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.

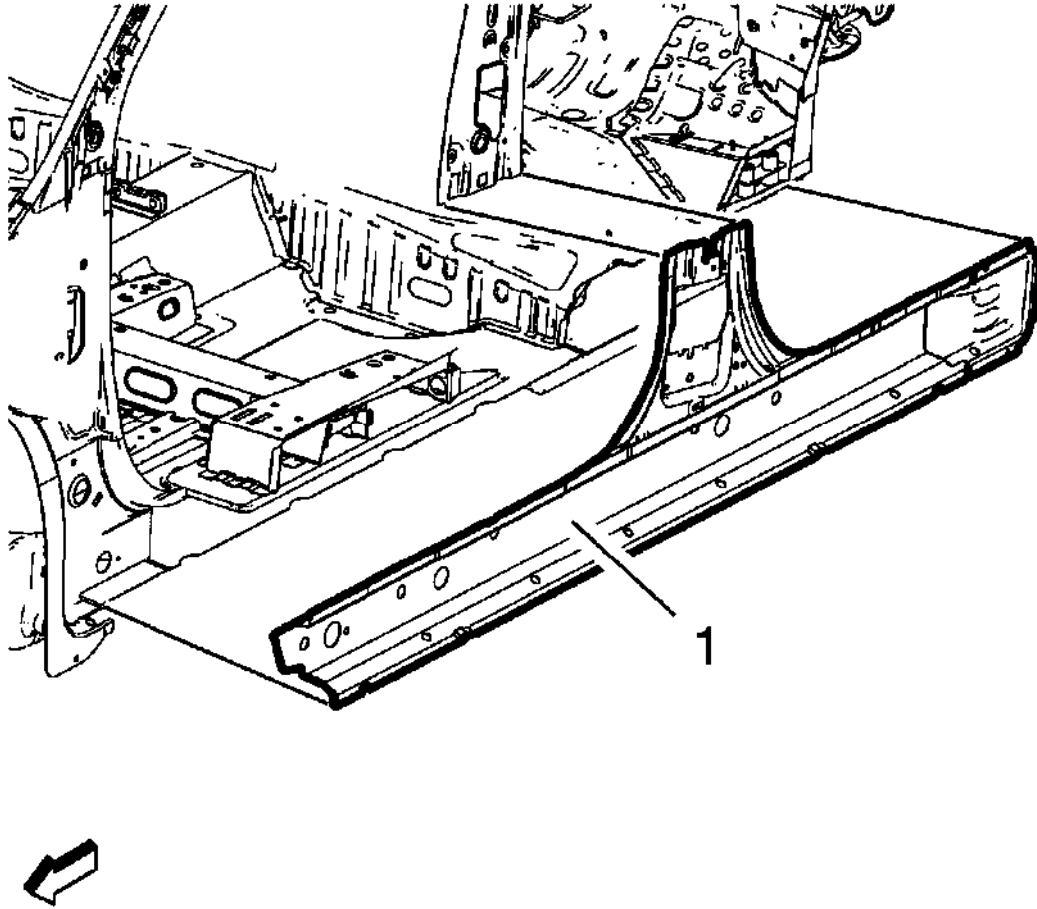


Fig. 83: Rocker Inner Panel

Courtesy of GENERAL MOTORS COMPANY

13. Remove the damaged rocker inner panel (1).

Installation Procedure

1. Align the rocker inner panel.

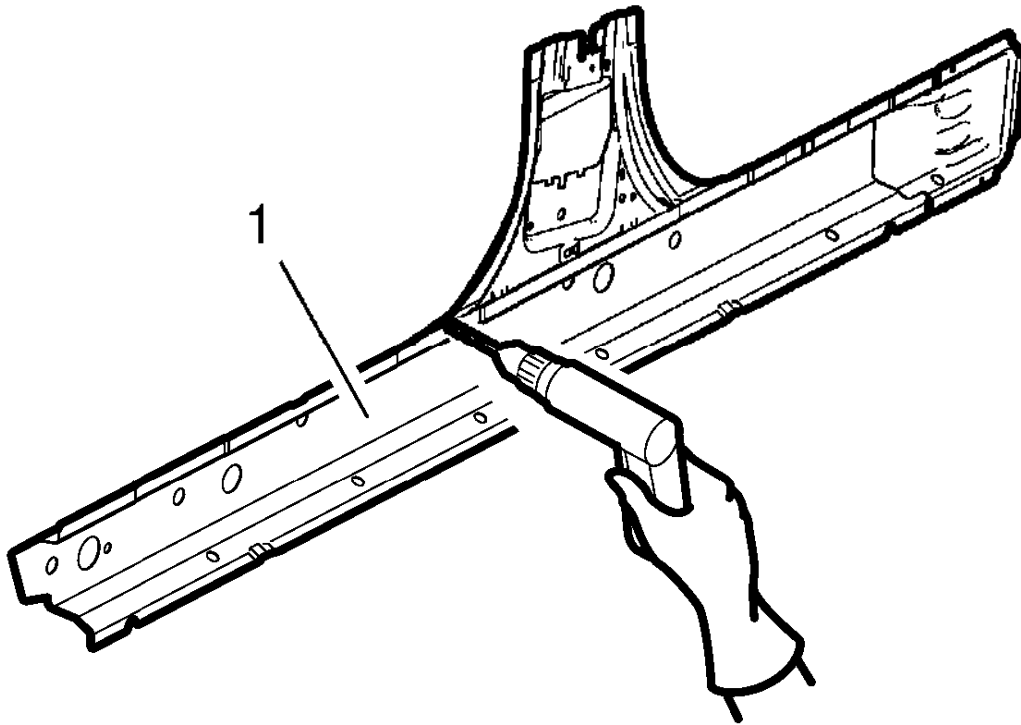


Fig. 84: Drilling Holes For Welding Rocker Inner Panel

Courtesy of GENERAL MOTORS COMPANY

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.

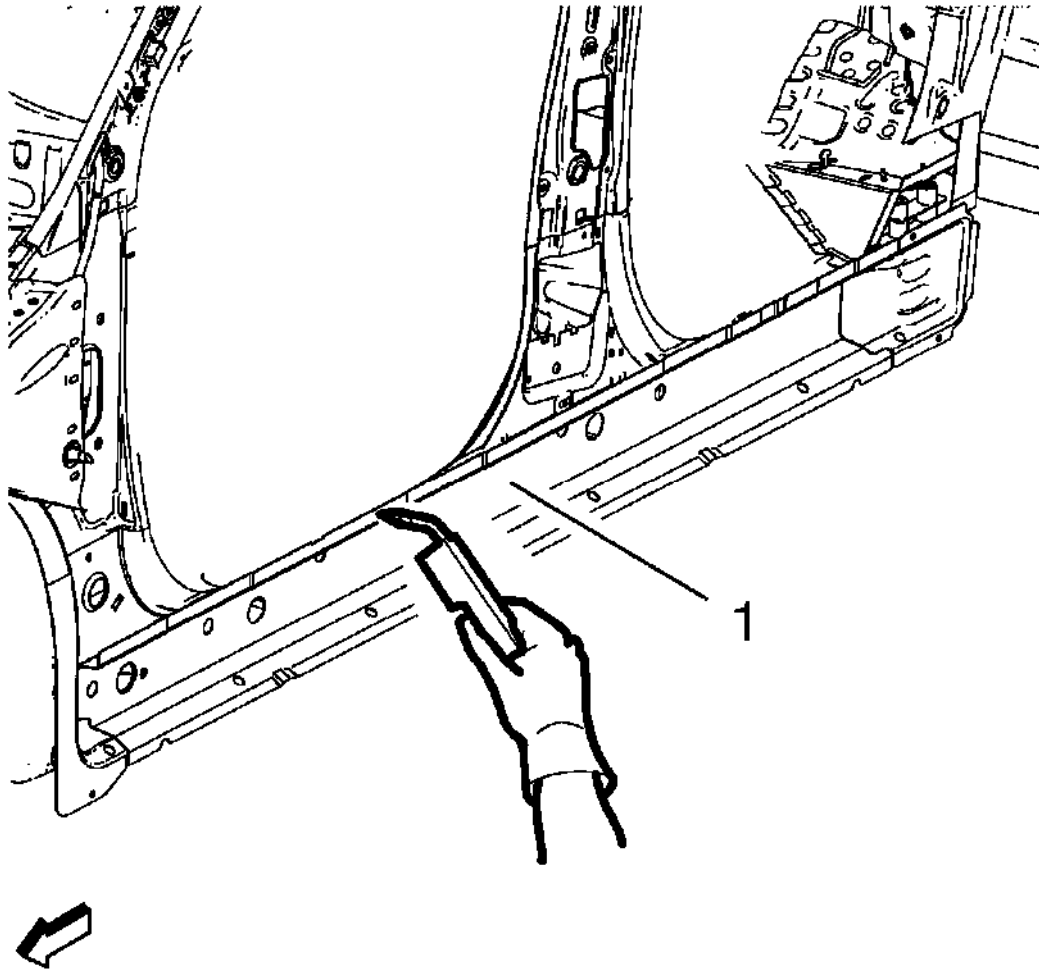


Fig. 85: Welding Rocker Inner Panel

Courtesy of GENERAL MOTORS COMPANY

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

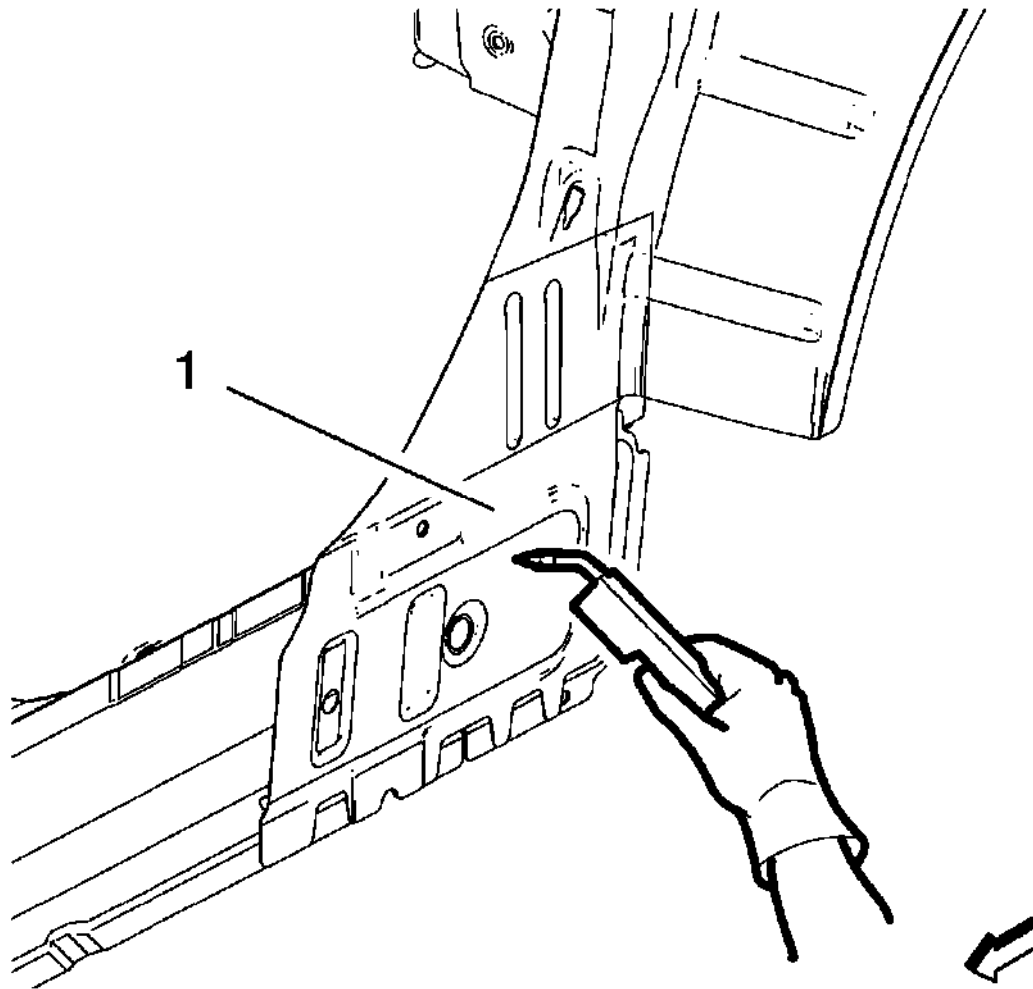


Fig. 86: Welding Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

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. Refer to **Anti-Corrosion Treatment and Repair** .
11. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
12. Install all related panels and components.
13. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
14. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

ROCKER OUTER PANEL REPLACEMENT

2013 Chevrolet Cruze

2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

NOTE: According to different corrosion warranties, only the regional mandatory joining methods are allowed.

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

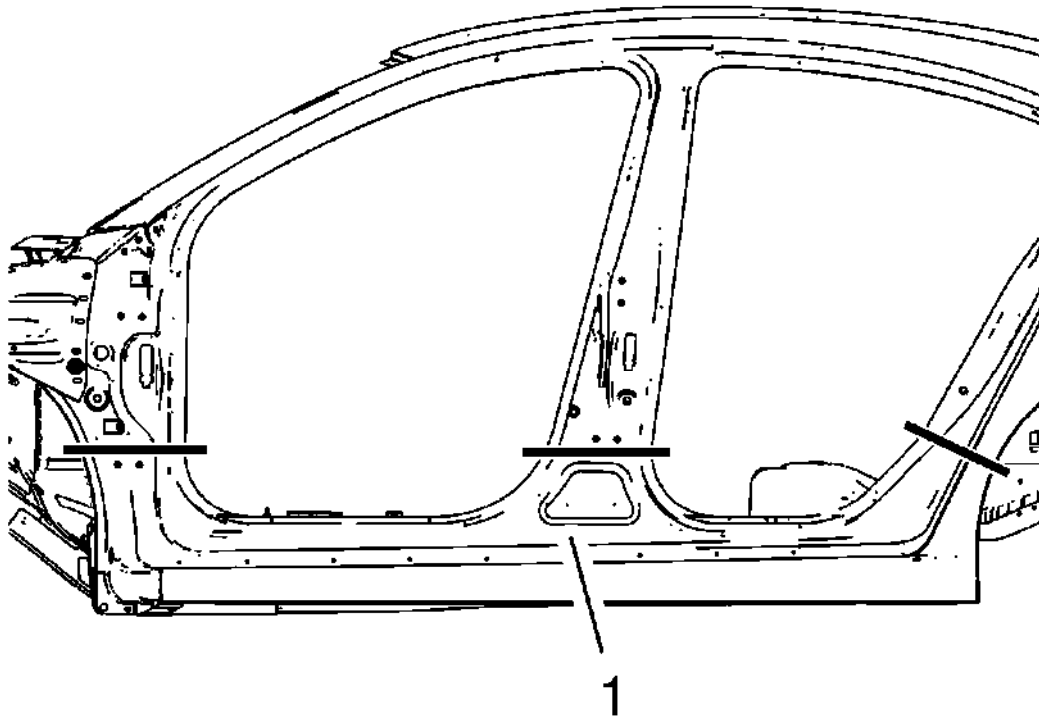


Fig. 87: Locating Cut Lines On Rocker Outer Panel
Courtesy of GENERAL MOTORS COMPANY

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

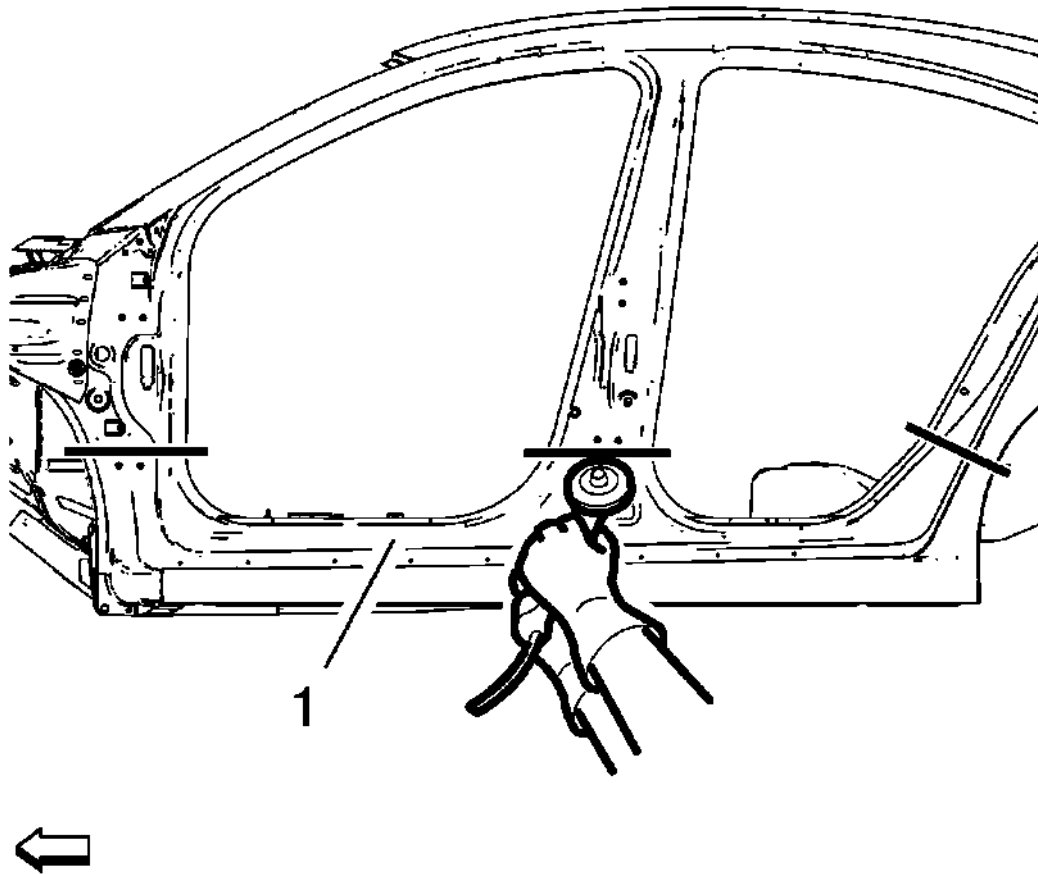


Fig. 88: Cutting Rocker Outer Panel
Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

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

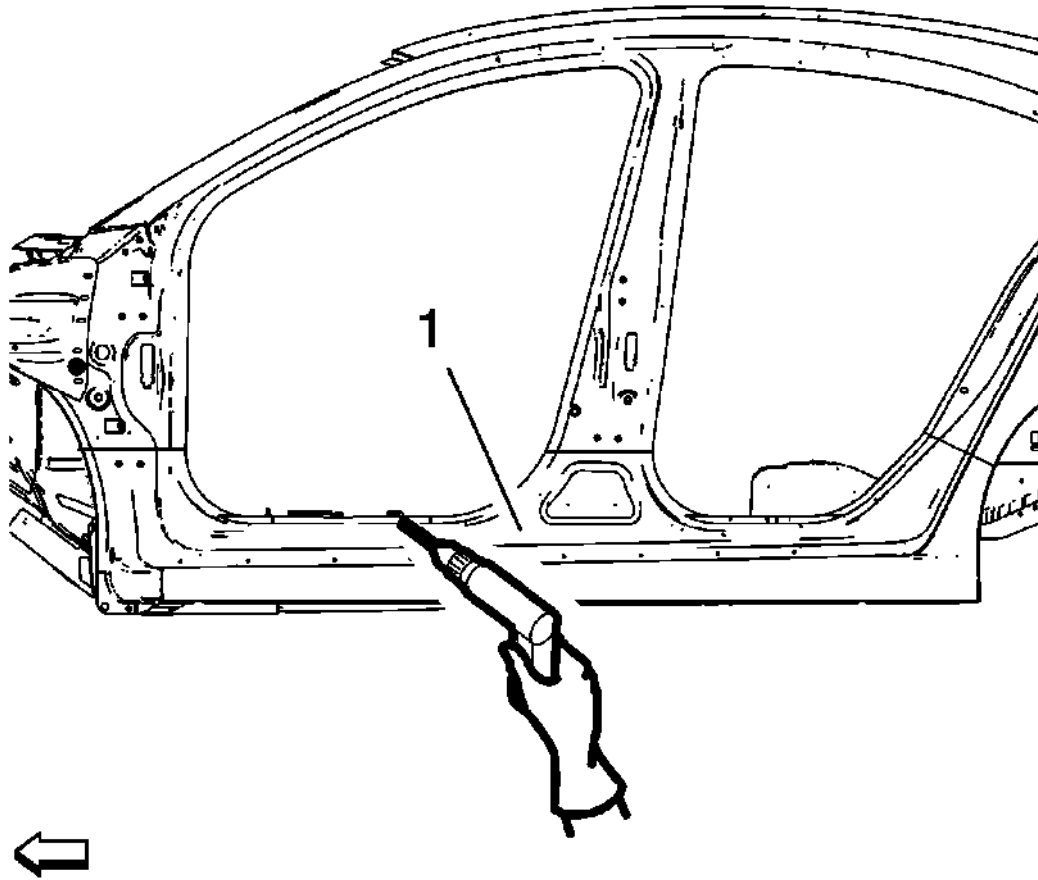


Fig. 89: Drilling Factory Welds Of Rocker Outer Panel
Courtesy of GENERAL MOTORS COMPANY

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

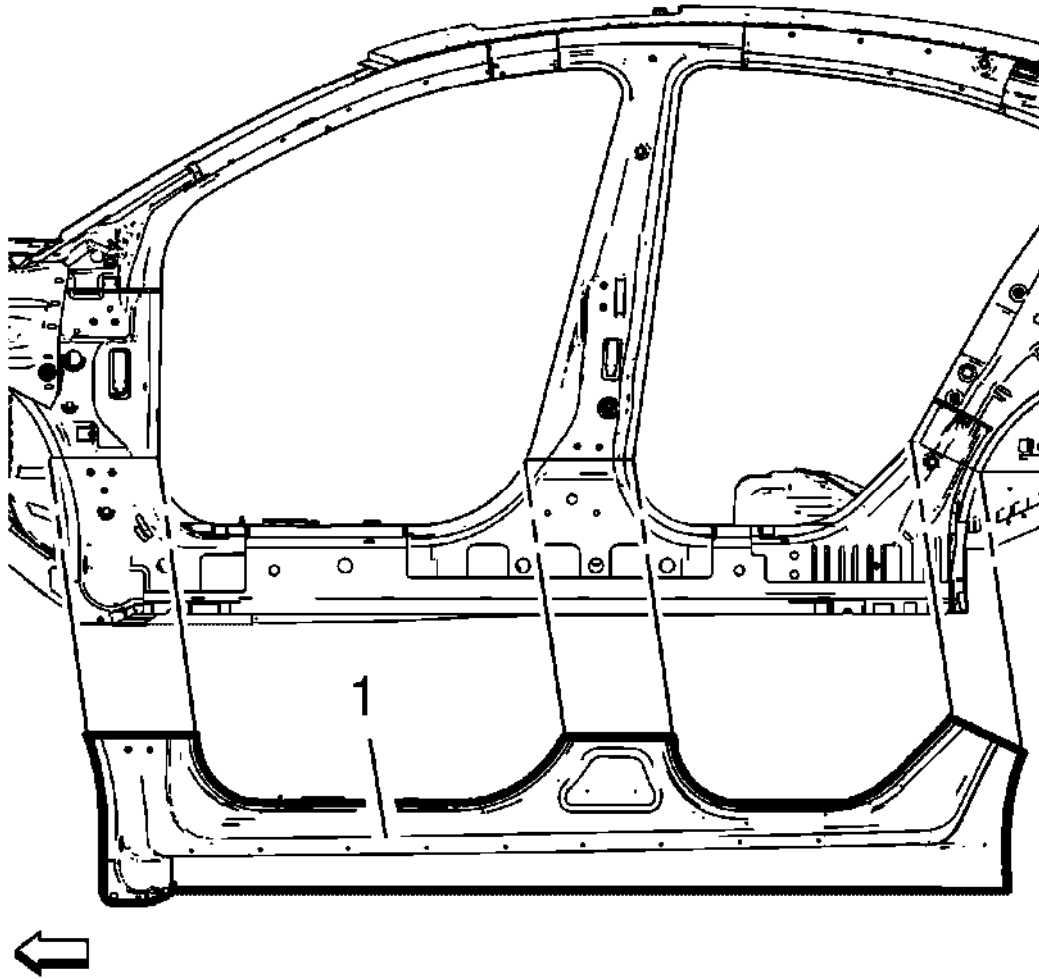
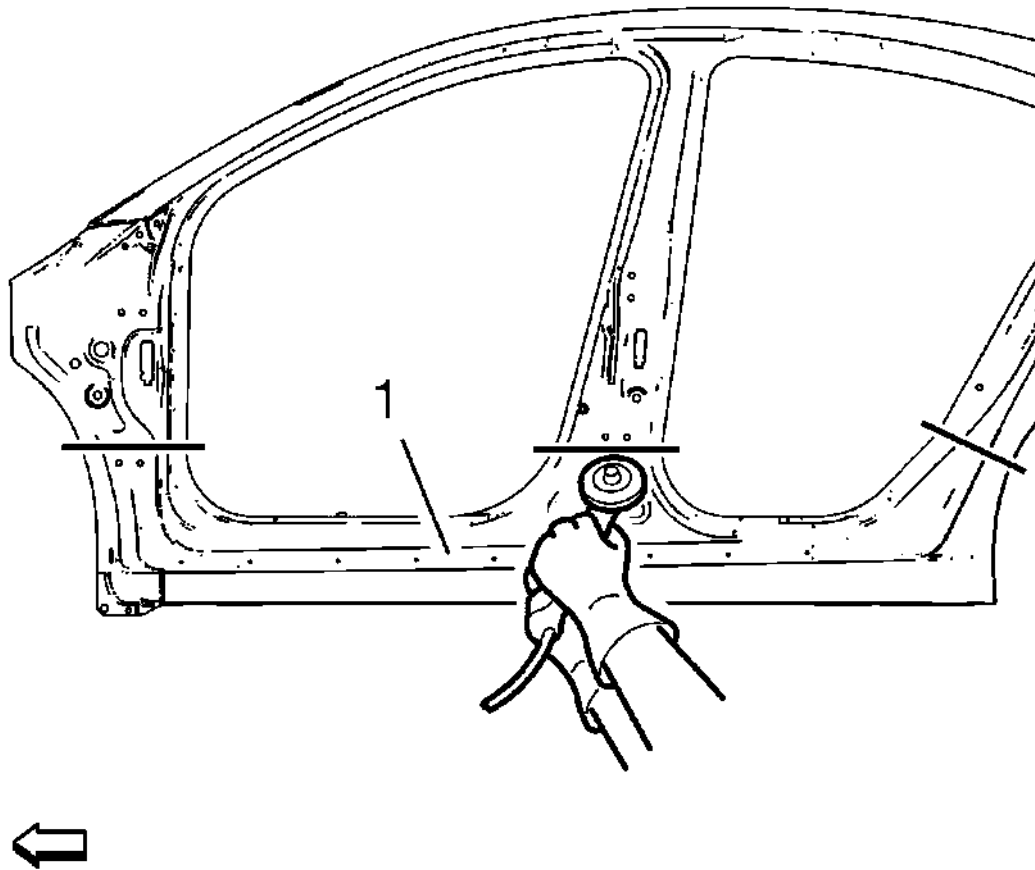


Fig. 90: Rocker Outer Panel

Courtesy of GENERAL MOTORS COMPANY

10. Remove the damaged rocker outer panel (1).

Installation Procedure

**Fig. 91: Cutting Rocker Outer Panel****Courtesy of GENERAL MOTORS COMPANY**

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 (1 1/2 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.

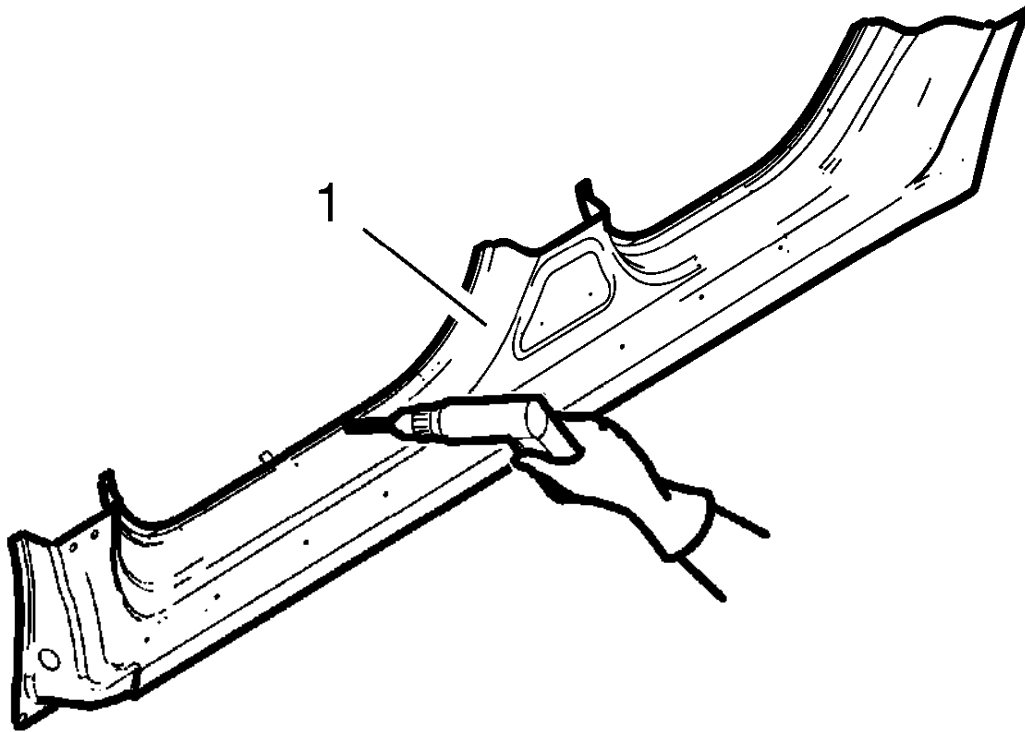


Fig. 92: Drilling Hole For Plug Welding New Rocker Outer Panel

Courtesy of GENERAL MOTORS COMPANY

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.

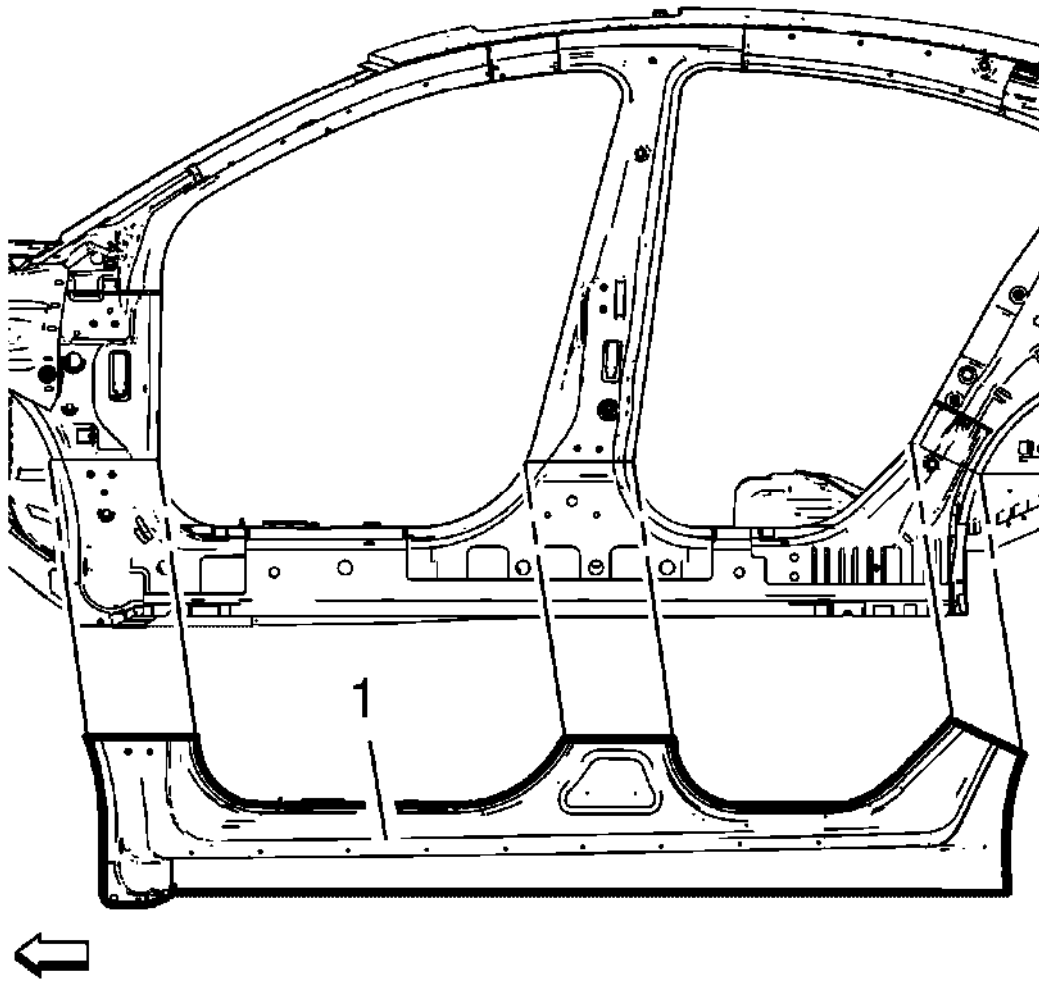


Fig. 93: Rocker Outer Panel

Courtesy of GENERAL MOTORS COMPANY

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.

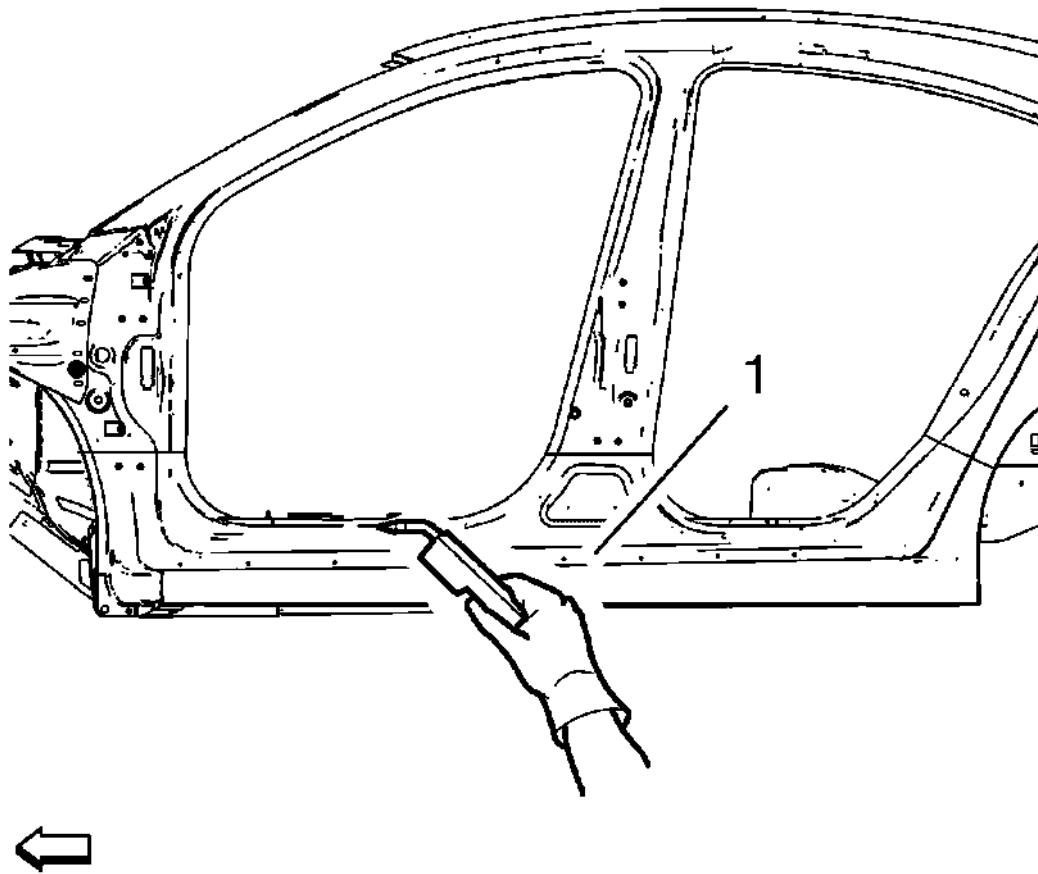


Fig. 94: Welding Rocker Outer Panel
Courtesy of GENERAL MOTORS COMPANY

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. Refer to **Anti-Corrosion Treatment and Repair** .
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** .

BODY SIDE OUTER PANEL REINFORCEMENT REPLACEMENT

Removal Procedure

2013 Chevrolet Cruze

2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

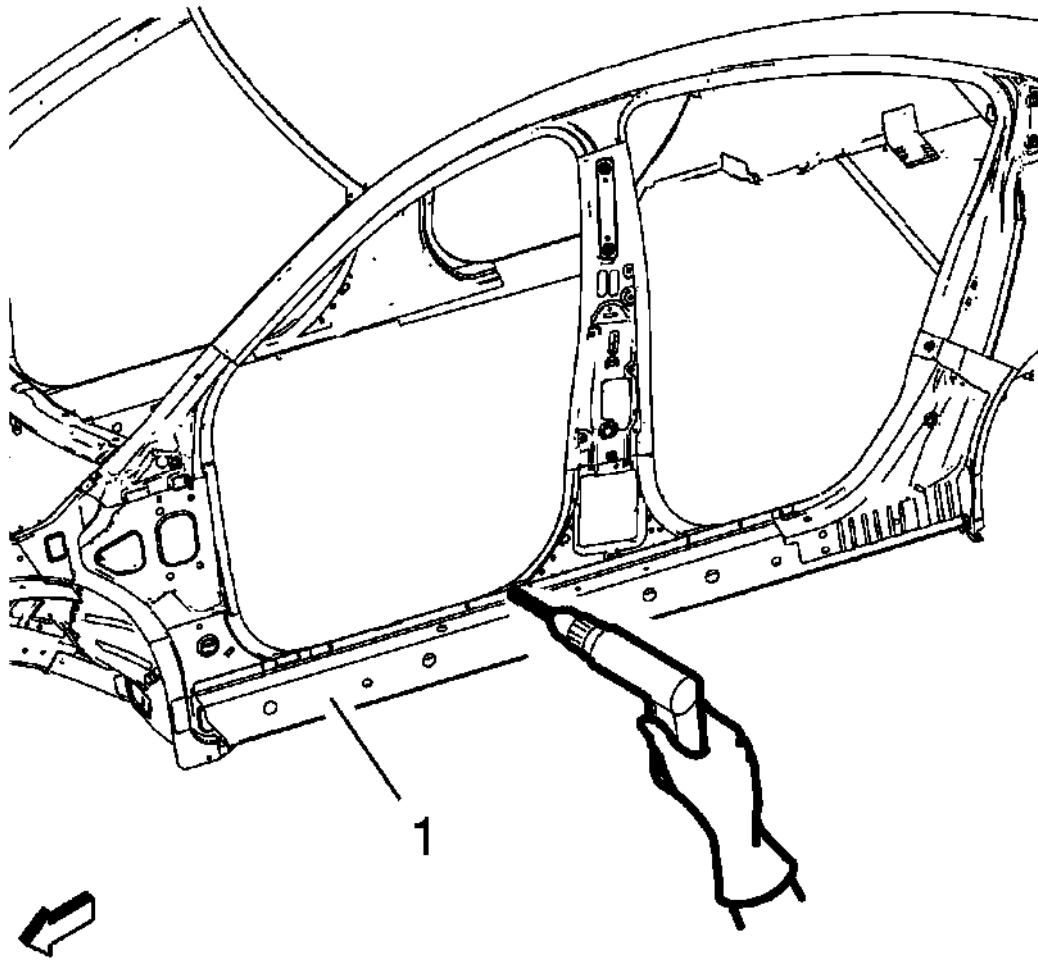


Fig. 95: Drilling Factory Welds Of The Body Side Outer Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the body side outer panel reinforcement (1).
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

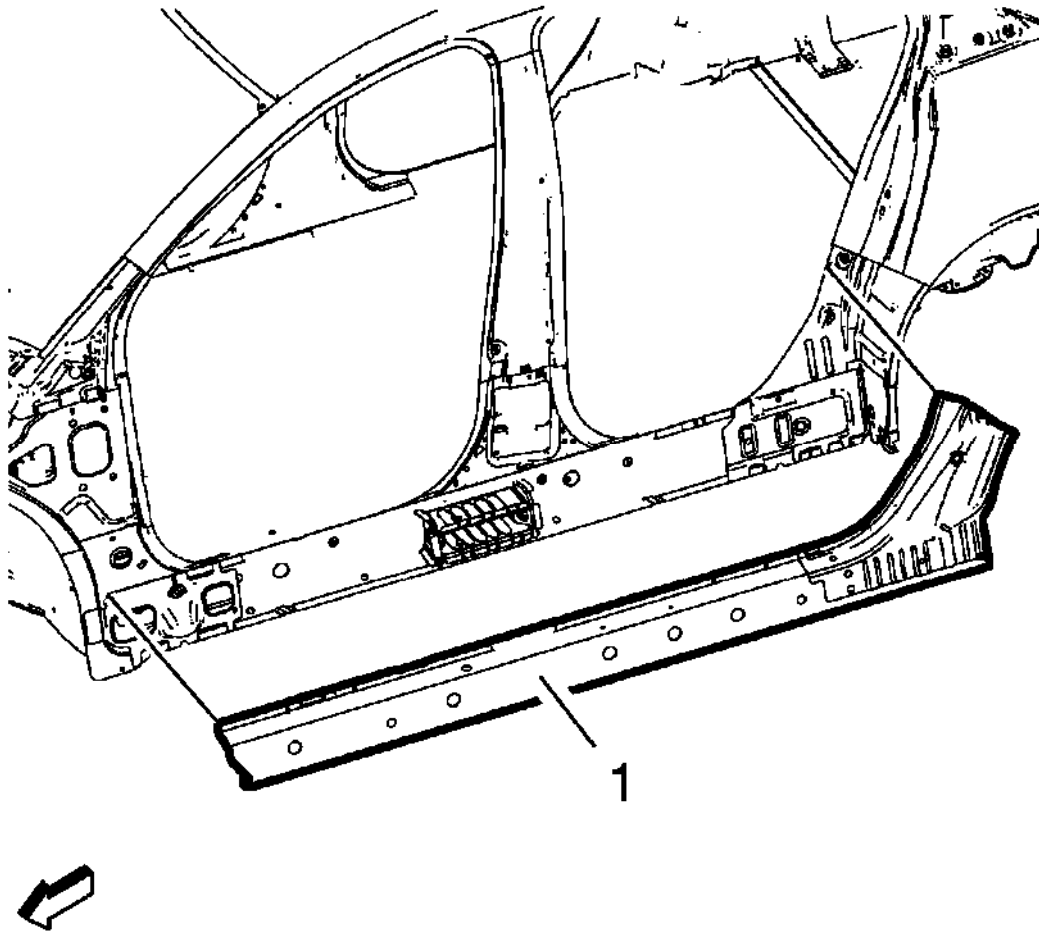


Fig. 96: Body Side Outer Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

8. Remove the damaged body side outer panel reinforcement (1).

Installation Procedure

1. Align the body side outer panel reinforcement.

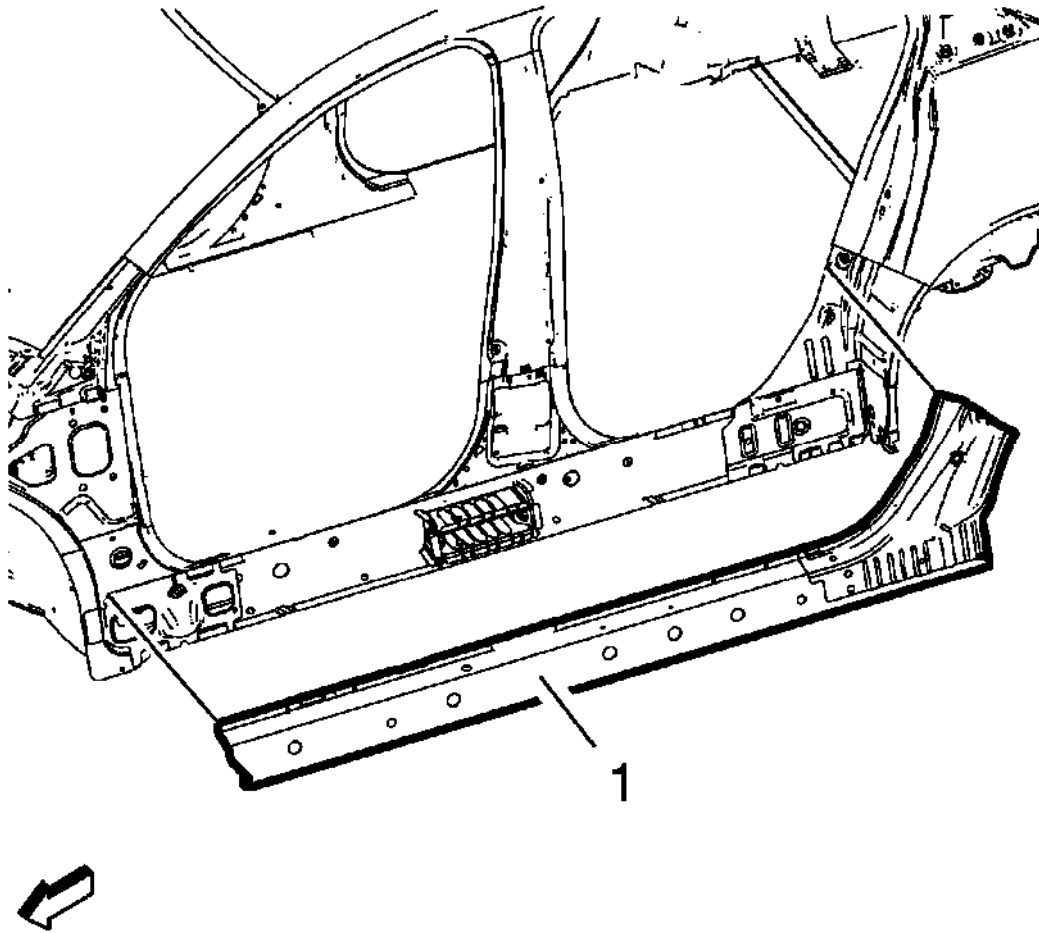


Fig. 97: Body Side Outer Panel Reinforcement

Courtesy of GENERAL MOTORS COMPANY

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

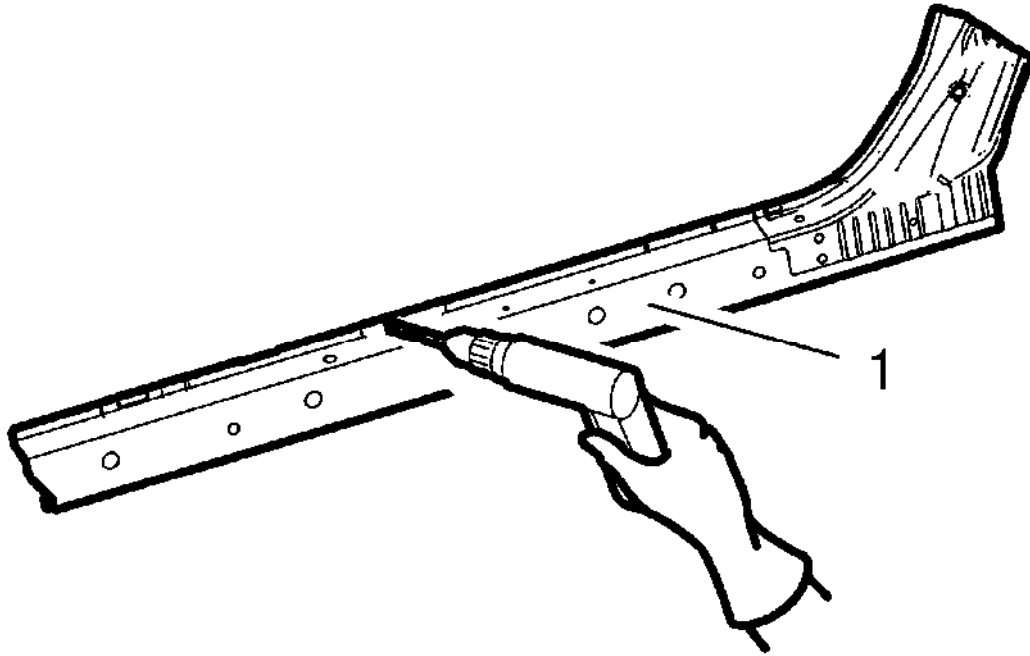


Fig. 98: Drilling Hole For Plug Welding New Body Side Outer Panel Reinforcement
Courtesy of GENERAL MOTORS COMPANY

4. Position the body side outer panel reinforcement (1) on the vehicle.
5. Verify the fit of the body side outer panel reinforcement.
6. Clamp the body side outer panel reinforcement into position.

