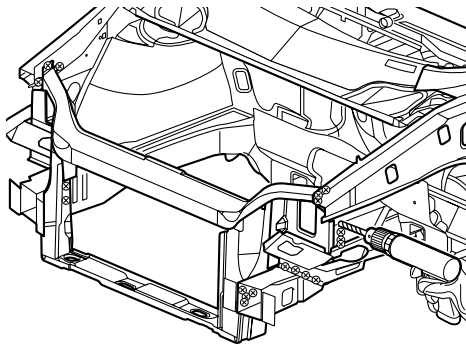
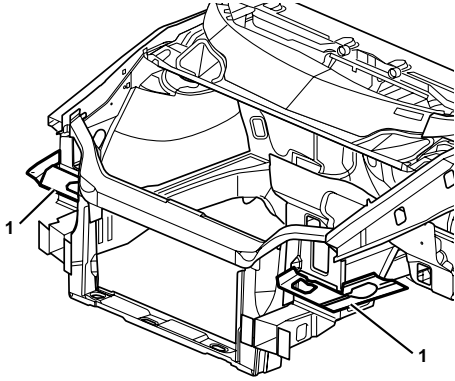


Radiator Support Replacement (Upper)

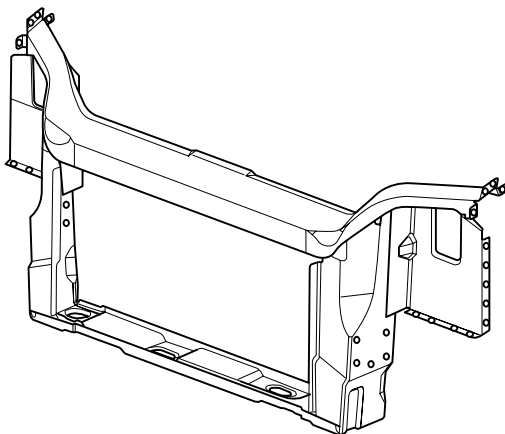
Removal Procedure

1. Remove all related panels and components including front fascia supports, right and left (1).
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Sealers
 - Sound deadeners
 - Anti-corrosion materials



IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the Radiator Support Assembly.
5. Remove the damaged Radiator Support Assembly.



Radiator Support Replacement (Upper)

Installation Procedure

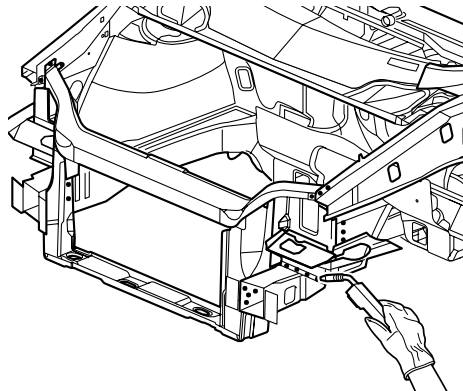
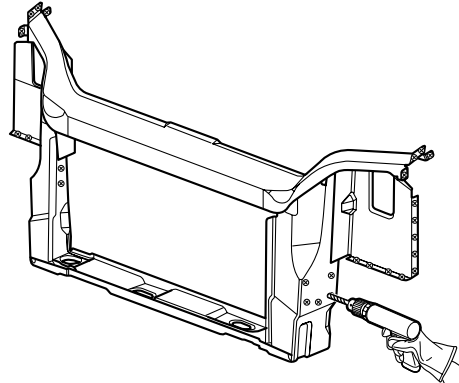
IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in) apart.

1. Drill 8 mm (5/16 in) plug weld holes as necessary in locations noted from the original panel.
2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.

4. Position the Radiator Support Assembly.
5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.



Radiator Support Replacement (Lower)

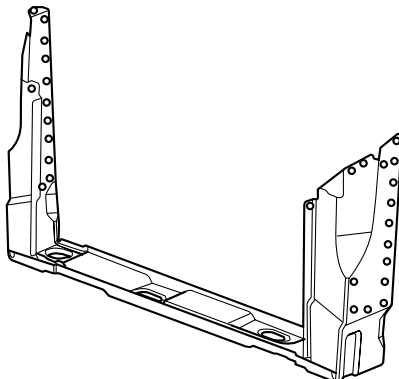
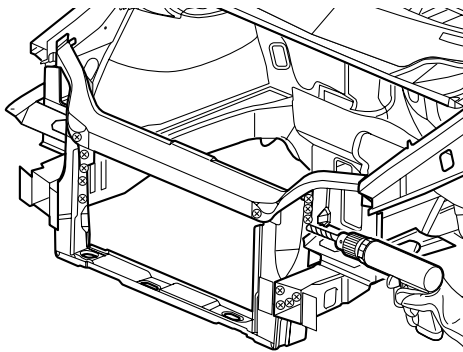
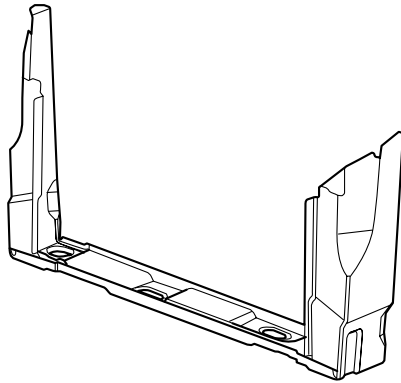
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Sealers
 - Sound deadeners
 - Anti-corrosion materials

IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the Lower Radiator Support.

5. Remove the damaged Lower Radiator Support.

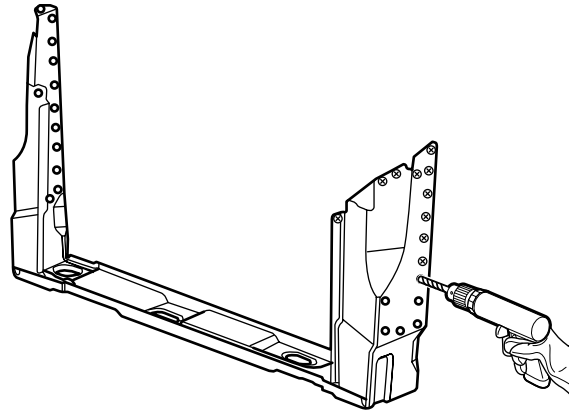


Radiator Support Replacement (Lower)

Installation Procedure

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in) apart.

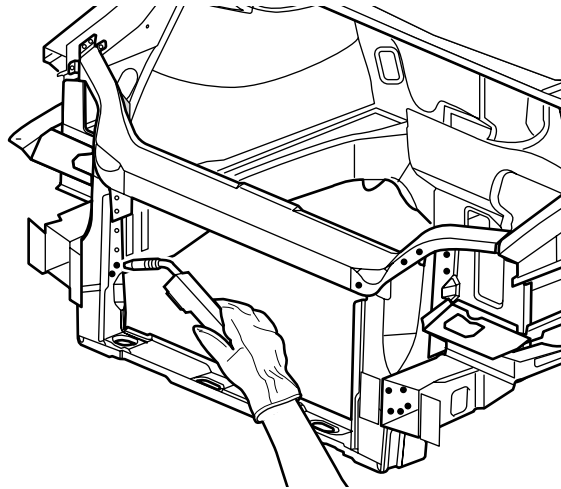
1. Drill 8 mm (5/16 in) plug weld holes as necessary in locations noted from the original panel.
2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.



4. Position the Lower Radiator Support.
5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

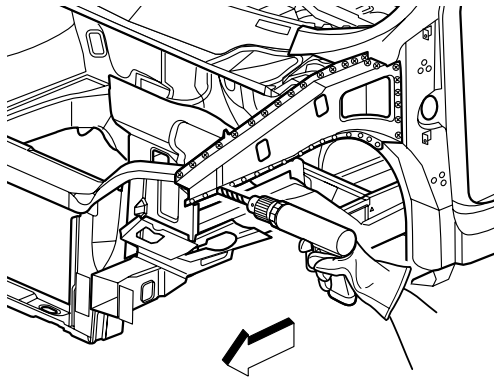
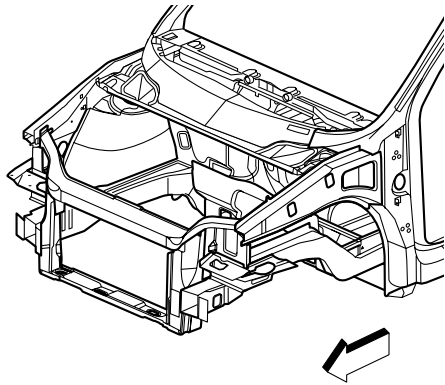
7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.



Rail Replacement (Upper)

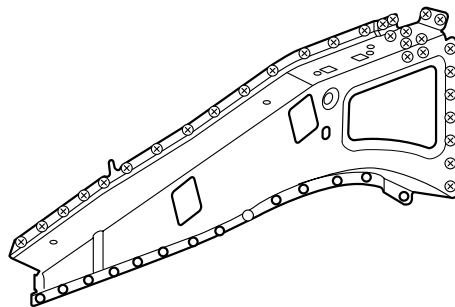
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers



IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the Front Upper Rail.



5. Remove the damaged Front Upper Rail.

Rail Replacement (Upper)

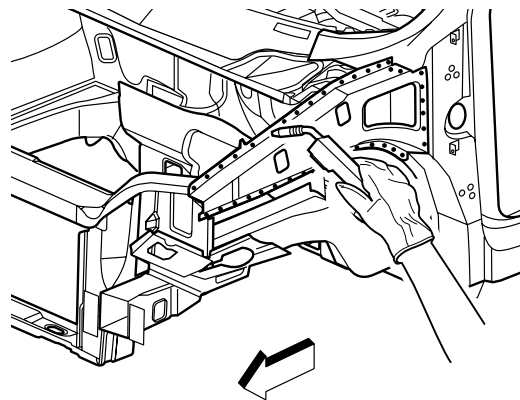
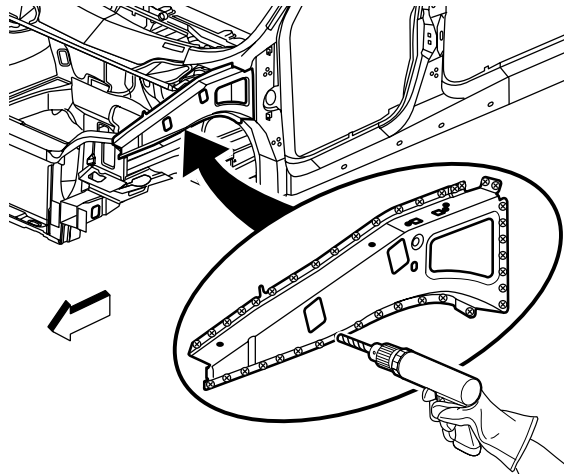
Installation Procedure

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in) apart.

1. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original front upper rail.
2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.
4. Position the Upper Rail.
5. Plug weld accordingly.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

6. Clean and prepare all welded surfaces.
7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.



Wheelhouse Replacement (Front)

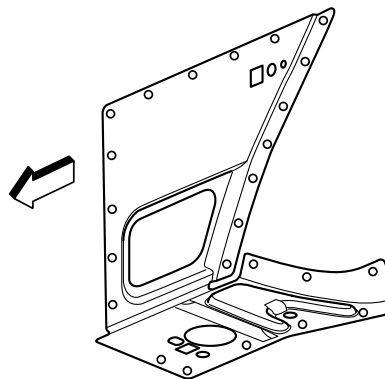
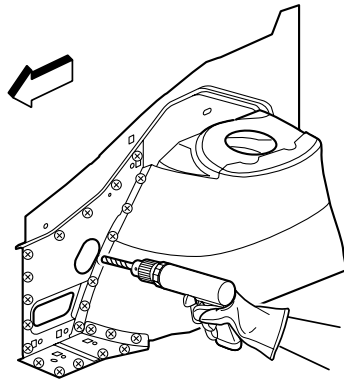
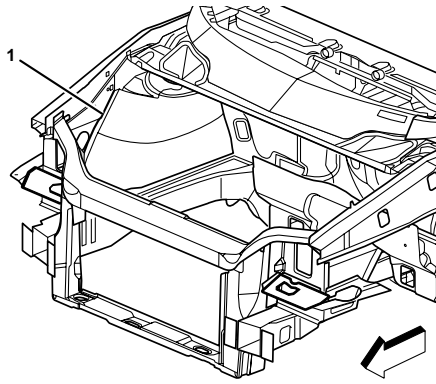
Removal Procedure

1. Remove all related panels and components in the area of the damaged apron extension (1).
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers

IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.

5. Remove the damaged apron extension.



Wheelhouse Replacement (Front)

Installation Procedure

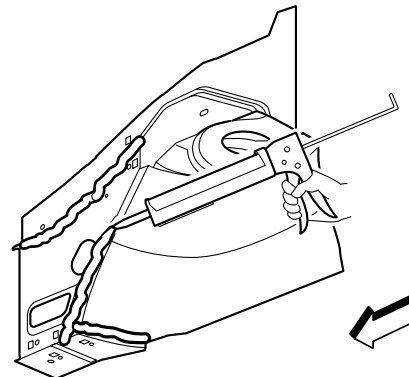
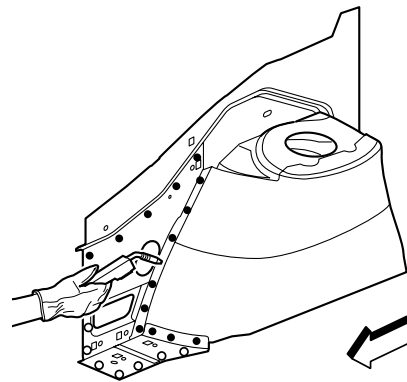
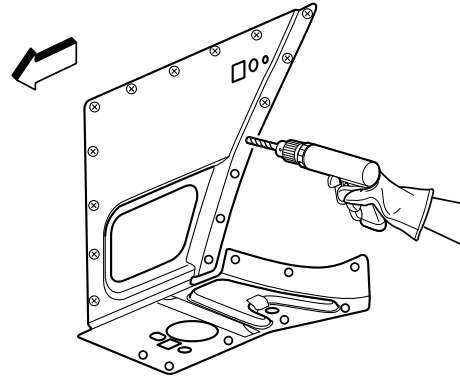
IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in) apart.

1. Drill 8 mm (5/16 in.) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all attachment surfaces as necessary.

IMPORTANT: Prior to refinishing, refer to the publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

3. Apply weld-thru primer to all bare metal surfaces.
4. Position the apron extension.
5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.

7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadening materials
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.

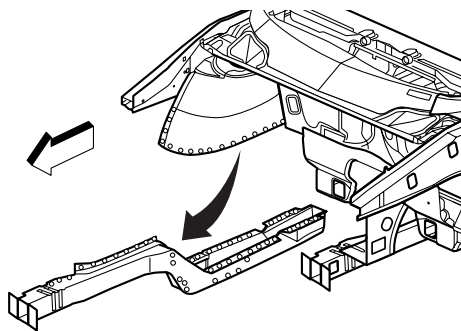
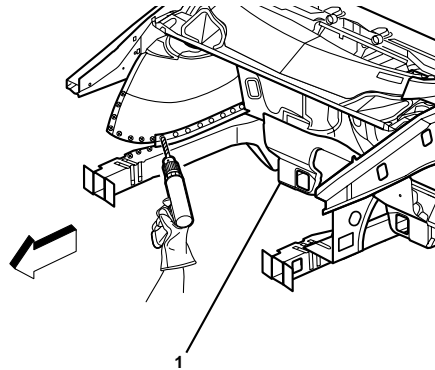
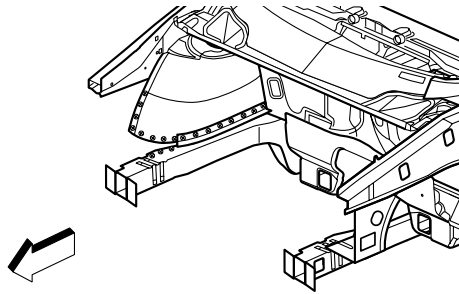


Rail Sub-Assembly Replacement (Front Lower)

Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
4. Separate the floor pan reinforcement (1) weld flanges from the inside of the lower rail. Care must be taken not to damage the weld flanges.

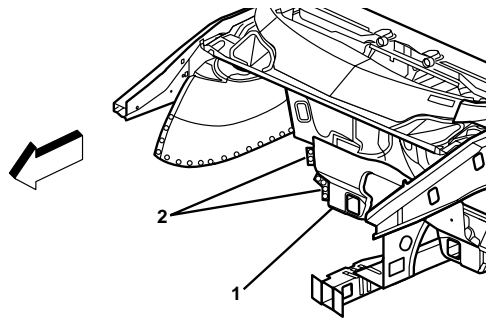
IMPORTANT: Do not damage any inner panels or reinforcements.
5. Locate and drill out all factory welds. Note the number and location of welds for installation of the Front Lower Rail.
6. Remove the damaged rail.



Rail Sub-Assembly Replacement (Front Lower)

Installation Procedure

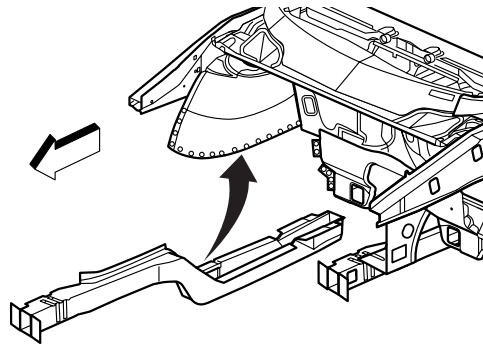
1. Prepare the mating surfaces of the floor pan reinforcement (1).
2. Turn the weld flanges outward (2) to be welded to the front lower rail.



3. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from removal.

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

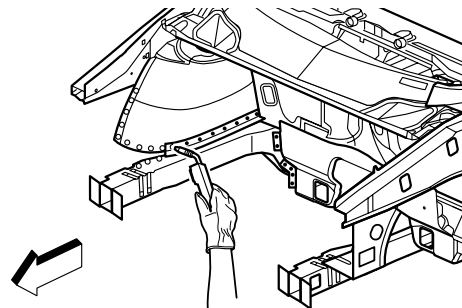
4. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel.
5. Prepare all attachment surfaces as necessary.
6. Apply weld-thru primer to all bare-metal surfaces.



7. Position the service part
8. Plug weld accordingly.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

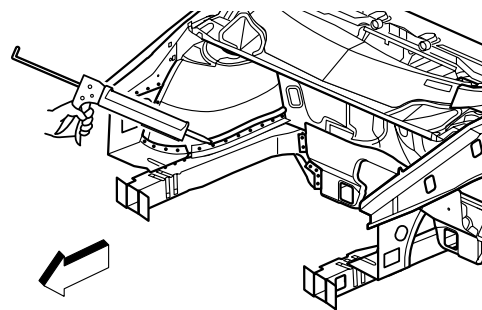
9. Clean and prepare all welded surfaces.



10. Apply the following as necessary :

- Anti-corrosion materials
- Sound deadeners
- Sealers

11. Refinish as necessary.
12. Install all related panels and components.



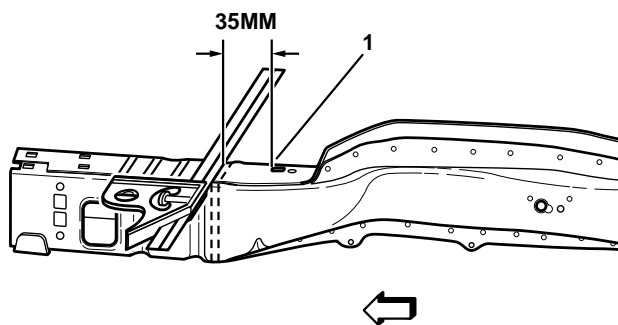
Left Front Lower Rail Sectioning

IMPORTANT: If the damage exceeds the recommended area for sectioning and the rail cannot be straightened, the complete rail must be replaced.

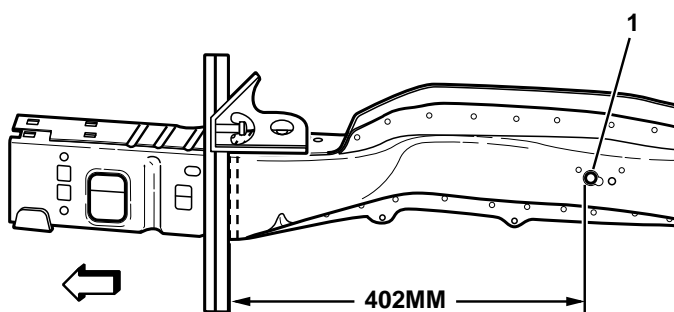
Sectioning procedures have been developed to simplify repair of the lower rails, providing the majority of the damage can be returned to factory specifications. This allows the damaged front section to be replaced without performing a full rail replacement. The rails come as a complete assembly. The front portion of the rail and bumper brackets are also serviced separately.

IMPORTANT: Failure to follow the instructions included with the service rail may lead to improper rail sectioning, which may compromise the structural integrity of the vehicle.

Removal of Damaged Left Front Rail



1. On top of the rail, locate the cut-out square (1). From the front edge of the square, measure forward 25 mm and scribe a line.
2. Add 10 mm and scribe a second line (1). The second line (35 mm) is the cut location. The additional 10 mm will be used to create a flange for welding the new service part to the vehicle.

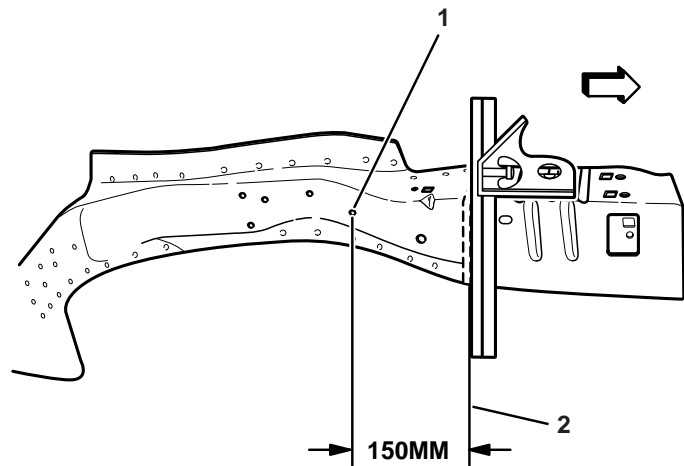


3. On the outboard side of the rail, locate the brake line pass-thru hole (1). At the larger hole, pull the tape measure from the forward edge of the hole and mark a line at 392 mm. Scribe a line with a straight edge, making sure it is square to inboard and top rail markings.
4. Measure forward 10 mm and scribe a second line. The second line (402 mm) is cut location.

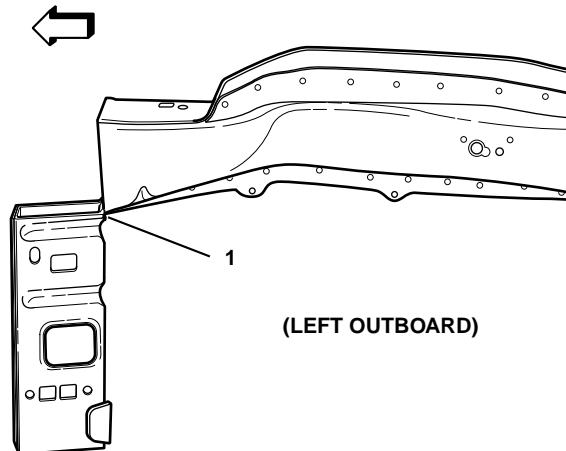
—continued

Removal of Damaged Left Front Rail con't

5. Locate hole (1), on the inboard side of the rail. Measure forward 140 mm (5-1/2 in.) and mark the location. Scribe a straight line on the rail.
6. Measure forward 10 mm (13/32 in.) and scribe a second line. The second line [150 mm (5-29/32 in.)] is the cut location (2).

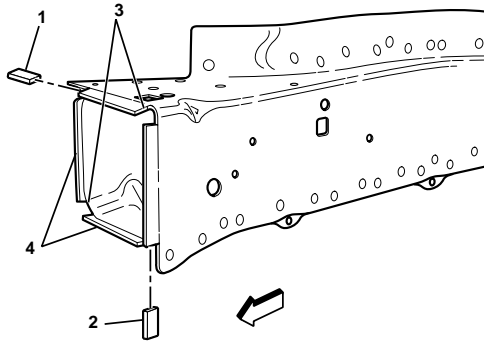


7. Make certain all three sides are aligned. Cut through three sides of the rail.
8. On the bottom of the damaged rail, scribe a line from the outboard to the inboard cut locations and cut the remainder of the rail (1) from the vehicle.
9. Remove the damaged section of rail.

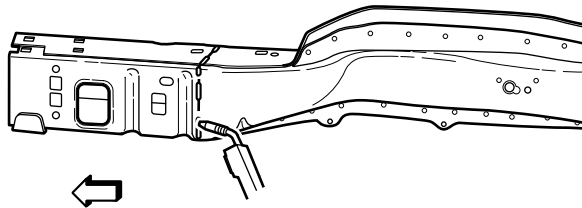


Left Front Lower Rail Sectioning

Preparing Service Part for Installation



1. On original rail, cut and remove 10 mm (13/32 in.) of the outboard (1) and downward (2) turned flanges of the rail. Cut 10 mm (13/32 in.) gaps along the corners of the original rail (3).
2. Step the top, bottom and side tabs inward (4) to allow the service part to fit over the original rail.
3. Clean and prepare mating surfaces as necessary.