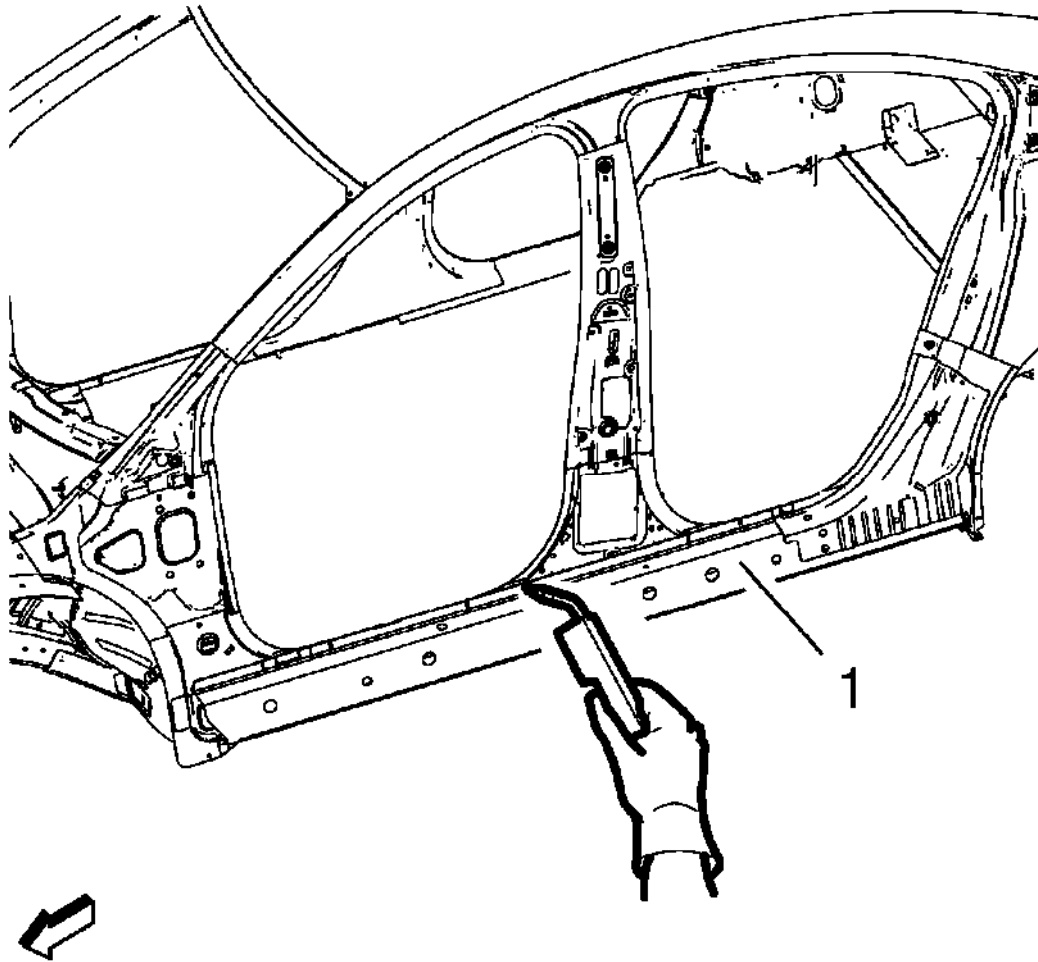


Fig. 99: Welding Body Side Outer Panel Reinforcement

Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the body side outer panel reinforcement (1) accordingly.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
9. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
10. Install all related panels and components.
11. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
12. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

BODY SIDE INNER PANEL SECTIONING

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to **Anti-Corrosion Treatment and Repair** .

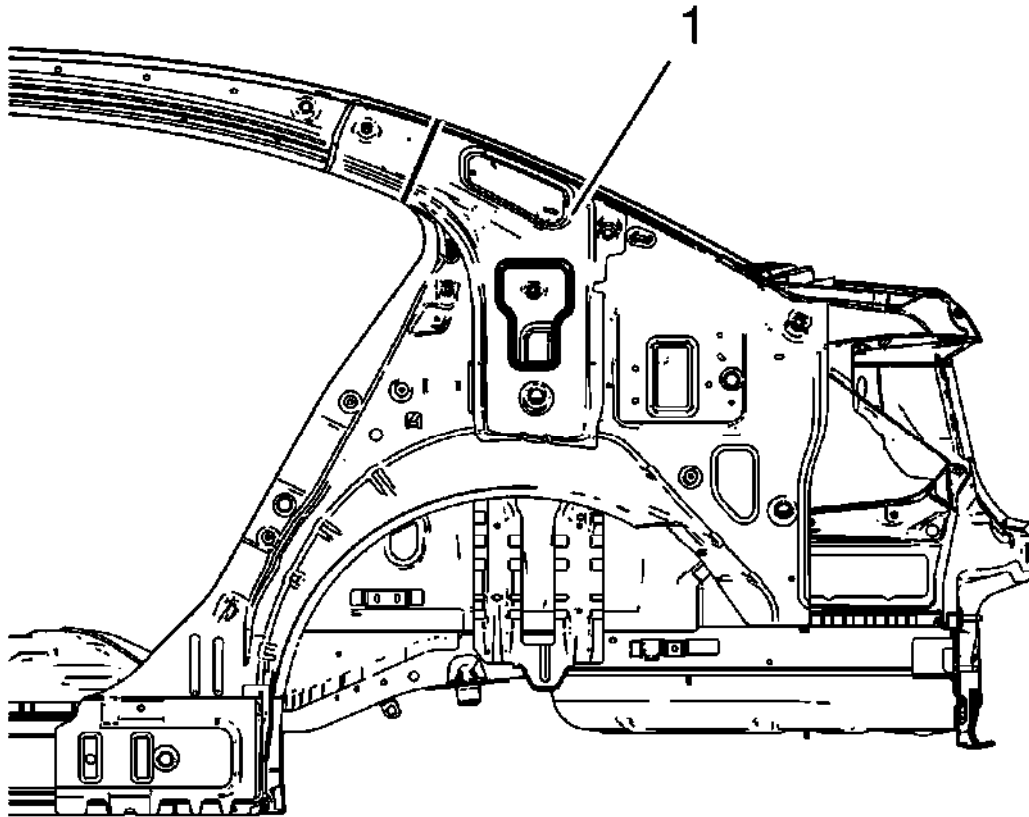


Fig. 100: Body Lock Pillar Upper Reinforcement

Courtesy of GENERAL MOTORS COMPANY

6. Create cut lines on the body lock pillar upper reinforcement (1).

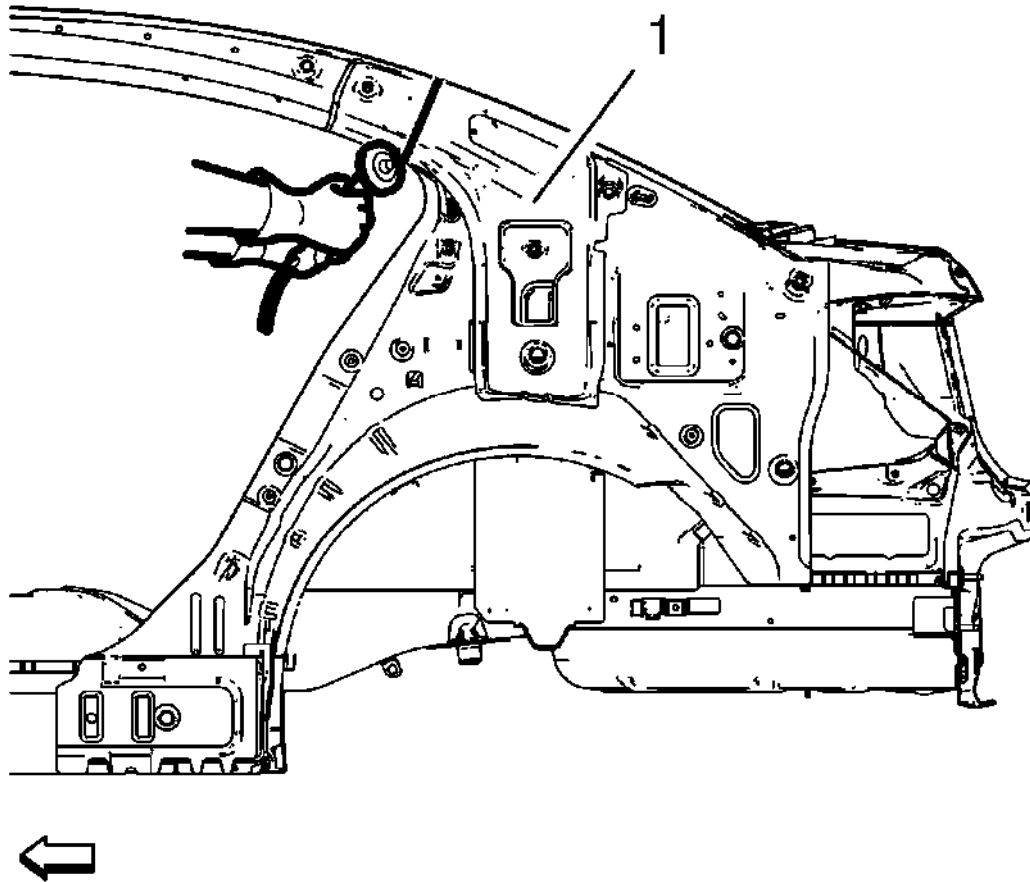


Fig. 101: Cutting Body Lock Pillar Upper Reinforcement

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any other panels or reinforcements.

7. Cut the body lock pillar upper reinforcement (1) where sectioning is to be performed.

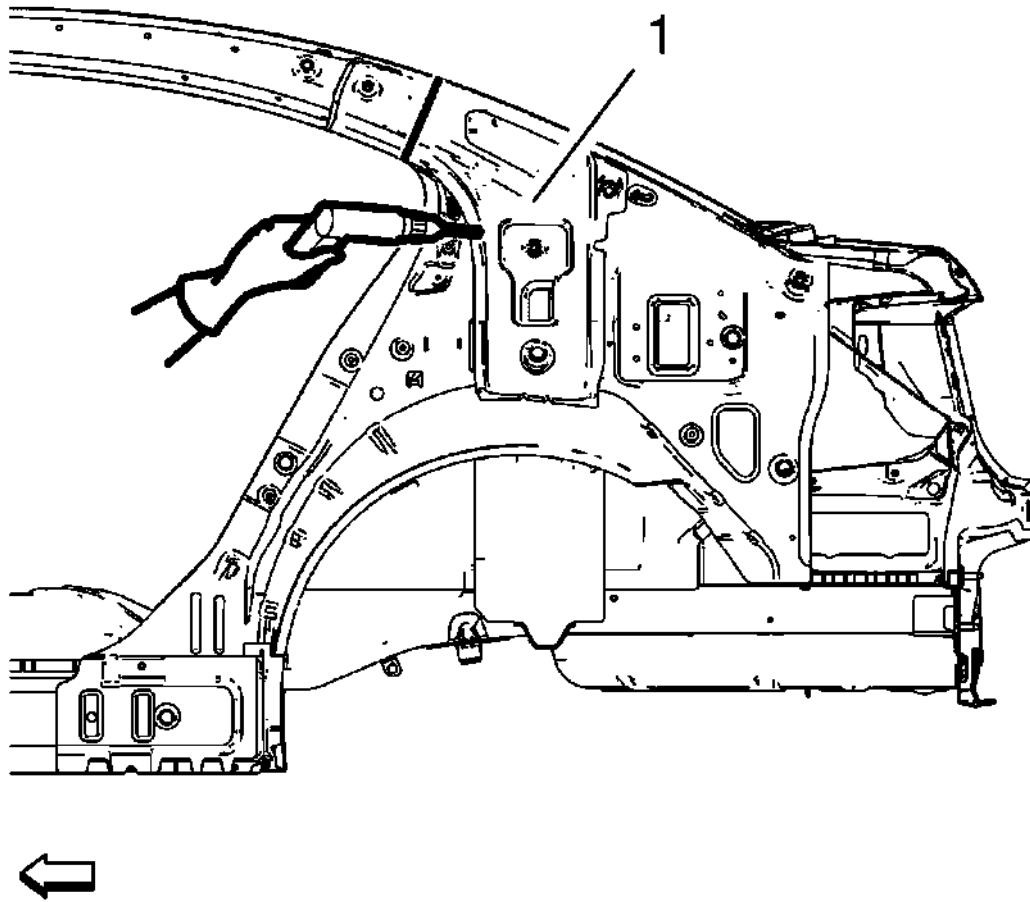


Fig. 102: Drilling Factory Welds From Body Lock Pillar Upper Reinforcement
Courtesy of GENERAL MOTORS COMPANY

8. Locate and mark all the necessary factory welds of the body lock pillar upper reinforcement (1).
9. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

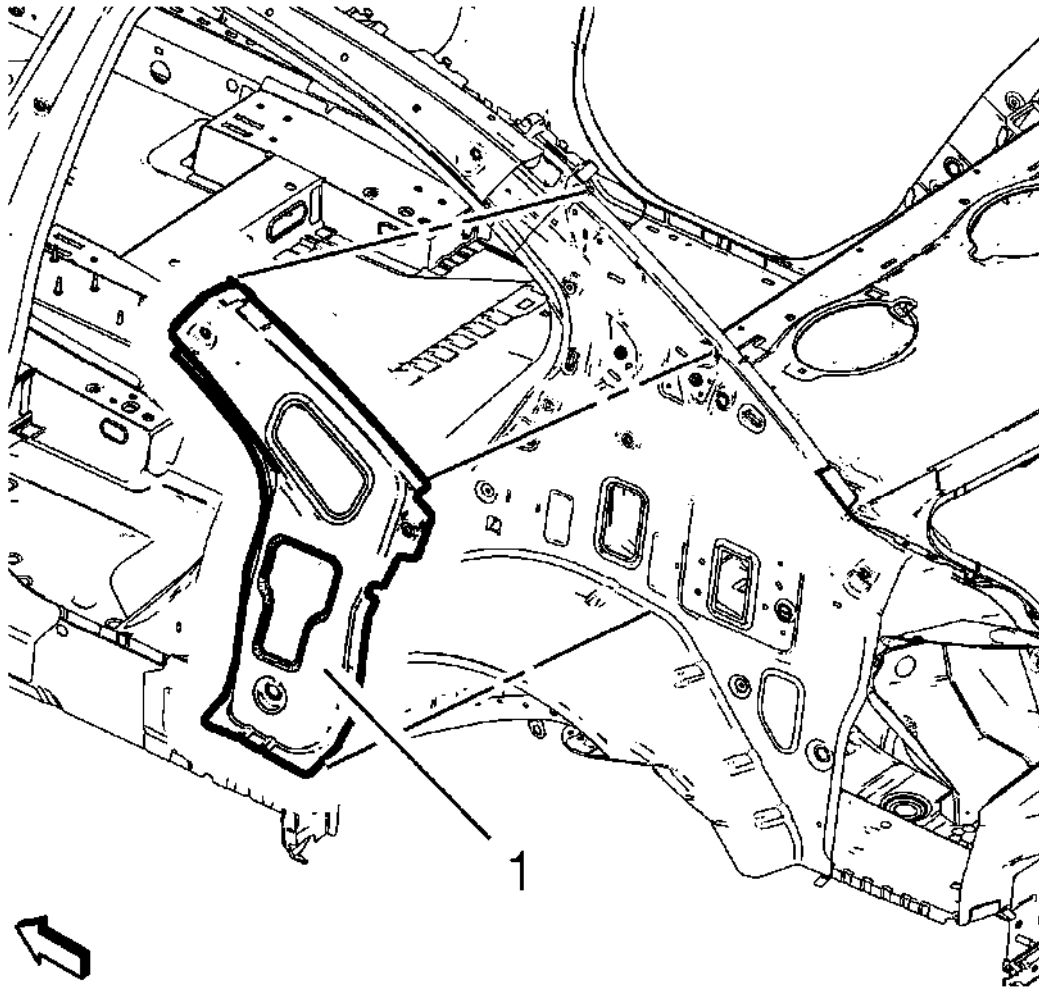


Fig. 103: Lock Pillar Upper Reinforcement
Courtesy of GENERAL MOTORS COMPANY

10. Remove the damaged body lock pillar upper reinforcement (1).

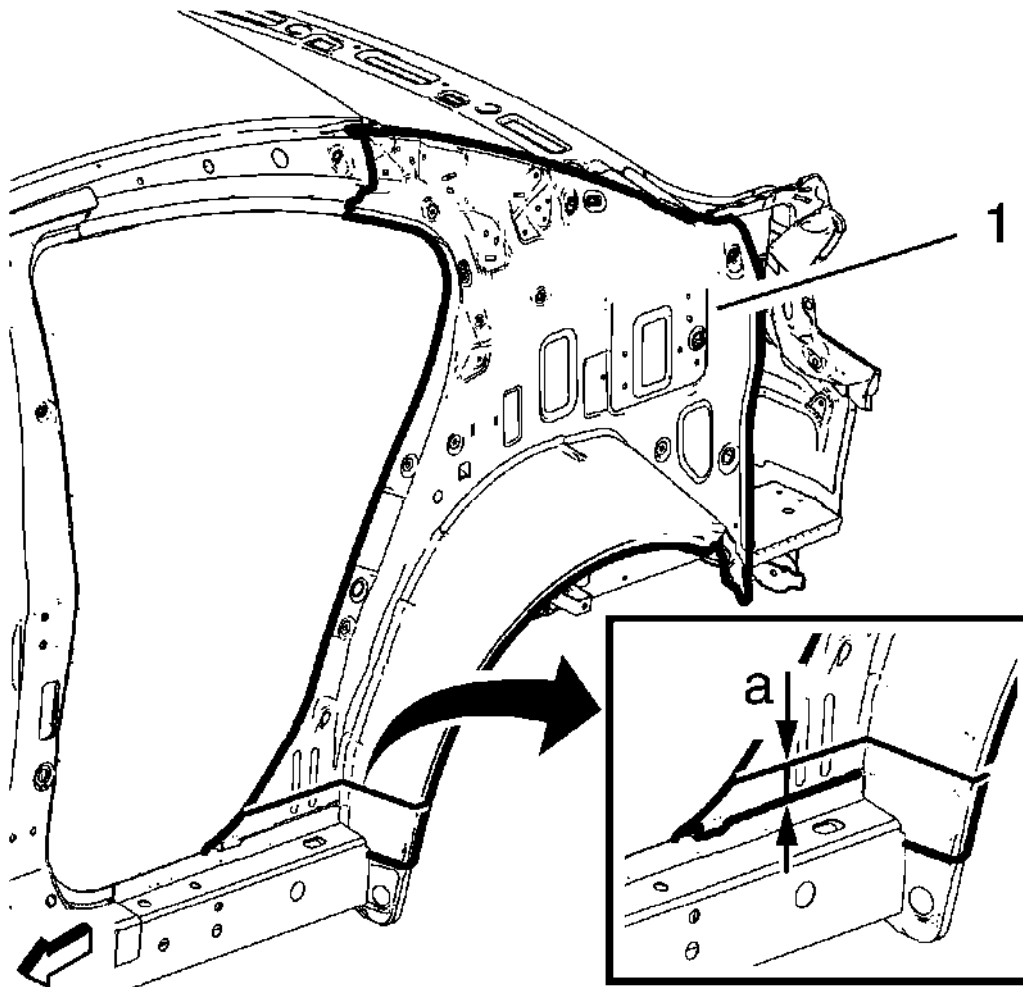


Fig. 104: Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: Cut the body side inner panel (a) 30 mm (1.2 in) above the body side outer panel reinforcement.

11. Create cut lines on the body side inner panel (1).

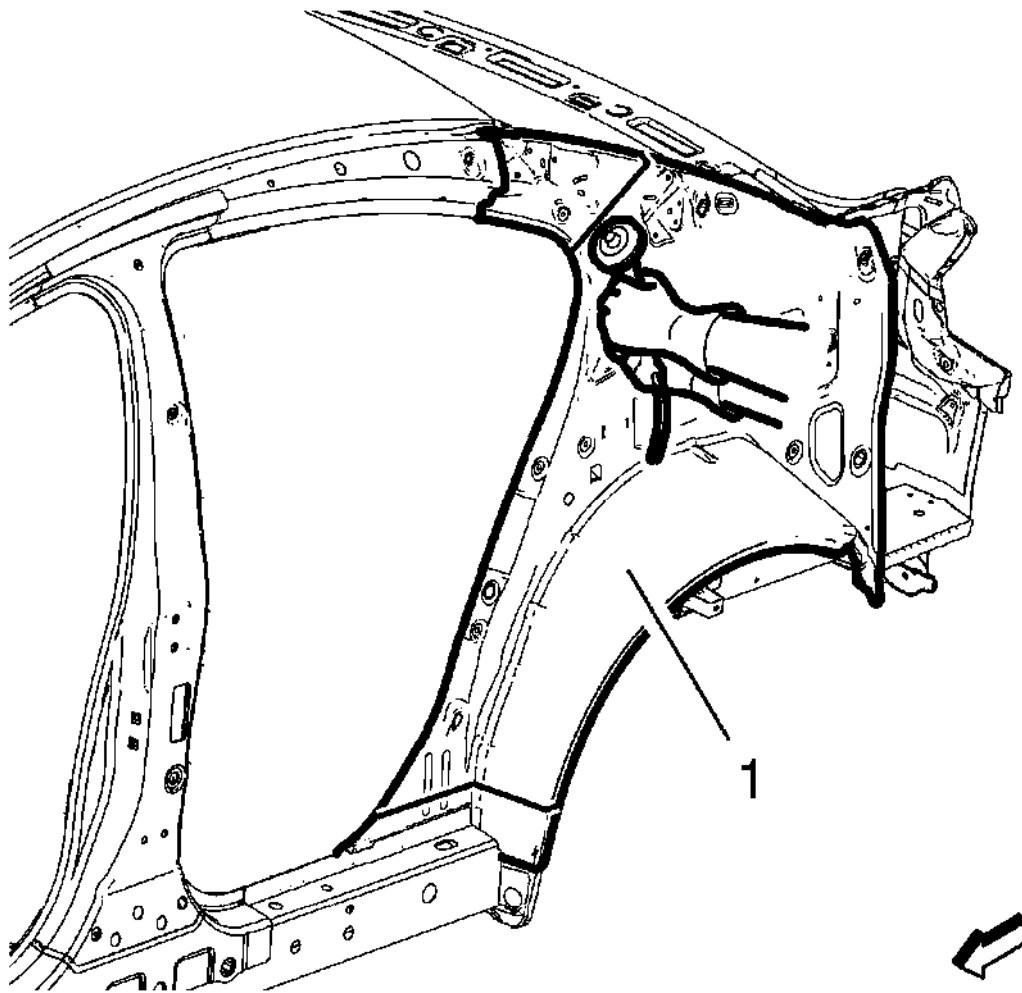


Fig. 105: Cutting Body Side Inner Panel
Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any other panels or reinforcements.

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

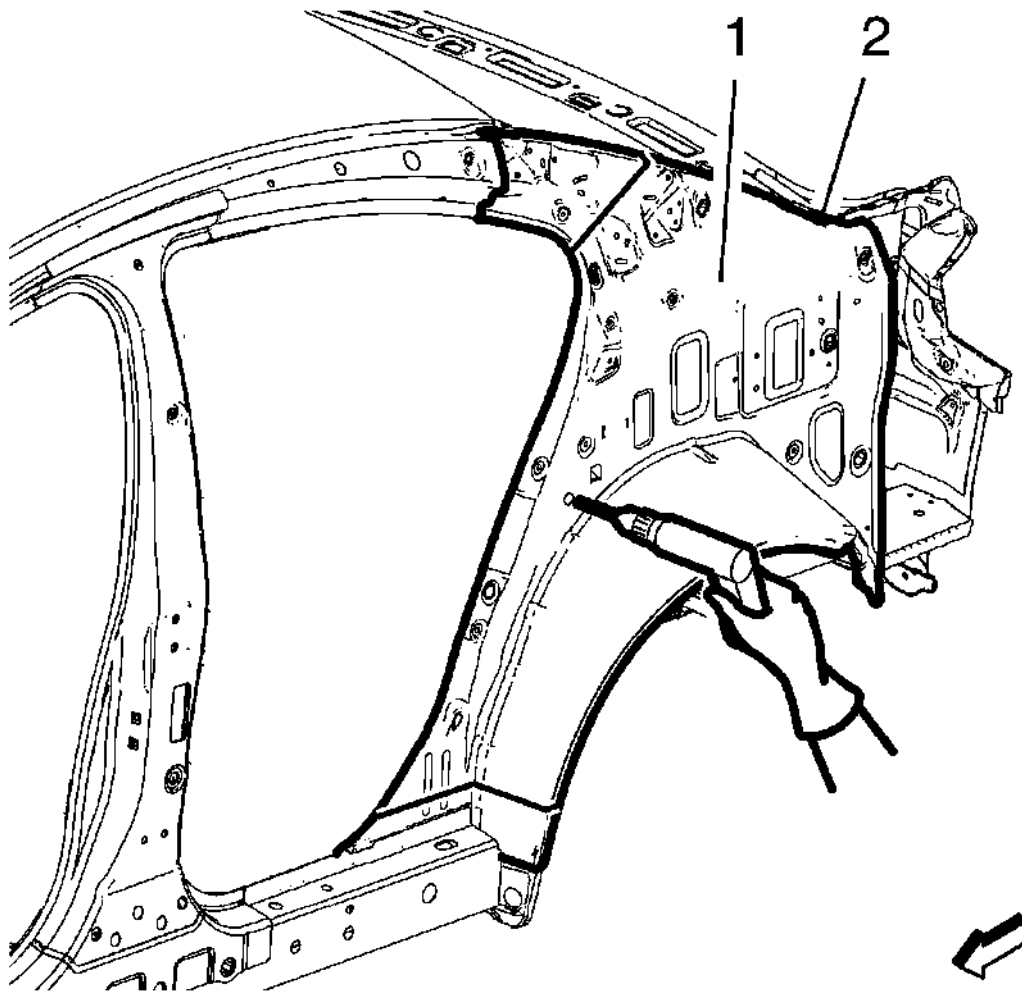


Fig. 106: Drilling Factory Welds Of Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: Drill hidden factory welds where body side outer rear panel drain gutter (2) and body side inner panel overlap.

13. Locate and mark all the necessary factory welds of the body side inner panel (1).
14. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

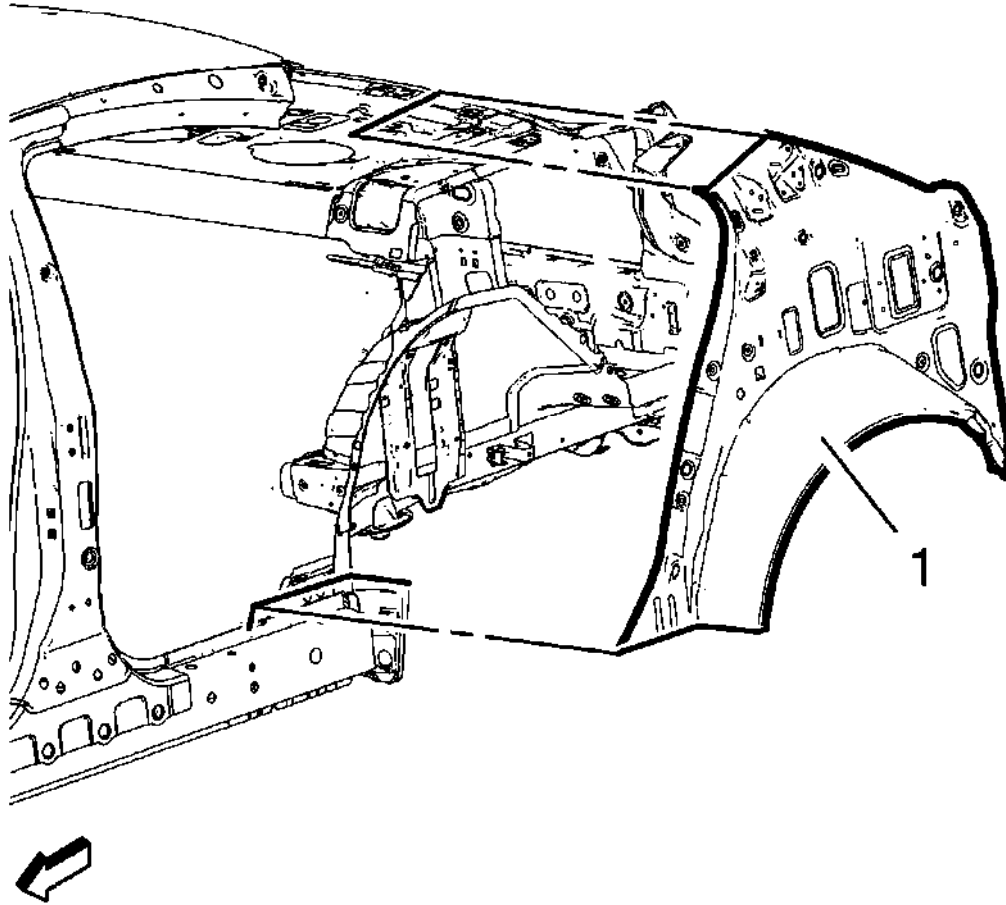


Fig. 107: Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

15. Remove the damaged body side inner panel (1).

Installation Procedure

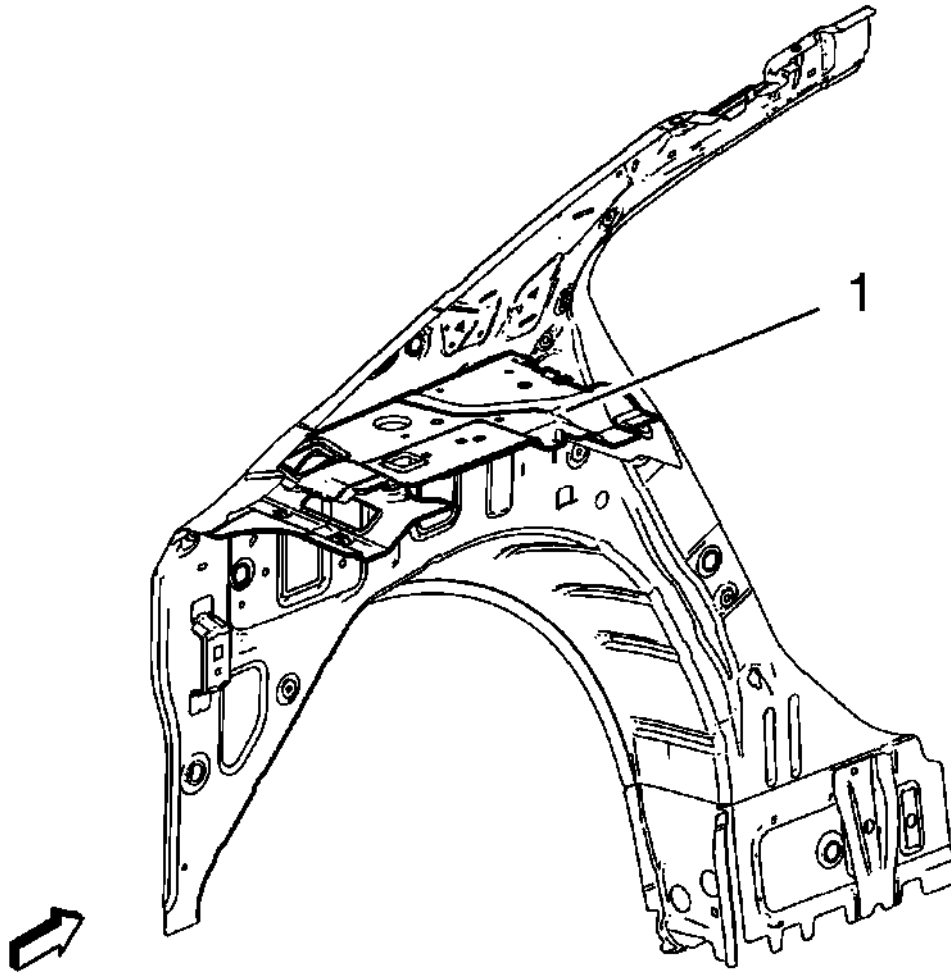


Fig. 108: Rear End Upper Panel Extension
Courtesy of GENERAL MOTORS COMPANY

1. Remove rear end upper panel extension (1) from service part.

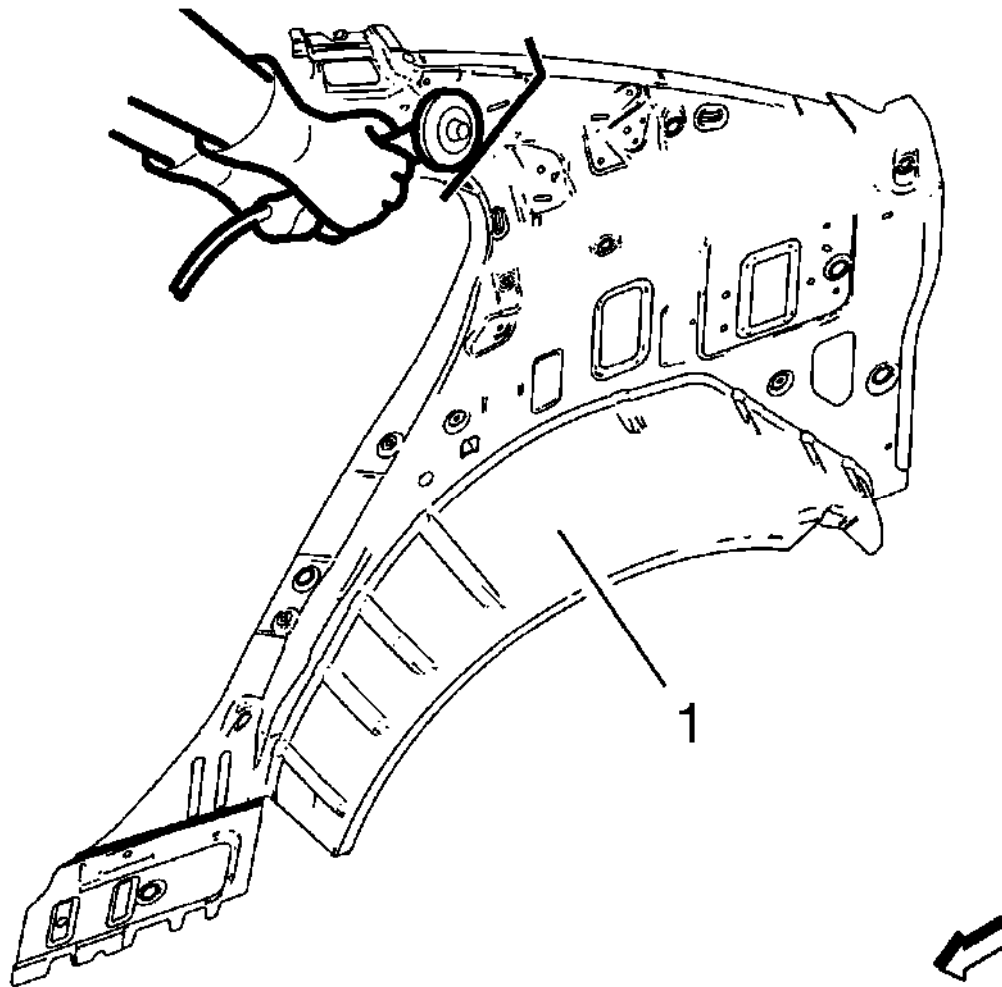


Fig. 109: Cutting Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: Cut the body side inner panel lower 30 mm (1.2 in) longer. It should overlap with the remaining of the original panel.

2. Cut the body side inner panel 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.
3. Create a 50 mm (2 in) backing plate from the unused portion of the service part.
4. Drill 8 mm (5/16 in) 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 (1 1/2 in) apart.
5. Prepare all mating surfaces as necessary.
6. Fit the backing plates halfway into the sectioning joints, clamp in place and plug weld to the vehicle.