Installation Procedure

1. Position the service part over the original rail. Align and check fit using three-dimensional measuring equipment.
2. Stitch weld along the entire sectioning joint. Make 25 mm (1 in.) welds along the seam with 25 mm (1 in.) gaps between them.
3. Go back and complete the stitch weld. This will create a solid weld joint with minimal heat distortion.
4. Clean and prepare all welded surfaces.

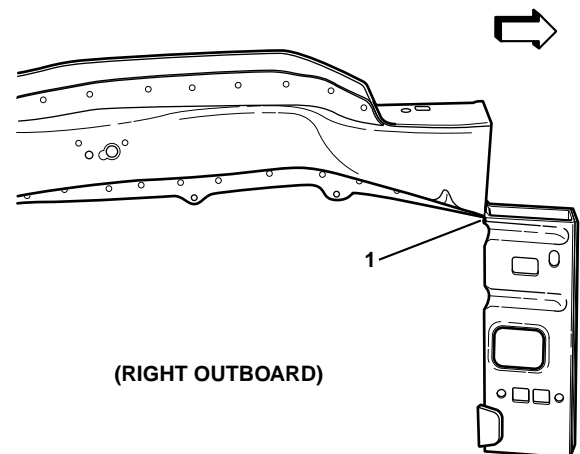
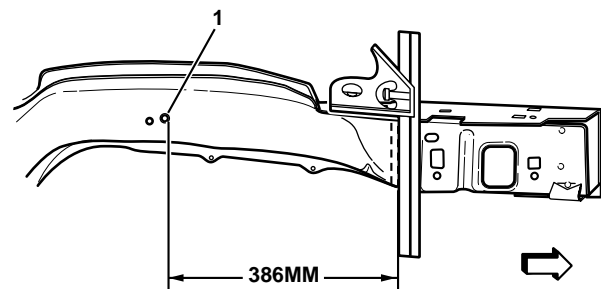
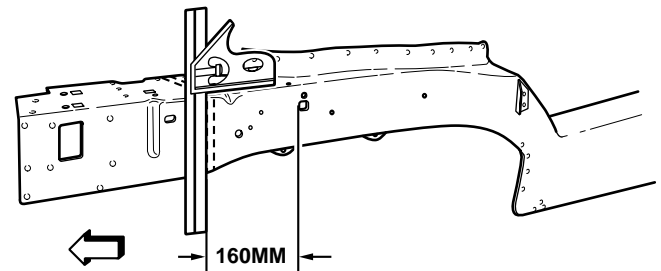
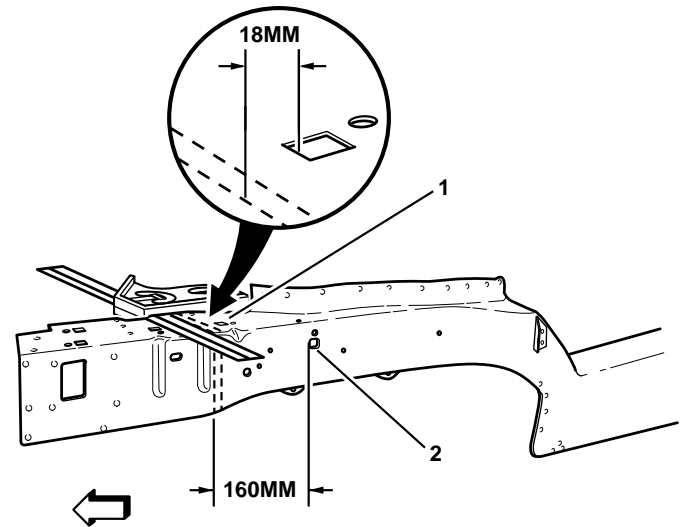
IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

5. Prime with two-part catalyzed primer.
6. Apply sealers and anti-corrosion materials as necessary.
7. Install all related panels and components.

Right Front Lower Rail Sectioning

Removal of Damaged Right Front Rail

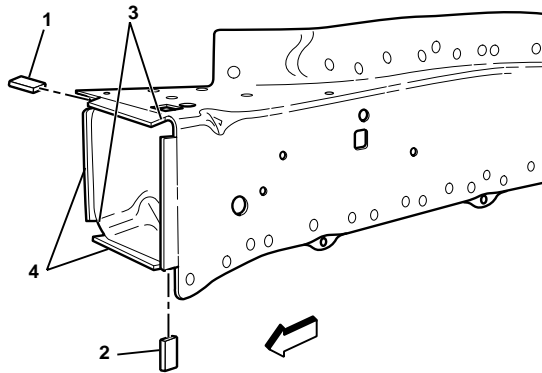
1. On top of rail, locate the last cut-out square. From the rear edge of the square (1), measure forward 8 mm (5/16 in.) and scribe a line.
2. Add 10 mm and scribe a second line. The second line is the cut location. The additional 10 mm (13/32 in.) will be used to create a flange for welding the new service part to the vehicle.
3. On the outboard side of the rail, locate the fixturing hole (2). Measure forward 150 mm (5-29/32 in.) and mark location. Scribe a straight line on the rail.
4. Measure forward 10 mm (13/32 in.) and scribe a second line. The second line [160 mm (6-5/16 in.)] is the cut location.
5. On the inboard side of the rail, locate the brake line pass-thru hole (1). At the larger hole, pull the tape measure from the forward edge of the hole and mark a line at 376 mm. Scribe a line with a straight edge, making sure it is square to inboard and top rail markings.
6. Measure forward 10 mm and scribe a second line. The second line (386 mm) is the cut location.
7. Make certain all three sides are aligned. Cut through three sides of the rail.
8. On the bottom of the damaged rail, scribe a line from the outboard to the inboard cut locations and cut the remainder of the rail (1) from the vehicle. Remove the damaged section of rail.



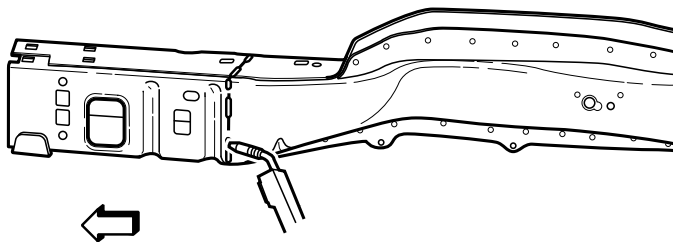
(RIGHT OUTBOARD)

Right Front Lower Rail Sectioning

Preparing the Undamaged Portion of the Rail for Installation



1. On original rail, cut and remove 10 mm of the outboard (1) and downward (2) turned flanges of the rail. Cut 10 mm gaps along the corners of the original rail.
2. Step the top, bottom and side tabs inward (3) to allow the service part to fit over the original rail.
3. Clean and prepare mating surfaces as necessary.



Installation Procedure

1. Position the service part over the original rail. Align and check fit using three-dimensional measuring equipment.
2. Stitch weld along the entire sectioning joint. Make 25 mm (1 in.) welds along the seam with 25 mm (1 in.) gaps between them.
3. Go back and complete the stitch weld. This will create a solid weld joint with minimal heat distortion.
4. Clean and prepare all welded surfaces.

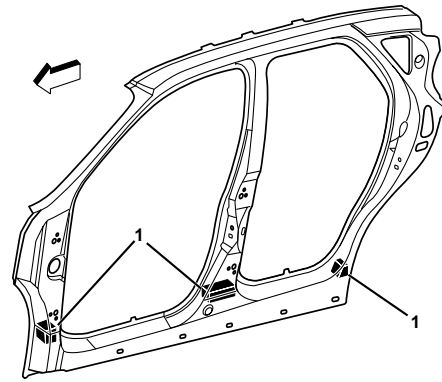
IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

5. Prime with two-part catalyzed primer.
6. Apply sealers and anti-corrosion materials as necessary.
7. Install all related panels and components.

Door Frame Sectioning—Outer (Front Hinge Pillar)

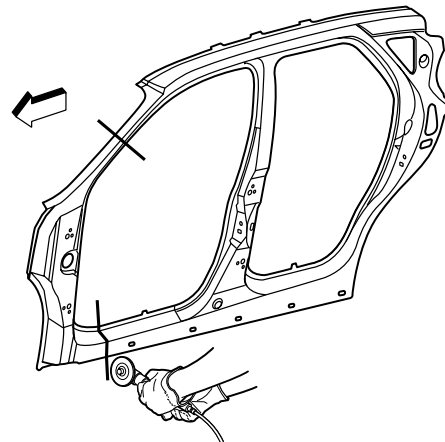
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers



IMPORTANT: Do not damage any inner panels or reinforcements.

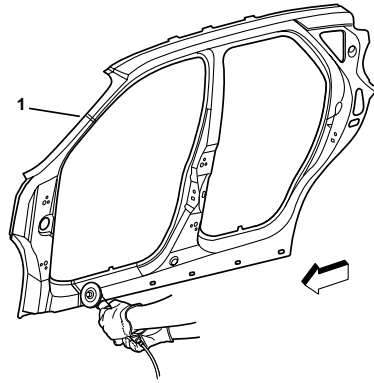
4. Cut the panel where sectioning is to be performed.
5. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.
6. Remove the damaged Front Hinge Pillar.



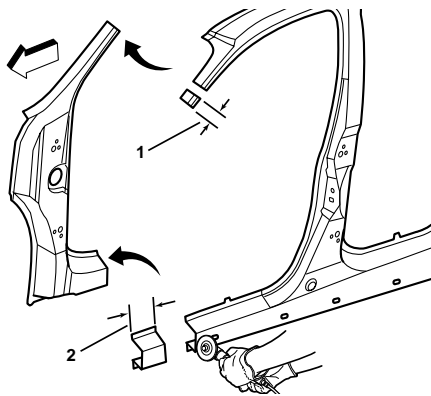
Door Frame Sectioning—Outer (Front Hinge Pillar)

Installation Procedure

1. Cut the replacement service part 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 (1) thickness at the sectioning joint.

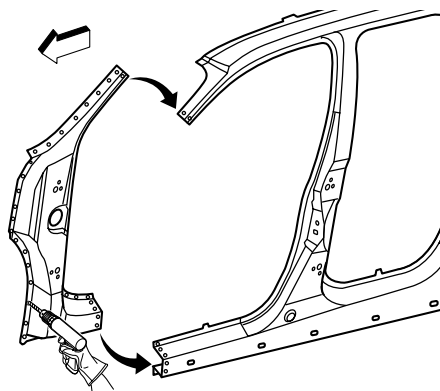


2. In the Front Hinge Pillar, create a 50 mm (2 in.) backing plate (1) from the unused portion of the Door Frame Opening. Trim the backing plate as necessary to fit behind the sectioning joint.
3. In the rocker locations, create a 100 mm (4 in.) backing plate (2) from the unused portion of the door frame opening. Trim the backing plate as necessary to fit behind the sectioning joint.



4. Drill 8 mm (5/16 in.) plug weld holes along the sectioning cut on the remaining original part

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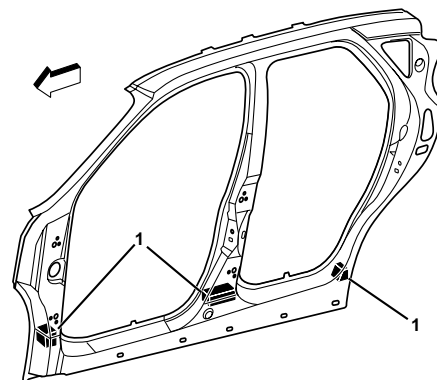
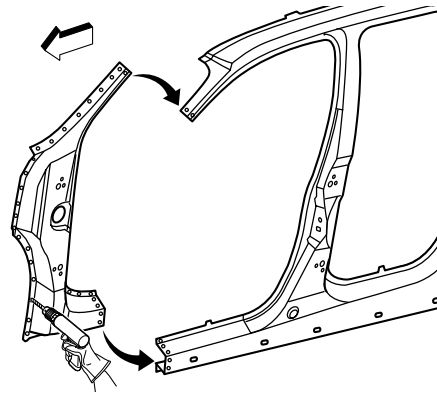
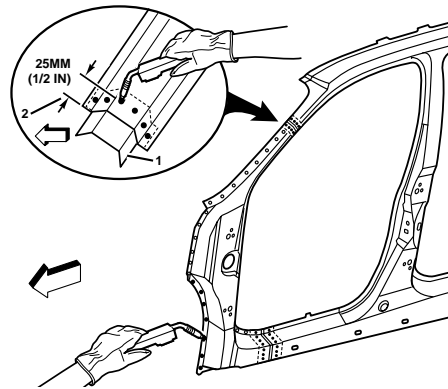
Door Frame Sectioning—Outer (Front Hinge Pillar) Installation Procedure con't

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

5. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel.
6. Prepare all attachment surfaces as necessary.
7. Apply weld-thru primer to all bare-metal surfaces.
8. Fit the backing plate (1) halfway into the sectioning joint (2). Clamp and plug weld to the vehicle.
9. Align the Front Hinge Pillar using three-dimensional measuring equipment.
10. Plug weld accordingly.
11. 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.

IMPORTANT: Prior to refinishing, refer to publication GM 4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

12. Clean and prepare all welded surfaces.
13. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
14. Refinish as necessary.
15. Install all related panels and components.



Door Frame Sectioning—Outer (Center Pillar)

Removal Procedure

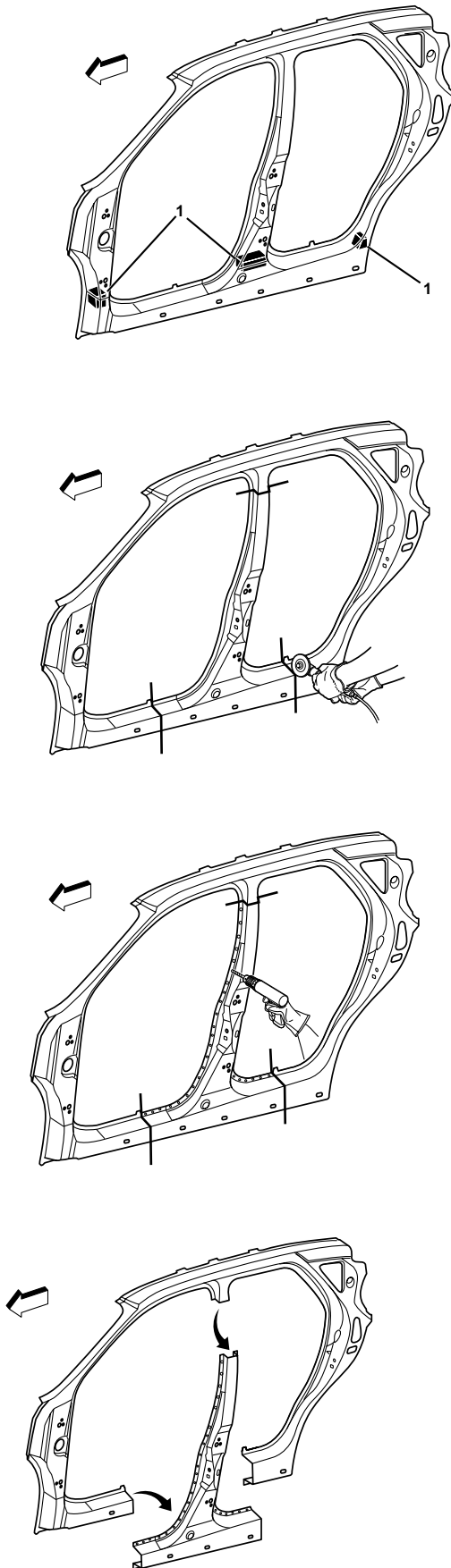
1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers

IMPORTANT: Do not damage any inner panels or reinforcements.

4. Cut the panel where sectioning is to be performed.

5. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.

6. Remove the damaged Center Pillar.

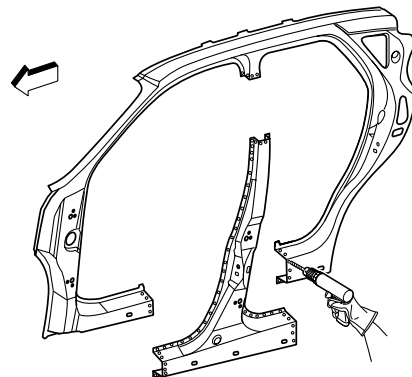
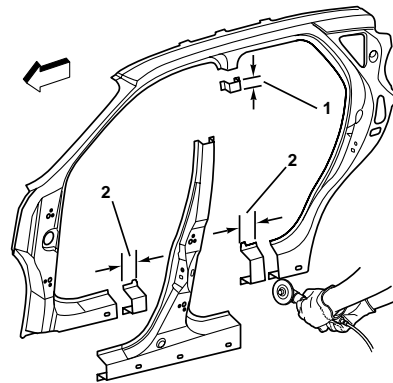
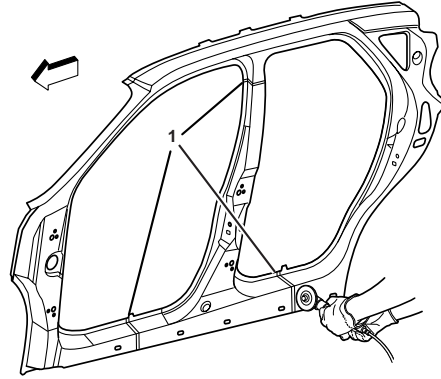


Door Frame Sectioning—Outer (Center Pillar)

Installation Procedure

1. Cut the replacement Center Pillar 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 (1) thickness at the sectioning joint.
2. In the Center Pillar, create a 50 mm (2 in.) backing plate (1) from the unused portion of the Door Frame Opening. Trim the backing plate as necessary to fit behind the sectioning joint.
3. In the rocker locations, create a 100 mm (4 in.) backing plate (2) from the unused portion of the door frame opening. Trim the backing plate as necessary to fit behind the sectioning joint.
4. Drill 8 mm (5/16 in.) plug weld holes along the sectioning cut on the remaining original part.

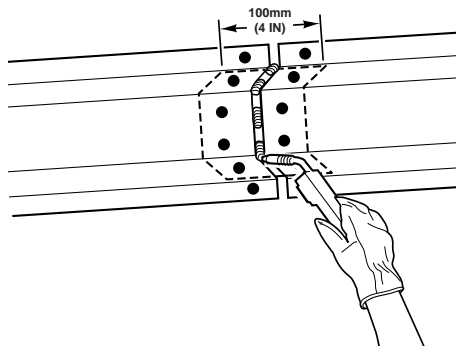
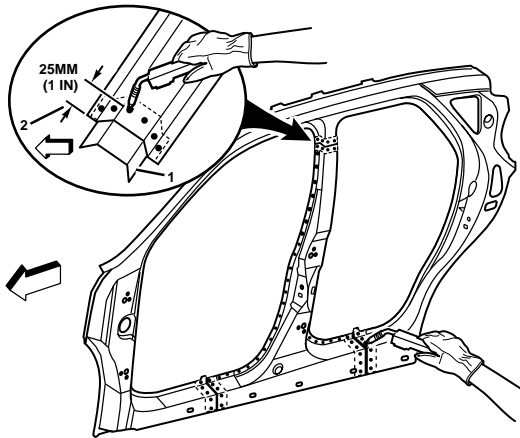
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Door Frame Sectioning—Outer (Center Pillar) Installation Procedure con't

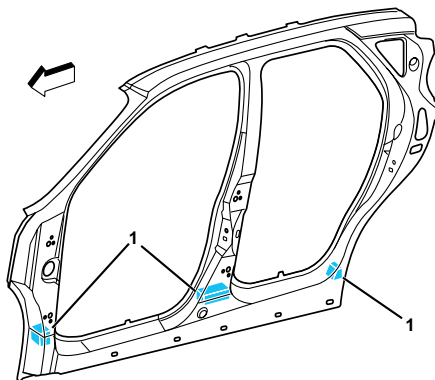
IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

5. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel.
6. Prepare all attachment surfaces as necessary.
7. Apply weld-thru primer to all bare-metal surfaces.
8. Fit the backing plate (1) halfway into the sectioning joint (2) clamp and plug weld to the vehicle.
9. Align the Center Pillar using three-dimensional measuring equipment.
10. Plug weld accordingly.



11. 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

IMPORTANT: Prior to refinishing, refer to publication GM 4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

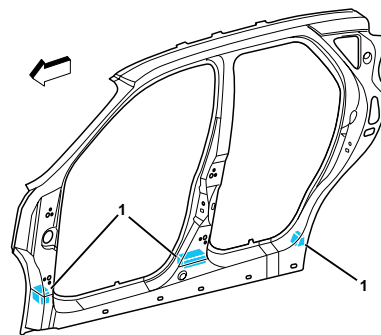


12. Clean and prepare all welded surfaces.
13. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
14. Refinish as necessary.
15. Install all related panels and components.

Door Frame Sectioning—Outer (Rear Lock Pillar)

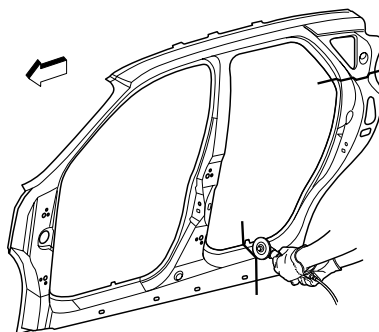
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers

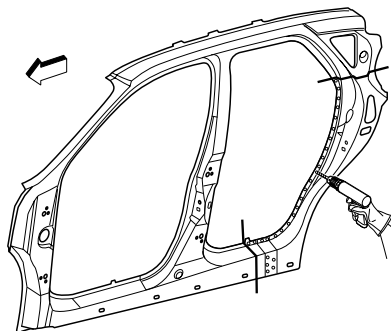


IMPORTANT: Do not damage any inner panels or reinforcements.

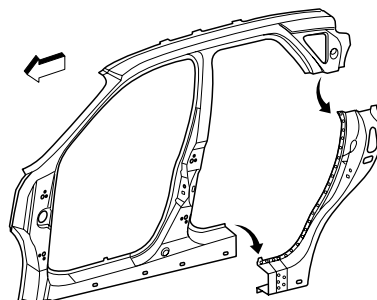
4. Cut the panel where sectioning is to be performed.



5. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.



6. Remove the damaged Rear Lock Pillar.

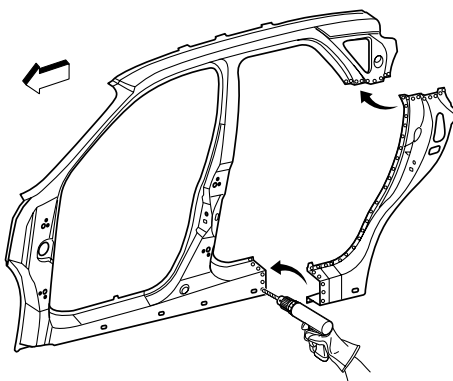
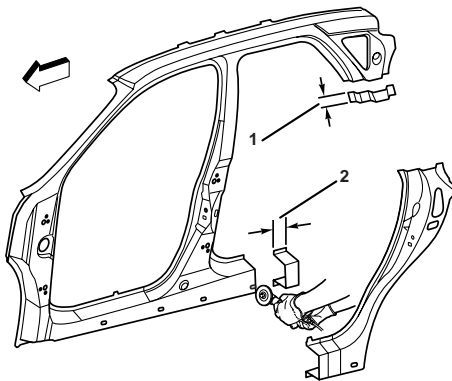
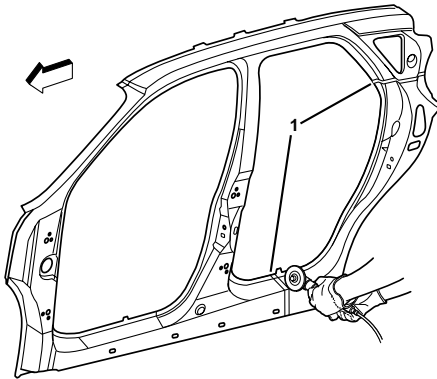


Door Frame Sectioning—Outer (Rear Lock Pillar)

Installation Procedure

1. Cut the replacement Rear Lock Pillar 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 (1) thickness at the sectioning joint.
2. In the Rear Lock Pillar, create a 50 mm (2 in.) backing plate (1) from the unused portion of the Door Frame Opening. Trim the backing plate as necessary to fit behind the sectioning joint.
3. In the rocker locations, create a 100 mm (4 in.) backing plate (2) the unused portion of the door frame opening. Trim the backing plate as necessary to fit behind the sectioning joint.
4. Drill 8 mm (5/16 in.) plug weld holes along the sectioning cut on the remaining original part.