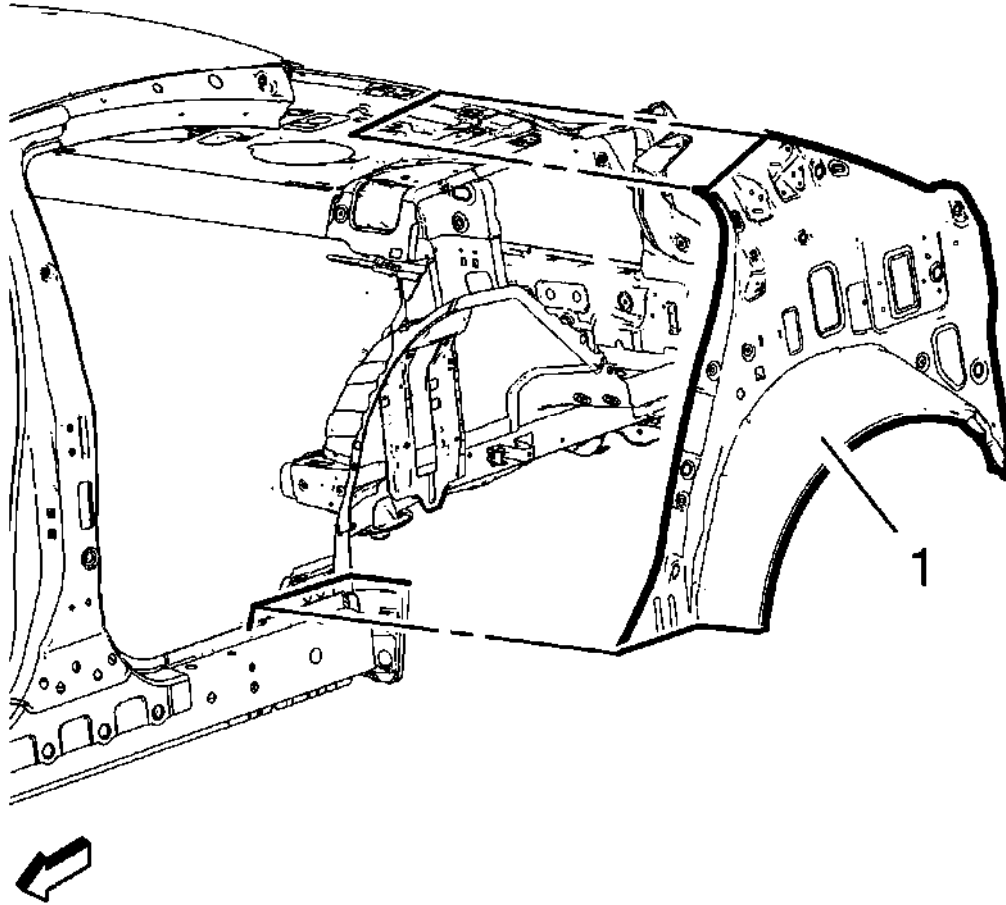


Fig. 110: Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

7. Position the body side inner panel (1).
8. Verify the fit of the panel.
9. Clamp the body side inner panel into position.

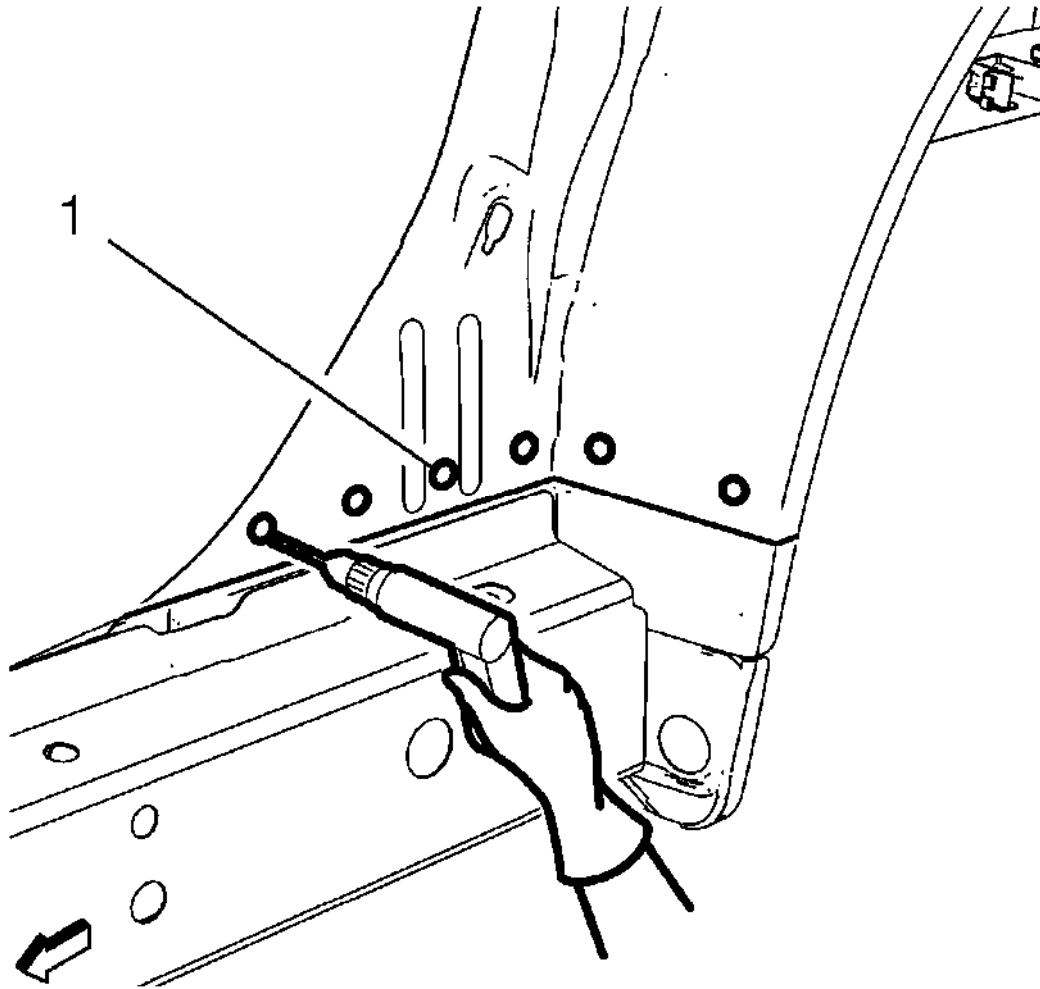


Fig. 111: Drilling Rivet Attachment Holes Of Service Body Side Inner Panel
Courtesy of GENERAL MOTORS COMPANY

10. Using a 7 mm (17/64 in) bit, drill the rivet attachment holes (1) into the service body side inner panel.
11. Remove the service body side inner panel.

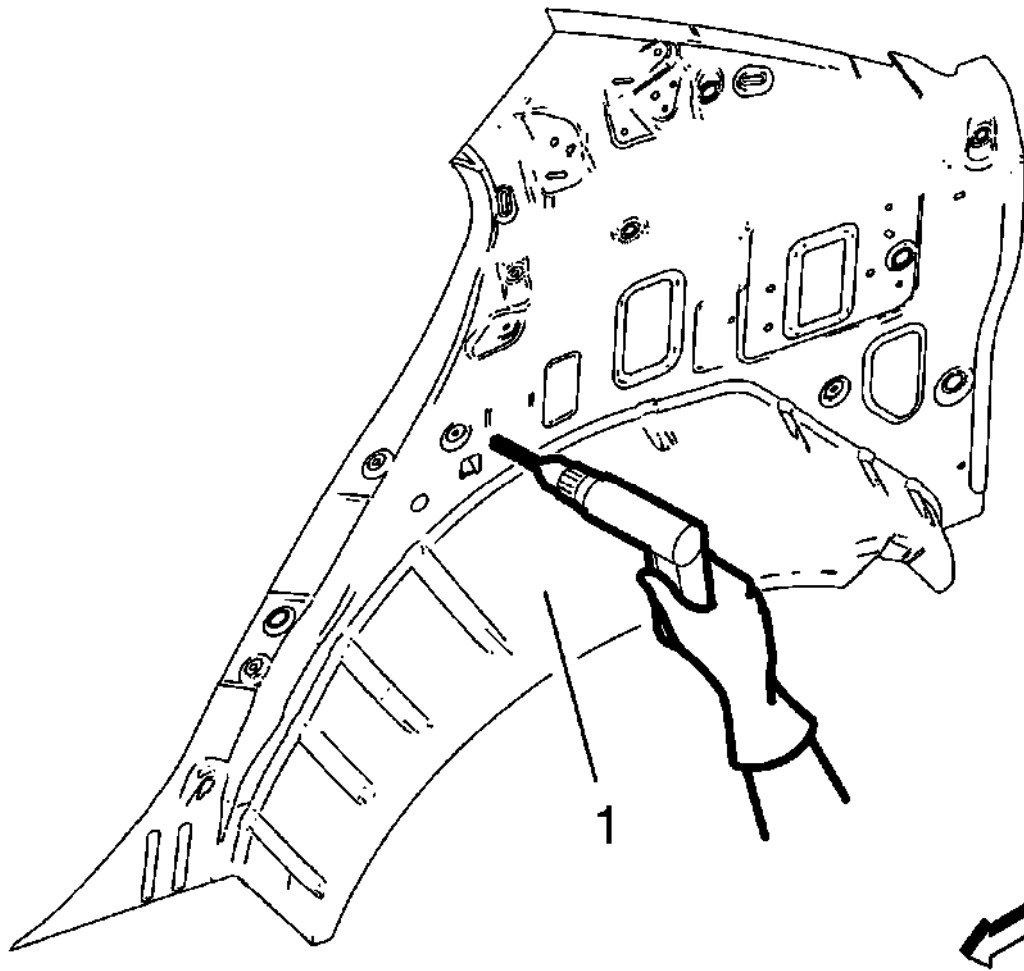


Fig. 112: Drilling Hole For Welding Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

12. Drill 8 mm (5/16 in) for plug welding along the edges of the body side inner panel (1) as noted from the original panel.
13. Prepare the bonding mating areas by grinding to bare steel the surface of the panels in the repair area.
14. Apply GM-approved weld-thru coating or equivalent to all mating surfaces. Refer to **Anti-Corrosion Treatment and Repair** .

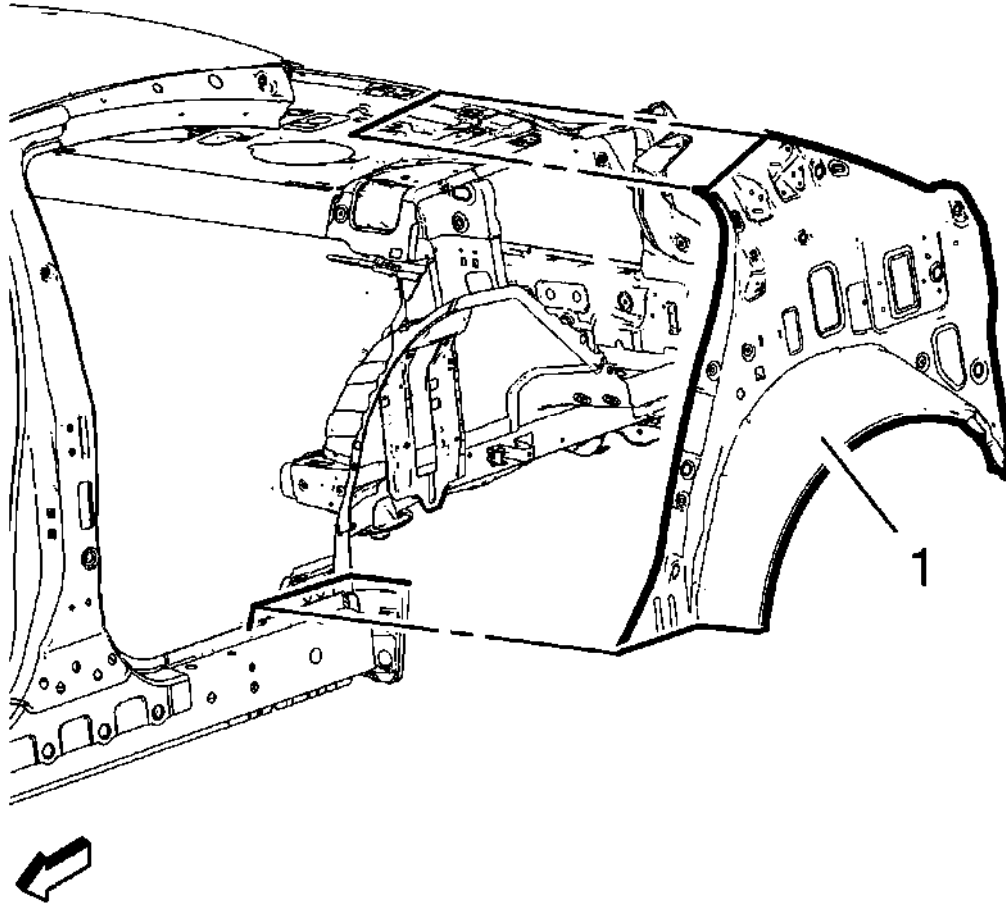


Fig. 113: Body Side Inner Panel

Courtesy of GENERAL MOTORS COMPANY

15. Position the body side inner panel (1).
16. Verify the fit of the panel.
17. Clamp the body side inner panel into position.

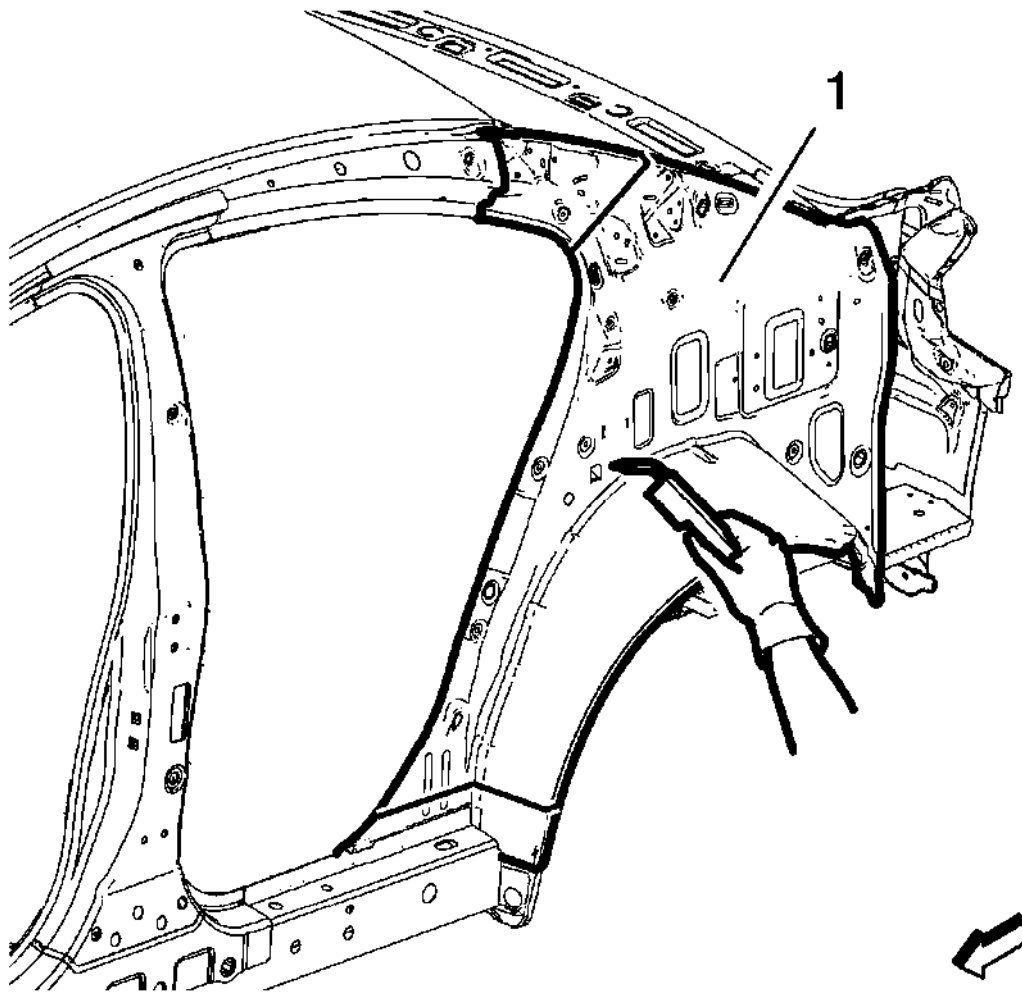


Fig. 114: Welding Body Side Inner Panel
Courtesy of GENERAL MOTORS COMPANY

18. Plug weld the body side inner panel (1) accordingly.
19. 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.

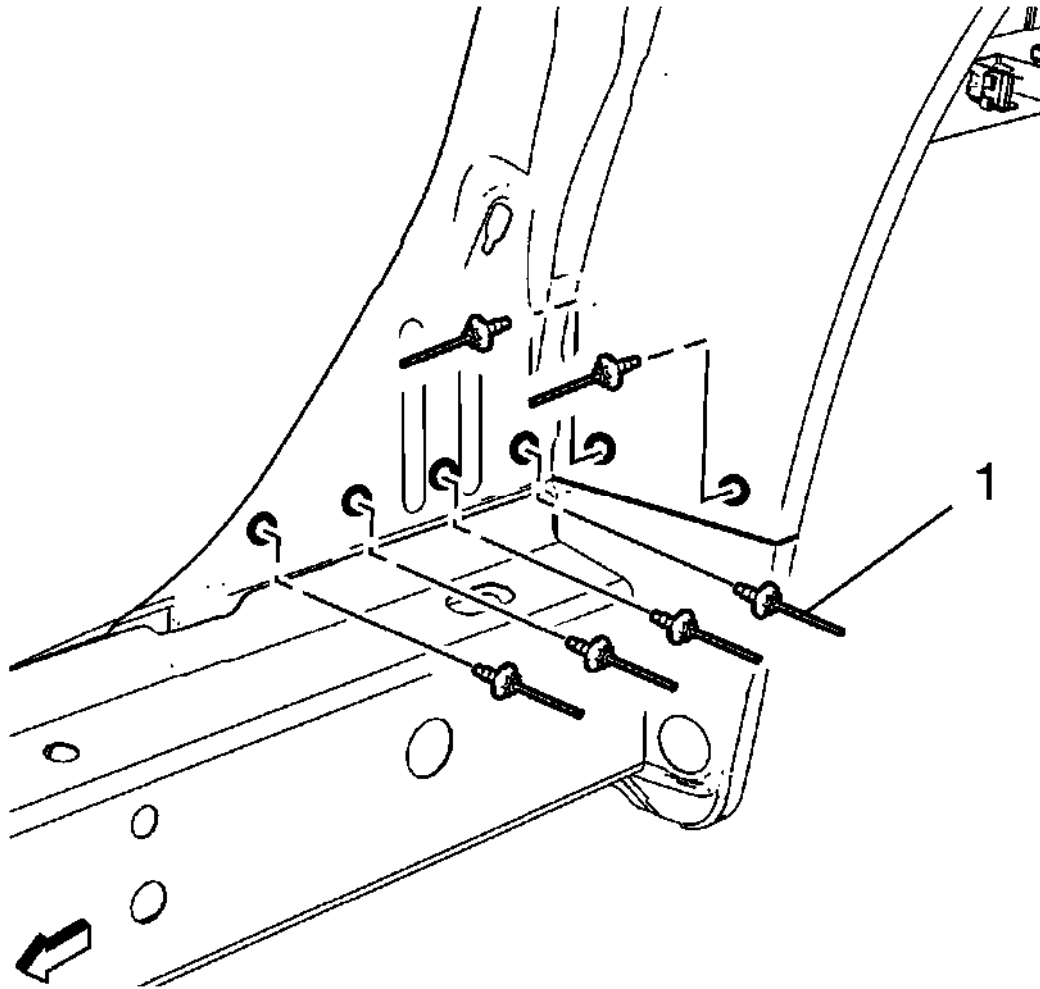


Fig. 115: Body Side Inner Panel Lower Rivets
Courtesy of GENERAL MOTORS COMPANY

20. Install the 14 mm (17/32 in) long rivets (1) to the body side inner panel lower.

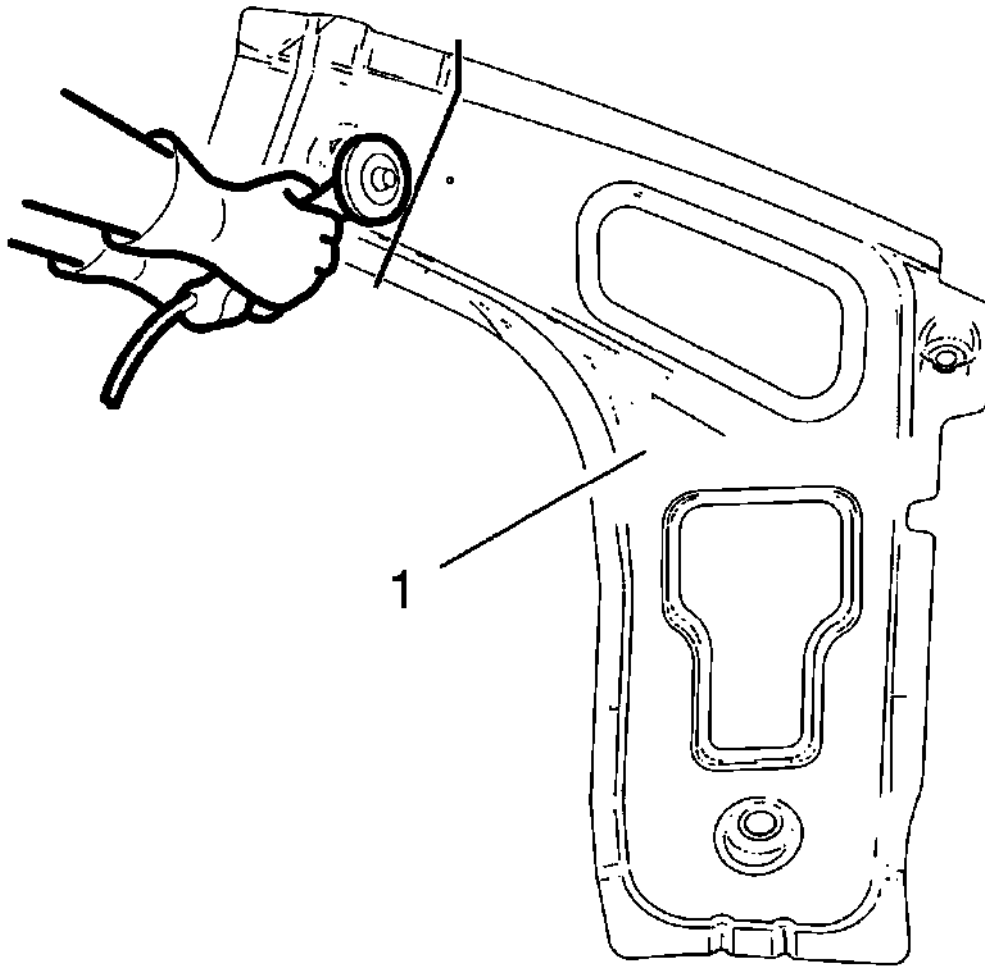


Fig. 116: Cutting Body Lock Pillar Upper Reinforcement

Courtesy of GENERAL MOTORS COMPANY

21. Cut the body lock pillar upper reinforcement (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.
22. Create a 50 mm (2 in) backing plate from the unused portion of the service part.
23. Drill 8 mm (5/16 in) 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 (1 1/2 in) apart.
24. Prepare all mating surfaces as necessary.
25. Fit the backing plates halfway into the sectioning joints, clamp in place and plug weld to the vehicle.
26. Align the body lock pillar upper reinforcement.

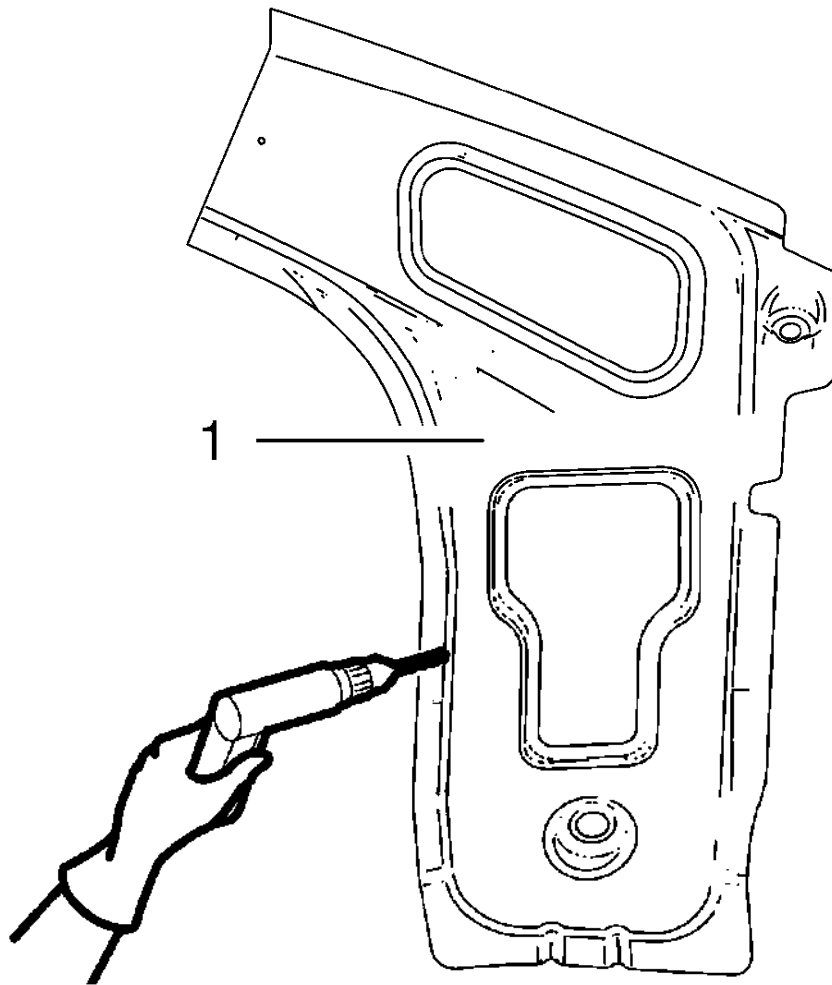


Fig. 117: Drilling Body Lock Pillar Upper Reinforcement For Welding
Courtesy of GENERAL MOTORS COMPANY

27. Drill 8 mm (5/16 in) for plug welding along the edges of the body lock pillar upper reinforcement (1) as noted from the original panel.
28. Clean and prepare the attaching surfaces for welding.

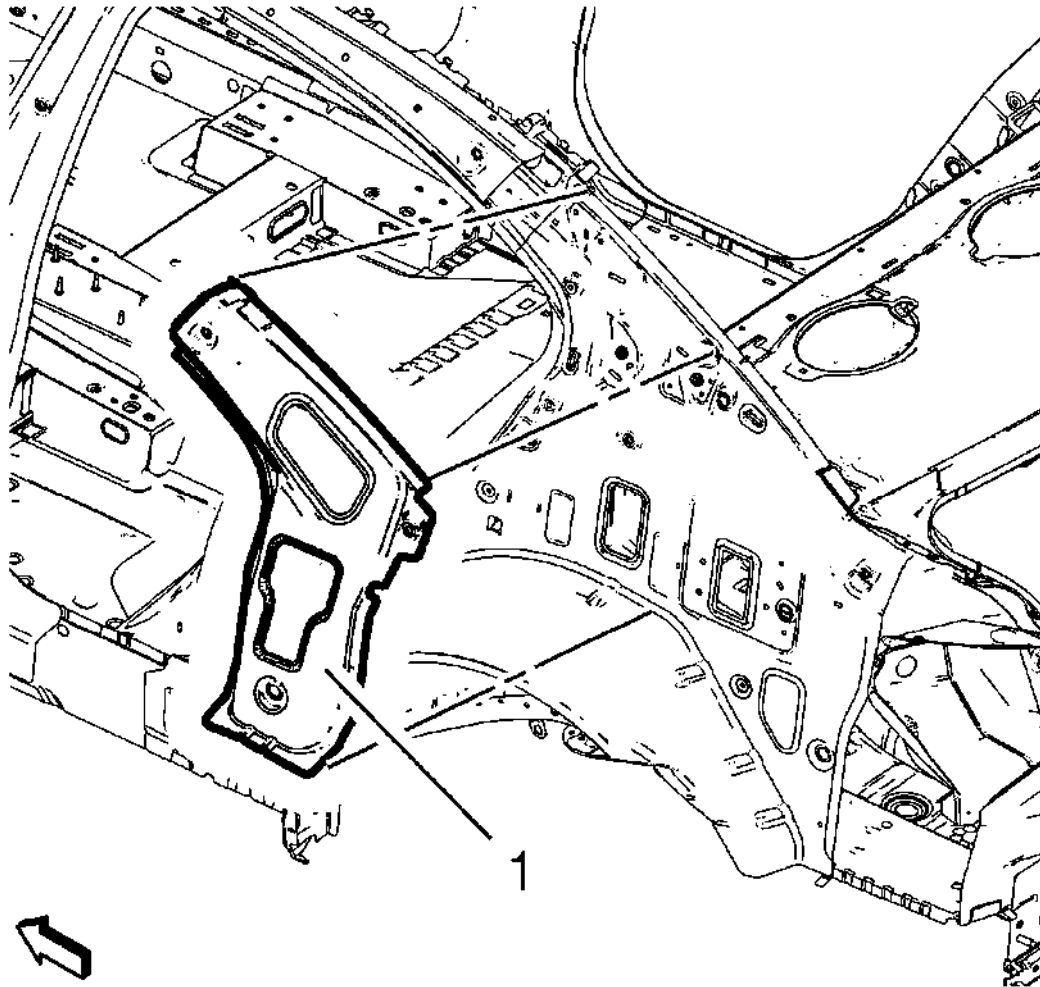


Fig. 118: Lock Pillar Upper Reinforcement
Courtesy of GENERAL MOTORS COMPANY

29. Position the body lock pillar upper reinforcement (1).
30. Verify the fit of the panel.
31. Clamp the body lock pillar upper reinforcement into position.

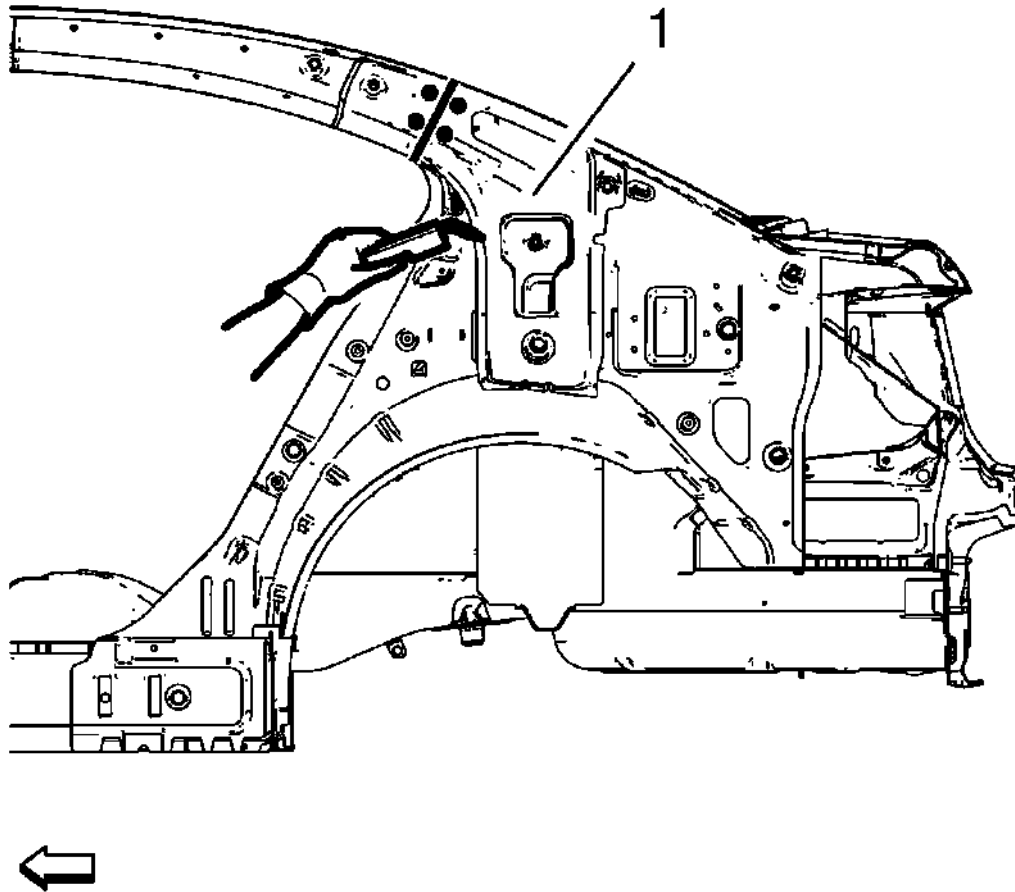


Fig. 119: Welding Body Lock Pillar Upper Reinforcement

Courtesy of GENERAL MOTORS COMPANY

32. Plug weld the body lock pillar upper reinforcement (1) accordingly.
33. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
34. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
35. Install all related panels and components.
36. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
37. Enable the SIR System. Refer to **SIR Disabling and Enabling** .

REAR COMPARTMENT FLOOR PANEL SECTIONING

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

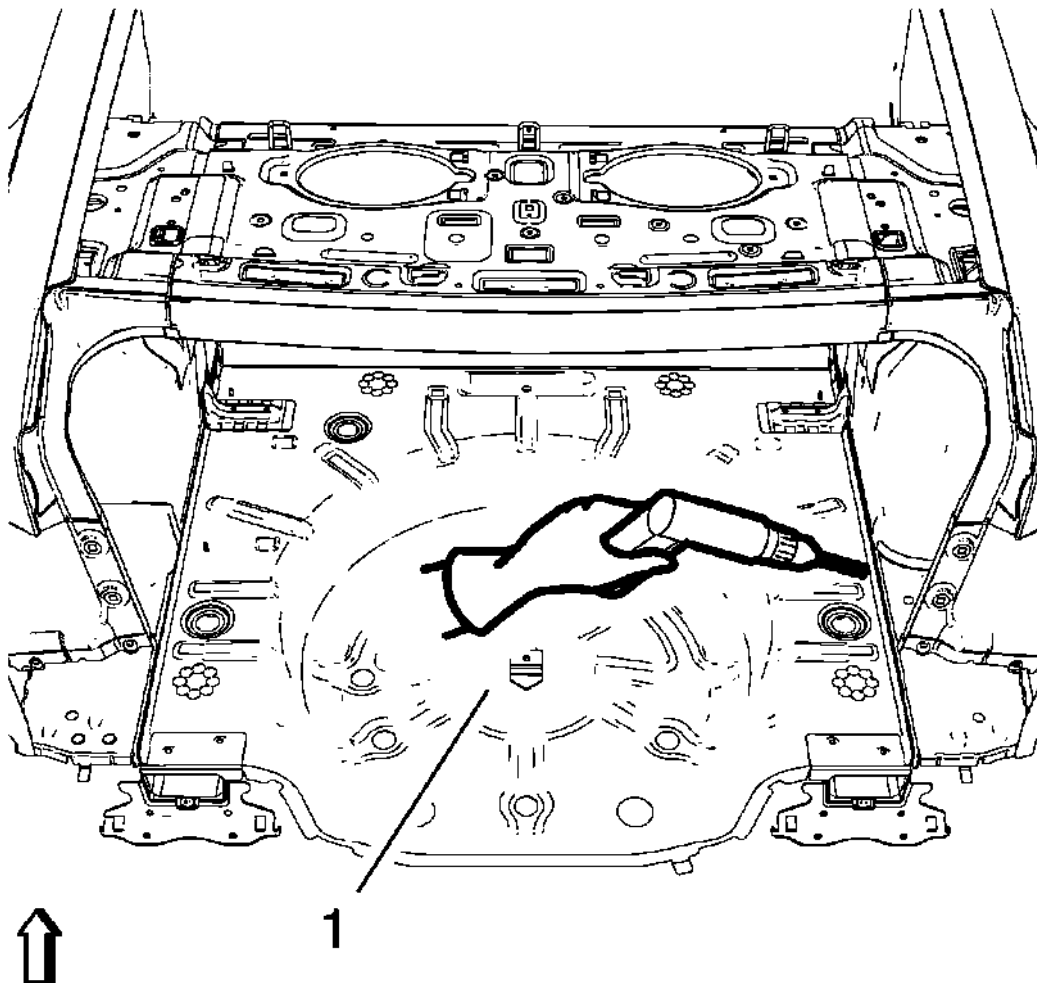


Fig. 120: Drilling Welds Of Rear Compartment Floor Panel
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the rear compartment floor panel (1).
7. Note the number and location of weld studs for installation of the service assembly.
8. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

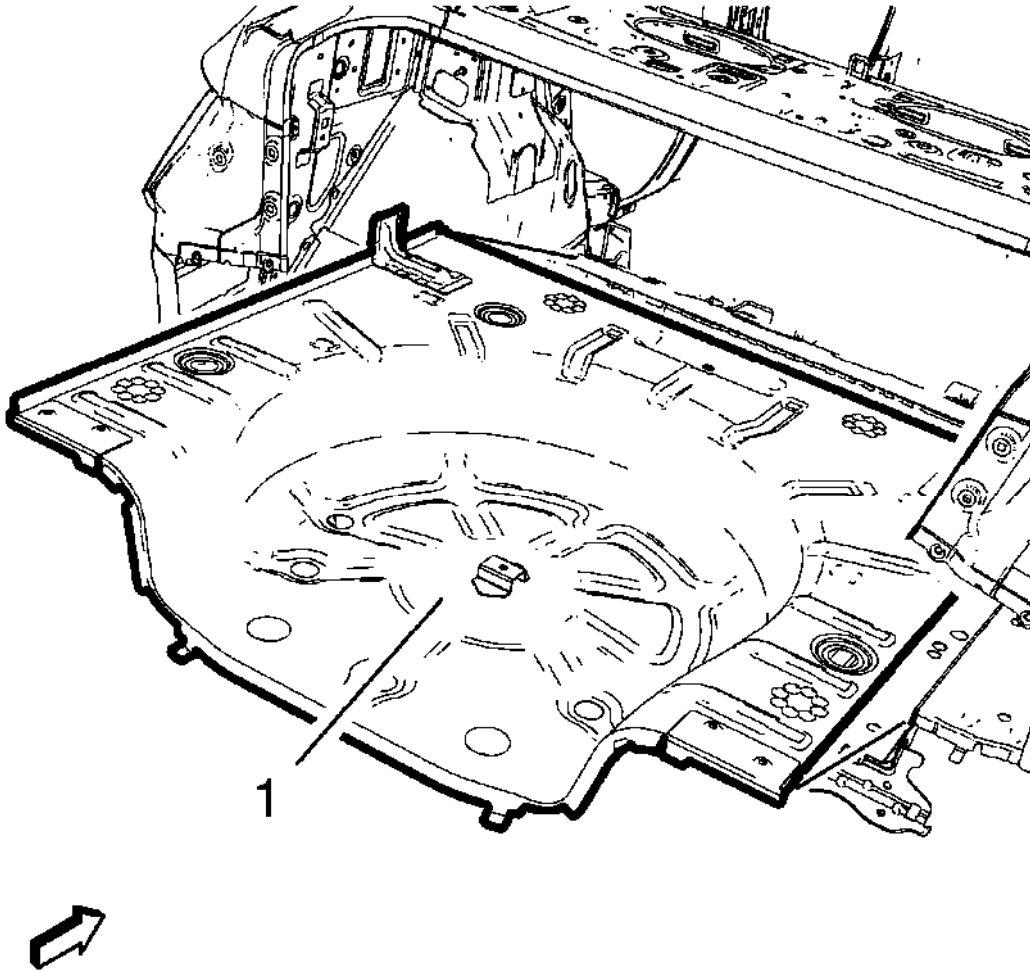


Fig. 121: Rear Compartment Floor Panel
Courtesy of GENERAL MOTORS COMPANY

9. Remove the damaged rear compartment floor panel (1).

Installation Procedure

1. Align the rear compartment floor panel.

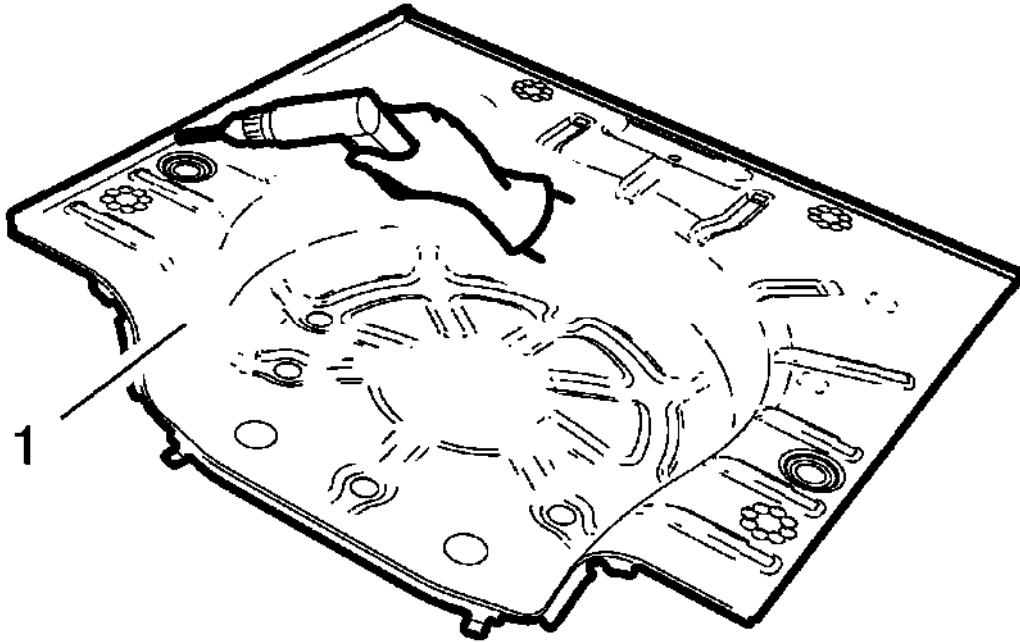


Fig. 122: Drilling Holes For Welding New Rear Compartment Floor Panel

Courtesy of GENERAL MOTORS COMPANY

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

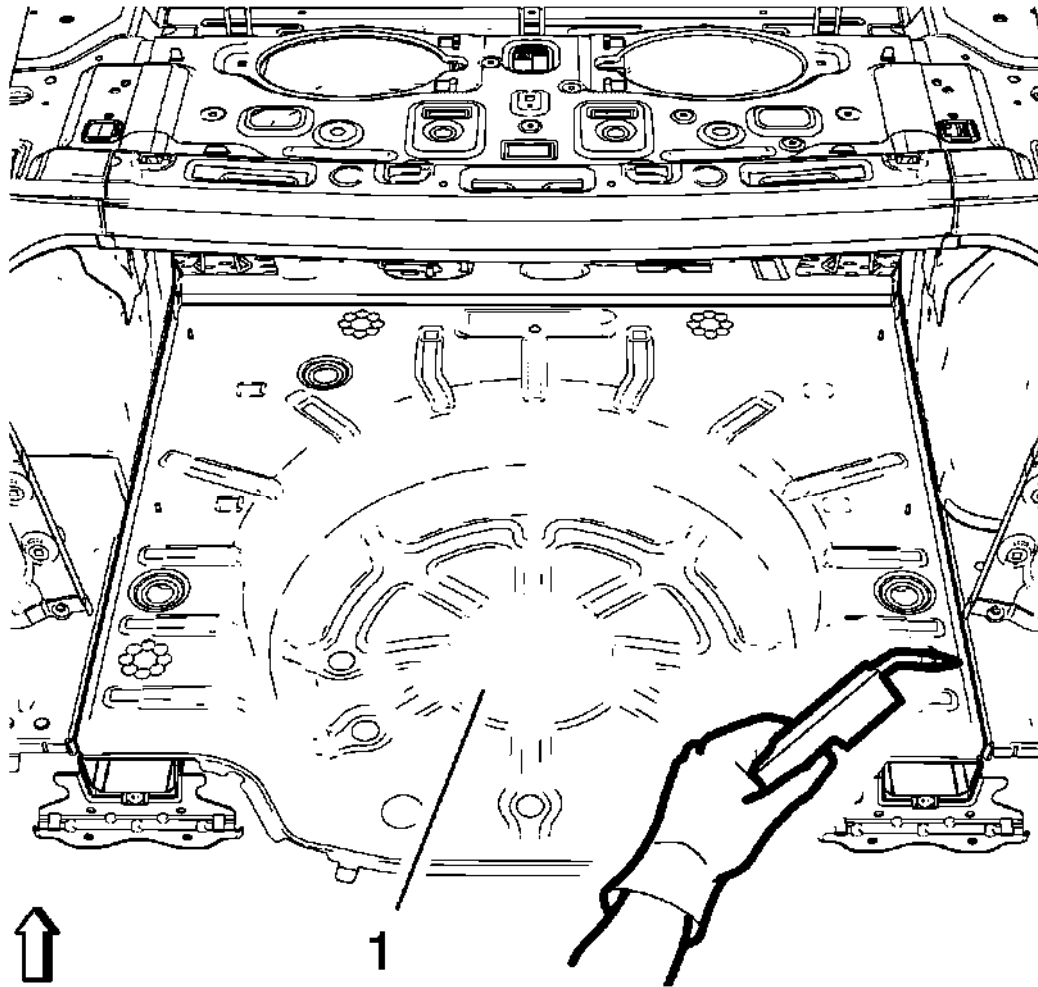


Fig. 123: Welding Rear Compartment Floor
 Courtesy of GENERAL MOTORS COMPANY

7. Plug weld the rear compartment floor (1) accordingly.
8. Weld accordingly the weld studs as noted.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair**.
10. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems**.
11. Install all related panels and components.
12. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection**.
13. Enable the SIR system. Refer to **SIR Disabling and Enabling**.