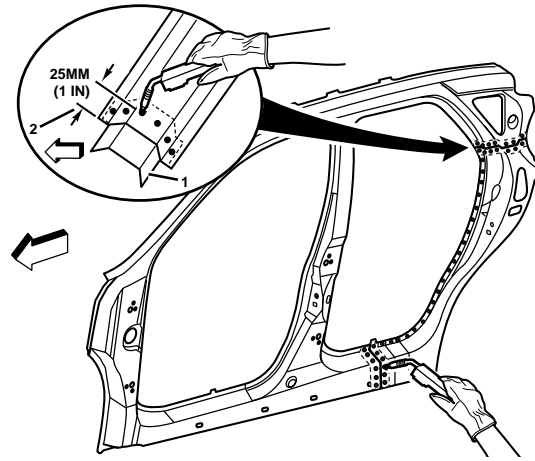
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Door Frame Sectioning—Outer (Rear Lock Pillar) Installation Procedure con't

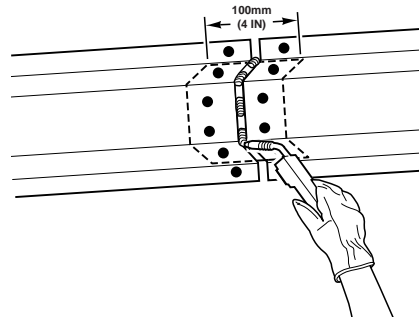
IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2in.) apart.

5. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel.
6. Prepare all attachment surfaces as necessary.
7. Apply weld-thru primer to all bare-metal surfaces.
8. Fit the backing plate (1) halfway into the sectioning joint (2) clamp and plug weld to the vehicle.
9. Align the Center Pillar using three-dimensional measuring equipment.
10. Plug weld accordingly.

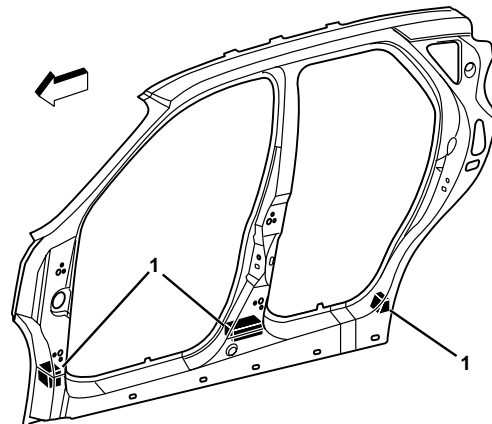


11. To create a solid weld with minimum heat distortion, make 25 mm (1 in.) stitch welds along the seam with 25 mm (1 in.) gaps between them. Then go back and complete the stitch weld.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.



12. Clean and prepare all welded surfaces.
13. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
14. Refinish as necessary.
15. Install all related panels and components.

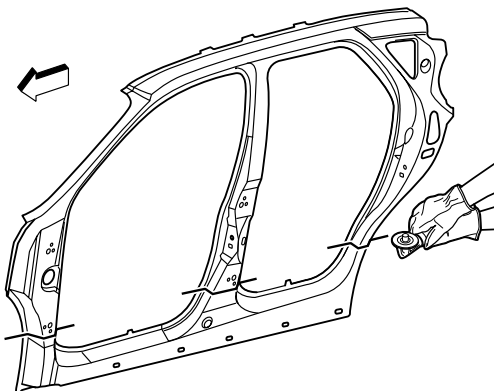
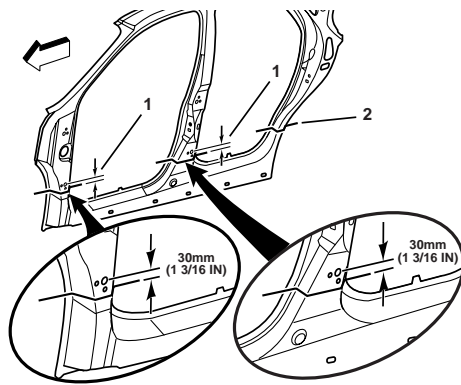
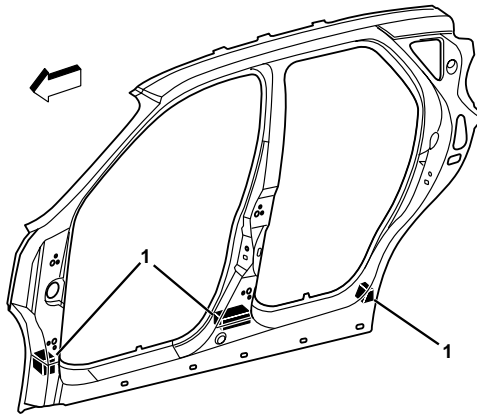


Door Frame Sectioning—Outer (Rocker Sectioning)

Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
4. By measuring from the lower edge of the guide hole (1) downward 30 mm (1-3/16 in.), locate and mark for sectioning of the Front Hinge Pillar and the Center Pillar.
5. With quarter panel removed (2), locate and mark for sectioning of the Rear Lock Pillar.
6. Scribe a line horizontally to the rocker.
7. Cut the panel where sectioning is to be performed.

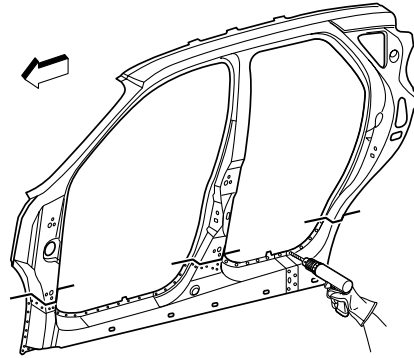
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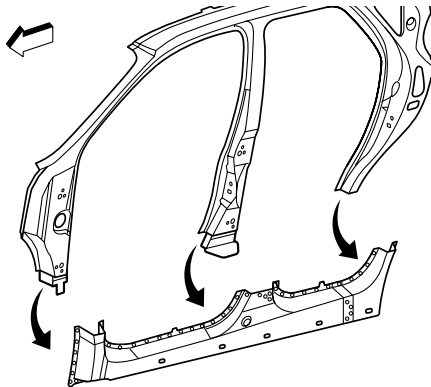
IMPORTANT: Do not damage any inner panels or reinforcements.

**Door Frame Sectioning—Outer
(Rocker Sectioning)
Removal Procedure con't**

8. Locate and drill out all factory welds. Note the number and location of welds for installation of the Rocker Panel.



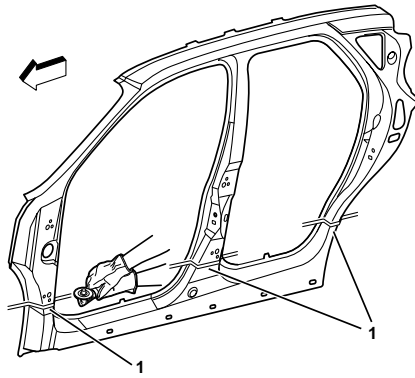
9. Remove the damaged Rocker Panel.



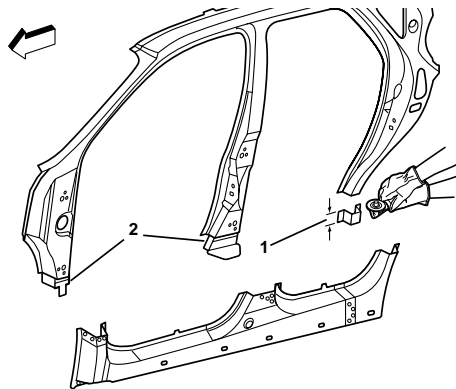
Door Frame Sectioning—Outer (Rocker Sectioning)

Installation Procedure

1. Cut the replacement service part 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 (1) thickness at the sectioning joint.



2. In the Rear Lock Pillar, create a 50 mm (2 in.) backing plate (1) from the unused portion of the Door Frame Opening. Trim the backing plate as necessary to fit behind the sectioning joint.
3. Use the lower hinge reinforcement (2) as the backing plate in the front Hinge Pillar and the Center Hinge Pillar.

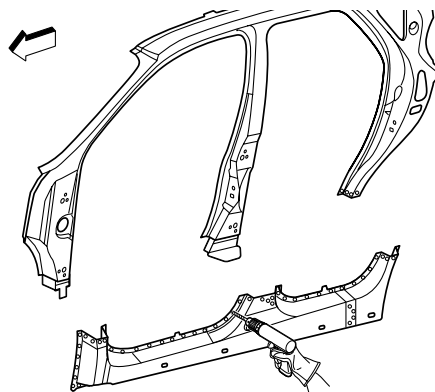


4. Drill 8 mm (5/16 in.) plug weld holes along the sectioning cut on the remaining original part.

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1 in.) apart.

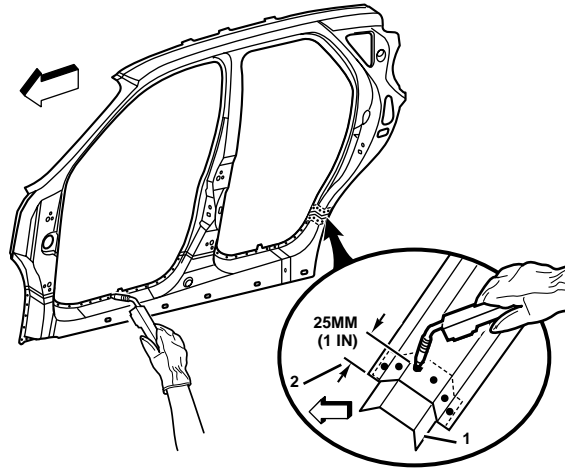
5. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel and along the sectioning cut.

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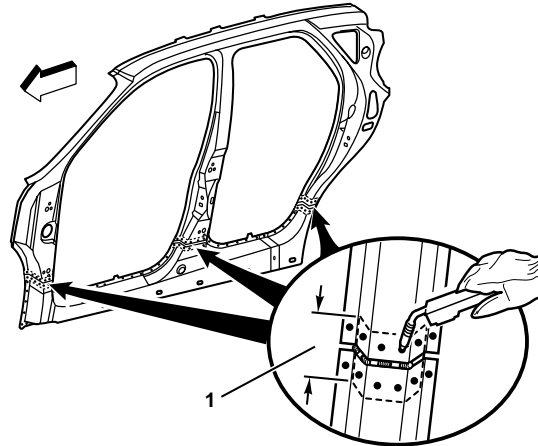


Door Frame Sectioning—Outer (Rocker Sectioning) Installation Procedure con't

6. Prepare all attachment surfaces as necessary.
7. Apply weld-thru primer to all bare-metal surfaces.
8. Fit the backing plate (1) halfway into the sectioning joint (2). Clamp and plug weld to the vehicle.

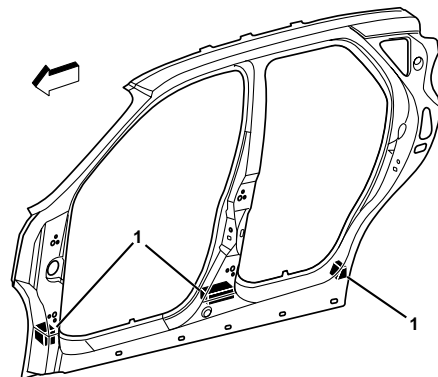


9. Align the Rocker Panel using three-dimensional measuring equipment.
10. Plug weld accordingly.
11. To create a solid weld with minimum heat distortion, make 25 mm (1 in.) stitch welds along the seam with 25 mm (1 in.) gaps between them. Then go back and complete the stitch weld.



IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

12. Clean and prepare all welded surfaces.
13. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
14. Refinish as necessary.
15. Install all related panels and components.



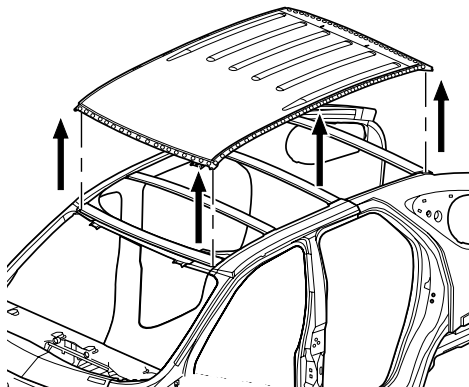
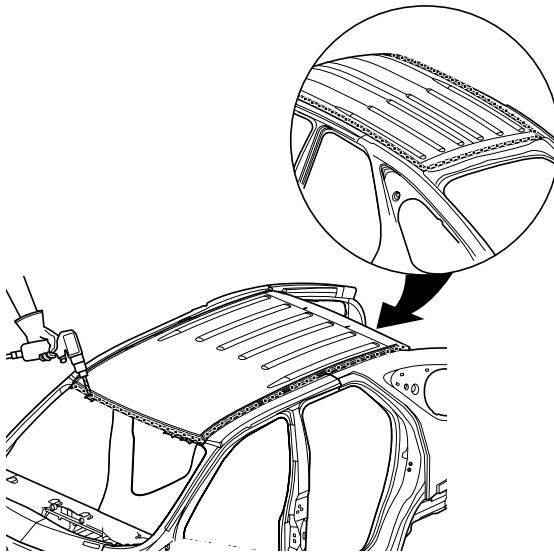
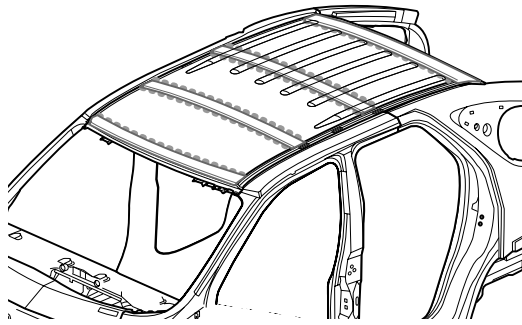
Roof Outer Replacement

Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Sealers
 - Sound deadeners
 - Anti-corrosion materials

IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the roof panel.