REAR WHEELHOUSE PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

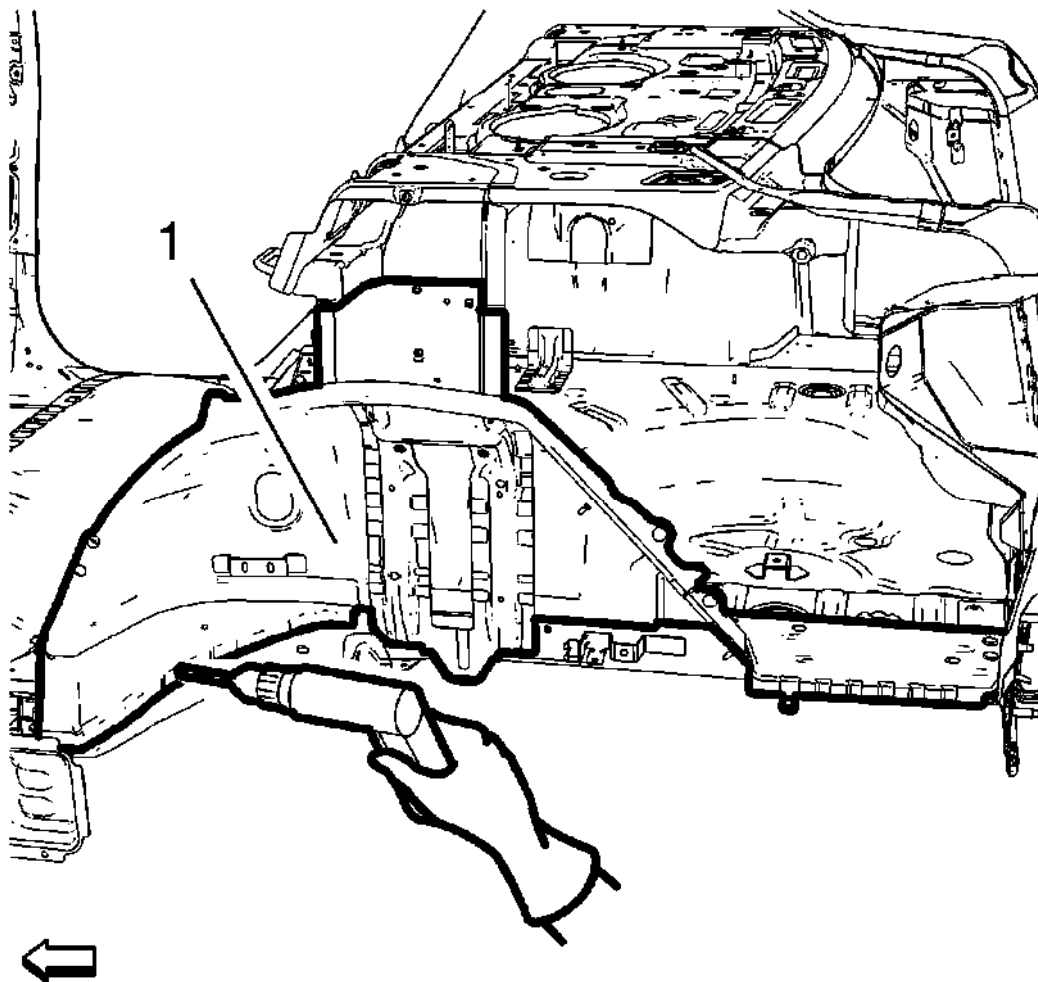


Fig. 124: Drilling Factory Welds Of Rear Inner Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the rear inner wheelhouse panel (1).
7. Drill all factory welds.

NOTE: Note the number and location of welds for installation of the service assembly.

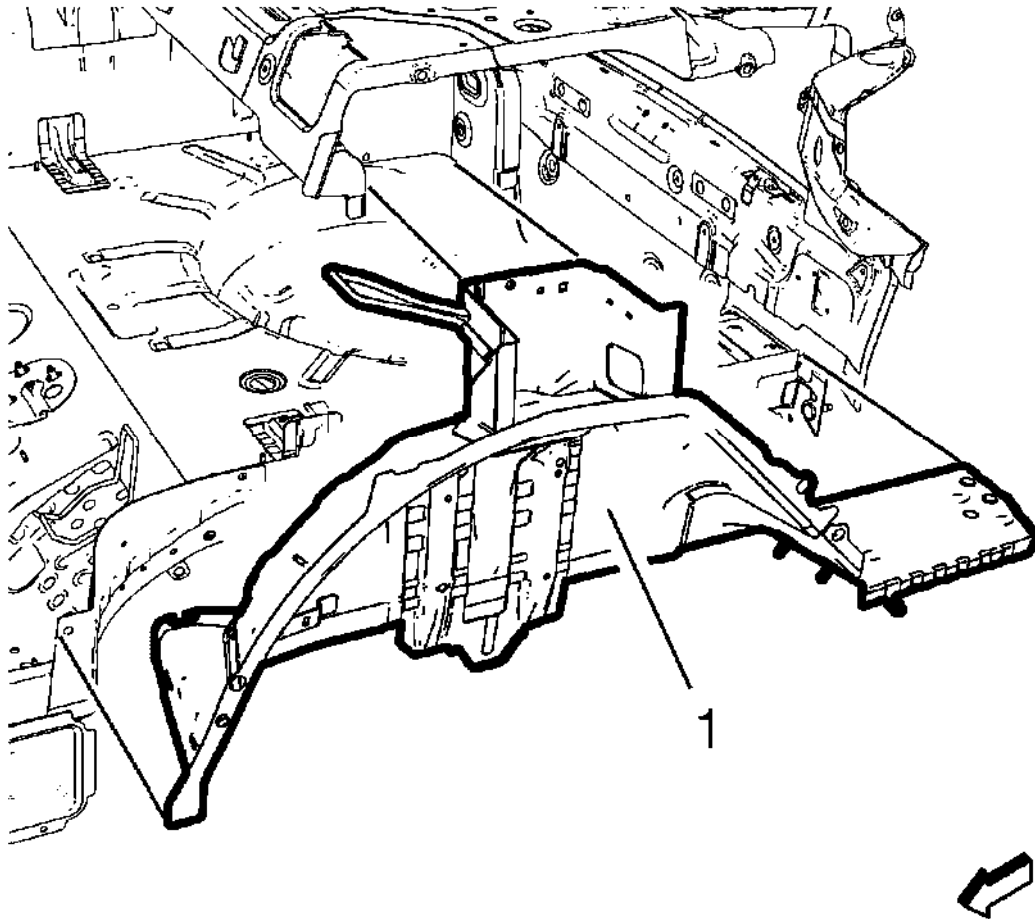


Fig. 125: Rear Inner Wheelhouse Panel
Courtesy of GENERAL MOTORS COMPANY

8. Remove the rear inner wheelhouse panel (1).

Installation Procedure

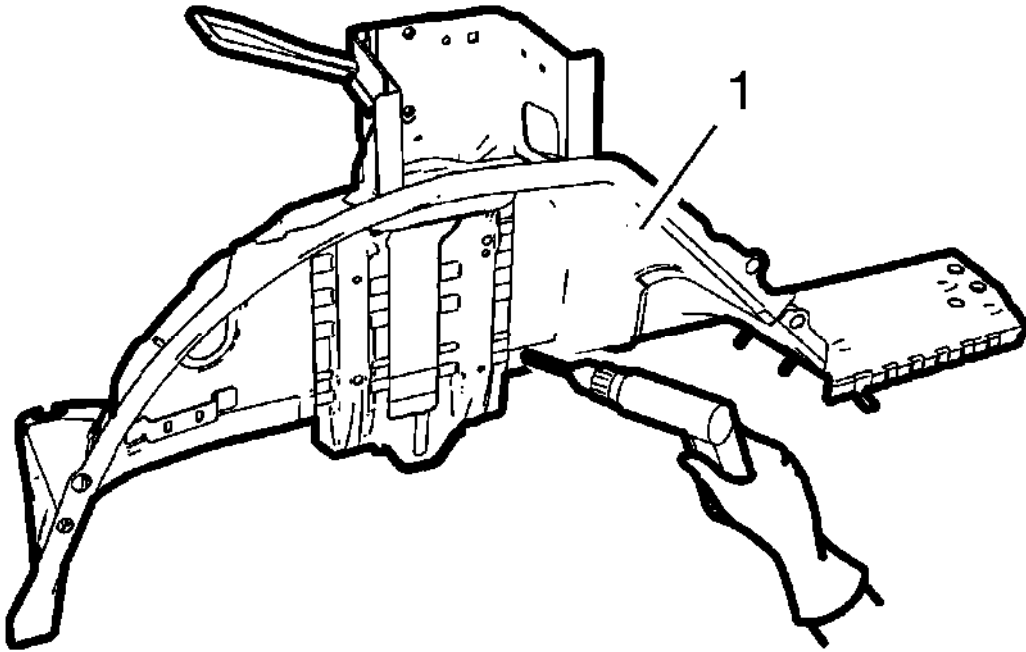


Fig. 126: Drilling Holes For Welding New Rear Inner Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in).

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

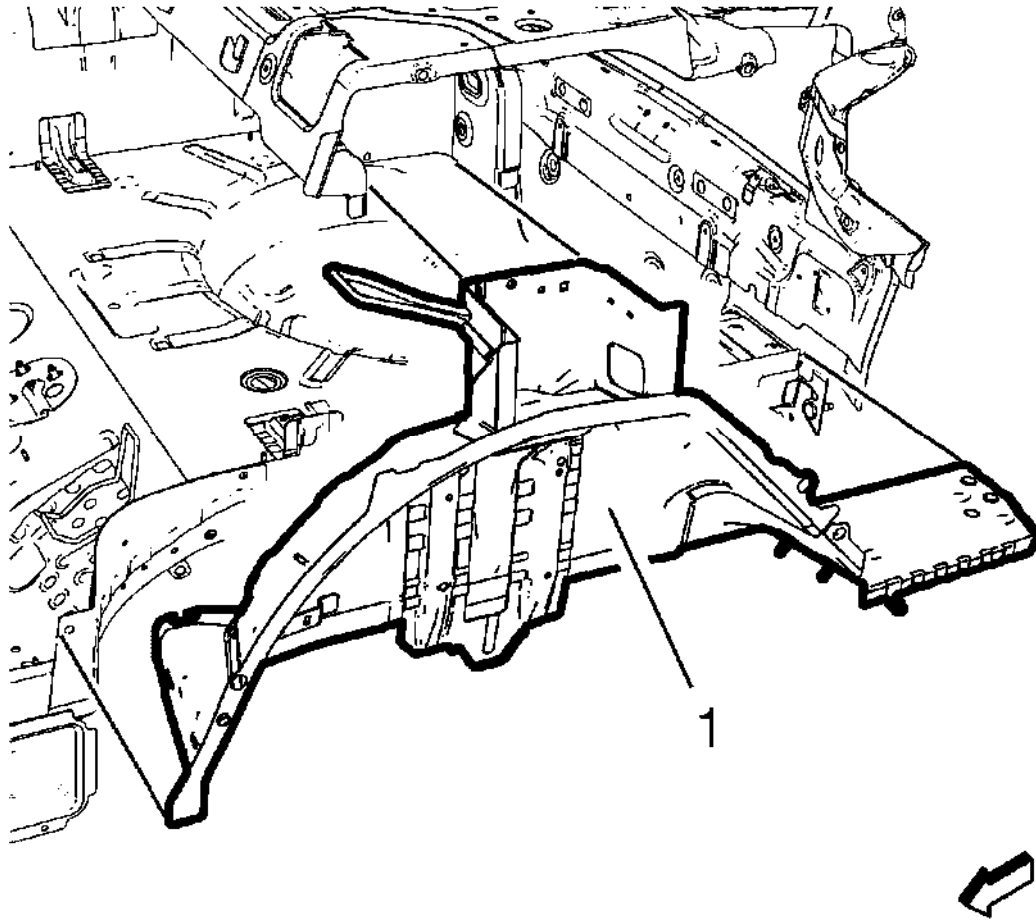


Fig. 127: Rear Inner Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

3. Position the rear inner wheelhouse panel (1) on the vehicle.
4. Verify the fit of the rear inner wheelhouse.
5. Clamp the rear inner wheelhouse into position.

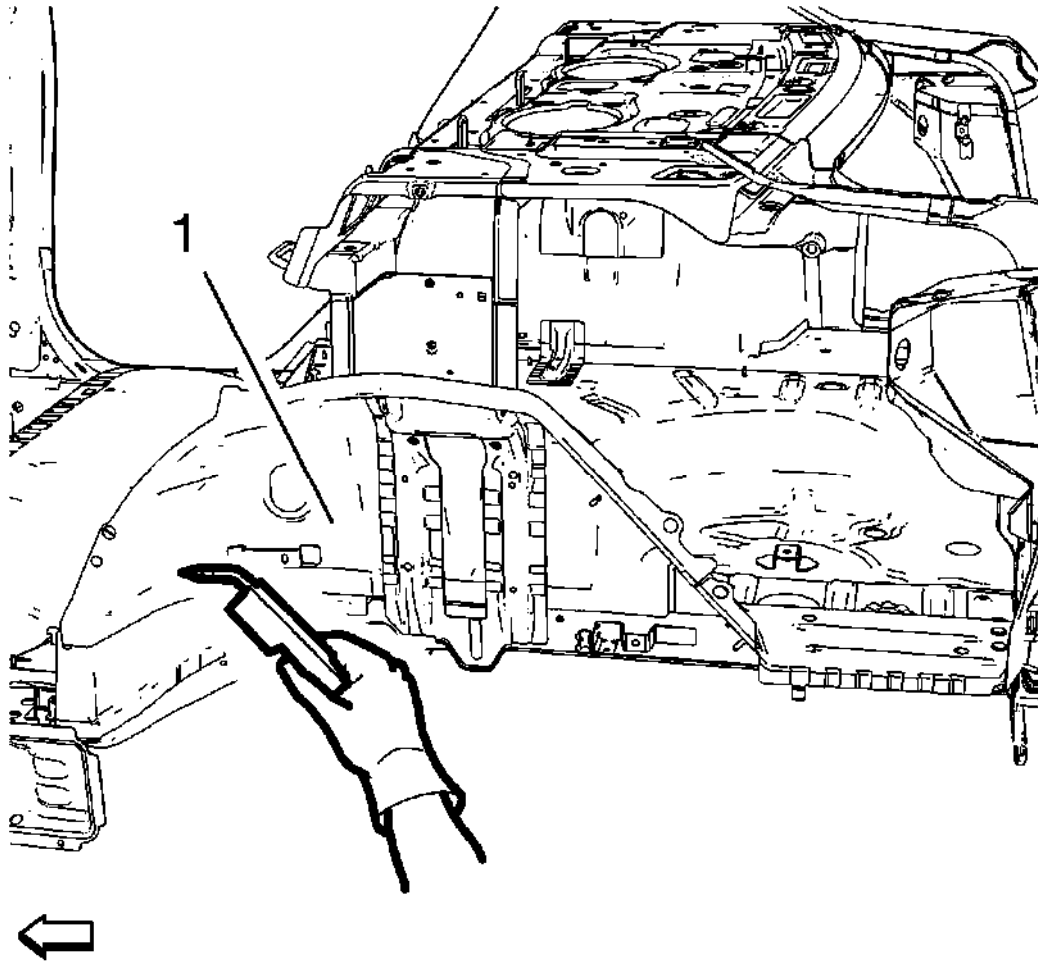


Fig. 128: Welding Rear Inner Wheelhouse Panel

Courtesy of GENERAL MOTORS COMPANY

6. Plug weld the rear wheelhouse panel (1) accordingly.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
8. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
9. Install all related panels and components.
10. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
11. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

QUARTER OUTER PANEL SECTIONING

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to **Anti-Corrosion Treatment and Repair** .

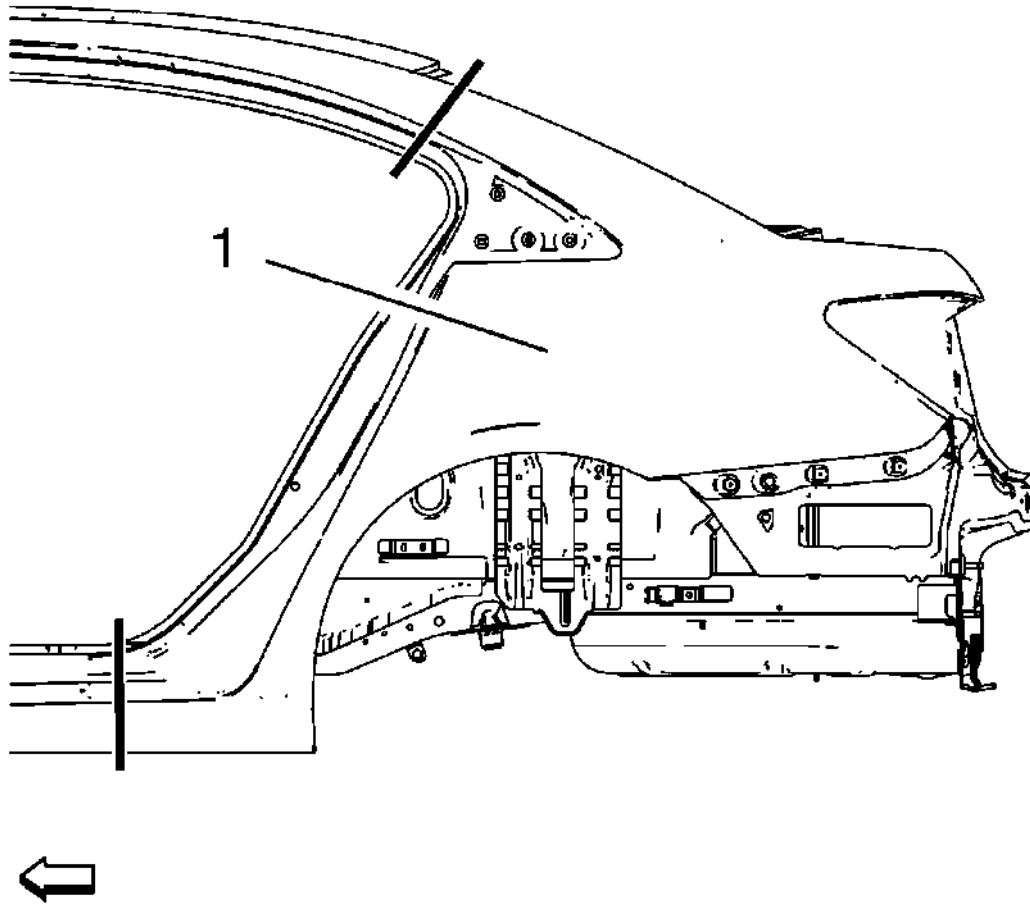


Fig. 129: Cut Lines On Quarter Outer Panel
Courtesy of GENERAL MOTORS COMPANY

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

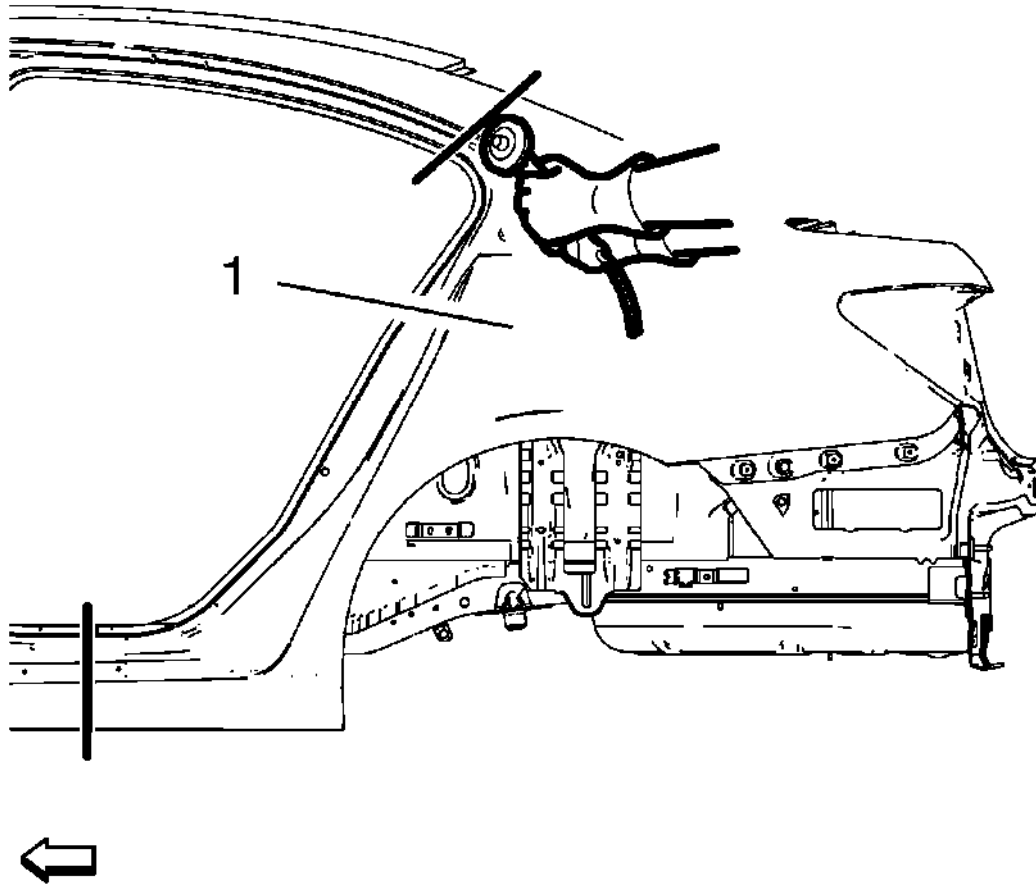


Fig. 130: Cutting Quarter Outer Panel
Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

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

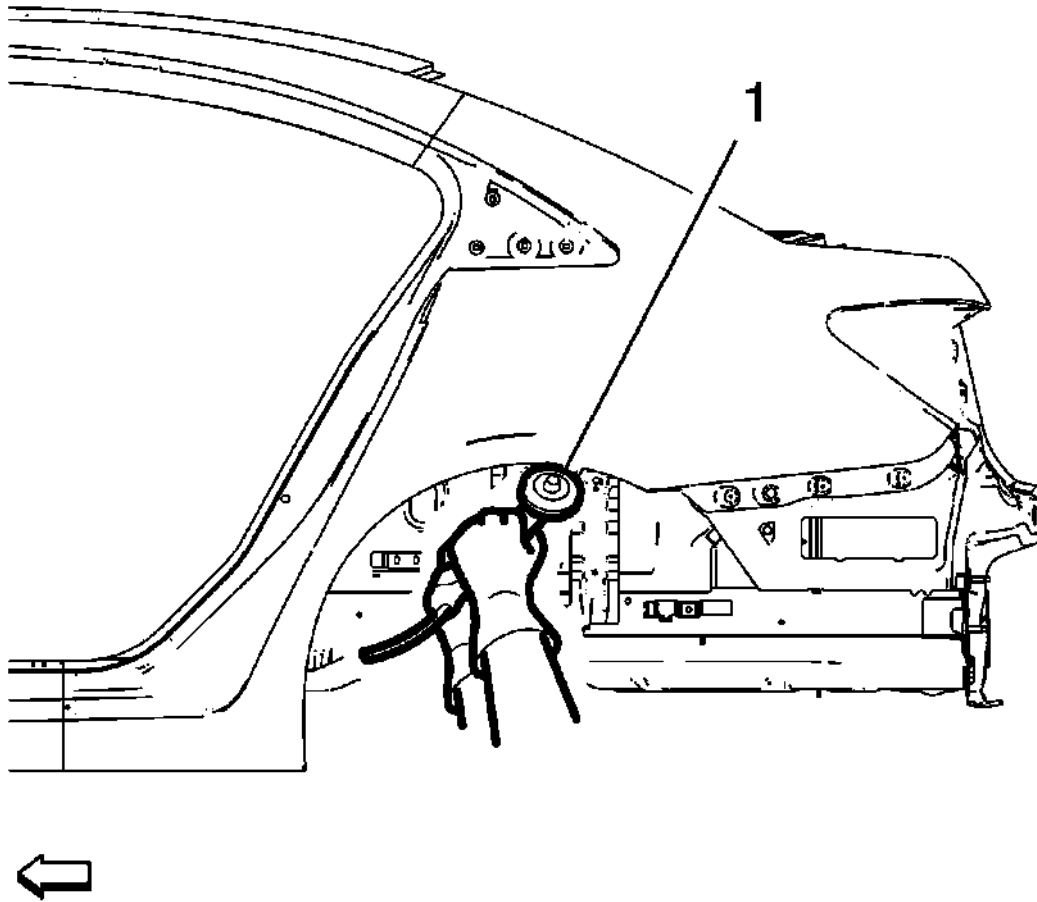


Fig. 131: Cutting Wheelhouse Flanging
Courtesy of GENERAL MOTORS COMPANY

8. Open the wheelhouse flanging (1).

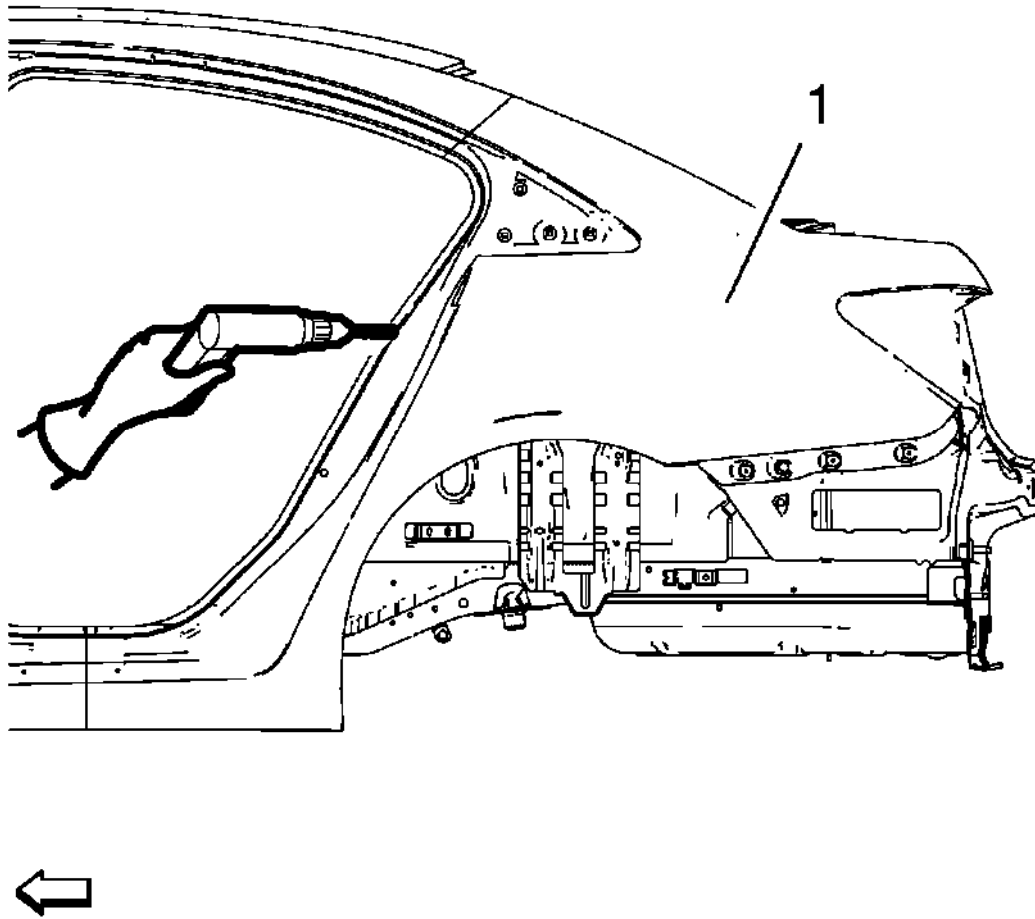


Fig. 132: Drilling Factory Welds On Quarter Outer Panel
Courtesy of GENERAL MOTORS COMPANY

9. Locate and mark all the necessary factory welds of the quarter outer panel (1).
10. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

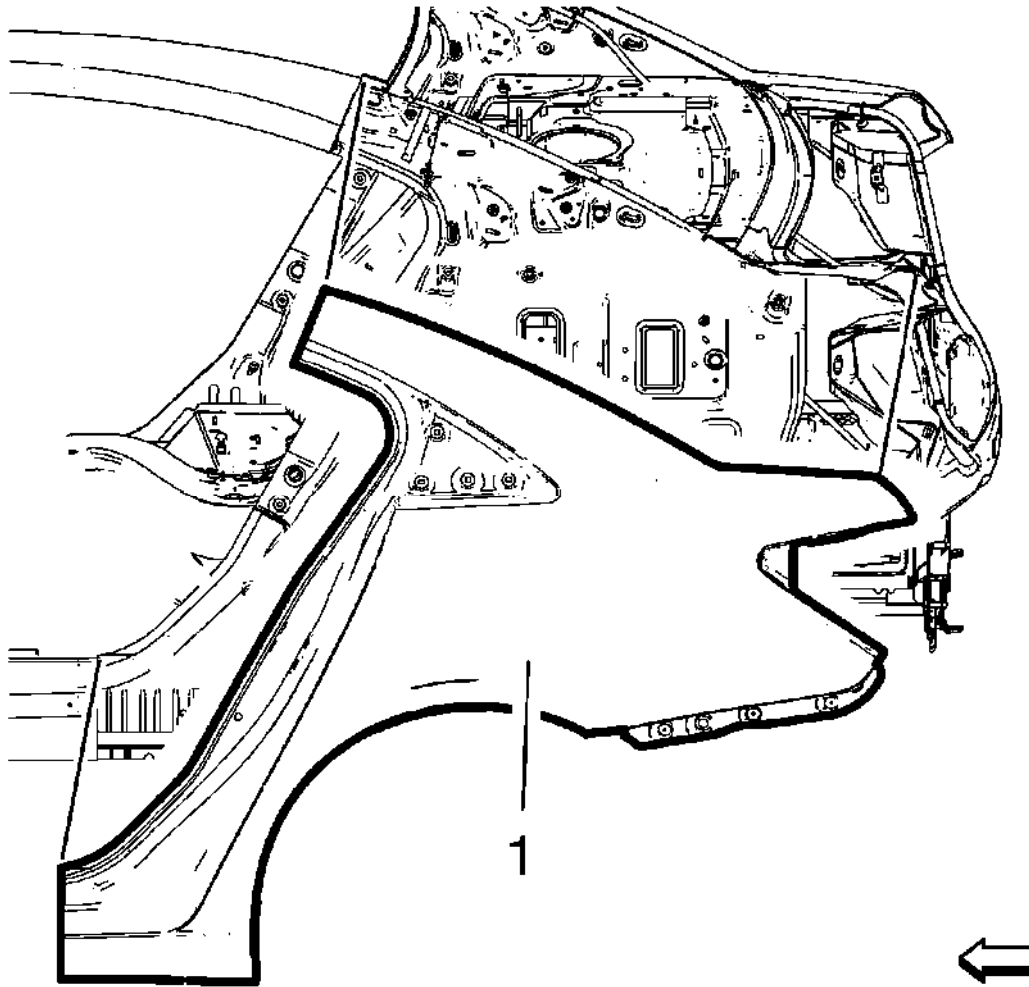


Fig. 133: Quarter Outer Panel

Courtesy of GENERAL MOTORS COMPANY

11. Remove the damaged quarter outer panel (1).

Installation Procedure

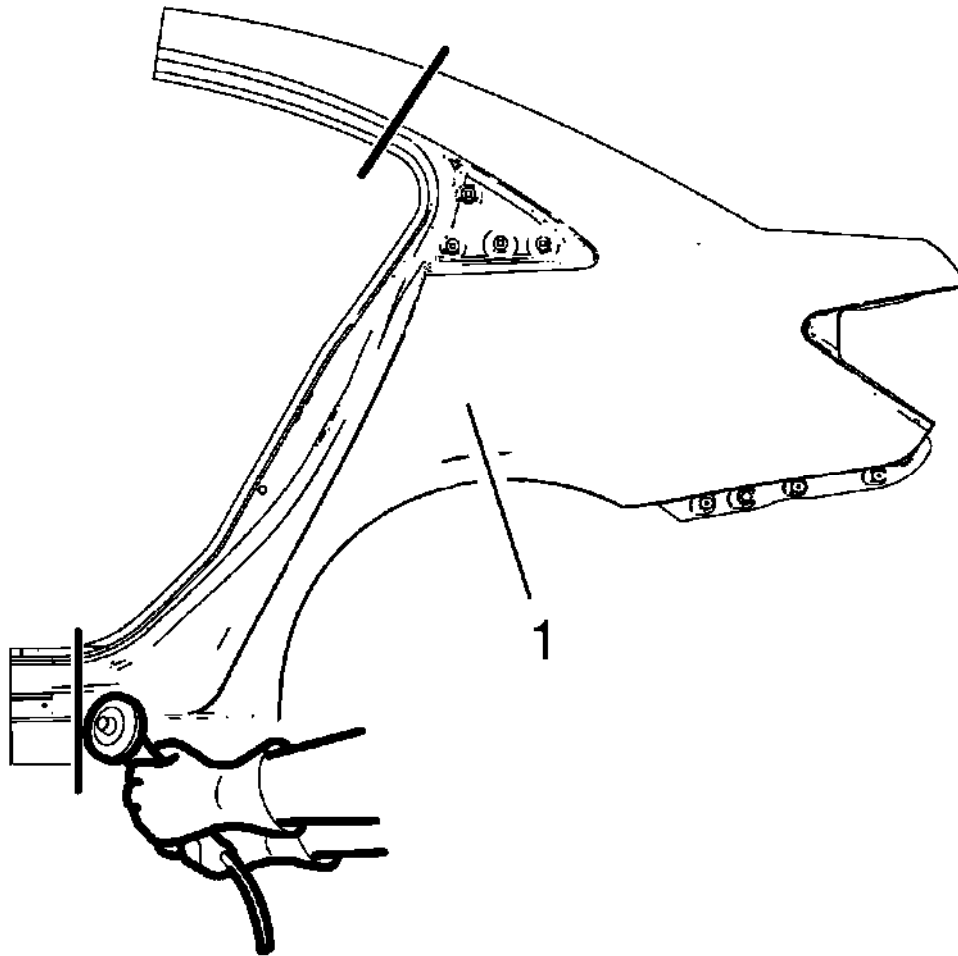


Fig. 134: Cutting Quarter Outer Panel

Courtesy of GENERAL MOTORS COMPANY

1. Cut the quarter 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 a 50 mm (2 in) backing plate from the unused portion of the service part.
3. Drill 8 mm (5/16 in) 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 (1 1/2 in) apart.
4. Prepare all mating surfaces as necessary.
5. Fit the backing plates halfway into the sectioning joints, clamp in place and plug weld to the vehicle.
6. Align the quarter outer panel.

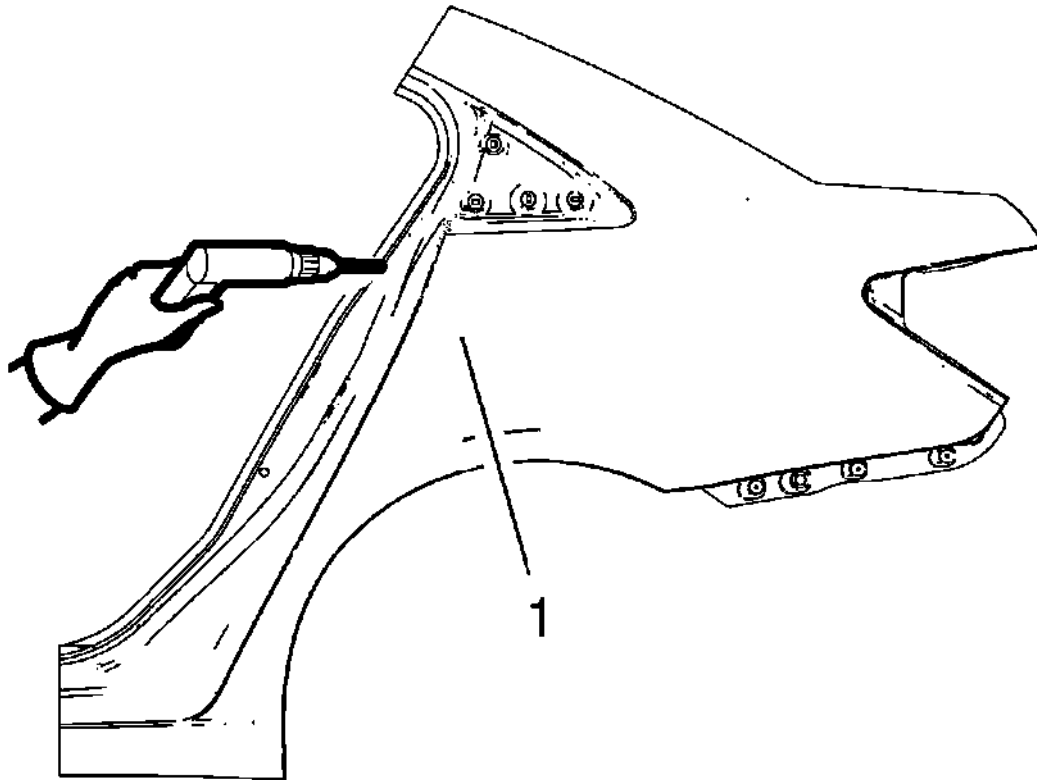


Fig. 135: Drilling Holes For Welding New Quarter Outer Panel

Courtesy of GENERAL MOTORS COMPANY

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

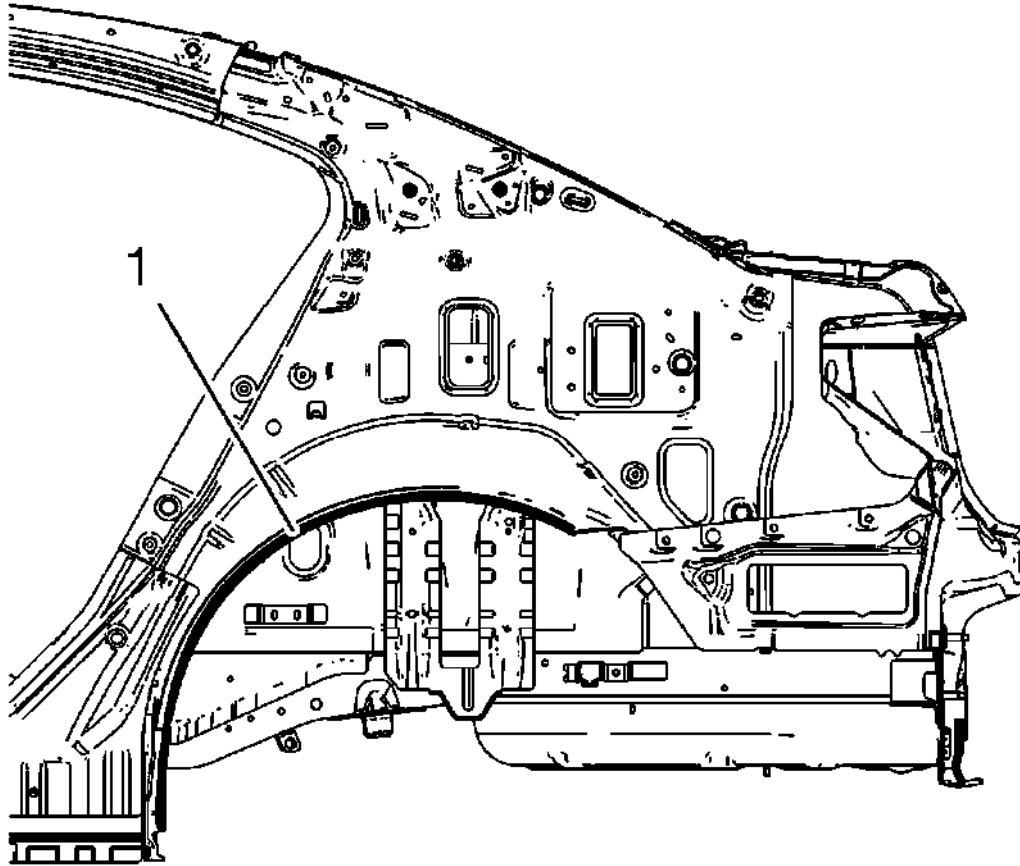


Fig. 136: Applying One-Part Windshield Urethane Adhesive
Courtesy of GENERAL MOTORS COMPANY

9. Apply structural adhesive (1) as noted from the original panel.
10. Position the quarter outer panel on the vehicle.
11. Verify the fit of the quarter outer panel.
12. Clamp the quarter outer panel into position.

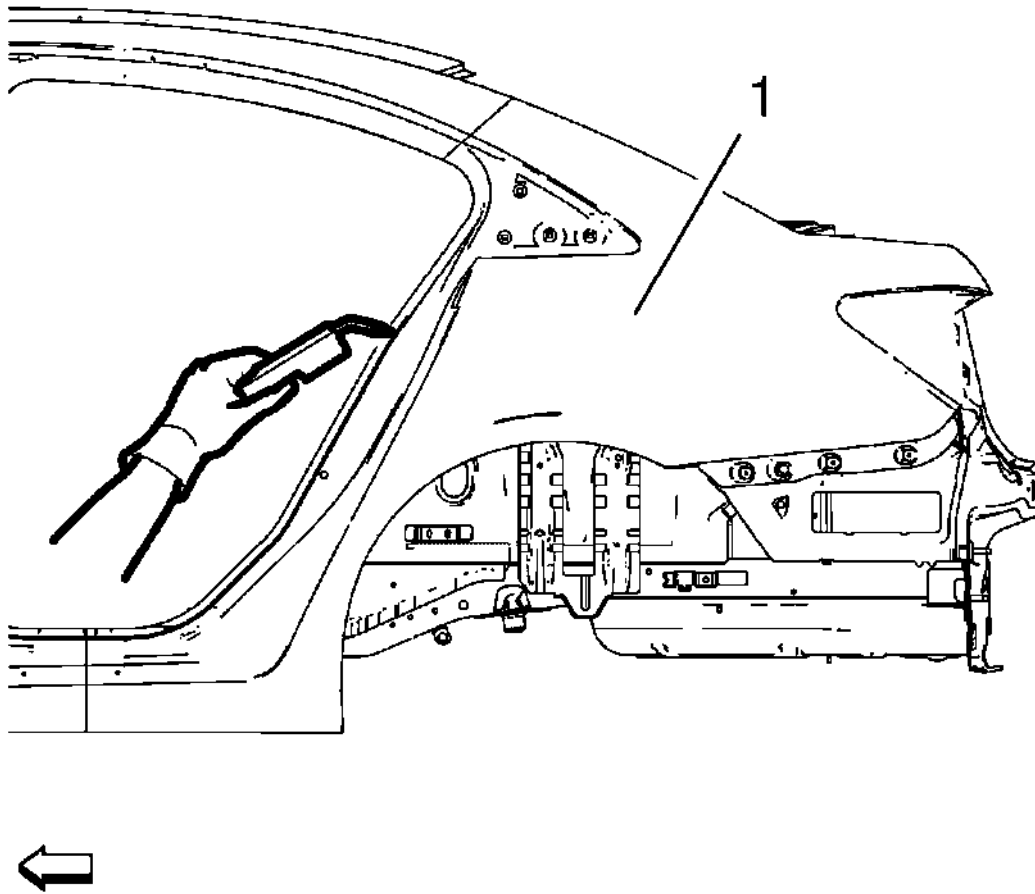


Fig. 137: Welding Quarter Outer Panel

Courtesy of GENERAL MOTORS COMPANY

13. Plug weld the quarter outer panel (1) accordingly.
14. 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.
15. Using a hammer re-hem the hem flanges of the wheelhouse flanging of the quarter outer panel (1)..

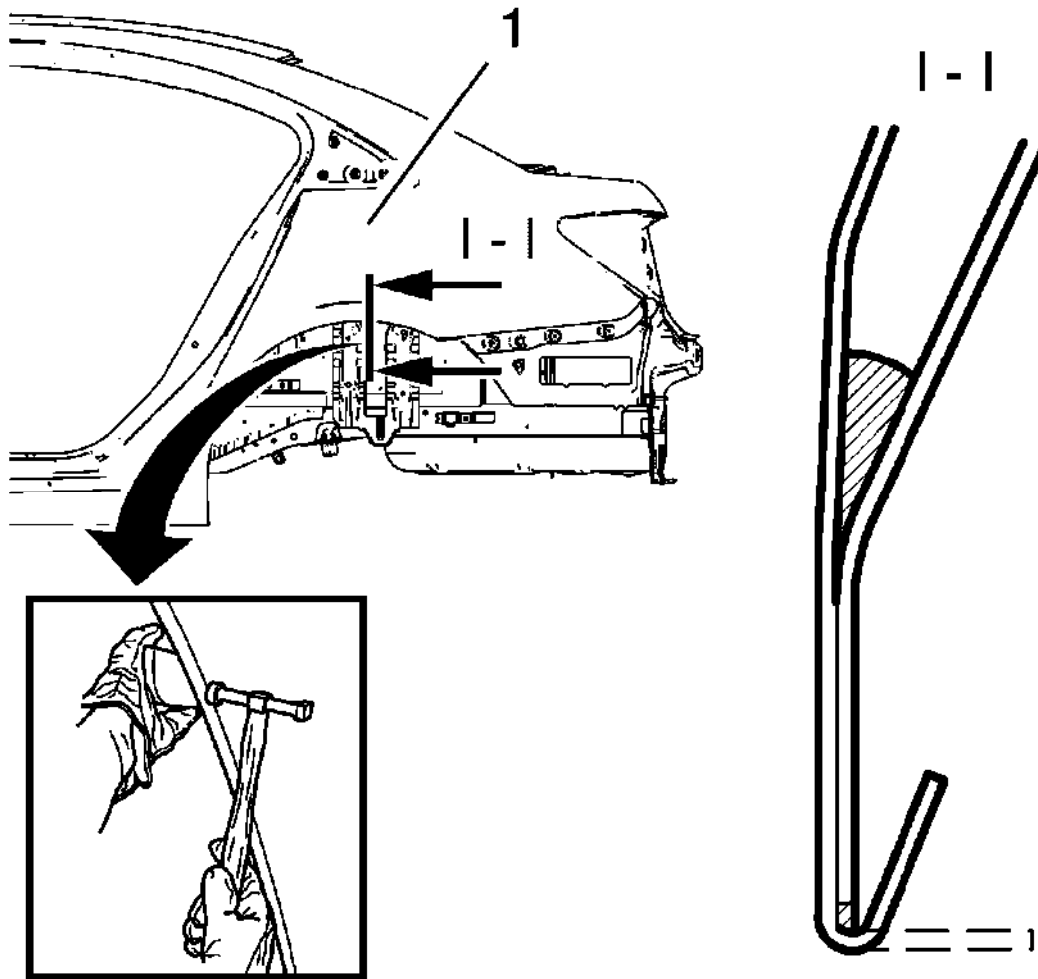


Fig. 138: Hammering In Stages Along Hem Flanges

Courtesy of GENERAL MOTORS COMPANY

16. Continue to hammer in stages along the hem flanges.
17. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
18. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
19. Install all related panels and components.
20. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
21. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

BODY REAR END PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

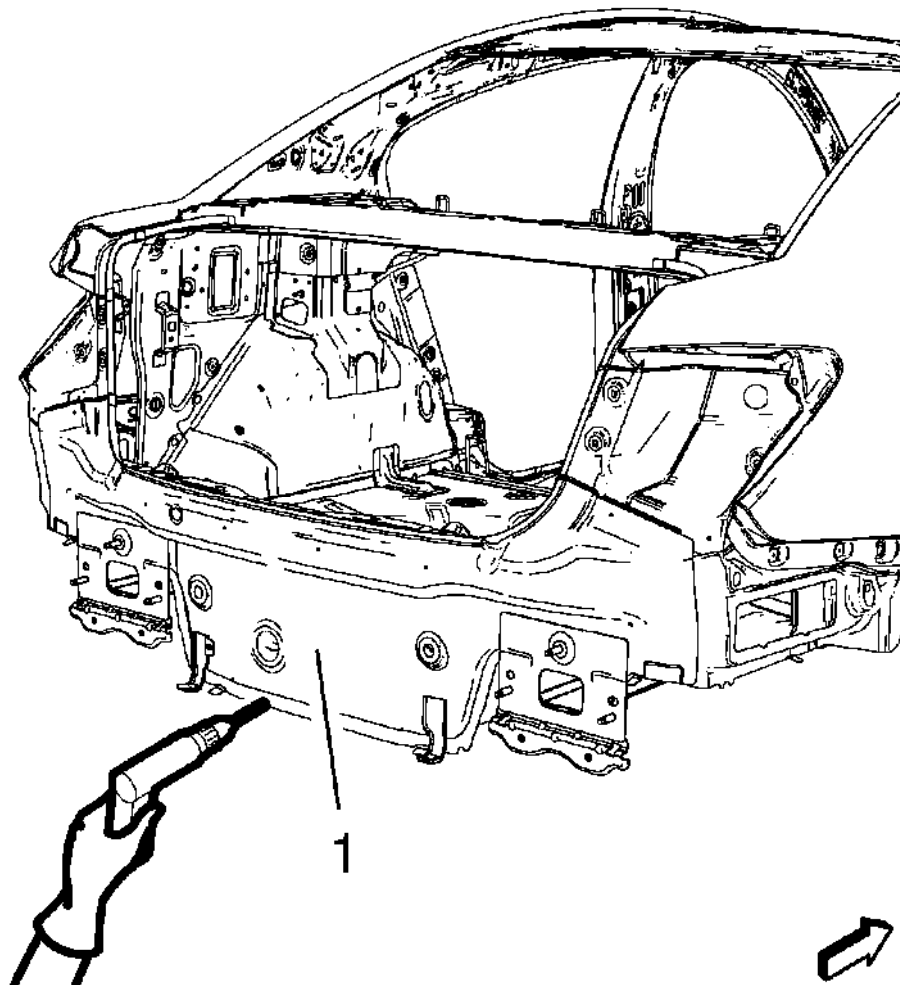


Fig. 139: Drilling Factory Welds Of Body Rear End Panel
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the body rear end panel (1).

NOTE: Note the number and location of welds for installation of the service assembly.

7. Drill all factory welds.

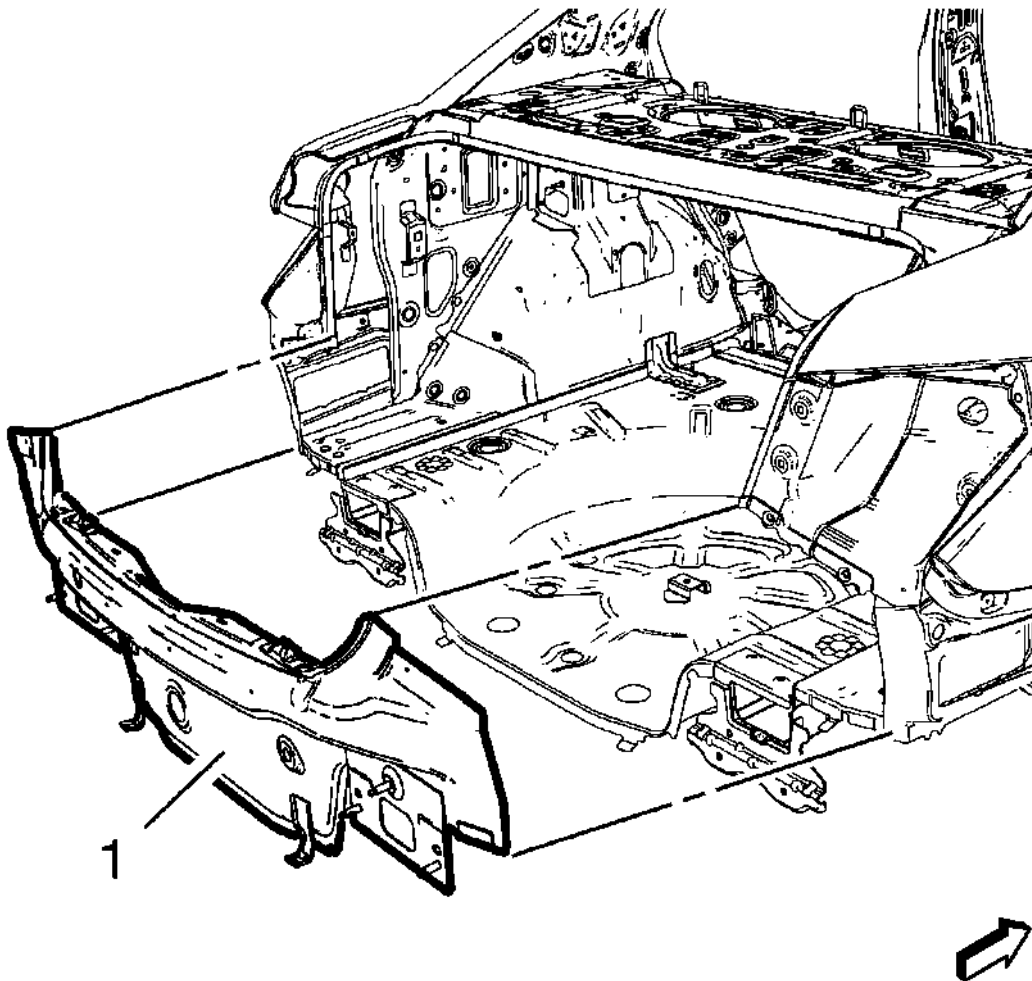


Fig. 140: Body Rear End Panel
Courtesy of GENERAL MOTORS COMPANY

8. Remove the body rear end panel (1).

Installation Procedure

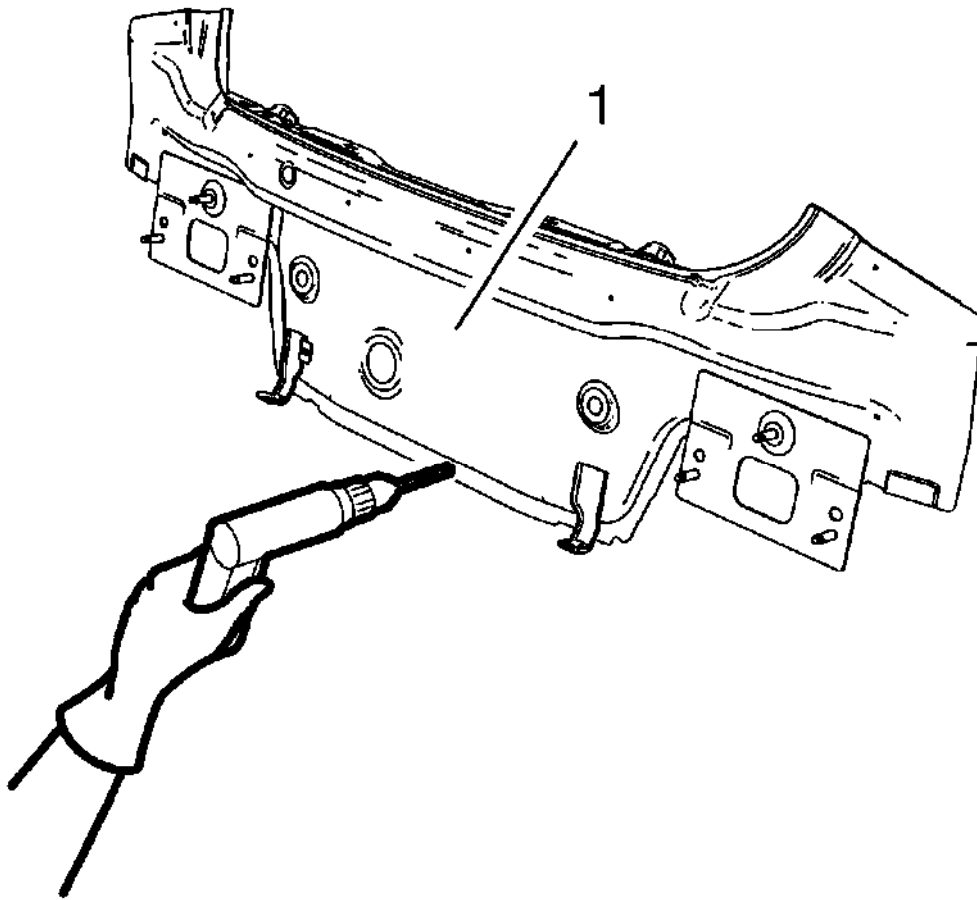


Fig. 141: Drilling Holes For Welding New Body Rear End Panel

Courtesy of GENERAL MOTORS COMPANY

NOTE: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in).

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

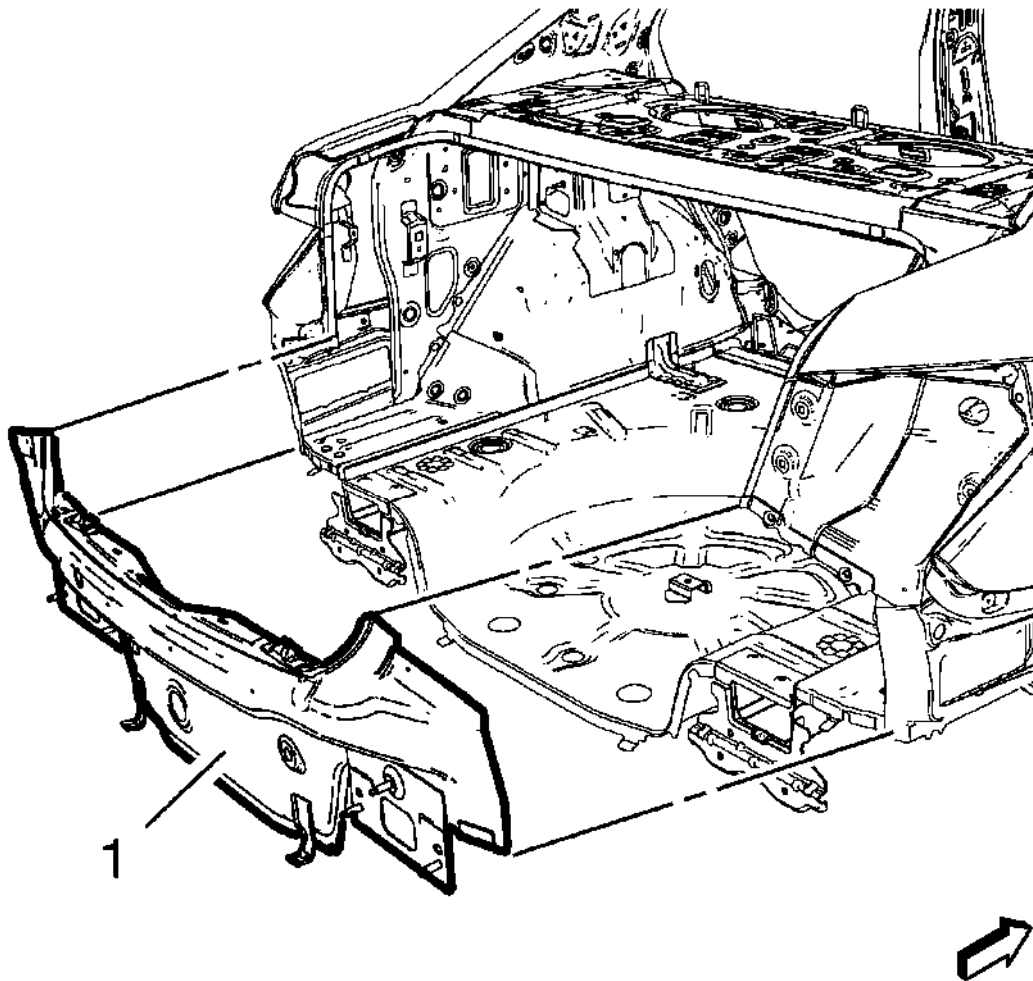


Fig. 142: Body Rear End Panel

Courtesy of GENERAL MOTORS COMPANY

3. Position the body rear end panel (1) on the vehicle.
4. Verify the fit of the body rear end panel.
5. Clamp the body rear end panel into position.

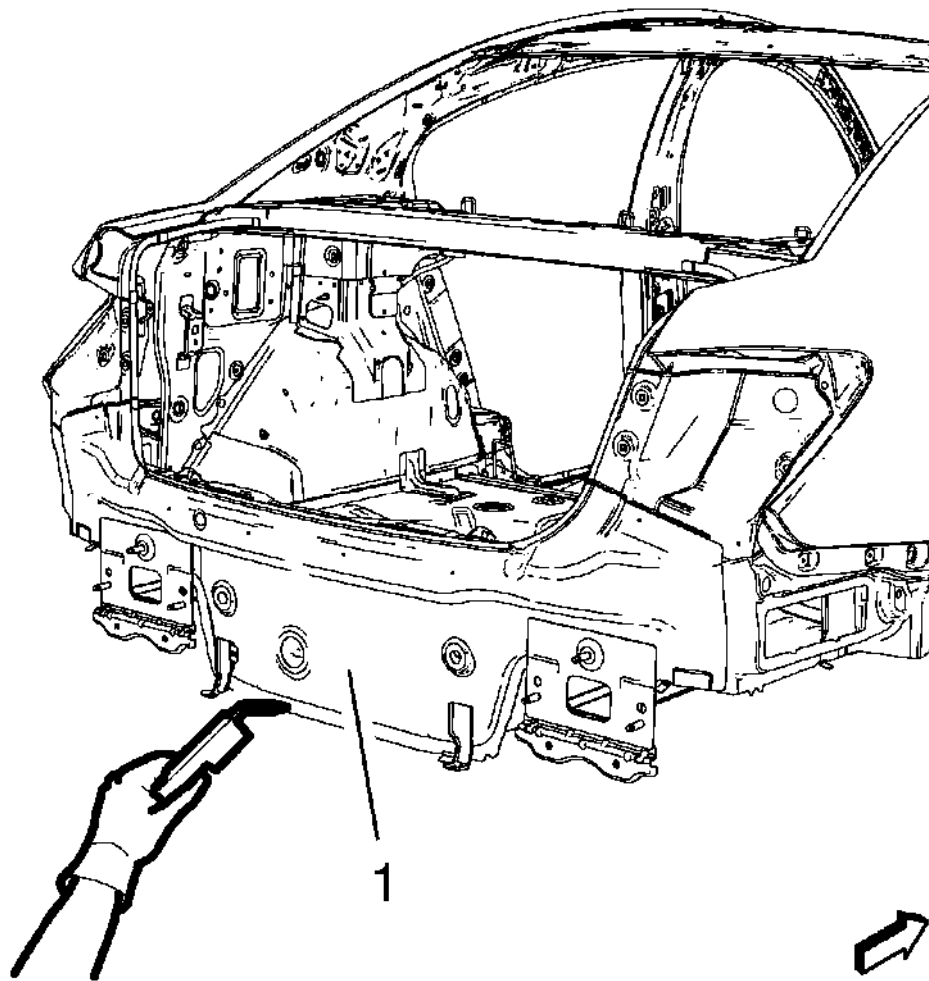


Fig. 143: Welding Body Rear End Panel

Courtesy of GENERAL MOTORS COMPANY

6. Plug weld the body rear end panel (1) accordingly.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
8. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
9. Install all related panels and components.
10. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
11. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

FRONT RAIL REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

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. Repair as much of the damage as possible to factory specifications. Refer to **Dimensions - Body**.
5. Note the location and remove the sealers and anti-corrosion materials from the repair area. Refer to **Anti-Corrosion Treatment and Repair** .

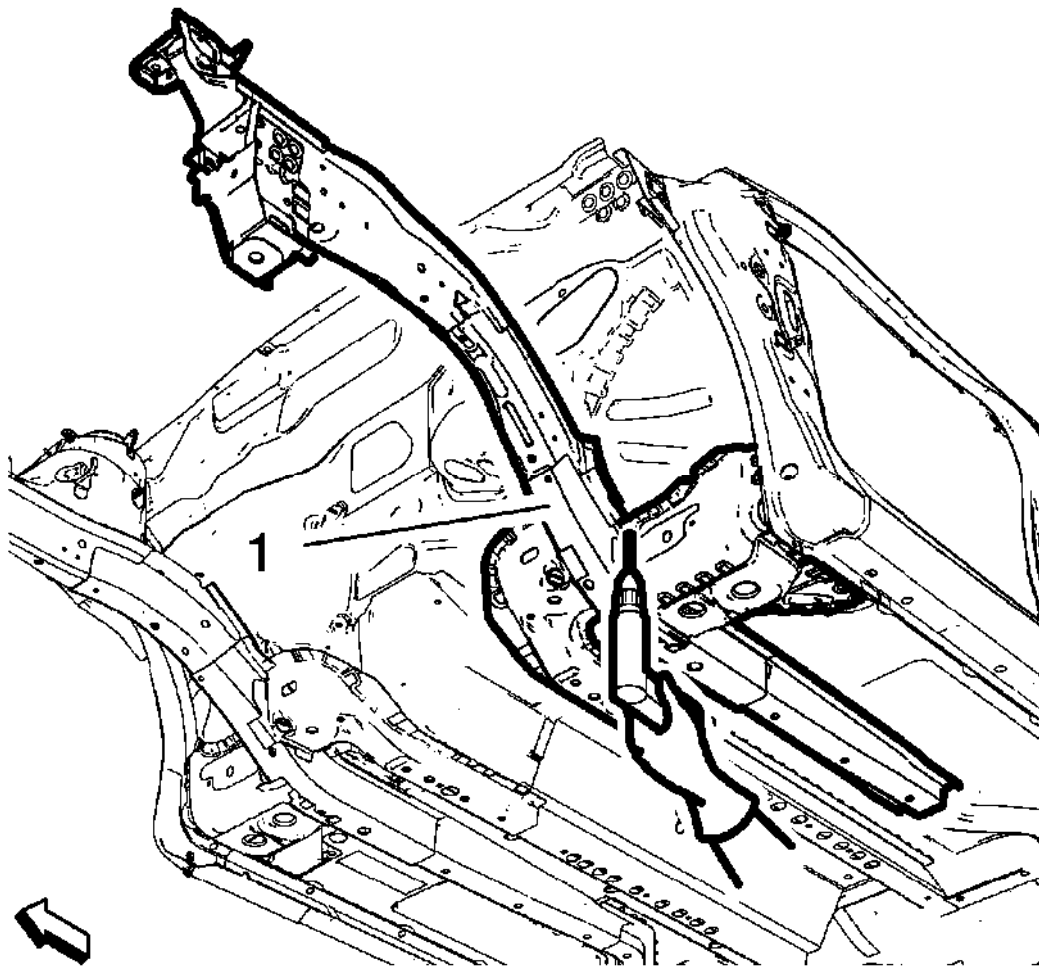


Fig. 144: Drilling Out Factory Welds From Front Rail
Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

6. Locate and drill out all factory welds. Note the number and location of the welds for installation of the

front rail (1).

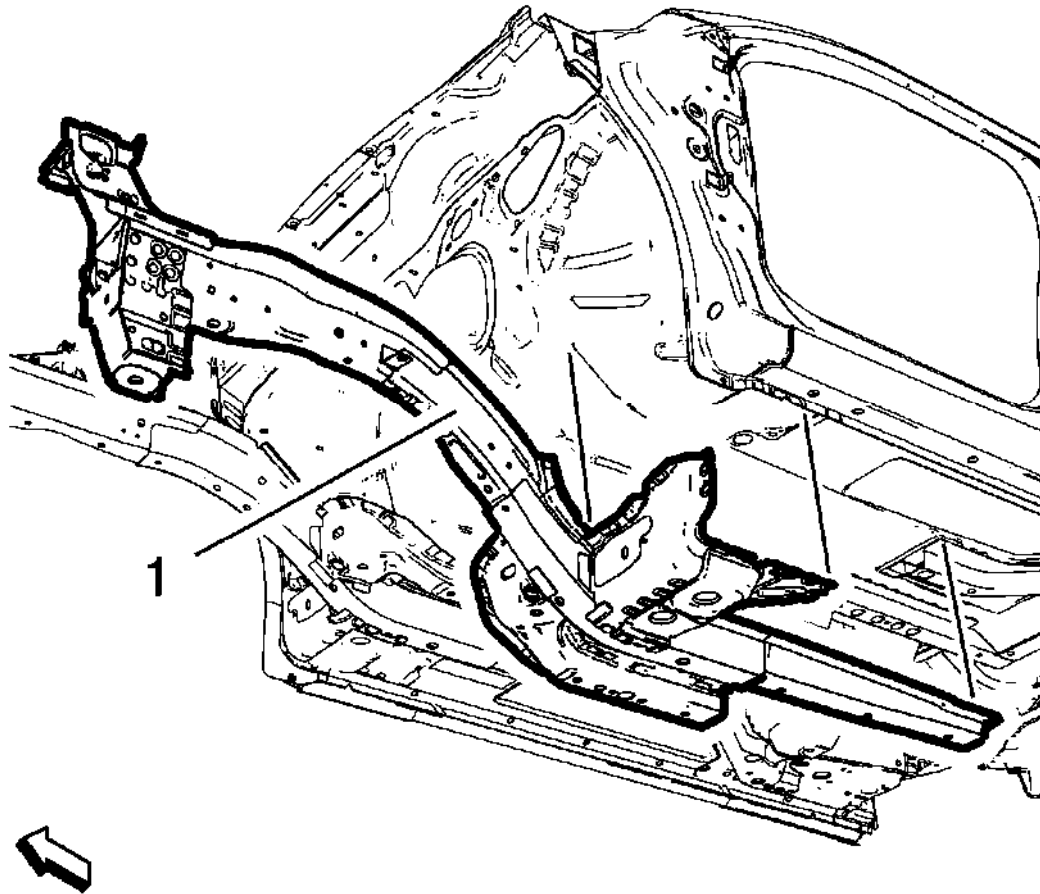


Fig. 145: Front Rail

Courtesy of GENERAL MOTORS COMPANY

7. Remove the damaged front rail (1).

Installation Procedure

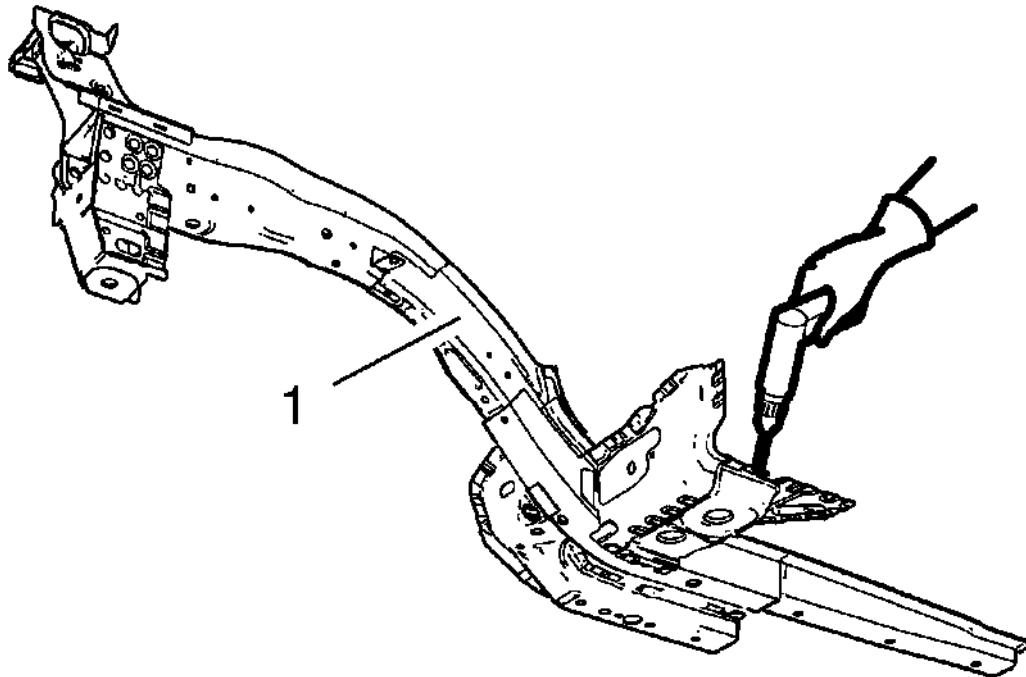


Fig. 146: Drilling Plug Weld Holes In New Front Rail

Courtesy of GENERAL MOTORS COMPANY

NOTE: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

Some panels may have structural weld-thru adhesive. Replace the weld-thru adhesive with an additional spot weld between each factory spot weld.

1. Drill 8 mm (5/16 in) plug weld holes in the service part front rail (1) as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply GM-approved Weld-Thru Coating or equivalent to all mating surfaces. Refer to **Anti-Corrosion Treatment and Repair** .

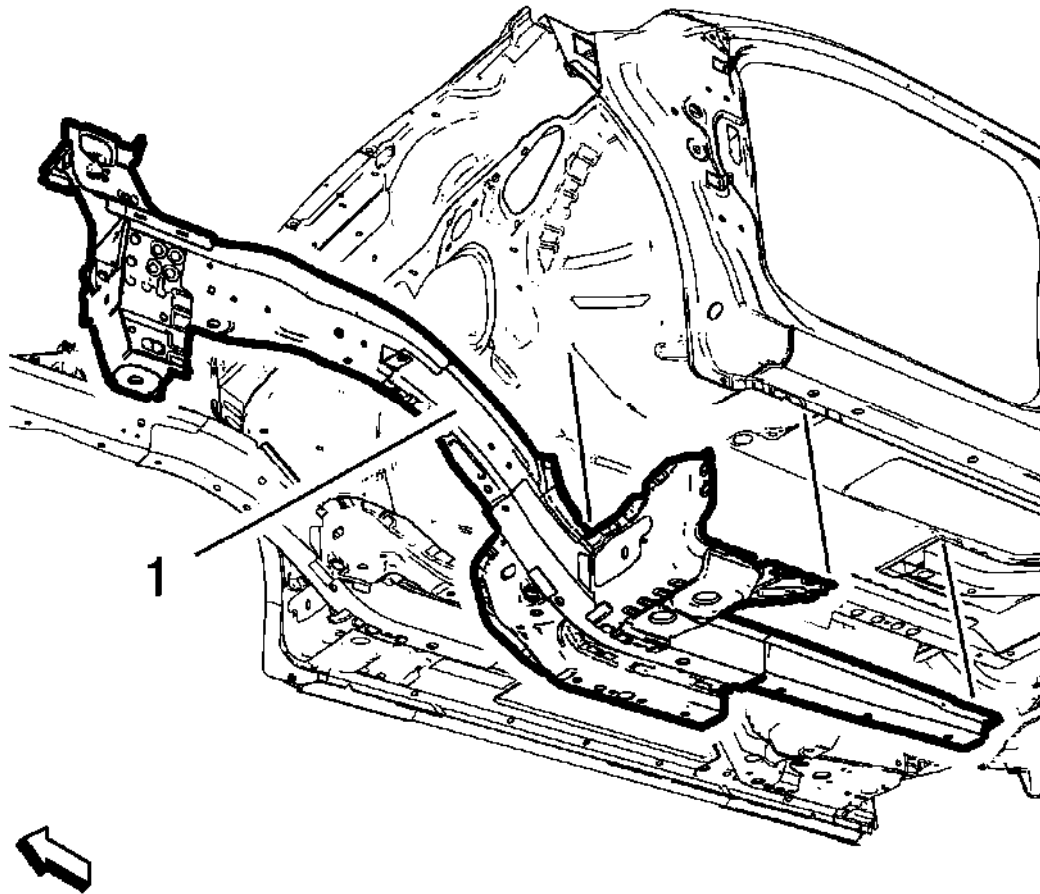


Fig. 147: Front Rail

Courtesy of GENERAL MOTORS COMPANY

4. Position the front rail (1) to the vehicle using 3-dimensional measuring equipment. Clamp the rail in place.

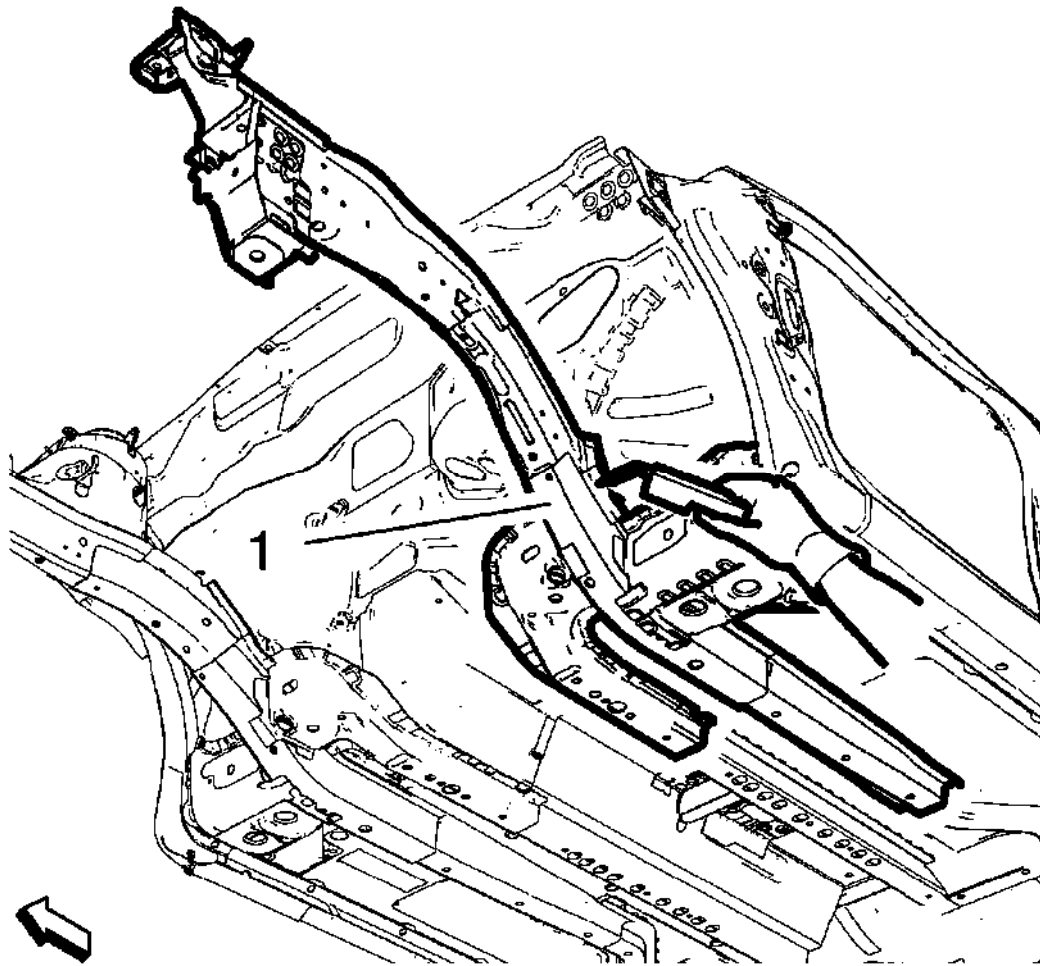


Fig. 148: Welding Front Rail

Courtesy of GENERAL MOTORS COMPANY

5. Plug weld the front rail (1) accordingly.
6. Clean and prepare all welded surfaces.
7. Install all related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
9. Paint the repair area. Refer to **Basecoat/Clearcoat Paint Systems** .
10. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
11. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

CENTER PILLAR INNER PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .
6. Locate and mark all factory welds.

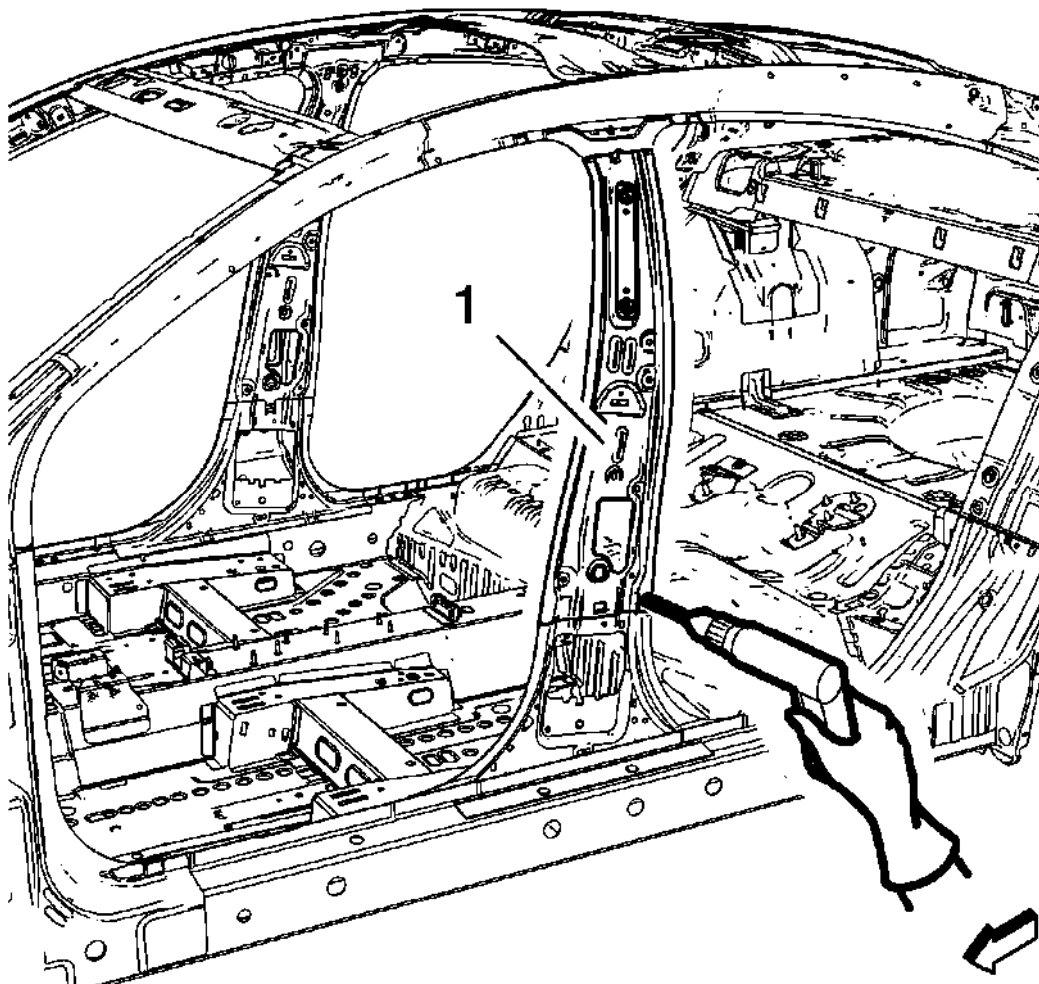


Fig. 149: Drilling Factory Welds From Lower Center Pillar Inner Panel

Courtesy of GENERAL MOTORS COMPANY

7. Drill all factory welds lower of the center pillar inner panel (1). Note the number and location of welds for installation of the service assembly.