5. Remove the damaged roof panel.

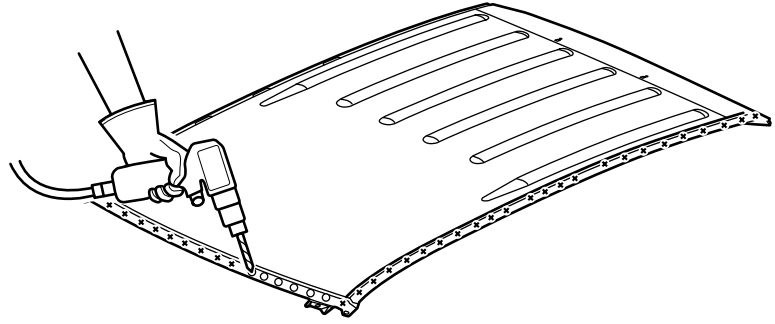
Roof Outer Replacement

Installation Procedure

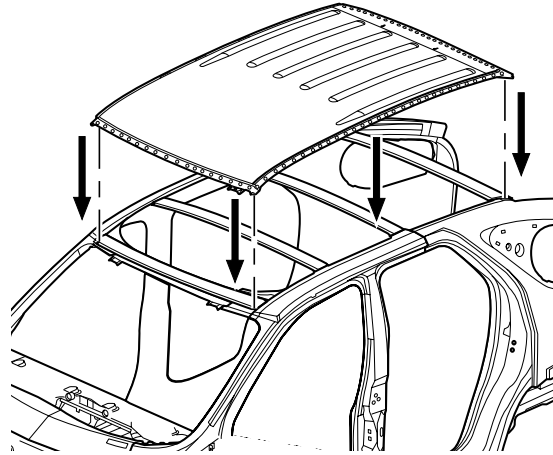
1. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original panel.

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.



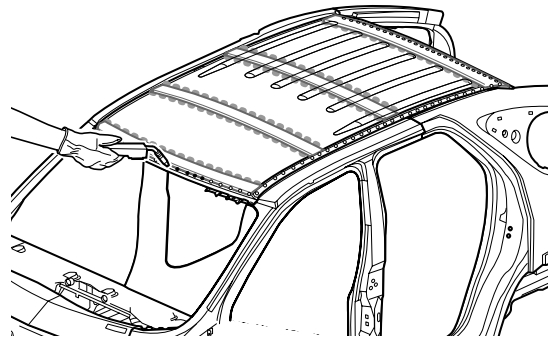
4. Position the roof panel.



5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-00 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

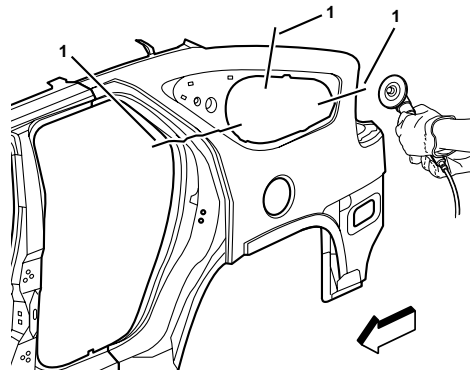
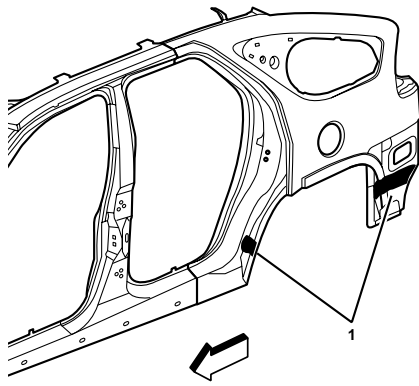
7. Apply the following as necessary:
 - An anti-corrosion primer
 - Sound deadeners
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.



Quarter Panel Replacement

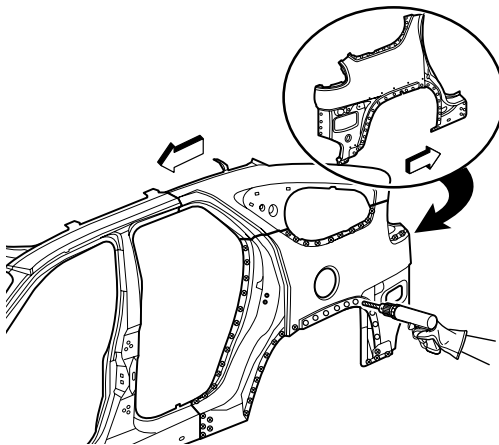
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Sealers
 - Sound deadeners (1)
 - Anti-corrosion materials



IMPORTANT: Do not damage any inner panels or reinforcements.

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

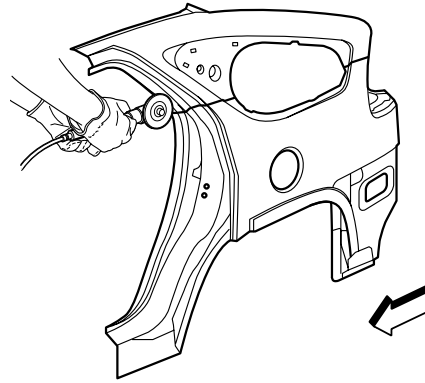


5. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.
6. Remove the damaged quarter.

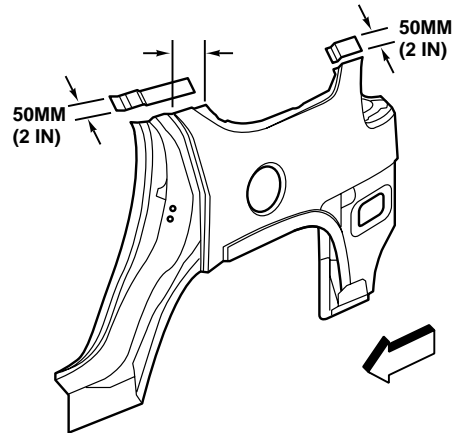
Quarter Panel Replacement

Installation Procedure

1. Cut the replacement quarter 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.



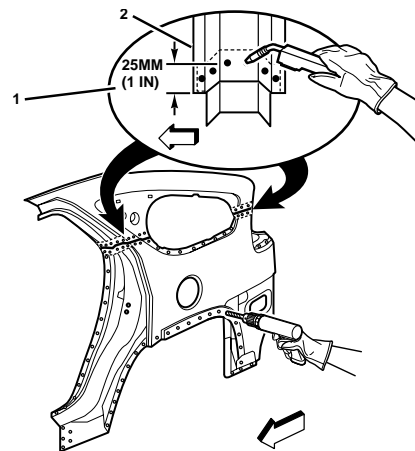
2. Create a 50 mm (2 in.) backing plate from the unused portion of the service part. Trim the backing plate as necessary to fit behind the sectioning joint.



3. Drill 8 mm (5/16 in.) plug weld holes (1) along the sectioning cut on the remaining original part (2).

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

4. Drill 8 mm (5/16 in.) plug weld holes in the service part as necessary in the locations noted from the original panel and along the sectioning cut.



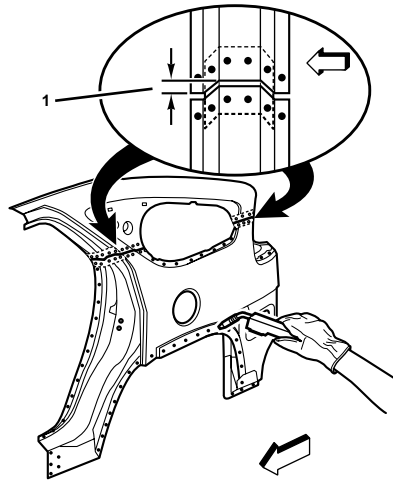
5. Prepare all attachment surfaces as necessary.

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

6. Apply weld-thru primer to all bare-metal surfaces.

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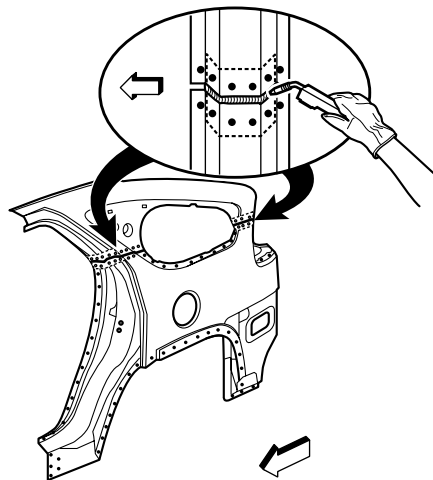
Quarter Panel Replacement Installation Procedure con't



7. Fit the backing plate halfway into the sectioning joint, clamp and plug weld to the vehicle.

CAUTION: THE FUEL FILLER OPENING MUST BE PROPERLY SEALED PRIOR TO POSITIONING THE QUARTER PANEL. FAILURE TO PROPERLY SEAL THE QUARTER PANEL COULD RESULT IN EXHAUST GAS LEAKAGE INTO THE INTERIOR OF THE VEHICLE, CAUSING PERSONAL INJURY.

8. Install GM P/N 12399117 Sealing Strip between outer wheelhouse and quarter panel gas door pocket.
9. Install service quarter panel leaving a gap of one and one half times the thickness of the metal (1) at the sectioning joint.
10. Plug weld accordingly.



11. 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.
12. Clean and prepare all welded surfaces.
13. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
14. Refinish as necessary.
15. Install all related panels and components.

Rail Sectioning— Rear

Removal Procedure

IMPORTANT: Rear rail sectioning may require replacement of the rear floor panel.

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers

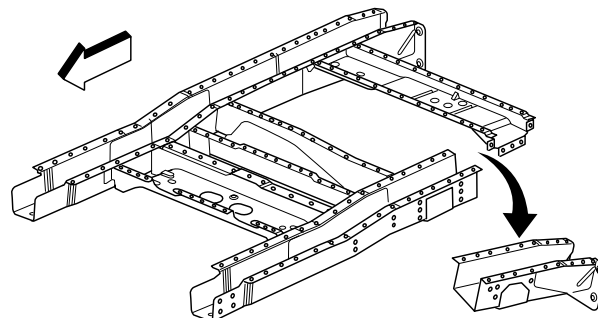
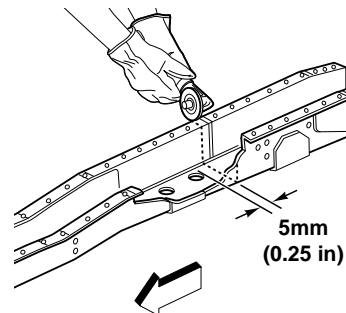
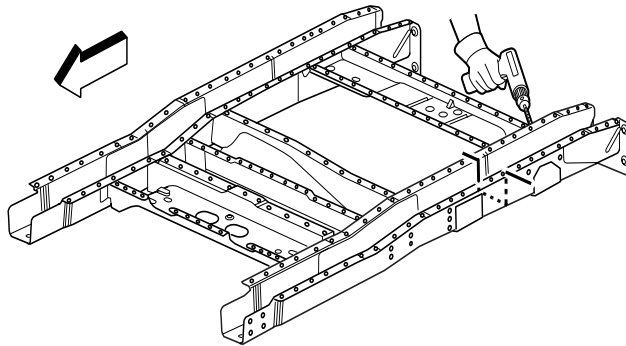
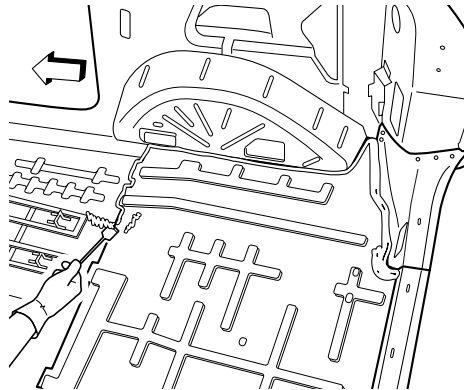
- IMPORTANT: Do not damage any inner panels or reinforcements.*
4. Perform the necessary procedures to gain access to the rear rail.

5. Locate and drill out all factory welds. Note the number and location of welds for installation of the rear rail.

6. Mark the cut location by measuring 5 mm (1/4 in.) from the rear edge of the second gauge hole rearward

7. Cut the rear rail section.

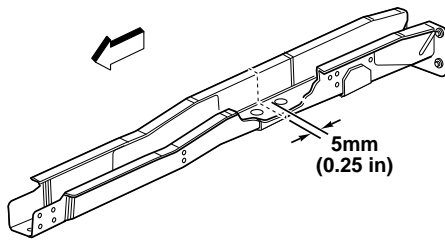
8. Remove the damaged rear rail section.