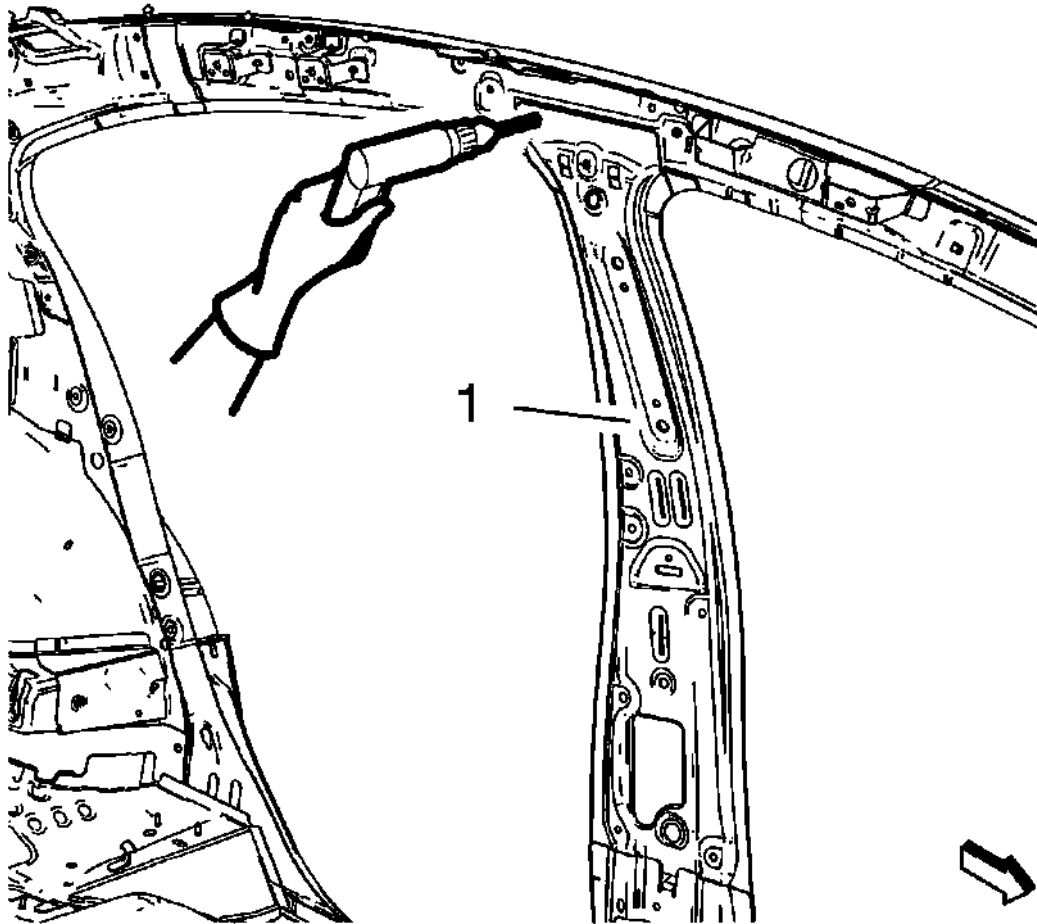


Fig. 150: Drilling Factory Welds From Upper Center Pillar Inner Panel

Courtesy of GENERAL MOTORS COMPANY

8. Drill all factory welds upper of the center pillar inner panel (1). Note the number and location of welds for installation of the service assembly.

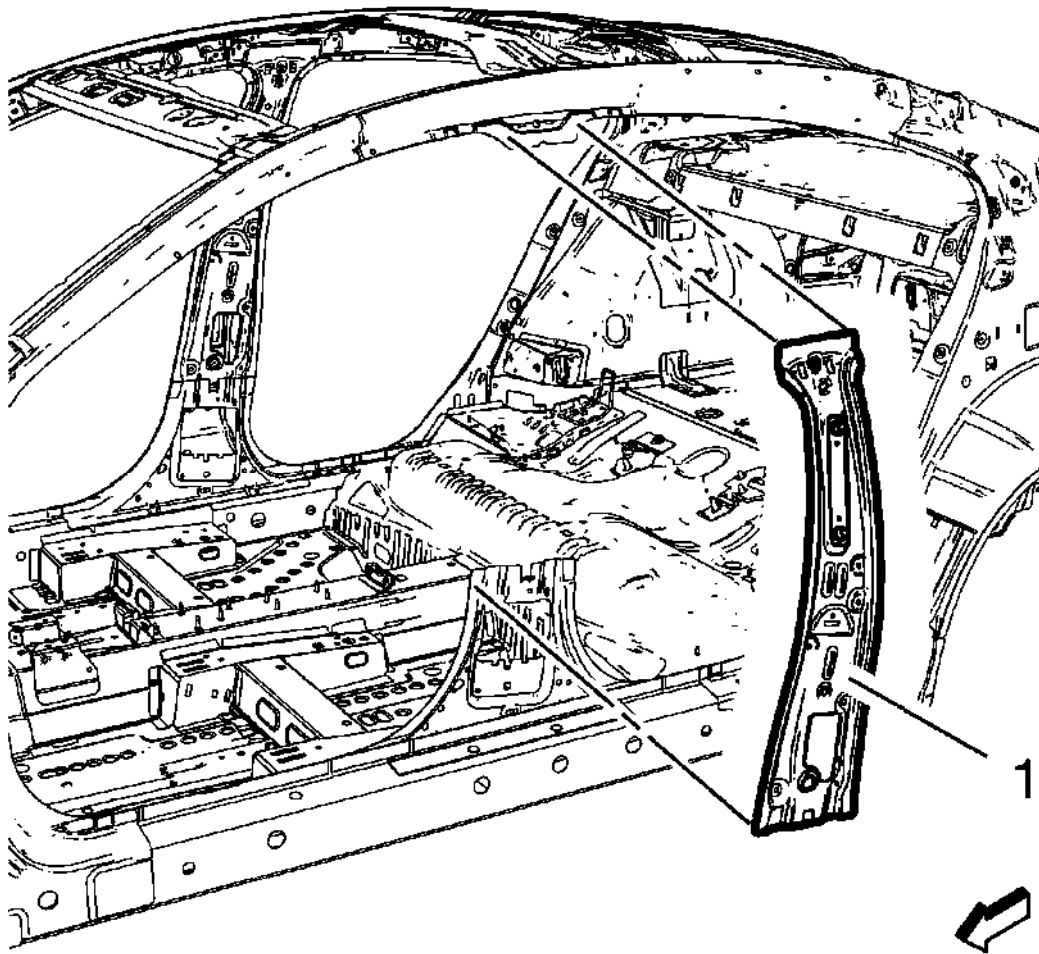


Fig. 151: Center Pillar Inner Panel
Courtesy of GENERAL MOTORS COMPANY

9. Remove the damaged center pillar inner panel (1).

Installation Procedure

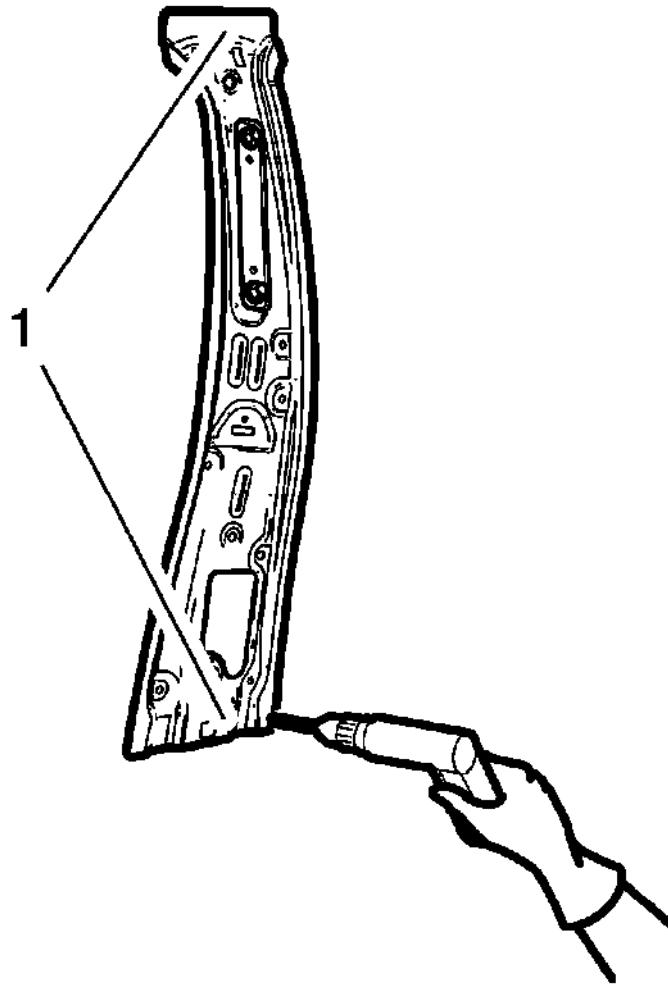


Fig. 152: Drilling Holes Plug Welding Holes In New Center Pillar Inner Panel
Courtesy of GENERAL MOTORS COMPANY

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

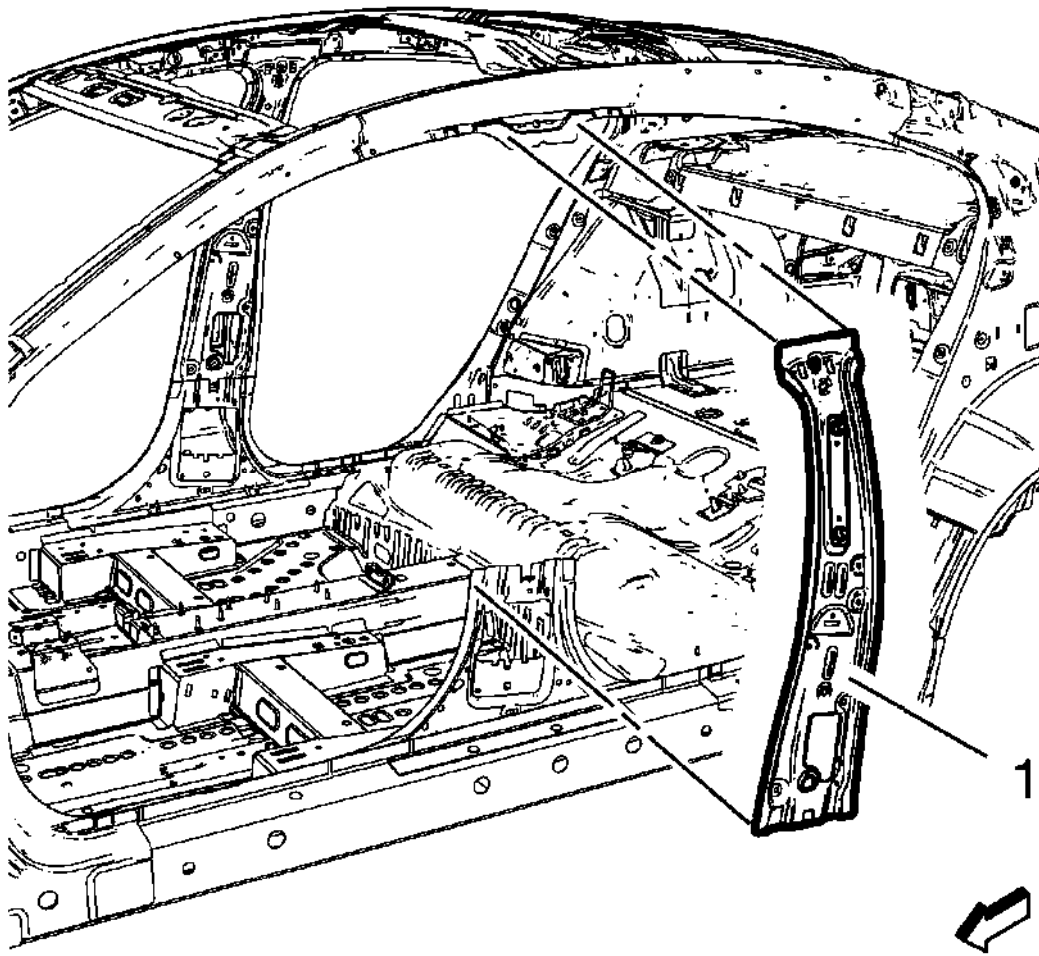


Fig. 153: Center Pillar Inner Panel

Courtesy of GENERAL MOTORS COMPANY

3. Position the center pillar inner panel (1) on the vehicle.
4. Verify the fit of the panel.
5. Clamp the center pillar inner panel into position.

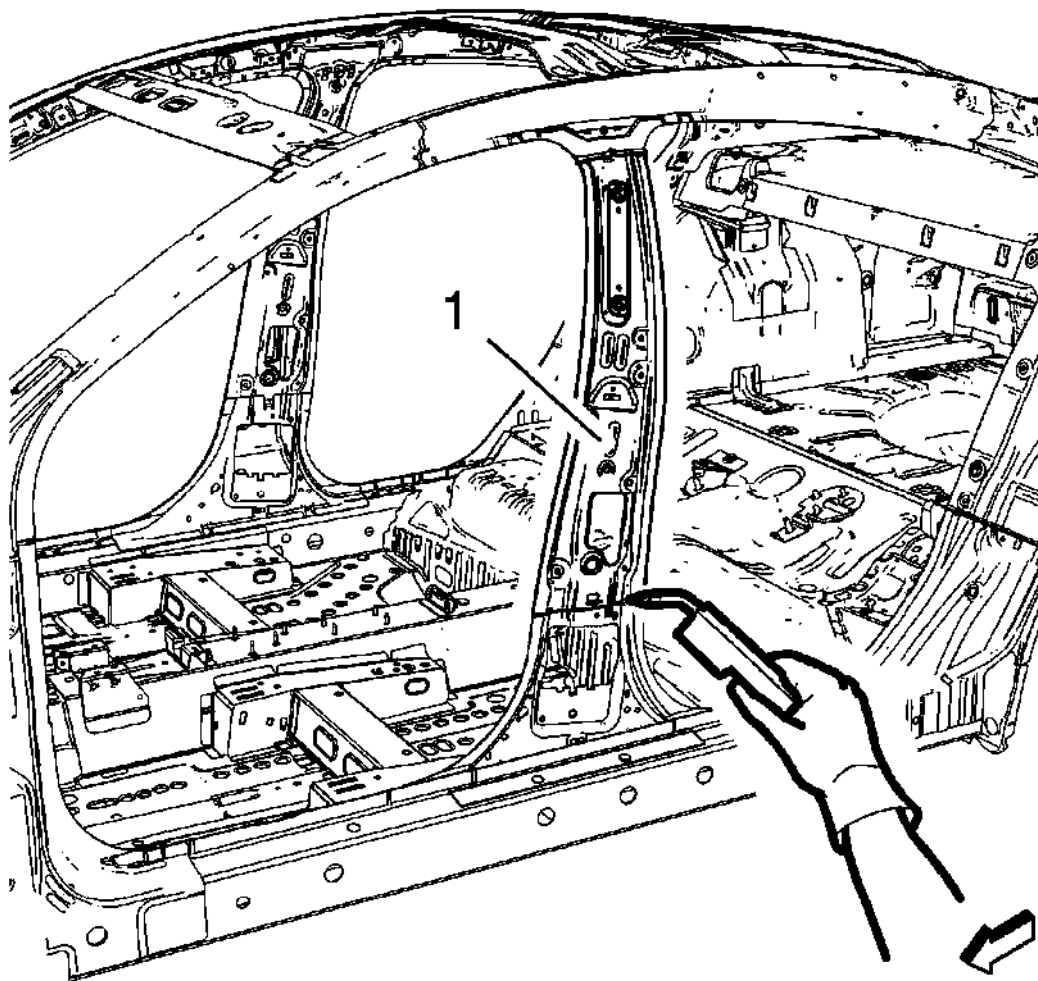


Fig. 154: Welding Upper And Lower Center Pillar Inner Panel

Courtesy of GENERAL MOTORS COMPANY

6. Plug weld accordingly center pillar inner panel (1) upper and lower.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
8. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
9. Install all related panels and components.
10. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
11. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

CENTER PILLAR REINFORCEMENT REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

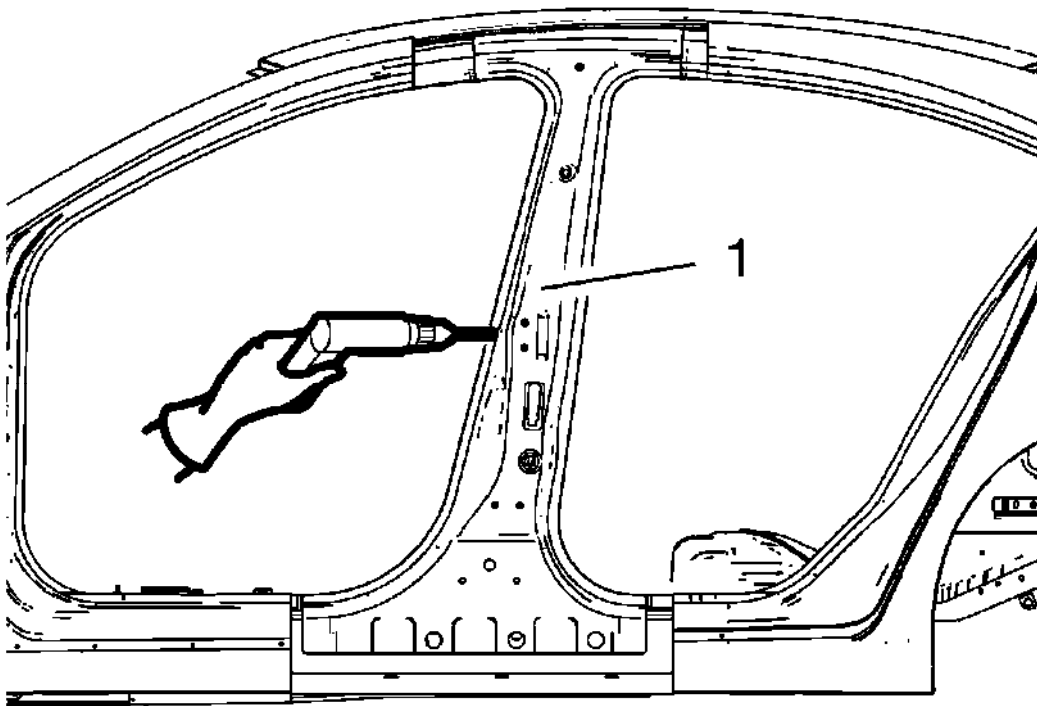


Fig. 155: Drilling Factory Welds Of Center Pillar Reinforcement
Courtesy of GENERAL MOTORS COMPANY

6. Locate and mark all the necessary factory welds of the center pillar reinforcement (1)
7. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

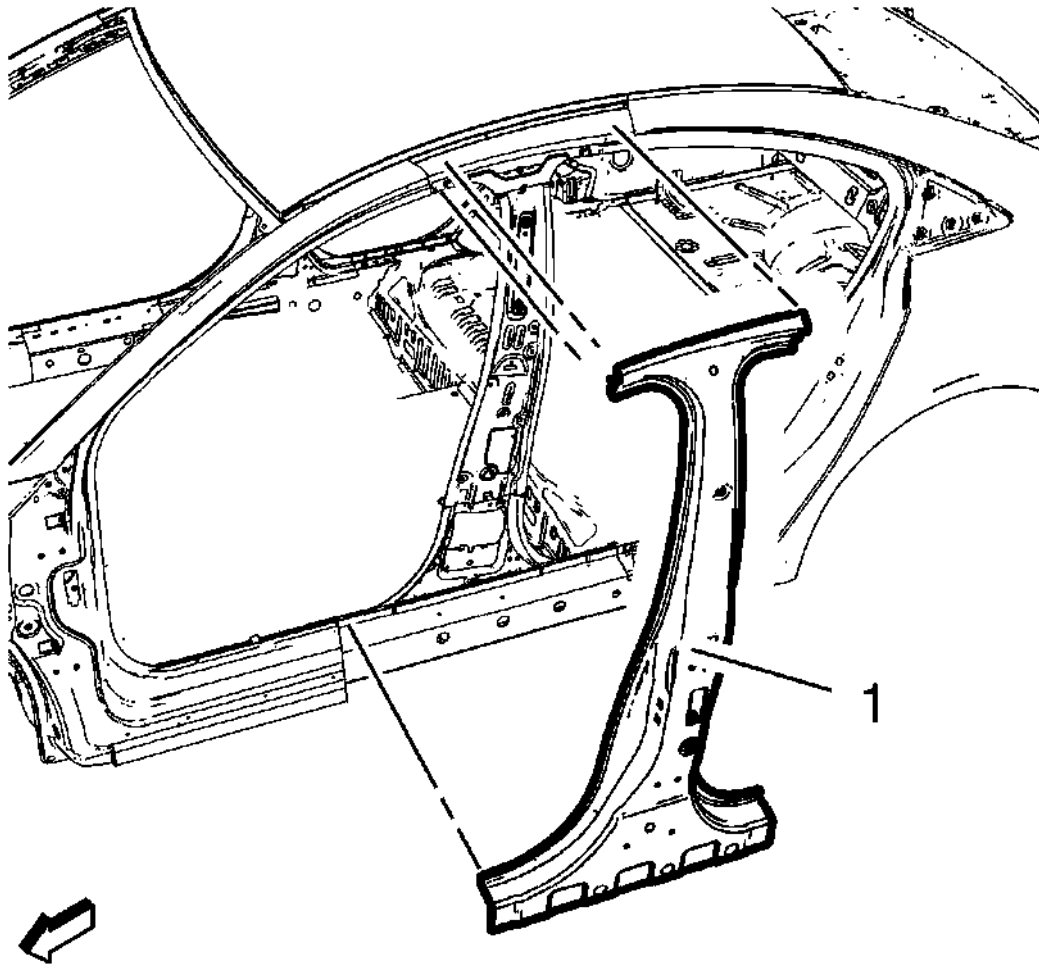


Fig. 156: center pillar reinforcement
Courtesy of GENERAL MOTORS COMPANY

8. Remove the damaged center pillar reinforcement (1).

Installation Procedure

1. Prepare all mating surfaces as necessary.
2. Align the center pillar reinforcement.

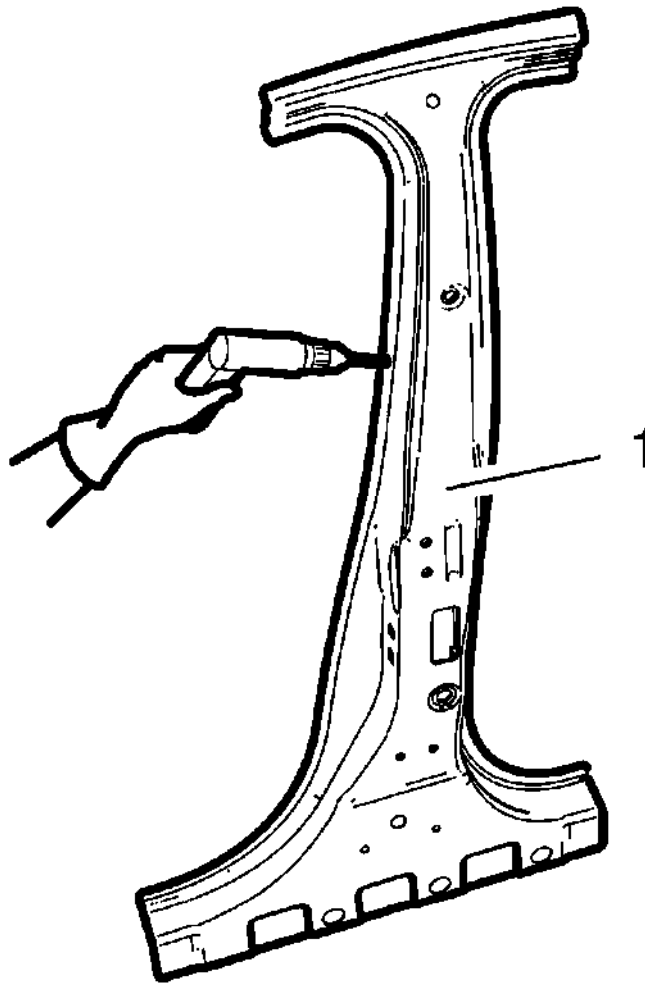


Fig. 157: Drilling Plug Weld Holes For New Center Pillar Reinforcement
Courtesy of GENERAL MOTORS COMPANY

3. Drill 8 mm (5/16 in) for plug welding along the edges of the center pillar reinforcement (1) as noted from the original panel.
4. Clean and prepare the attaching surfaces for welding.

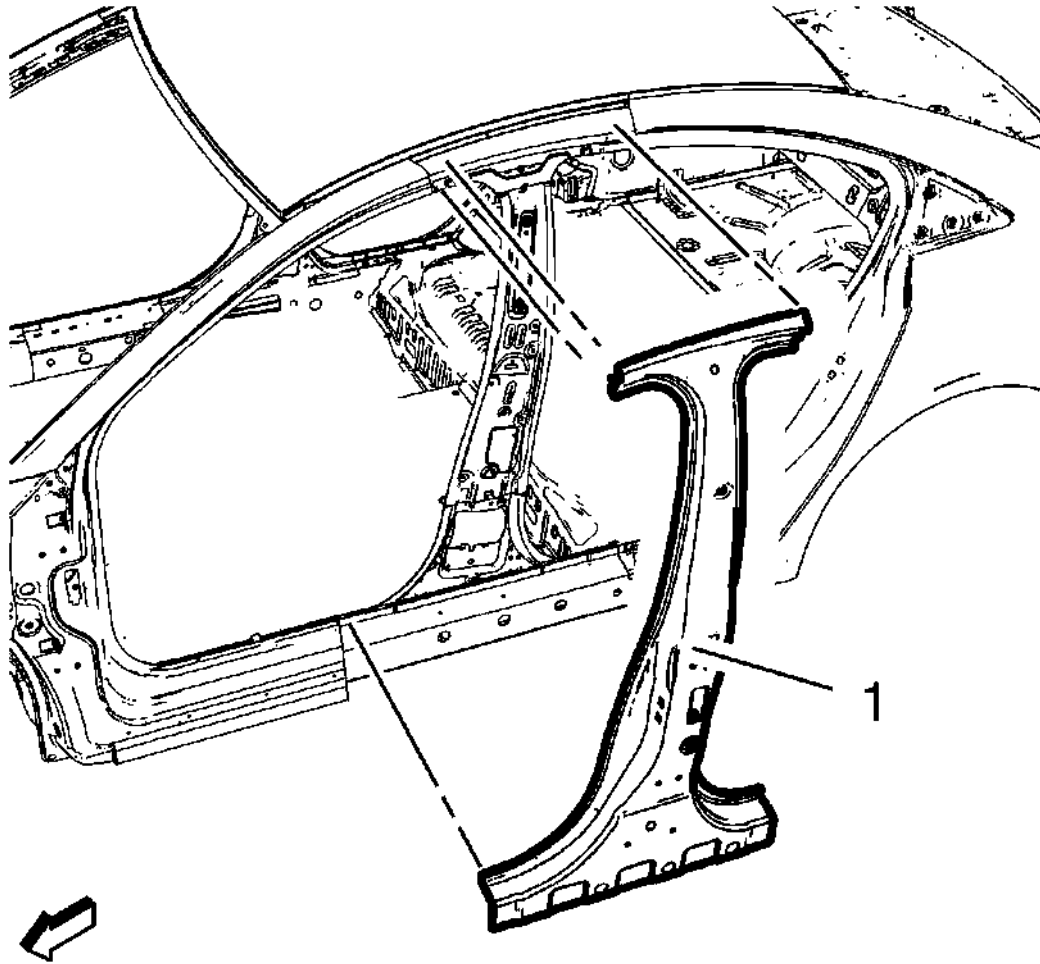


Fig. 158: Center pillar reinforcement

Courtesy of GENERAL MOTORS COMPANY

5. Position the center pillar reinforcement (1) on the vehicle.
6. Verify the fit of the center pillar reinforcement.
7. Clamp the center pillar reinforcement into position.

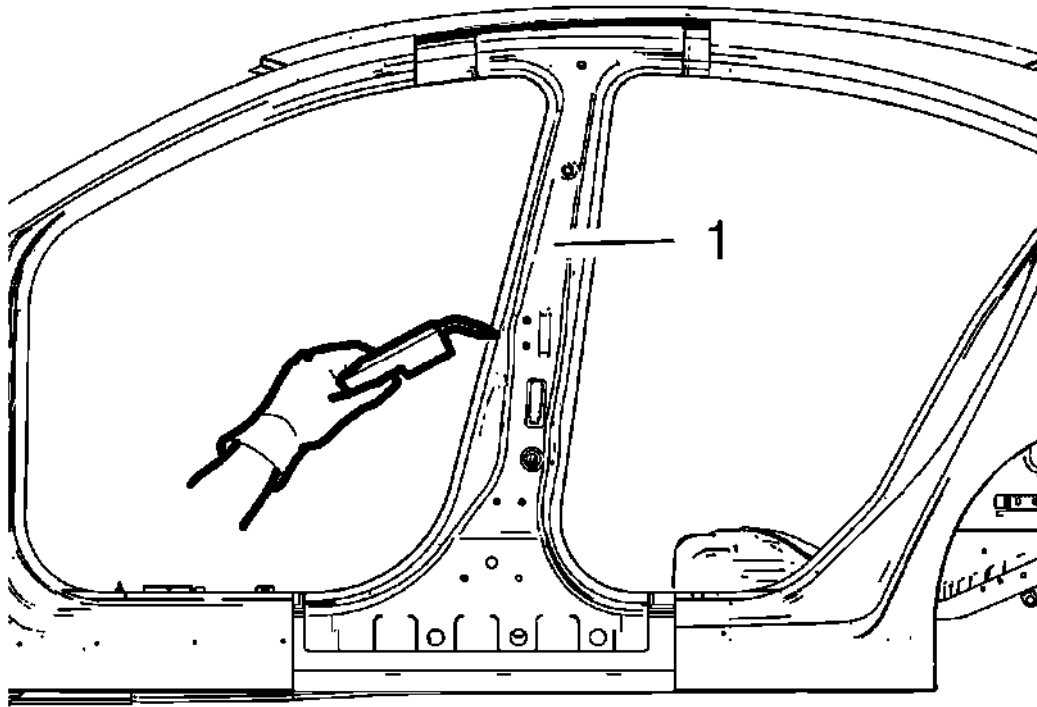


Fig. 159: Welding Center Pillar Reinforcement

Courtesy of GENERAL MOTORS COMPANY

8. Plug weld the center pillar reinforcement (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. Refer to **Anti-Corrosion Treatment and Repair** .
11. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
12. Install all related panels and components.
13. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
14. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

CENTER PILLAR SECTIONING - OUTER

Removal Procedure

2013 Chevrolet Cruze

2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

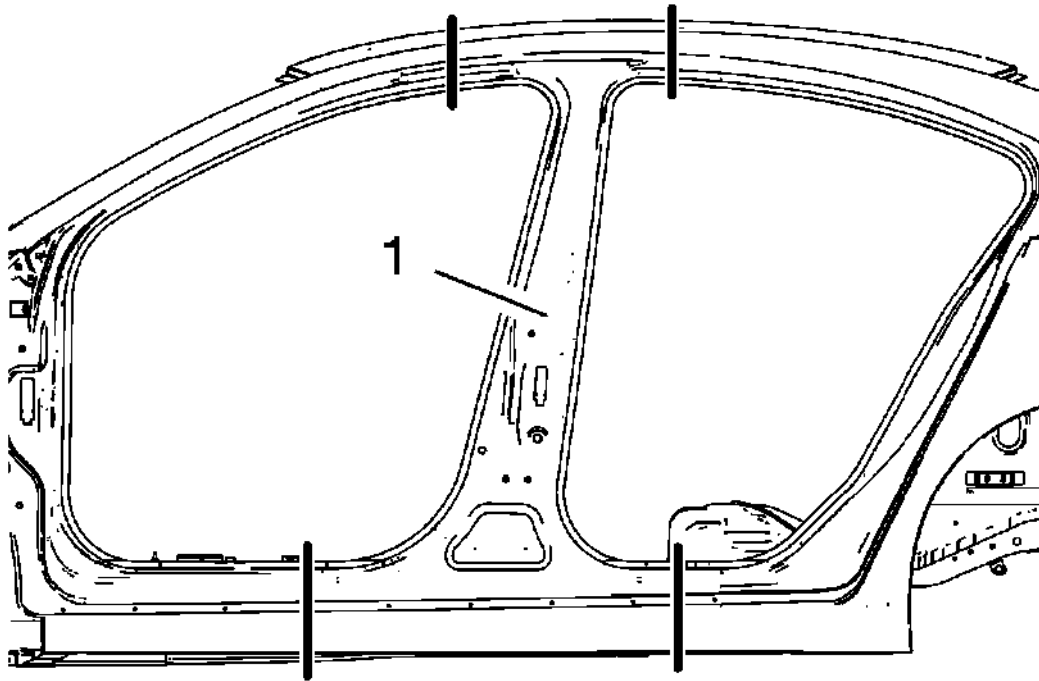


Fig. 160: Locating Cut Lines On Center Pillar
Courtesy of GENERAL MOTORS COMPANY

6. Create cut lines on the center pillar (1).

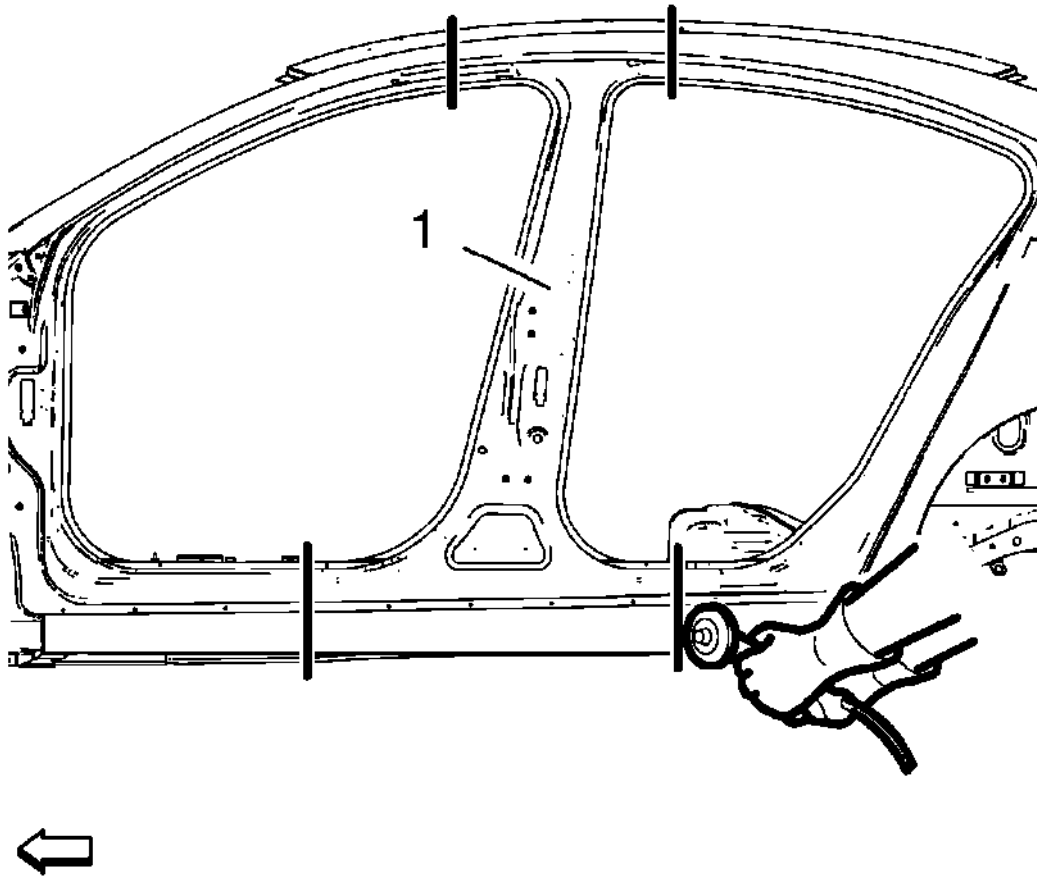


Fig. 161: Cutting Center Pillar

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

7. Cut the center pillar (1) where sectioning is to be performed.

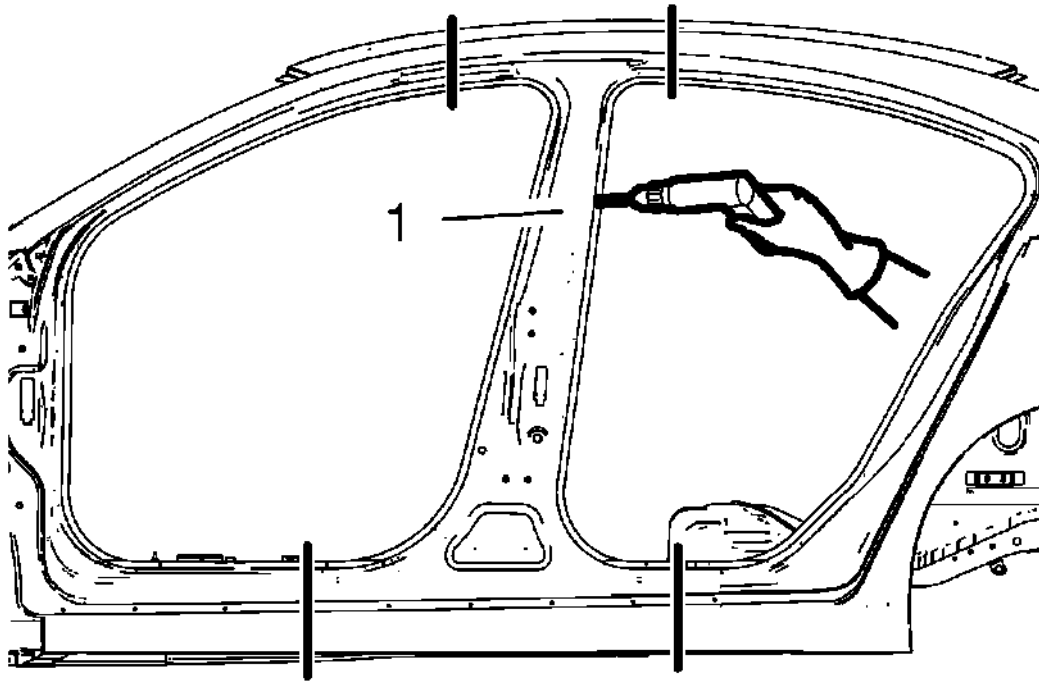


Fig. 162: Drilling Factory Welds Of Center Pillar
Courtesy of GENERAL MOTORS COMPANY

8. Locate and mark all the necessary factory welds of the center pillar (1).
9. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

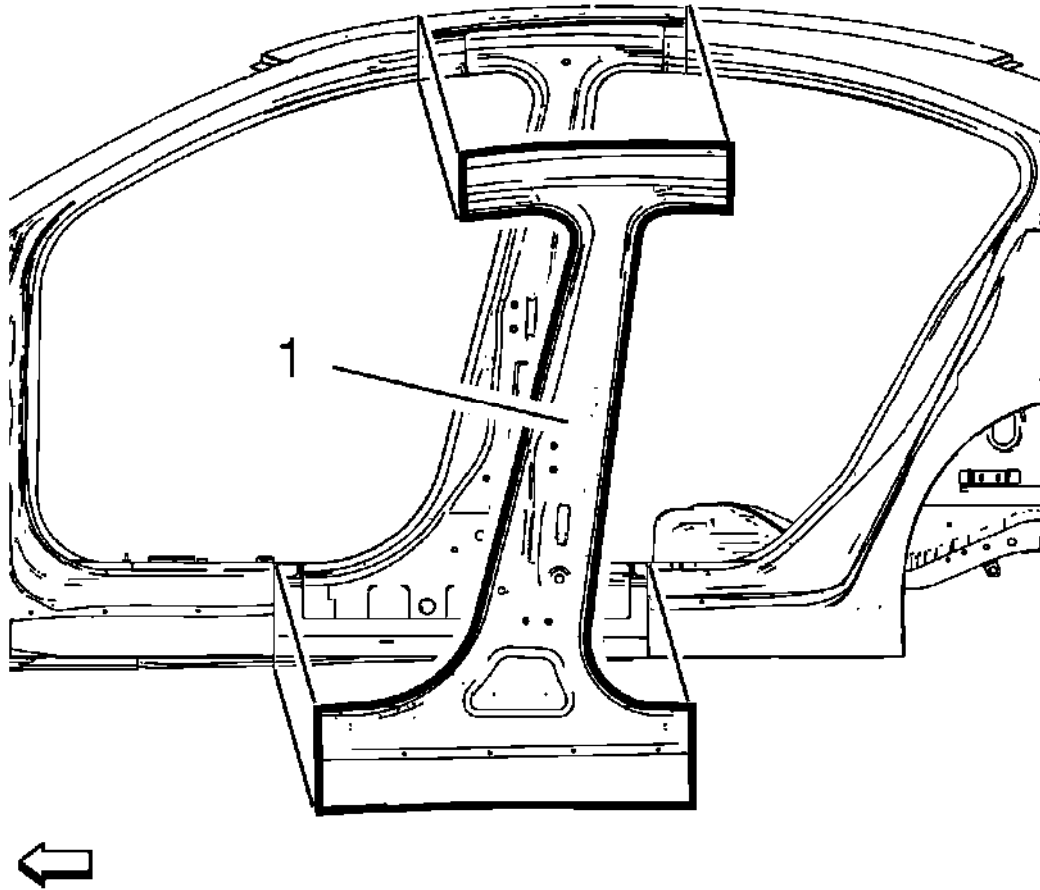


Fig. 163: Center Pillar

Courtesy of GENERAL MOTORS COMPANY

10. Remove the damaged center pillar (1).

Installation Procedure

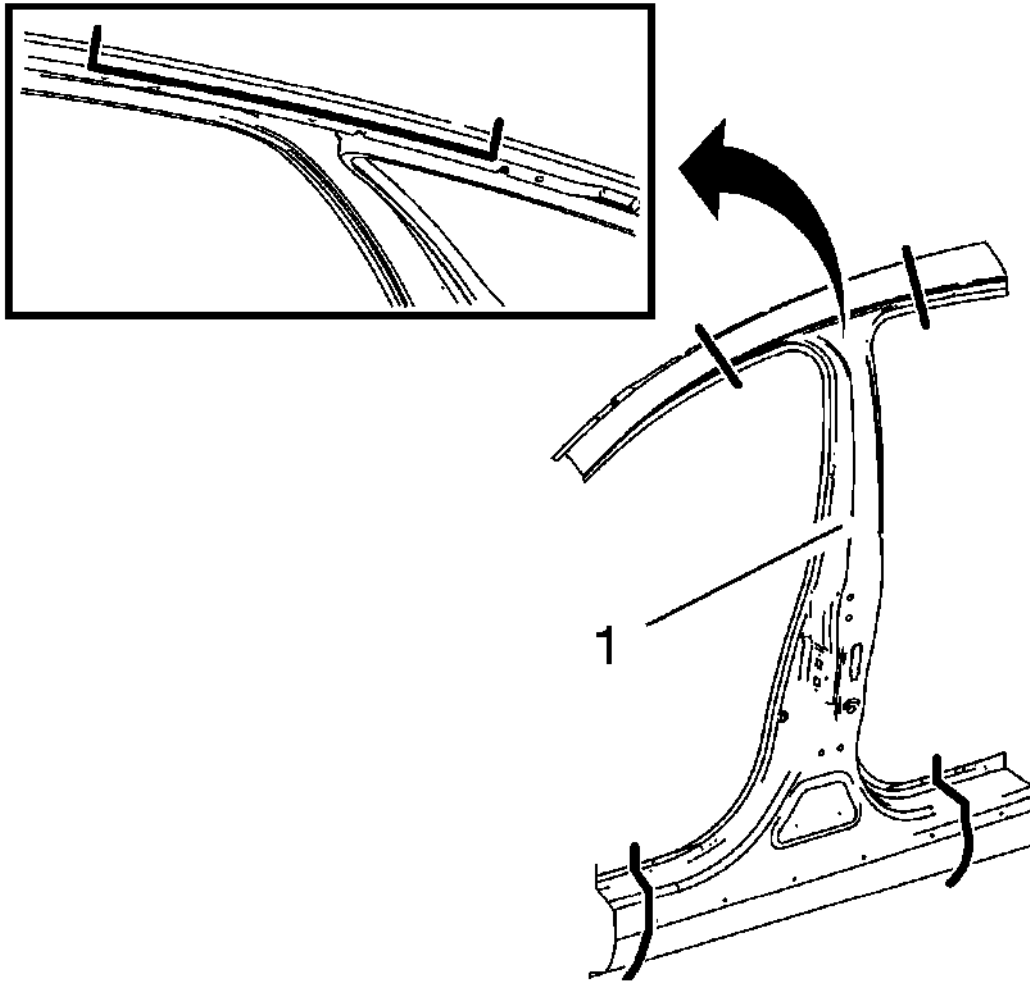


Fig. 164: Center Pillar Cut Lines

Courtesy of GENERAL MOTORS COMPANY

1. Cut the center pillar (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 a 50 mm (2 in) backing plate from the unused portion of the service part.
3. Drill 8 mm (5/16 in) 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 (1 1/2 in) apart.
4. Prepare all mating surfaces as necessary.
5. Fit the backing plates halfway into the sectioning joints, clamp in place and plug weld to the vehicle.
6. Align the center pillar.

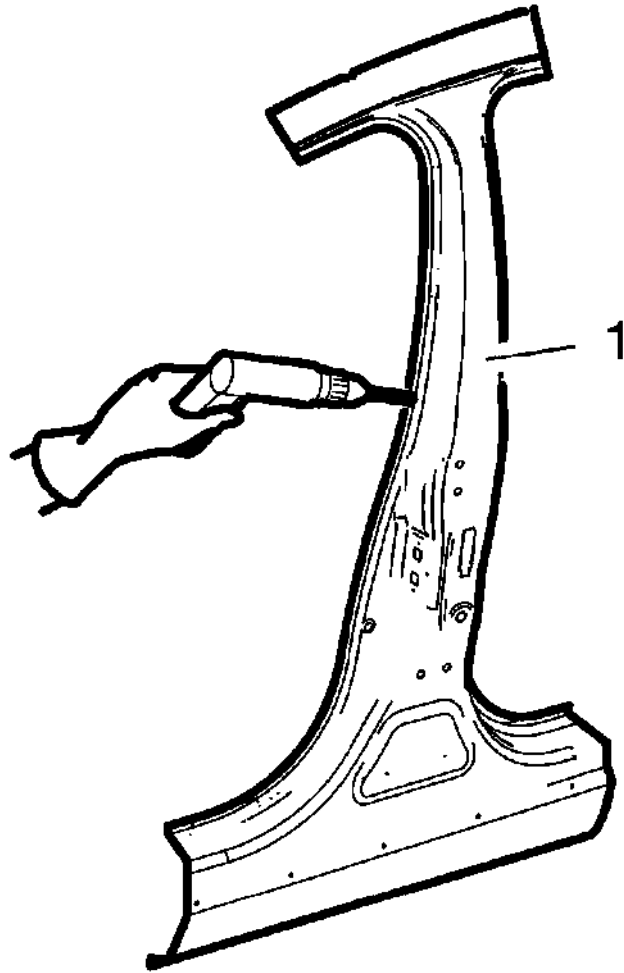


Fig. 165: Drilling Holes For Plug Welding New Center Pillar
Courtesy of GENERAL MOTORS COMPANY

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

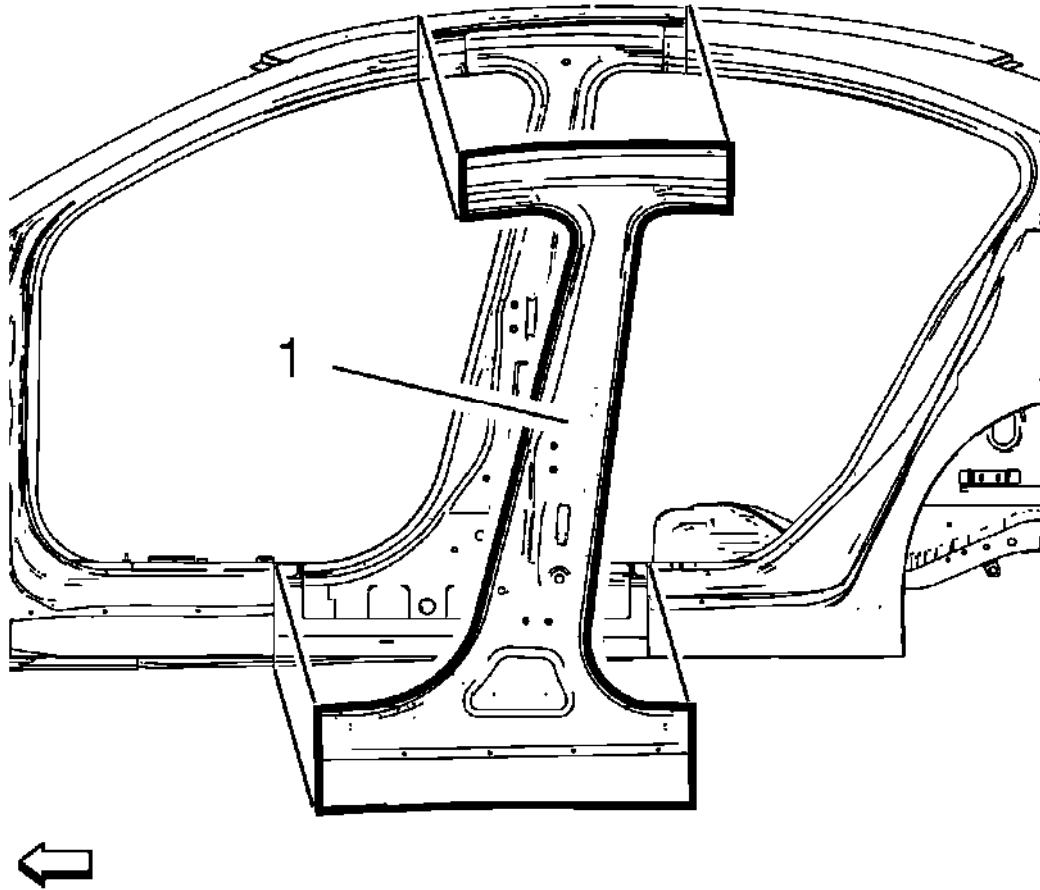


Fig. 166: Center Pillar

Courtesy of GENERAL MOTORS COMPANY

9. Position the center pillar (1) on the vehicle.
10. Verify the fit of the center pillar.
11. Clamp the center pillar into position.

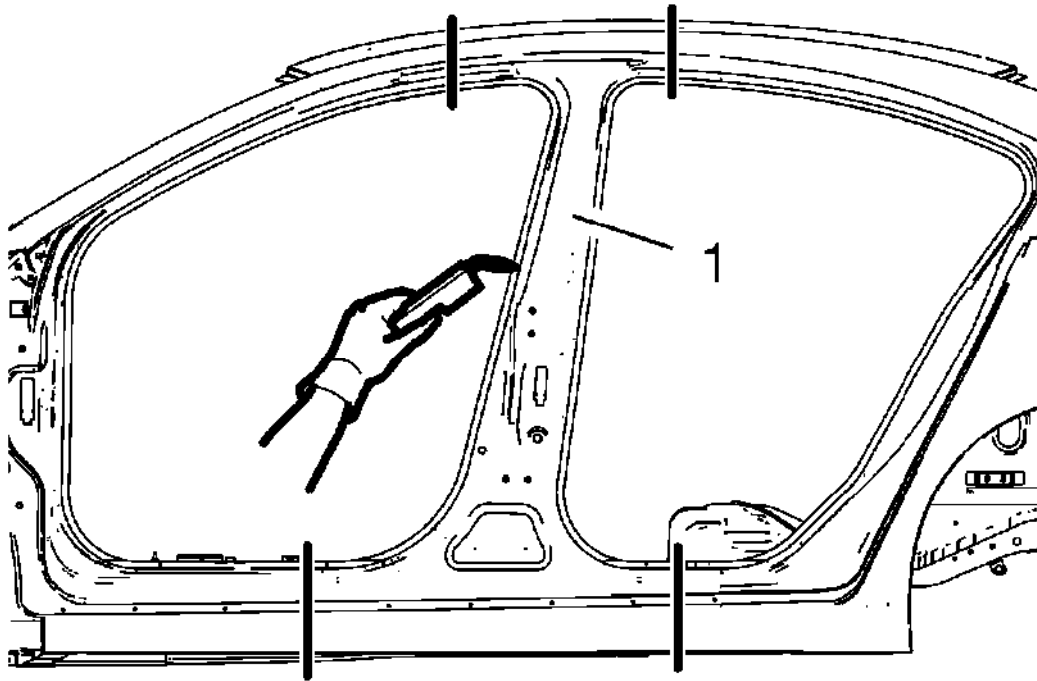


Fig. 167: Welding Center Pillar

Courtesy of GENERAL MOTORS COMPANY

12. Plug weld the center pillar (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. Refer to **Anti-Corrosion Treatment and Repair** .
15. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
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** .

FRONT SIDE DOOR OUTER PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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 the front side door. Refer to Front Side Door Replacement .
4. Remove the front side door outside handle. Refer to Front Side Door Outside Handle Replacement .
5. Remove the outside rearview mirror. Refer to Outside Rearview Mirror Replacement .
6. Remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to Anti-Corrosion Treatment and Repair .

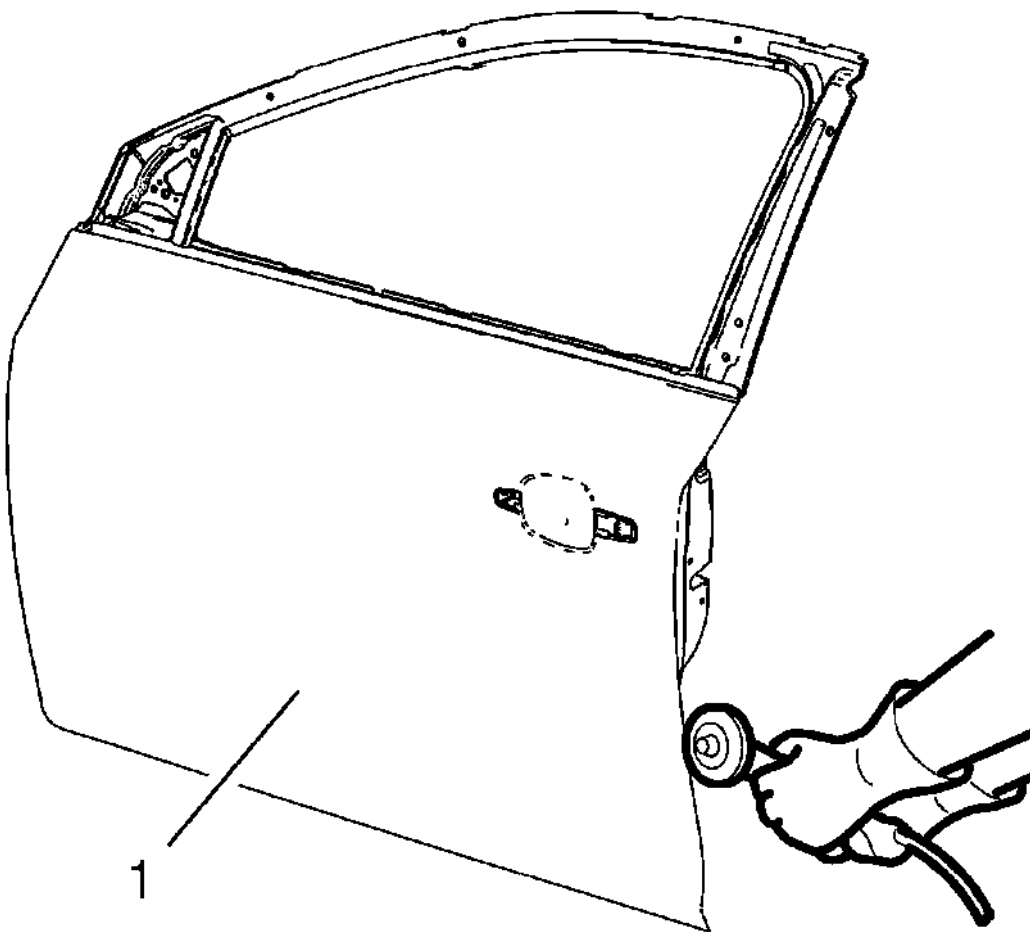


Fig. 168: Grinding Edges Of Front Side Door Outer Panel
Courtesy of GENERAL MOTORS COMPANY

7. Grind the edges of the front side door outer panel (1) to separate the outer door panel from the door shell.

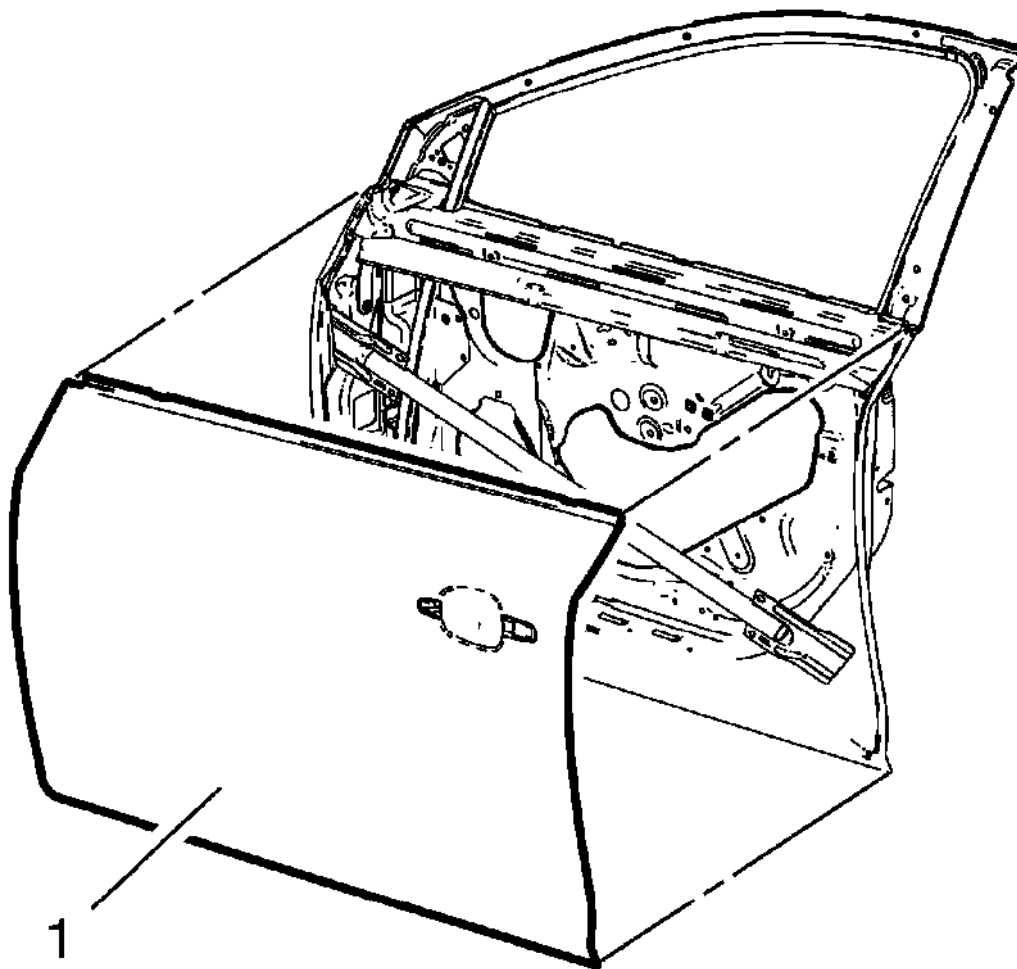


Fig. 169: Front Side Door Outer Door Panel
Courtesy of GENERAL MOTORS COMPANY

8. Remove the front side door outer door panel (1).
9. Note the location of the adhesive for installation of the service assembly.
10. Remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair**.
11. Straighten the edges of the door shell.

Installation Procedure

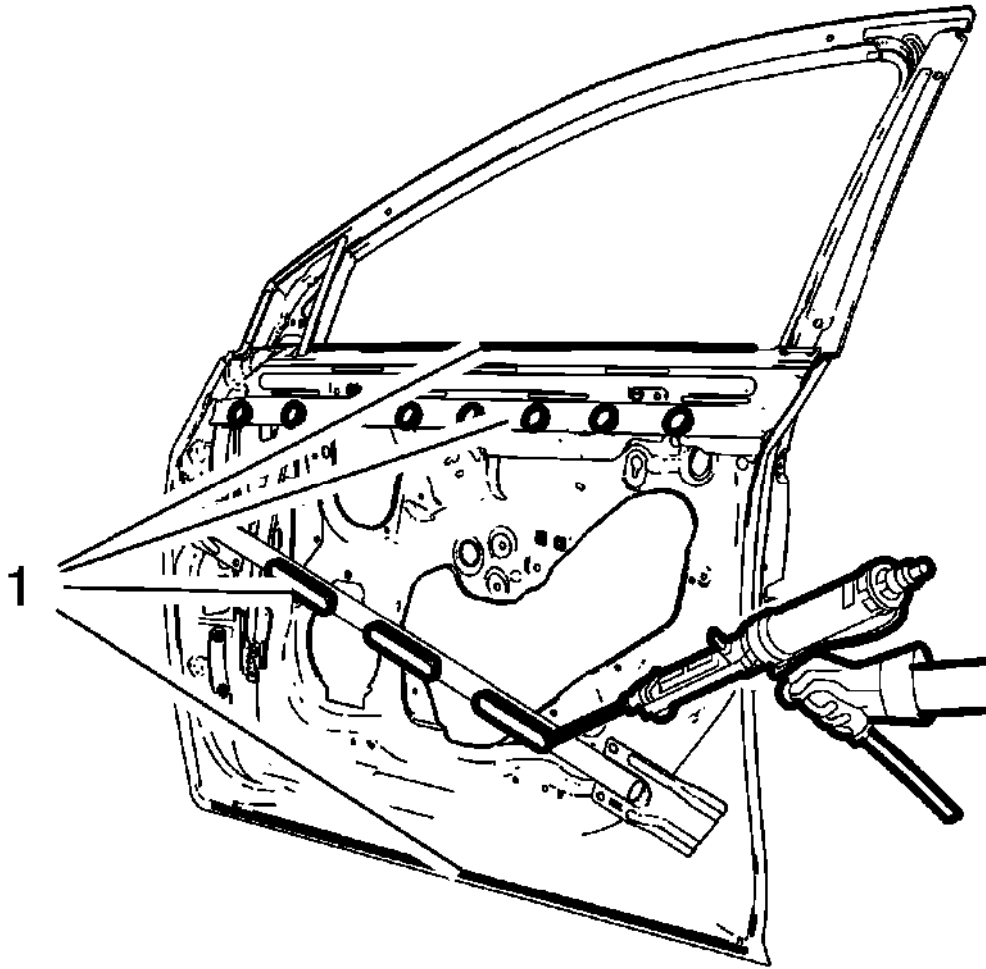


Fig. 170: Applying Urethane Adhesive To Front Side Door
Courtesy of GENERAL MOTORS COMPANY

1. Apply urethane adhesive (1) to the front side door as noted from the original panel.
2. Align the front side door outer panel.
3. Verify the fit of the front side door outer panel.
4. Clamp the front side door outer panel into position.
5. Using a hammer re-hem the hem flanges around the door shell.

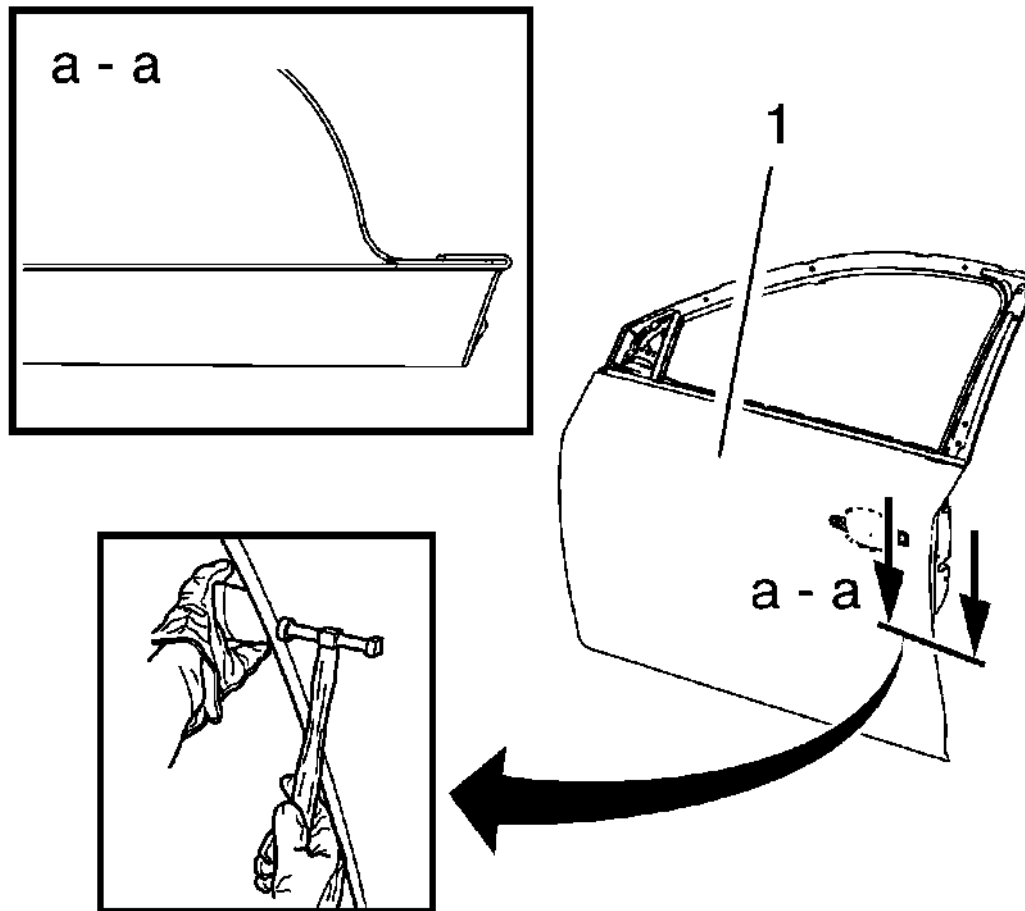


Fig. 171: Hammering In Stages Along Hem Flanges Of Front Side Door Outer Panel
 Courtesy of GENERAL MOTORS COMPANY

6. Continue to hammer in stages along the hem flanges of the front side door outer panel (1).
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
8. Install the outside rearview mirror. Refer to **Outside Rearview Mirror Replacement** .
9. Install the front side door outside handle. Refer to **Front Side Door Outside Handle Replacement** .
10. Install the front side door. Refer to **Front Side Door Replacement** .
11. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
12. Install all related panels and components.
13. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
14. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

REAR SIDE DOOR OUTER PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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 the rear side door. Refer to Rear Side Door Replacement .
4. Remove the rear side door outside handle. Refer to Rear Side Door Outside Handle Replacement .
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to Anti-Corrosion Treatment and Repair .

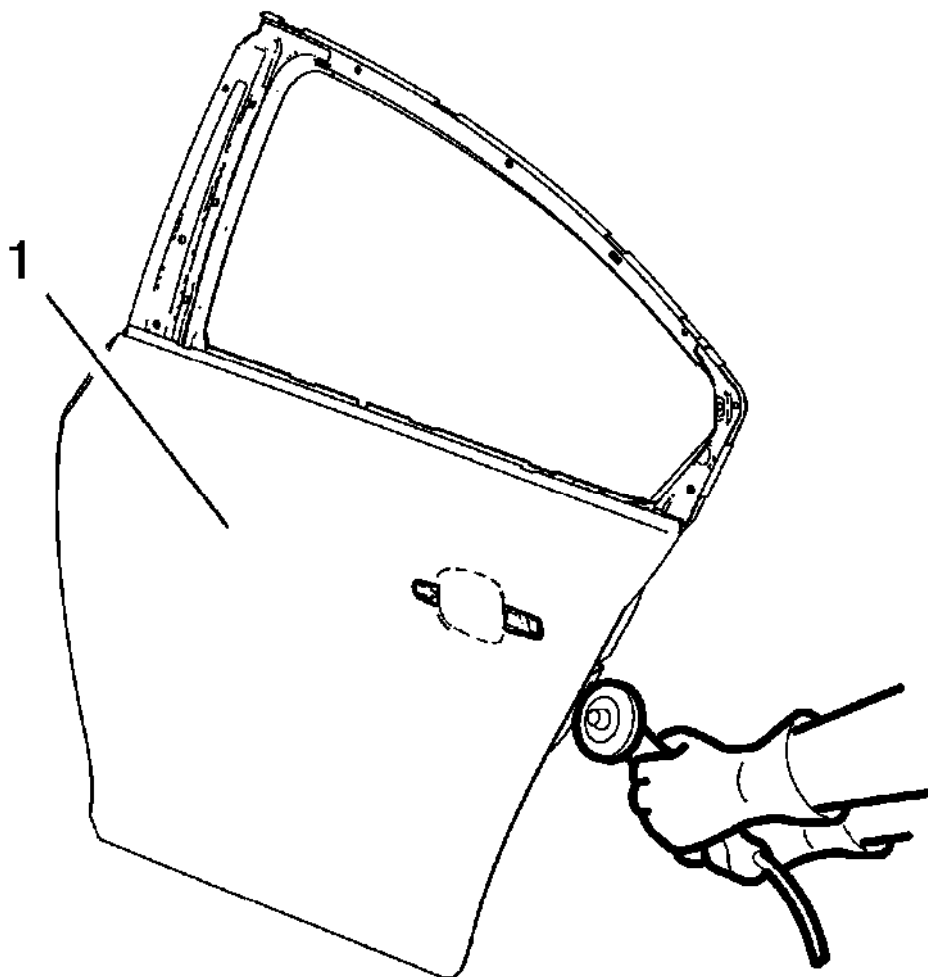


Fig. 172: Grinding Edges Of Rear Side Door Outer Panel
Courtesy of GENERAL MOTORS COMPANY

6. Grind the edges of the rear side door outer panel (1) to separate the outer door panel from the door shell.

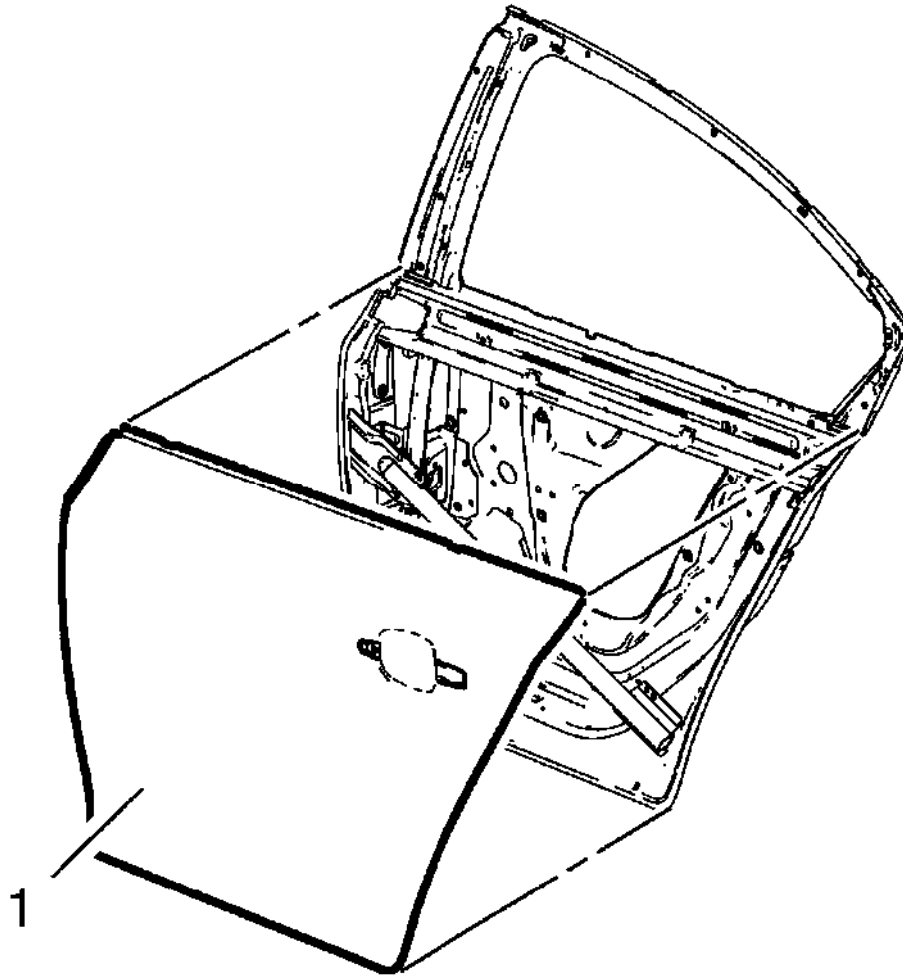


Fig. 173: Rear Side Door Outer Door Panel
Courtesy of GENERAL MOTORS COMPANY

7. Remove the rear side door outer door panel (1).
8. Remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair**.
9. Straighten the edges of the door shell.

Installation Procedure

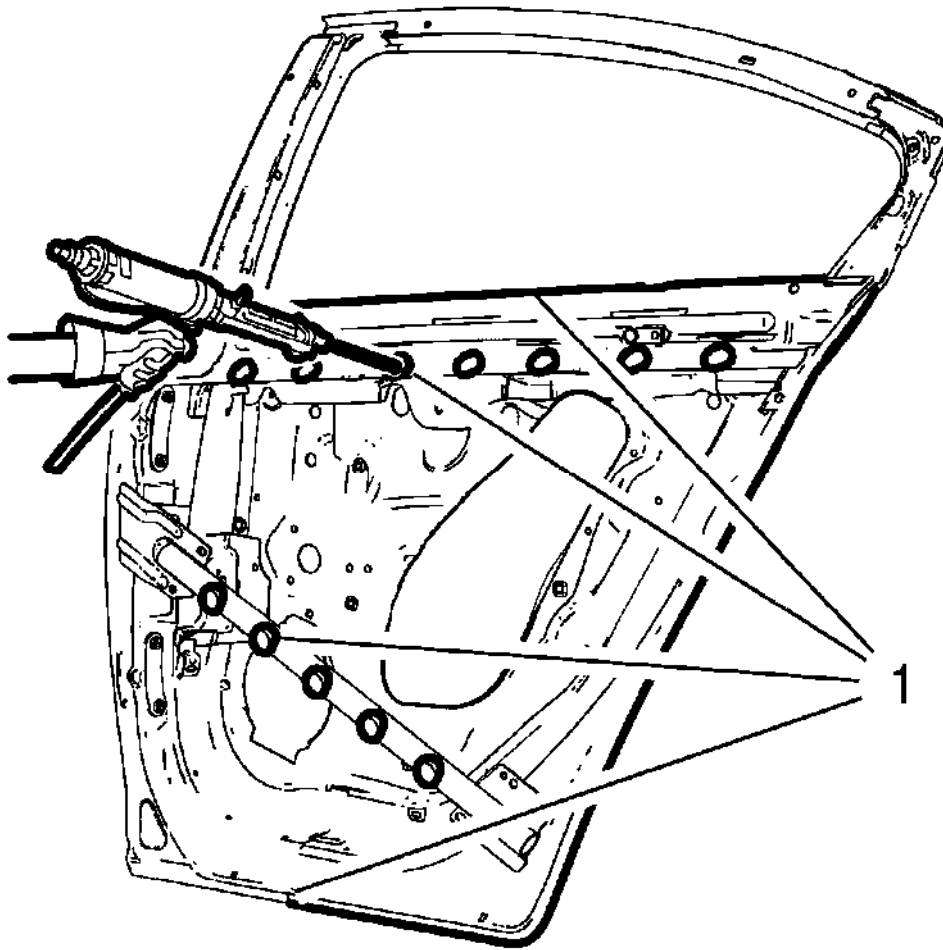


Fig. 174: Applying Urethane Adhesive To Rear Side Door
Courtesy of GENERAL MOTORS COMPANY

1. Apply urethane adhesive (1) to the rear side door as noted from the original panel.
2. Align the rear side door outer panel.
3. Verify the fit of the rear side door outer panel.
4. Clamp the rear side door outer panel into position.
5. Using a hammer re-hem the hem flanges around the door shell.

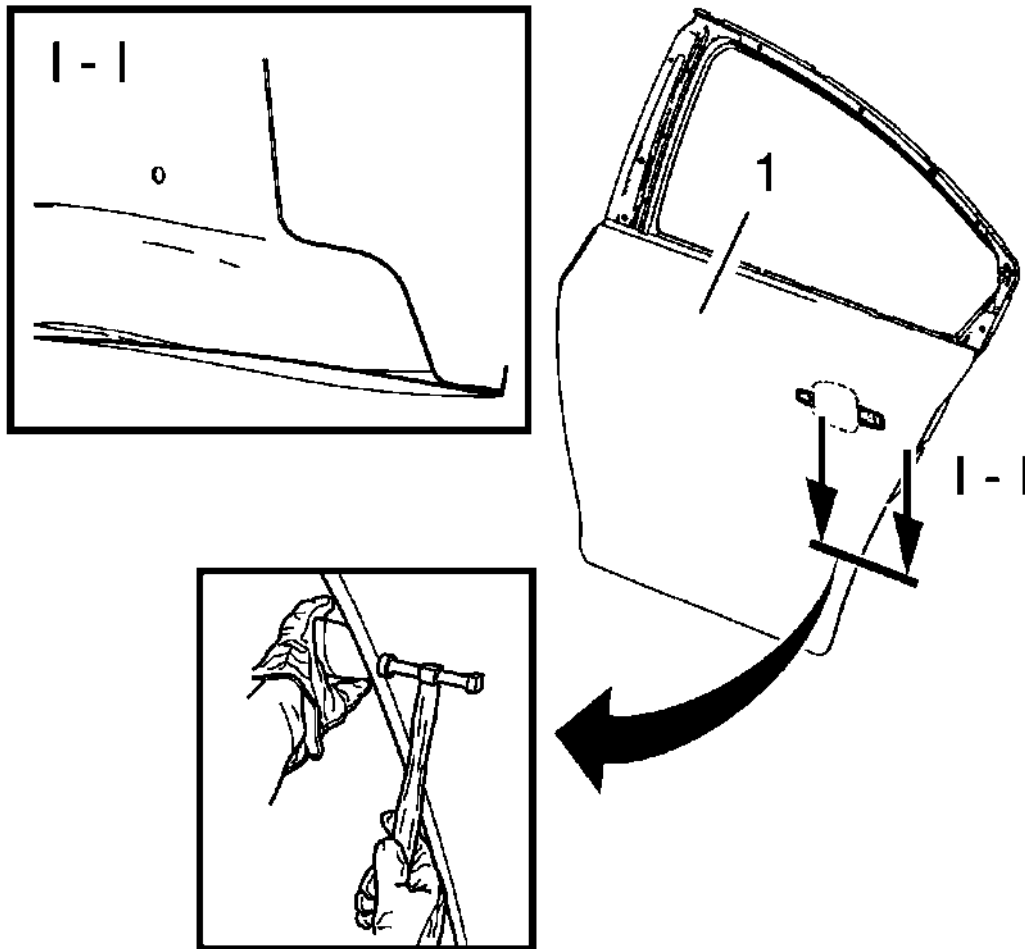


Fig. 175: Hammering In Stages Along Hem Flanges Of Rear Side Door Outer Panel
 Courtesy of GENERAL MOTORS COMPANY

6. Continue to hammer in stages along the hem flanges of the rear side door outer panel (1).
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair**.
8. Install the rear side door outside handle. Refer to **Rear Side Door Outside Handle Replacement**.
9. Install the rear side door. Refer to **Rear Side Door Replacement**.
10. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems**.
11. Install all related panels and components.
12. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection**.
13. Enable the SIR system. Refer to **SIR Disabling and Enabling**.

REAR RAIL SECTIONING

Removal Procedure

2013 Chevrolet Cruze

2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

WARNING: Refer to Approved Equipment for Collision Repair Warning .

WARNING: Refer to Collision Sectioning Warning .

WARNING: Refer to Glass and Sheet Metal Handling Warning .

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. Refer to Anti-Corrosion Treatment and Repair .

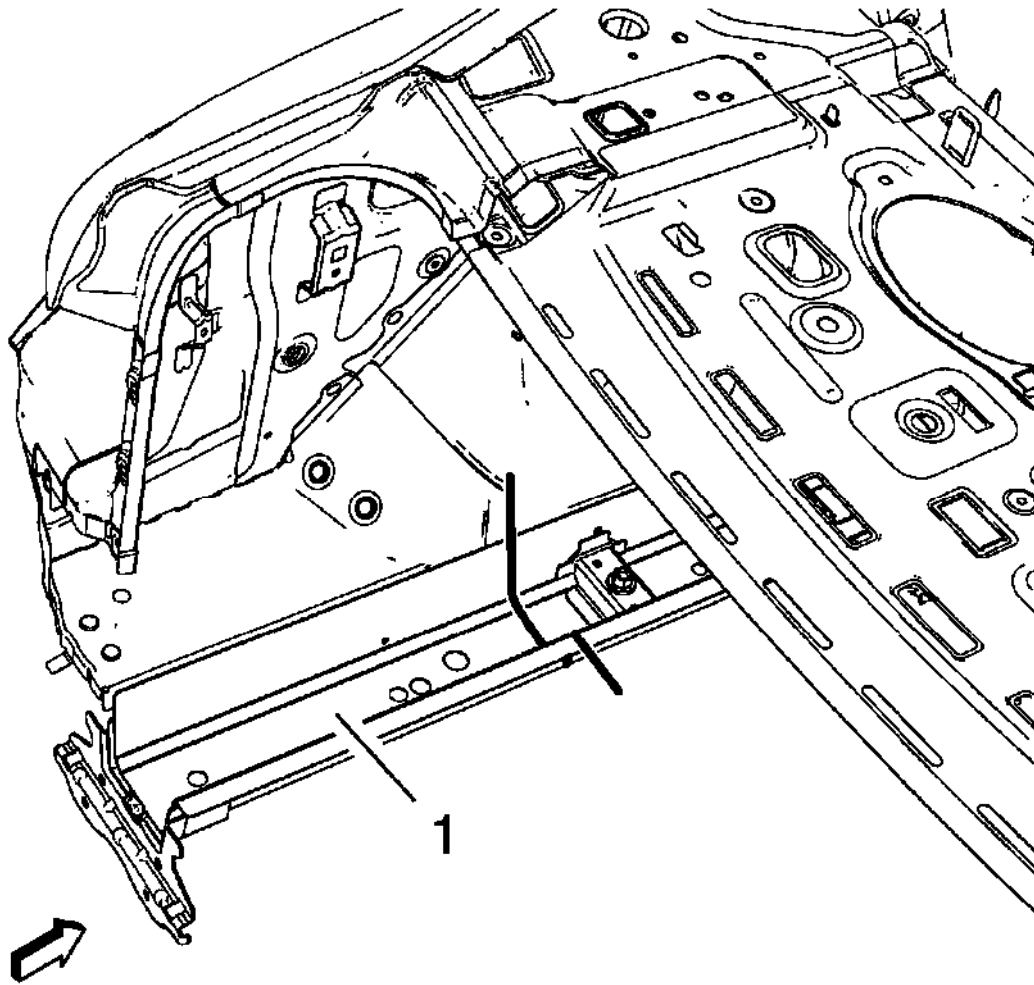


Fig. 176: Cut Lines On Rear Side Rail
Courtesy of GENERAL MOTORS COMPANY

6. Create cut lines on the rear side rail (1).

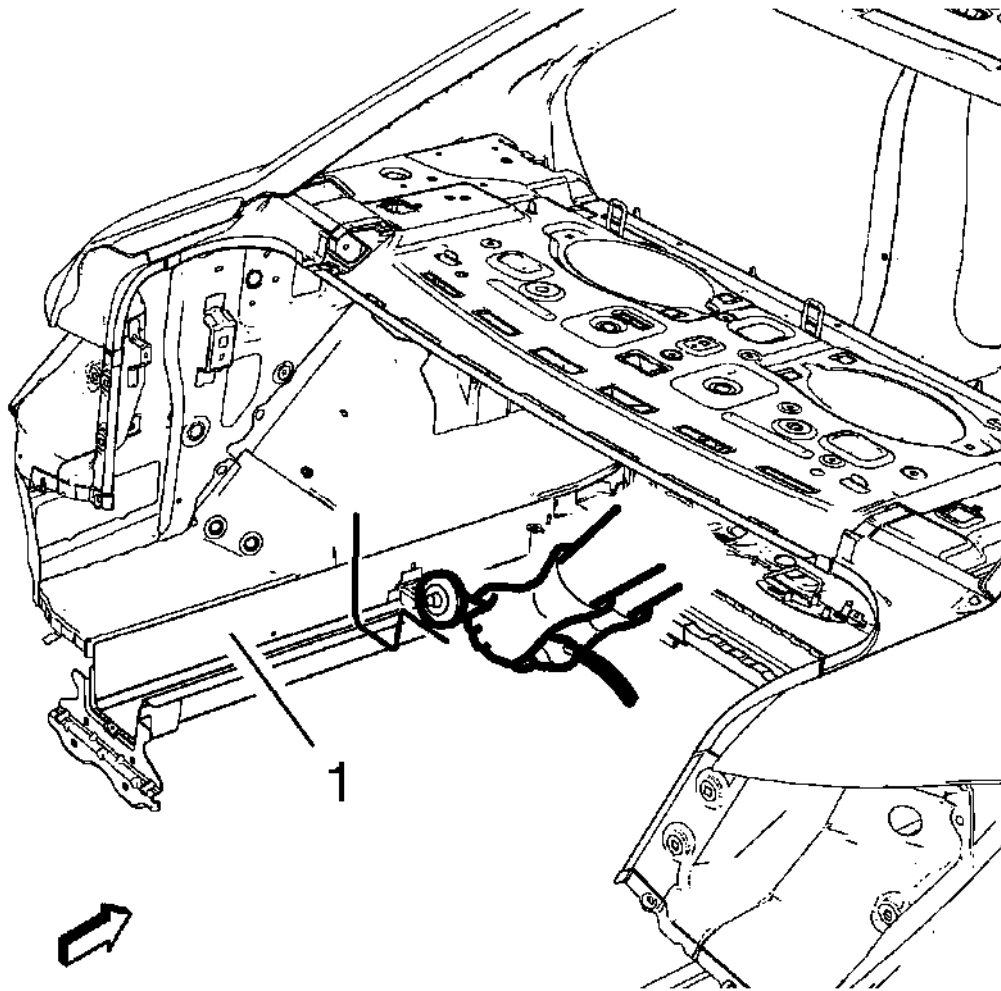


Fig. 177: Cutting Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any other panels or reinforcements.