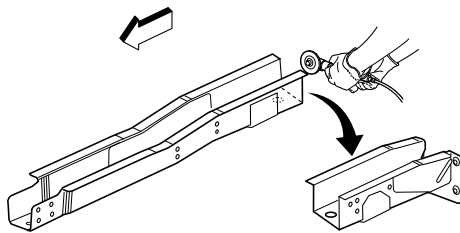
Rail Sectioning—Rear

Installation Procedure

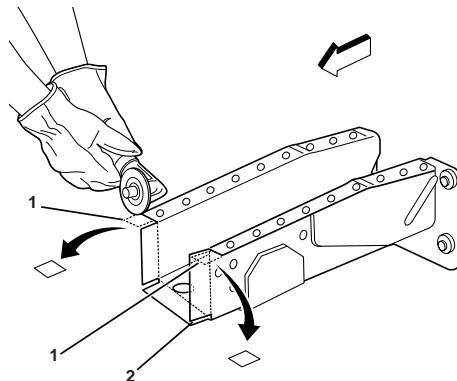
1. Mark the cut location on the service rail by measuring 5 mm (1/4 in.) from the front edge of the second gauge hole forward.



2. Cut the rear rail service part.



3. Cut and remove 30 mm (1 and 3/16 in.) from the flanges on either side of the service section rail to create 30 mm (1 and 3/16 in.) tabs (1).

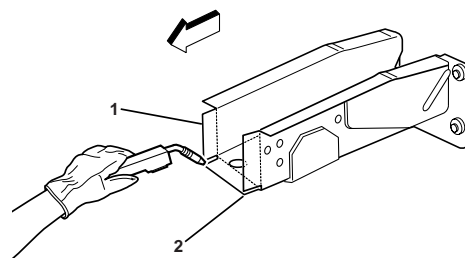


4. Cut 5 mm (1/4 in.) wide gaps in the bottom corners (2).

5. Step the tabs inward (1) to allow the service rail section to fit inside of the original rear rail.

IMPORTANT: The metal of the rear rail is of a heavy gauge. However, the tabs can be created using the appropriate tools.

6. Weld the tabs together along the lower edges (2).

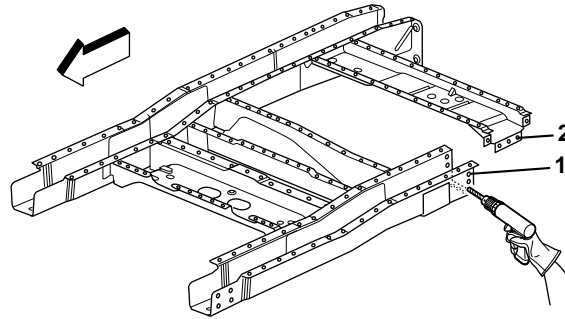


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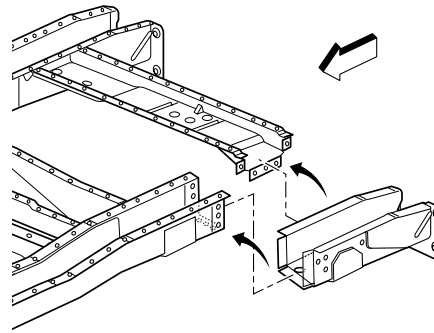
Rail Sectioning—Rear Installation Procedure con't

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

7. Drill 8 mm (5/16 in.) plug weld holes along the sectioning cut on the original rail. Locate these holes 13 mm (1/2 in.) from the edge and spaced 40 mm (1/2 in.) apart.
8. Prepare all attachment surfaces as necessary.
9. Turn the weld flange downward for rewelding (2).
10. Apply weld-thru primer to all bare-metal surfaces.

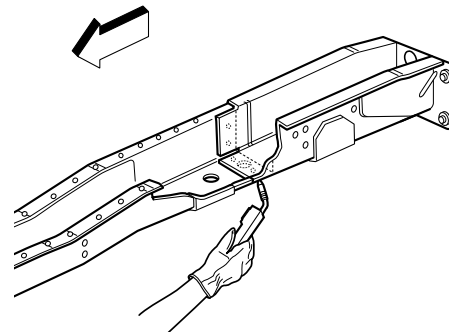


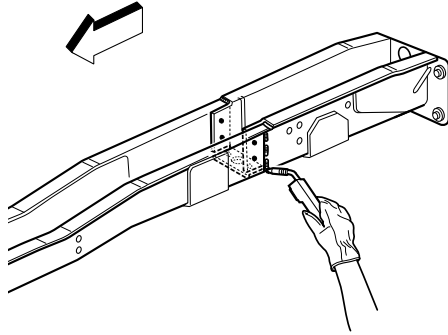
11. Align the service part over the stepped tab using three-dimensional measuring equipment.



12. Plug weld accordingly.

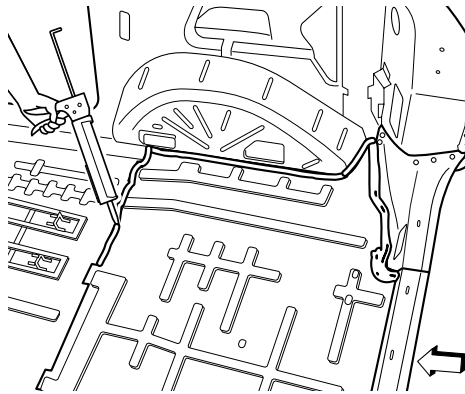
—continued





Rail Sectioning—Rear Installation Procedure con't

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.



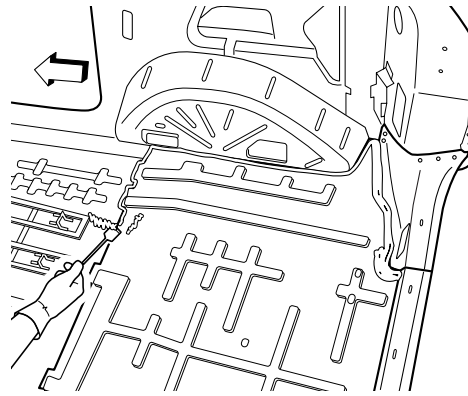
IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

14. Clean and prepare all welded surfaces.
15. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
16. Install all related panels and components.

Floor Panel Replacement

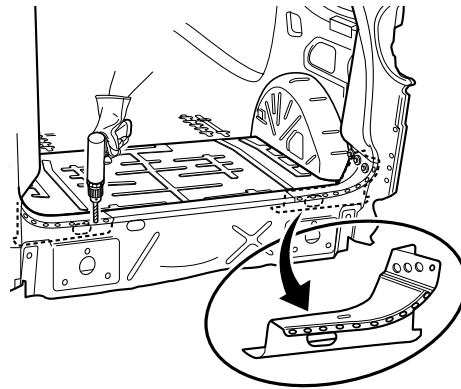
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers



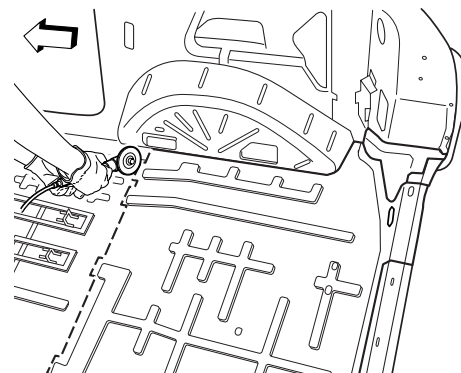
IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the rear body opening right and left lower reinforcements, gaining access to the rear floor panel.
5. Locate Rear Floor Panel to mid-floor overlay seam.



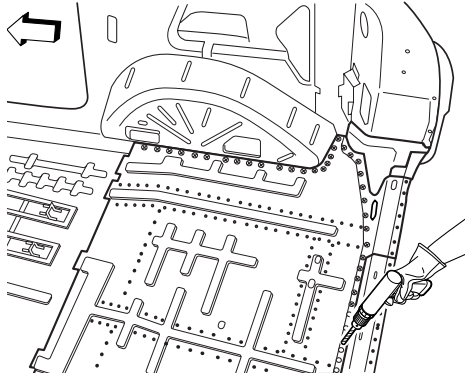
6. Cut rearward of the mid-floor. Use a straight line to cut Rear Floor Panel.

—continued

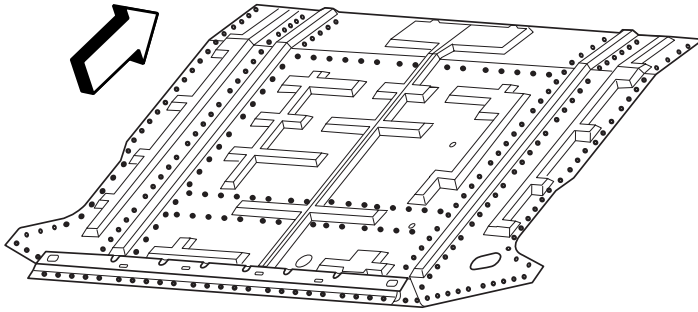


Floor Panel Replacement Removal Procedure con't

7. Locate and drill out all factory welds. Note the number and location of the welds for installation of the Rear Floor Panel.



8. Remove the damaged Rear Floor Panel.

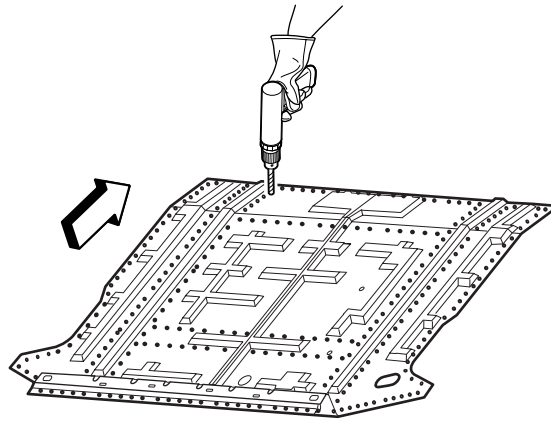


Floor Panel Replacement

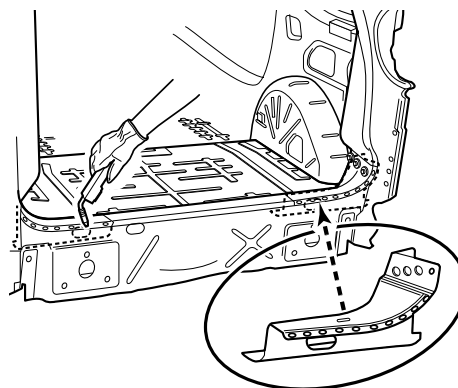
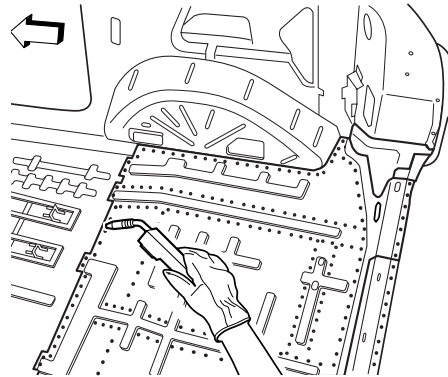
Installation Procedure

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

1. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original rear outer wheelhouse.
2. Drill 8 mm (5/16 in.) plug weld holes at the forward edge of the rear floor panel.
3. Prepare all attachment surfaces as necessary.
4. Apply weld-thru primer to all bare-metal surfaces.
5. Position the rear floor panel to overlap the mid-floor panel.
6. Plug weld accordingly.
7. Drill 8 mm (5/16 in.) plug weld holes in the service part as necessary in locations noted from the original panel.

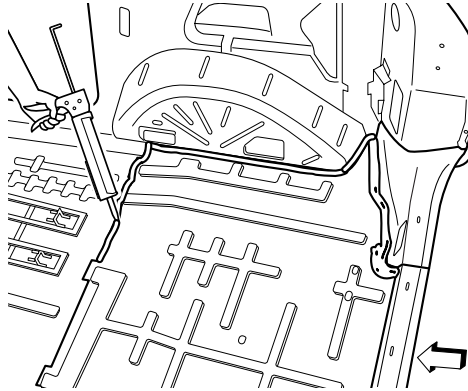


8. Position right and left lower reinforcements to the rear body opening.
9. Plug weld accordingly.



Floor Panel Replacement Installation Procedure con't

IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

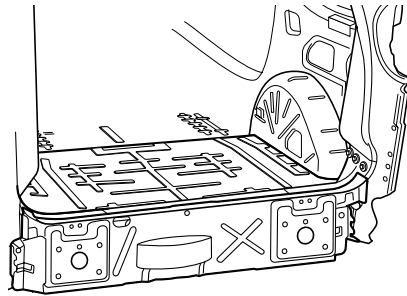


10. Clean and prepare all welded surfaces
11. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
12. Refinish as necessary.
13. Install all related panels and components.