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

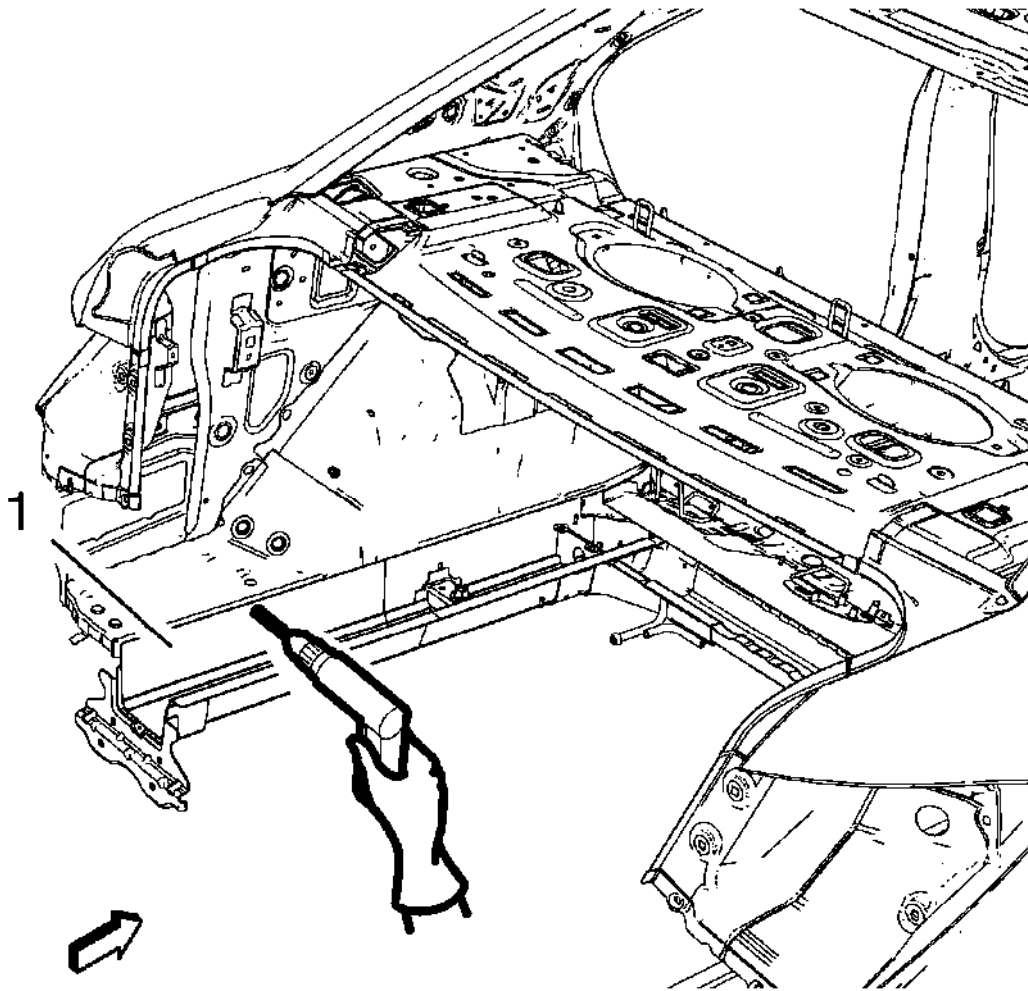


Fig. 178: Drilling Factory Welds Of Rear Side Rail
Courtesy of GENERAL MOTORS COMPANY

8. Locate and mark all the necessary factory welds of the rear side rail (1).
9. Drill all factory welds. Note the number and location of welds for installation of the service assembly.

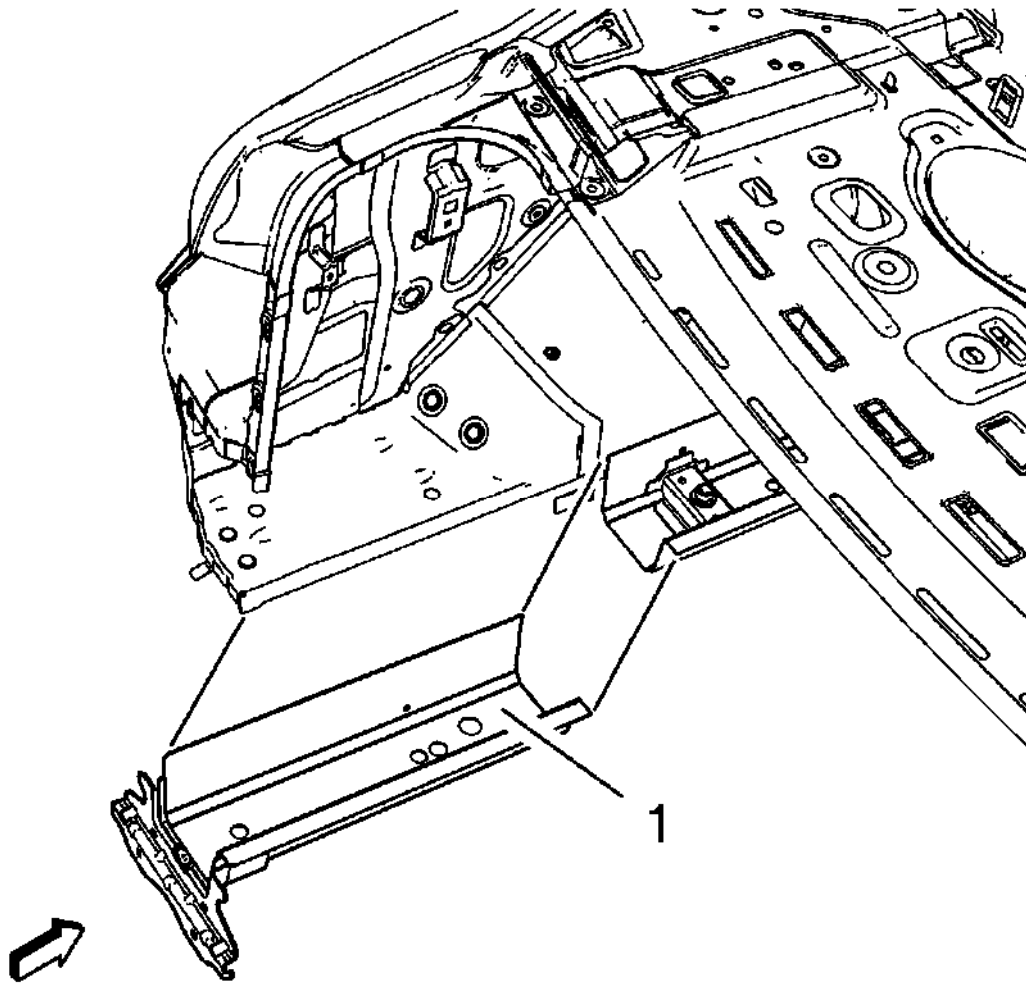


Fig. 179: Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

10. Remove the damaged rear side rail (1).

Installation Procedure

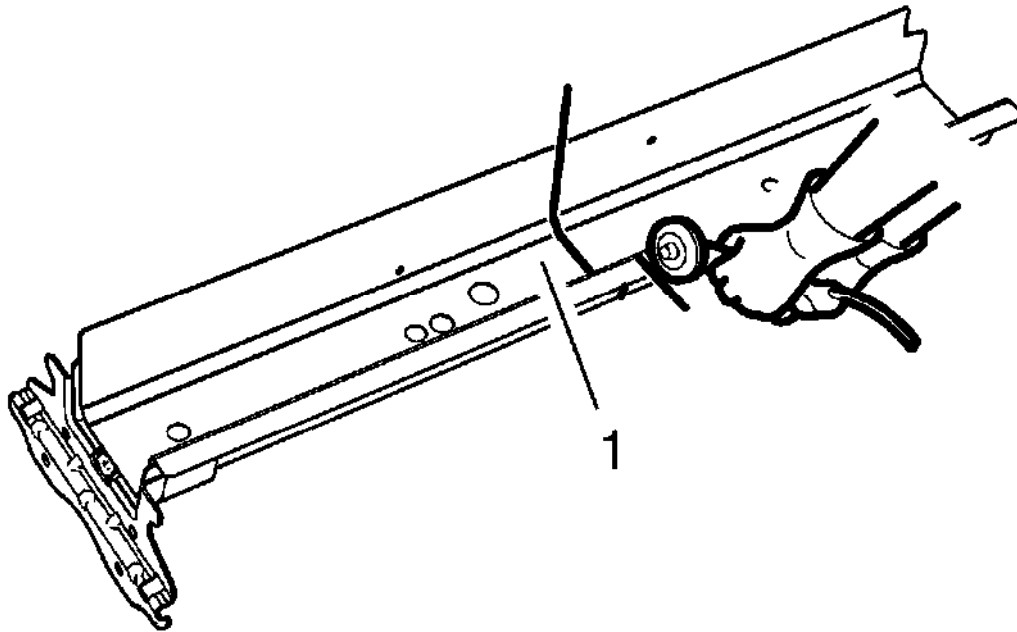


Fig. 180: Cutting New Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

1. Cut the rear side rail (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. Prepare all mating surfaces as necessary.
3. Align the rear side rail.

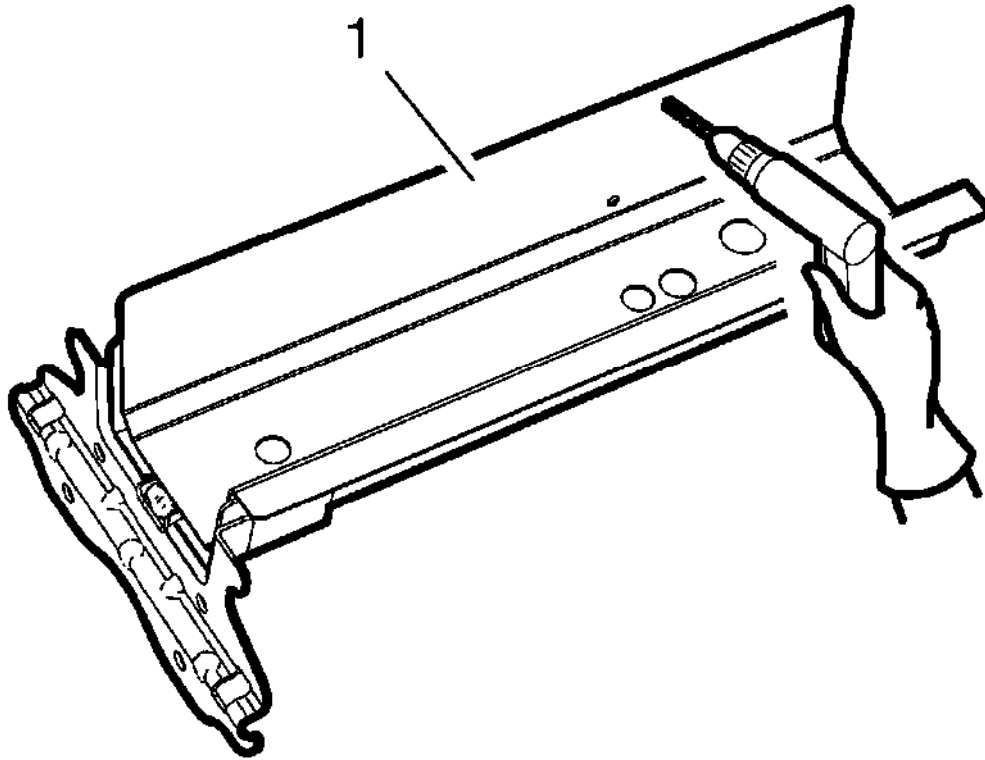


Fig. 181: Drill Holes For Plug Welding New Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

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

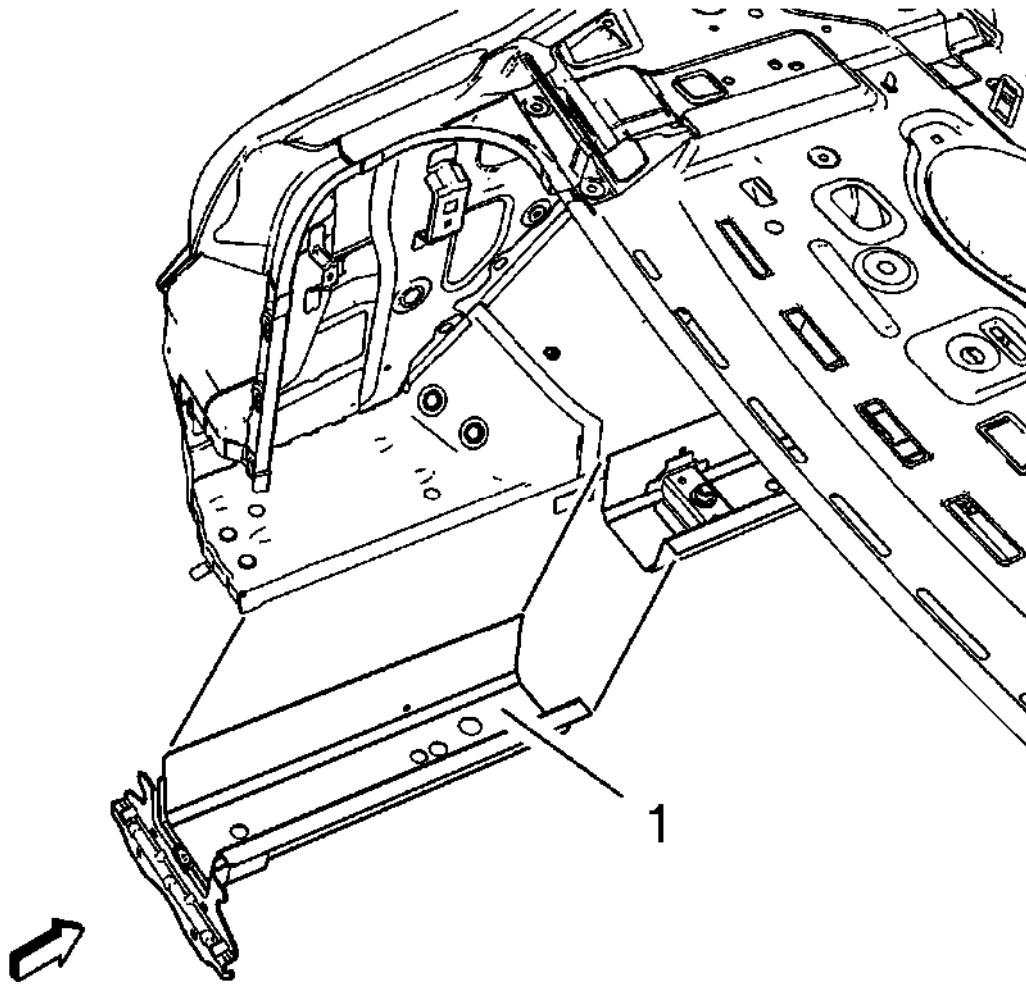


Fig. 182: Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

6. Position the rear side rail (1) on the vehicle.
7. Verify the fit of the rear side rail.
8. Clamp the rear side rail into position.

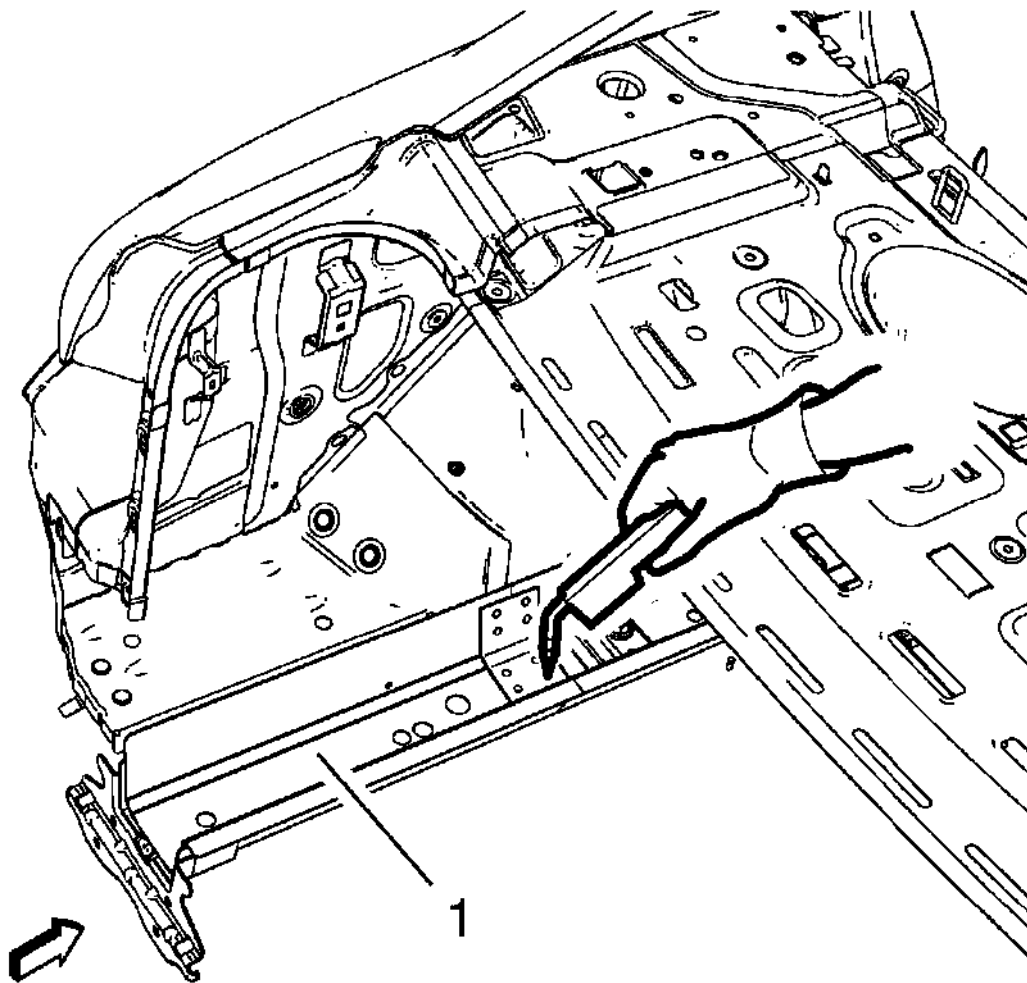


Fig. 183: Welding Rear Side Rail

Courtesy of GENERAL MOTORS COMPANY

9. Plug weld the rear side rail (1) accordingly.
10. 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.
11. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
12. Paint the repaired area. Refer to **Basecoat/Clearcoat Paint Systems** .
13. Install all related panels and components.
14. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
15. Enable the SIR System. Refer to **SIR Disabling and Enabling** .

RESISTANCE SPOT WELDED FULL PANEL REPLACEMENT

2013 Chevrolet Cruze

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NOTE: Use this procedure for all panels that are replaced at the factory seams, unless a specific procedure exists in the Collision Repair section of this vehicle's service information.

Removal Procedure

WARNING: Refer to Approved Equipment for Collision Repair Warning .

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. Repair as much of the damage as possible to factory specifications.

WARNING: Refer to Foam Sound Deadeners Warning .

5. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to Anti-Corrosion Treatment and Repair .

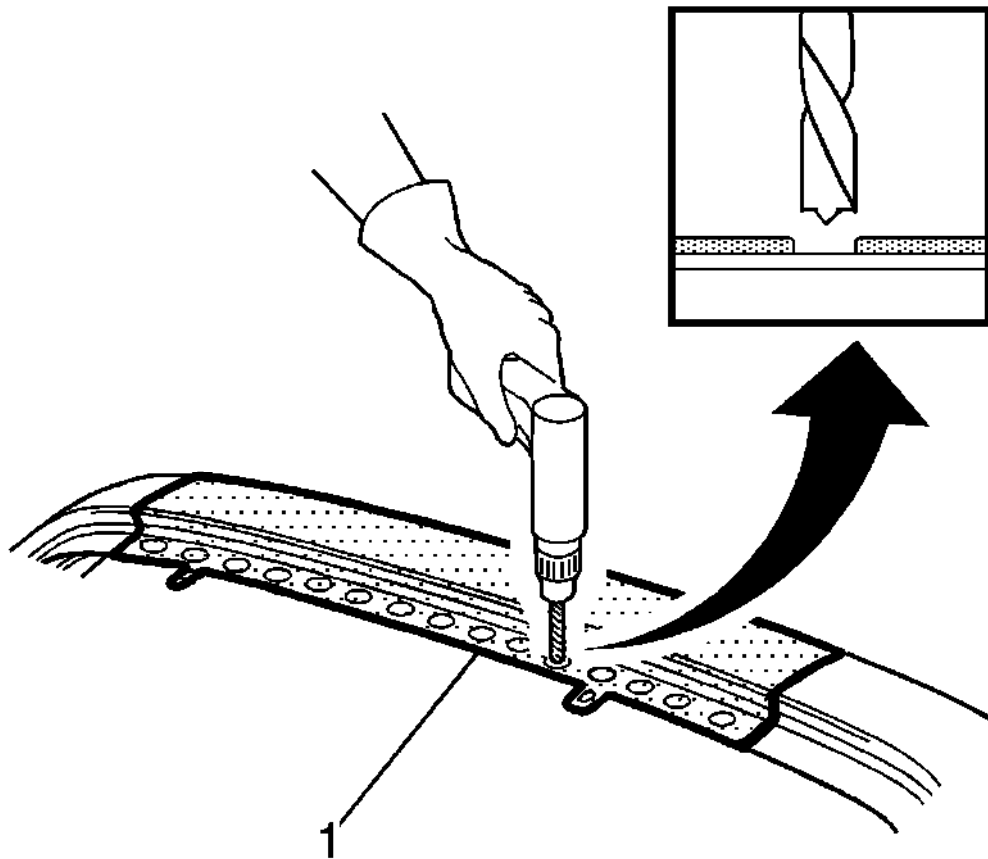


Fig. 184: Drilling Out Factory Welds (Full Panel)

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

6. Locate and drill out all factory welds (1). Note the number and location of the welds for installation of the service part.

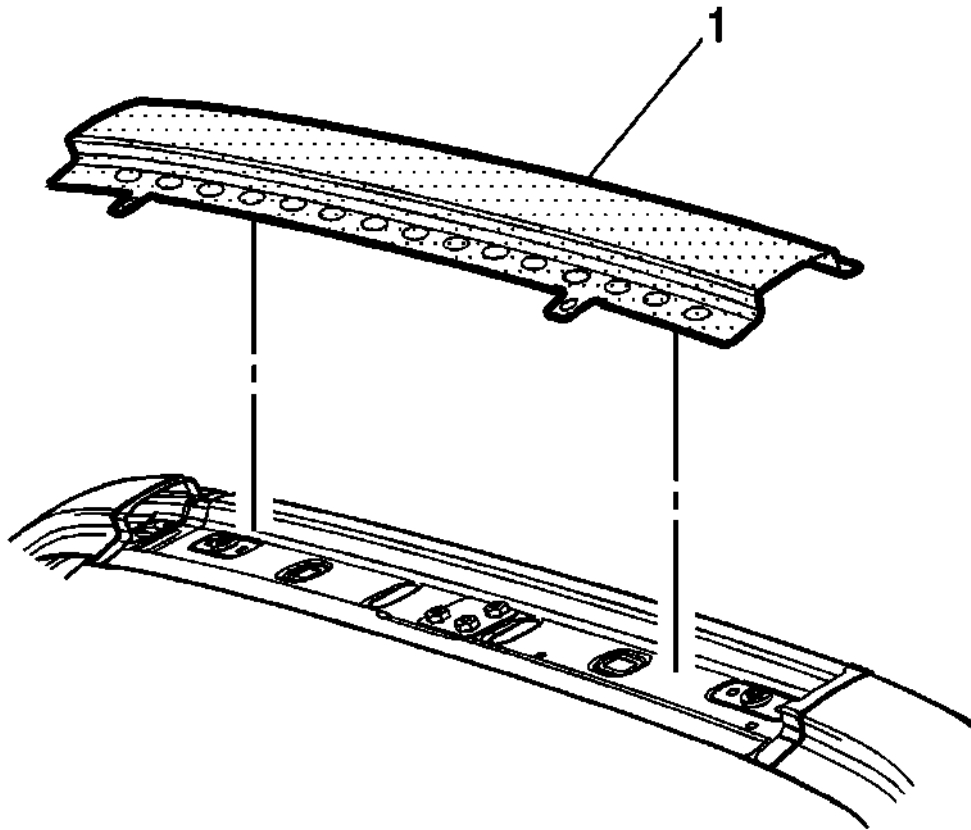


Fig. 185: View Of Damaged Part (Full Panel)
Courtesy of GENERAL MOTORS COMPANY

7. Remove the damaged part (1).

Installation Procedure

NOTE: If the location of the original plug weld holes cannot be determined, space the plug weld holes every 40 mm (1 1/2 in) apart. Where structural adhesive was present, space the plug weld holes every 20 mm (3/4 in) apart.

1. Prepare all mating surfaces as necessary.
2. Apply GM-approved Weld-Thru Coating or equivalent to all mating surfaces. Refer to **Anti-Corrosion Treatment and Repair**.
3. Position the service part. Clamp in place.

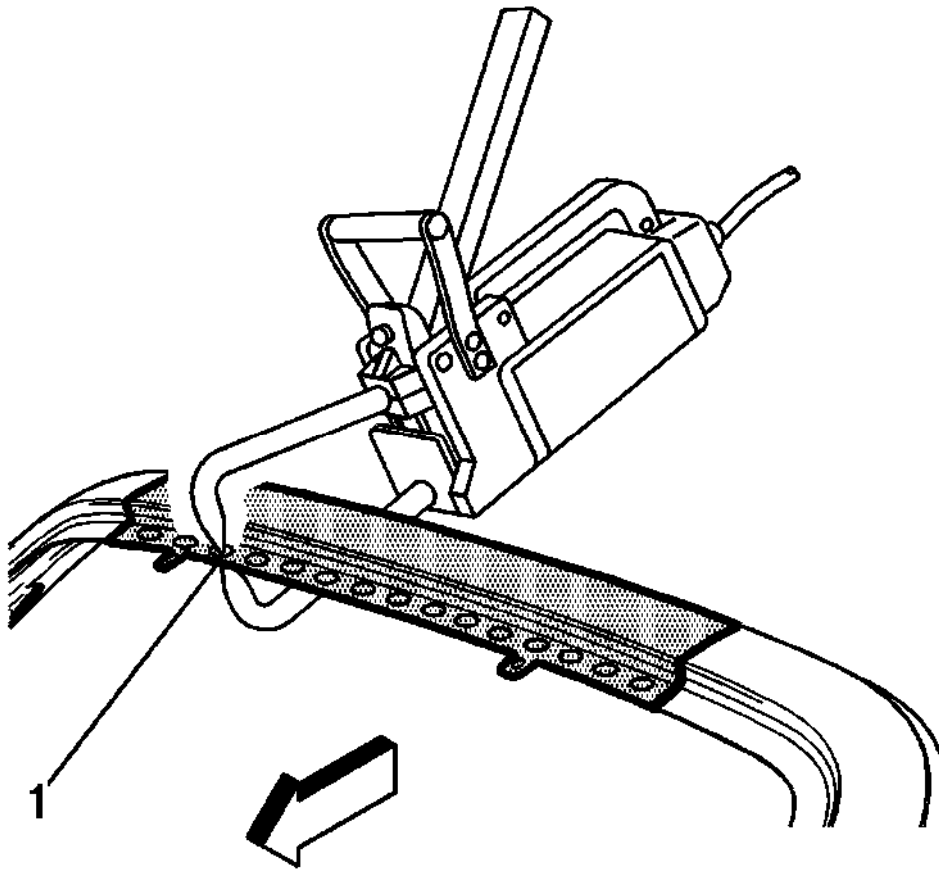


Fig. 186: Welding New Part (Full Panel)

Courtesy of GENERAL MOTORS COMPANY

4. Apply welds accordingly (1).
5. Clean and prepare all welded surfaces.
6. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
7. Paint the repair area. Refer to **Basecoat/Clearcoat Paint Systems** .
8. Install all related panels and components.
9. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
10. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

MIG WELDED FULL PANEL REPLACEMENT

Removal Procedure

WARNING: Refer to **Approved Equipment for Collision Repair Warning** .

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2013 ACCESSORIES & EQUIPMENT Collision Repair - Cruze

NOTE: Use this procedure for all panels that are replaced at the factory seams, unless a specific procedure exists in the Collision Repair section of this vehicle's service information.

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. Repair as much of the damage as possible to factory specifications.

WARNING: Refer to **Foam Sound Deadeners Warning** .

5. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .

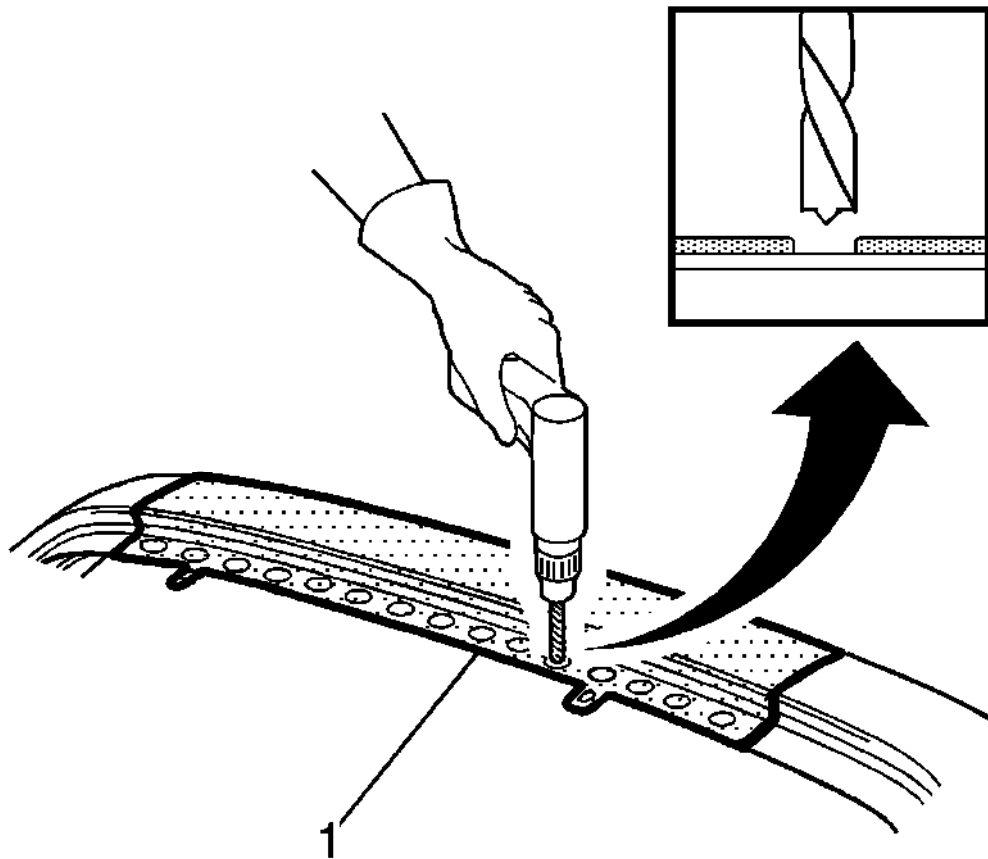


Fig. 187: Drilling Out Factory Welds (Full Panel)

Courtesy of GENERAL MOTORS COMPANY

NOTE: Do not damage any inner panels or reinforcements.

6. Locate and drill out all factory welds (1). Note the number and location of the welds for installation of the service part.

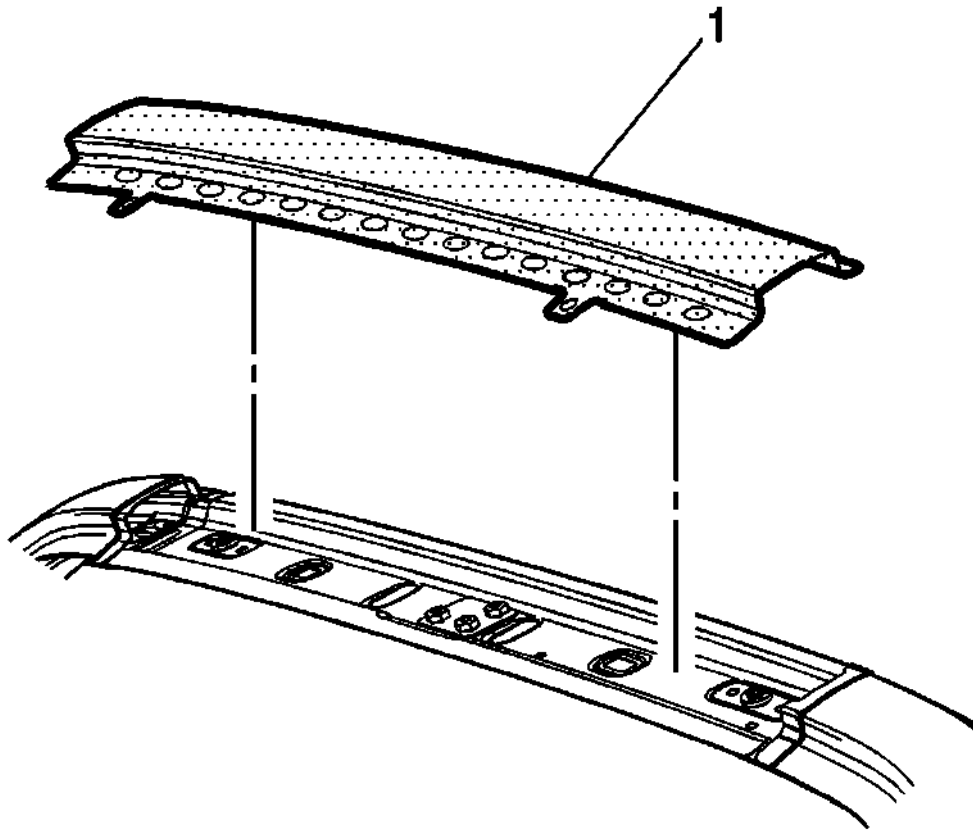


Fig. 188: View Of Damaged Part (Full Panel)
Courtesy of GENERAL MOTORS COMPANY

7. Remove the damaged part (1).

Installation Procedure

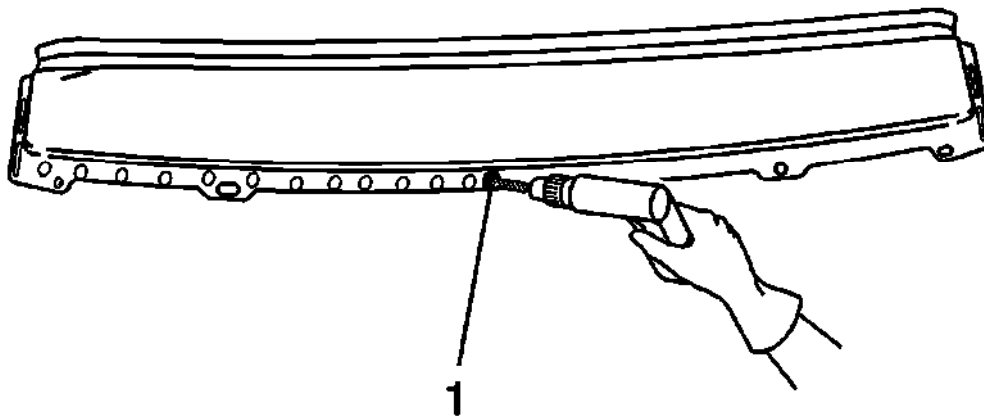


Fig. 189: Drilling Plug Weld Holes (Full Panel)

Courtesy of GENERAL MOTORS COMPANY

NOTE: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart. Where structural adhesive was present, space the plug weld holes every 20 mm (3/4 in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel (1).
2. Prepare all attachment surfaces as necessary.
3. Prepare all mating surfaces as necessary.
4. Apply GM-approved Weld-Thru Coating or equivalent to all mating surfaces. Refer to **Anti-Corrosion Treatment and Repair**.
5. Position the service part. Clamp in place.

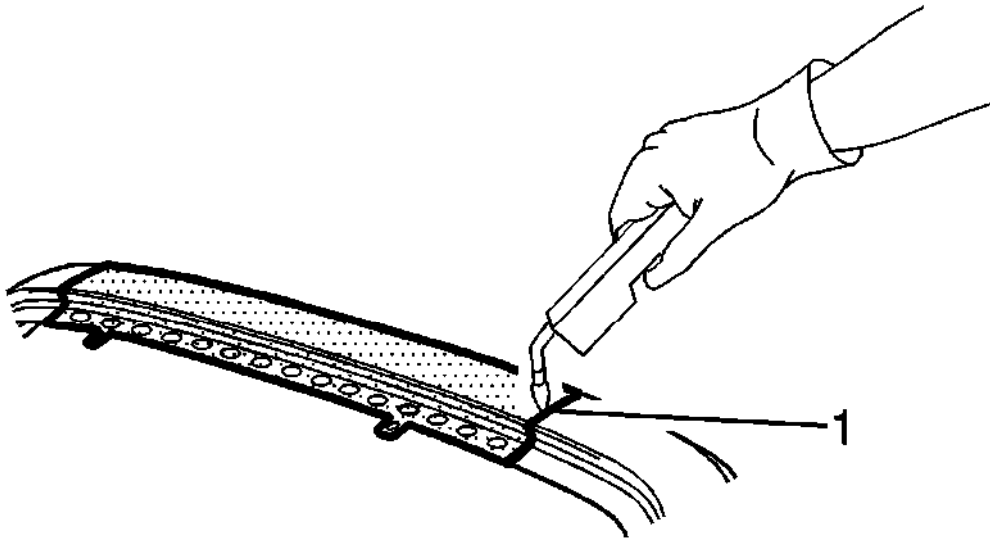


Fig. 190: Plug Welding Service Part (Full Panel)

Courtesy of GENERAL MOTORS COMPANY

6. Plug weld accordingly (1).
7. Clean and prepare all welded surfaces.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary. Refer to **Anti-Corrosion Treatment and Repair** .
9. Paint the repair area. Refer to **Basecoat/Clearcoat Paint Systems** .
10. Install all related panels and components.
11. Connect the negative battery cable. Refer to **Battery Negative Cable Disconnection and Connection** .
12. Enable the SIR system. Refer to **SIR Disabling and Enabling** .

DESCRIPTION AND OPERATION

DUAL PHASE STEEL

This information provides repair recommendations and general guidelines for steel classified as Dual Phase

Steel, also known as DP. This type of steel normally has a tensile strength below 780 MPa.

General Motors recommends the following when repairing or replacing this type of steel during collision repair.

NOTE: **The use of heat to repair damage is not recommended for this classification of steel.**

Recommended Repairs

- Cold repairs can be performed on this type of steel, unless the damage includes kinks. If the damage includes kinks, the part should be replaced.
- Sectioning or partial replacement of this type of steel is recommended only at approved locations, in a specific sectioning procedure.
- This type of steel can be used as a sleeve, or backer plate, when recommended in a specific sectioning procedure.
- Squeeze Resistance Spot Welding can be used to replace factory spot welds, where applicable.
- MIG plug welding and MIG stitch welding can be used on this type of steel.
- MIG Brazing can be used on this type of steel.

HIGH STRENGTH LOW ALLOY STEEL

This information provides repair recommendations and general guidelines for steel classified as High Strength Low Alloy Steel, also known as HSLA. This type of steel normally has a tensile strength range from 300-700 MPa.

General Motors recommends the following when repairing or replacing this type of steel during collision repair.

Recommended Repairs

- Cold repairs can be performed on this type of steel, unless the damage includes kinks. If the damage includes kinks, the part should be replaced.
- Controlled use of heat can be used to repair damage, if the heat does not exceed 650°C (1200°F). The heat should be applied a maximum of 2 times, for up to 90 seconds.
- Sectioning or partial replacement of this type of steel is recommended only at approved locations, in a specific sectioning procedure.
- This type of steel can be used as a sleeve, or backer plate, during sectioning procedures.
- Squeeze Resistance Spot Welding can be used to replace factory spot welds, where applicable.
- MIG plug welding and MIG stitch welding can be used on this type of steel.
- MIG Brazing can be used on this type of steel.

MILD STEEL

This information provides repair recommendations and general guidelines for steel classified as Mild Steel. This type of steel normally has a tensile strength less than 270 MPa. This includes the common steel names of:

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- Mild Steel
- Bake Hardenable Steel (BH)
- Solid Solution Strengthened Steel

General Motors recommends the following when repairing or replacing this type of steel during collision repair.

Recommended Repairs:

- Cold repairs can be performed on this type of steel, unless the damage includes kinks. If the damage includes kinks, the part should be replaced.
- Controlled use of heat can be used to repair damage, if the heat does not exceed 650°C (1200°F). The heat should be applied a maximum of 2 times, for up to 90 seconds.
- Sectioning or partial replacement of this type of steel is recommended only at approved locations, in a specific sectioning procedure.
- This type of steel can be used as a sleeve, or backer plate, when recommended in a specific sectioning procedure.
- Squeeze Resistance Spot Welding can be used to replace factory spot welds, where applicable
- MIG plug welding and MIG stitch welding can be used on this type of steel.
- MIG Brazing can be used on this type of steel.

ULTRA HIGH STRENGTH DUAL PHASE STEEL

This information provides repair recommendations and general guidelines for steel classified as Ultra High Strength Dual Phase Steel, also known as DPX. This type of steel normally has a tensile strength of 780 MPa, or greater.

General Motors recommends the following when repairing or replacing this type of steel during collision repair.

NOTE:

- **Repair of this type of steel is not recommended.**
- **This type of steel should be replaced at factory joints only. Sectioning or partial replacement is not recommended.**
- **The use of heat to repair damage is not recommended for this type of steel.**
- **Stitch Welding is not recommended for this type of steel (unless replacing a factory installed stitch weld).**
- **This type of steel should not be used as a backing reinforcement or a sleeve for a sectioning joint.**

Recommended Repairs:

- Squeeze Resistance Spot Welding can be used to replace factory spot welds, where applicable.
- MIG plug welding can be used to replace factory spot welds.
- MIG Brazing can be used to replace factory spot welds.