Panel Replacement – Rear End

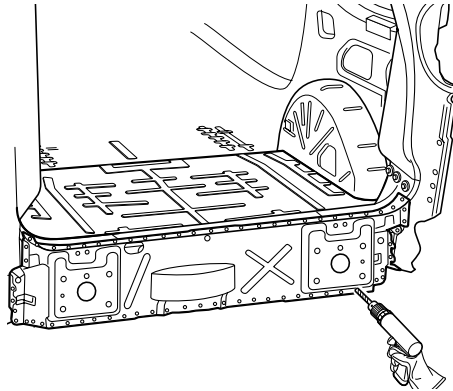
Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers

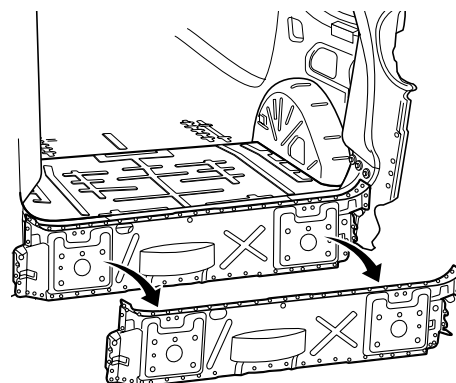


IMPORTANT: Do not damage any inner panels or reinforcements.

4. Locate and drill out all factory welds. Note the number and location of welds for installation of the rear body opening right and left lower reinforcements, gaining access to the rear floor panel.



5. Remove the Rear End Panel.

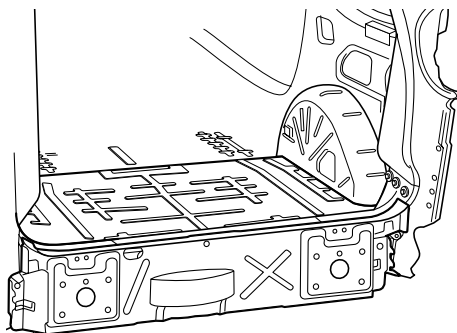
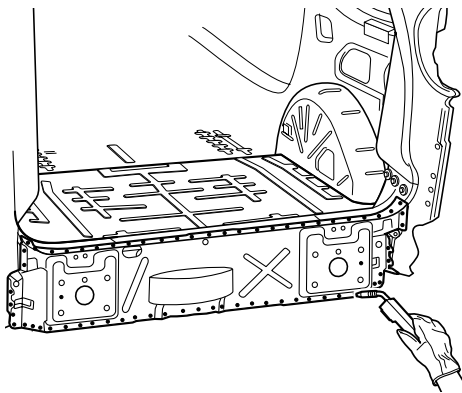
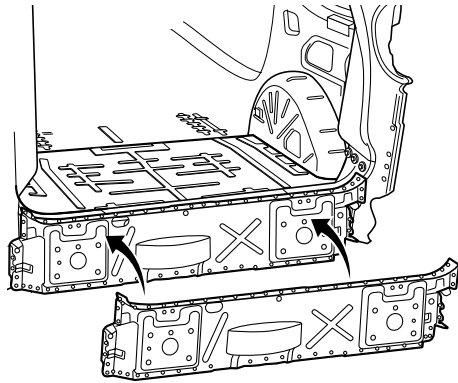
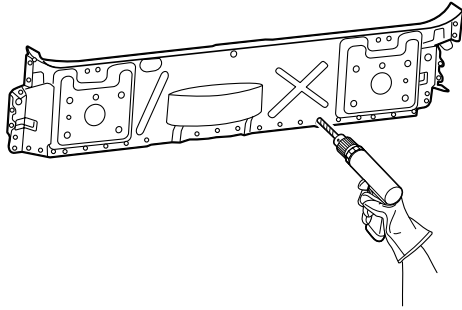


Panel Replacement – Rear End

Installation Procedure

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

1. Drill 8 mm (5/16 in.) plug weld holes in the service part as necessary in locations noted from the original panel.
2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.
4. Position the Rear End Panel.



5. Plug weld accordingly.

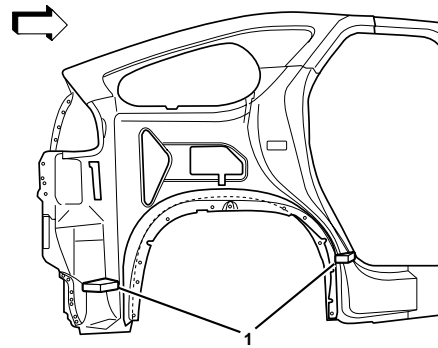
IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

6. Clean and prepare all welded surfaces.
7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.

Wheelhouse Replacement – Rear Outer

Removal Procedure

1. Remove all related panels and components.
2. Restore as much of the damage as possible to factory specifications.
3. Note the location and remove the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers

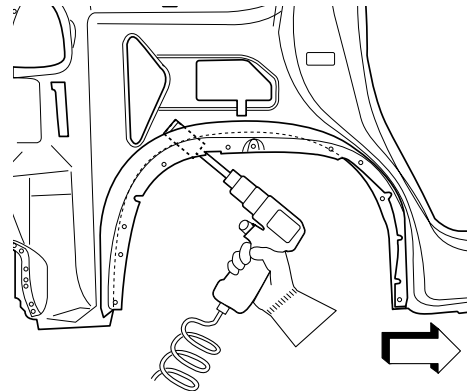


IMPORTANT: Do not damage any inner panels or reinforcements.

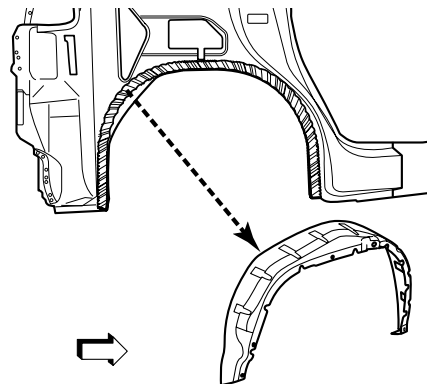
4. Using a suitable tool, trim off the damaged rear wheelhouse.

IMPORTANT: The original weld flange can be used as an attachment surface for installation of the new wheelhouse.

5. Note the number and location of welds for installation of the Rear Outer Wheelhouse.



6. Remove the damaged Rear Outer Wheelhouse.

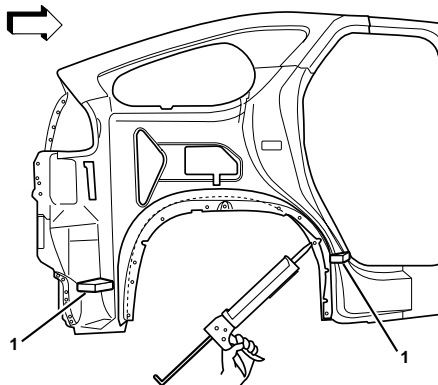
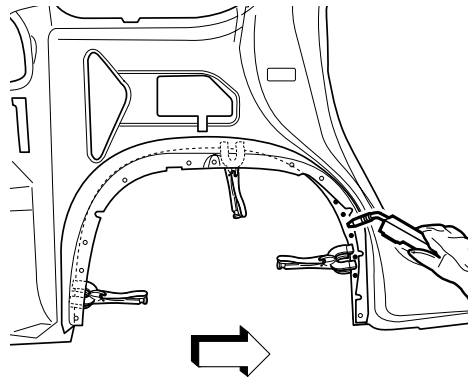
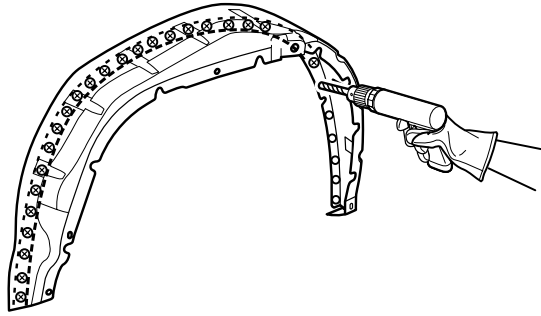


Wheelhouse Replacement – Rear Outer

Installation Procedure

IMPORTANT: In any area damaged beyond recognition, space plug weld holes every 40 mm (1-1/2 in.) apart.

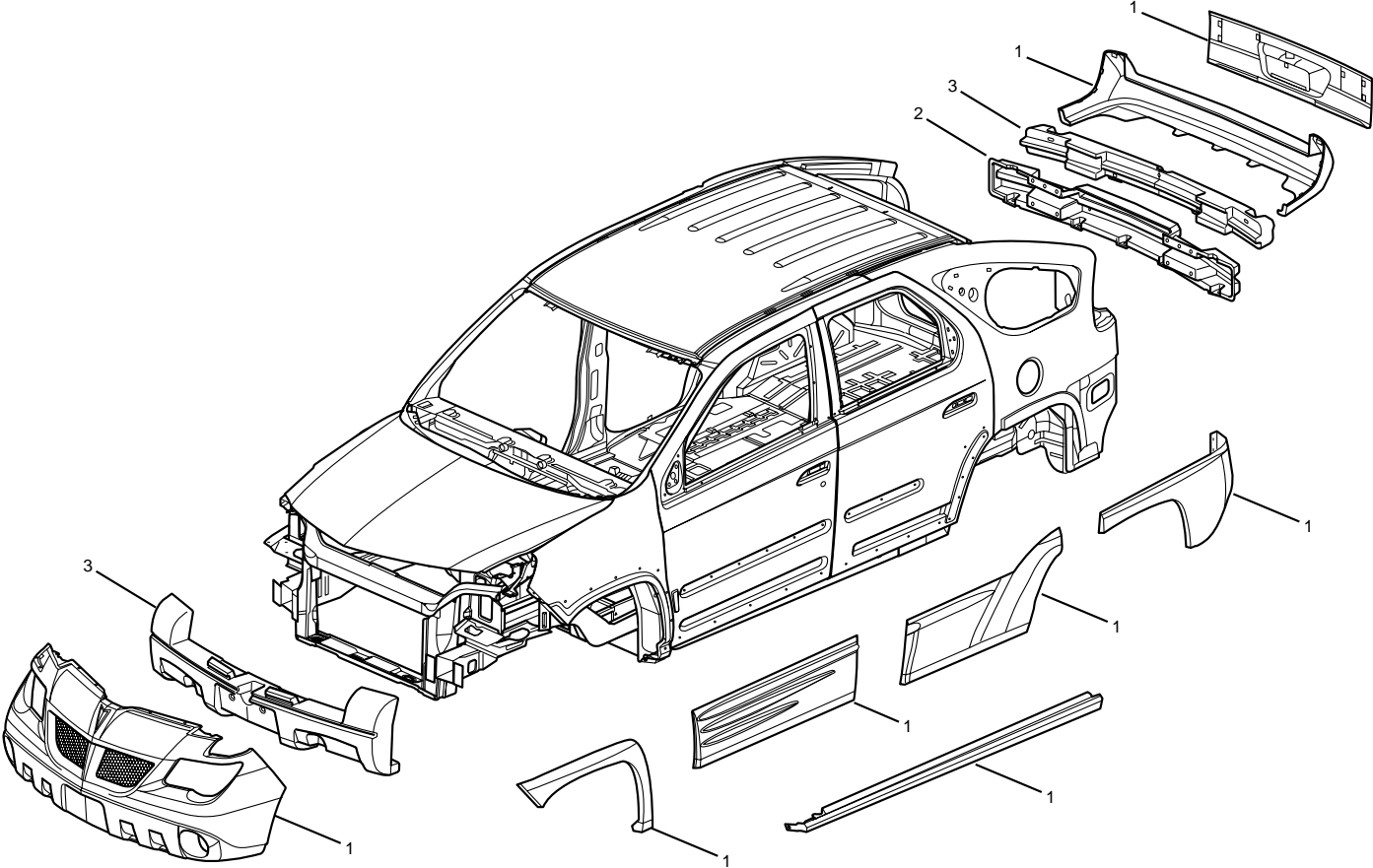
1. Drill 8 mm (5/16 in.) plug weld holes as necessary in locations noted from the original Rear Outer Wheelhouse.
2. Prepare all attachment surfaces as necessary.
3. Apply weld-thru primer to all bare-metal surfaces.
4. Position the Rear Outer Wheelhouse.
5. Plug weld accordingly.



IMPORTANT: Prior to refinishing, refer to publication GM4901M-D-01 GM Approved Refinish Materials for recommended products. Do not combine paint systems. Refer to paint manufacturer's recommendations.

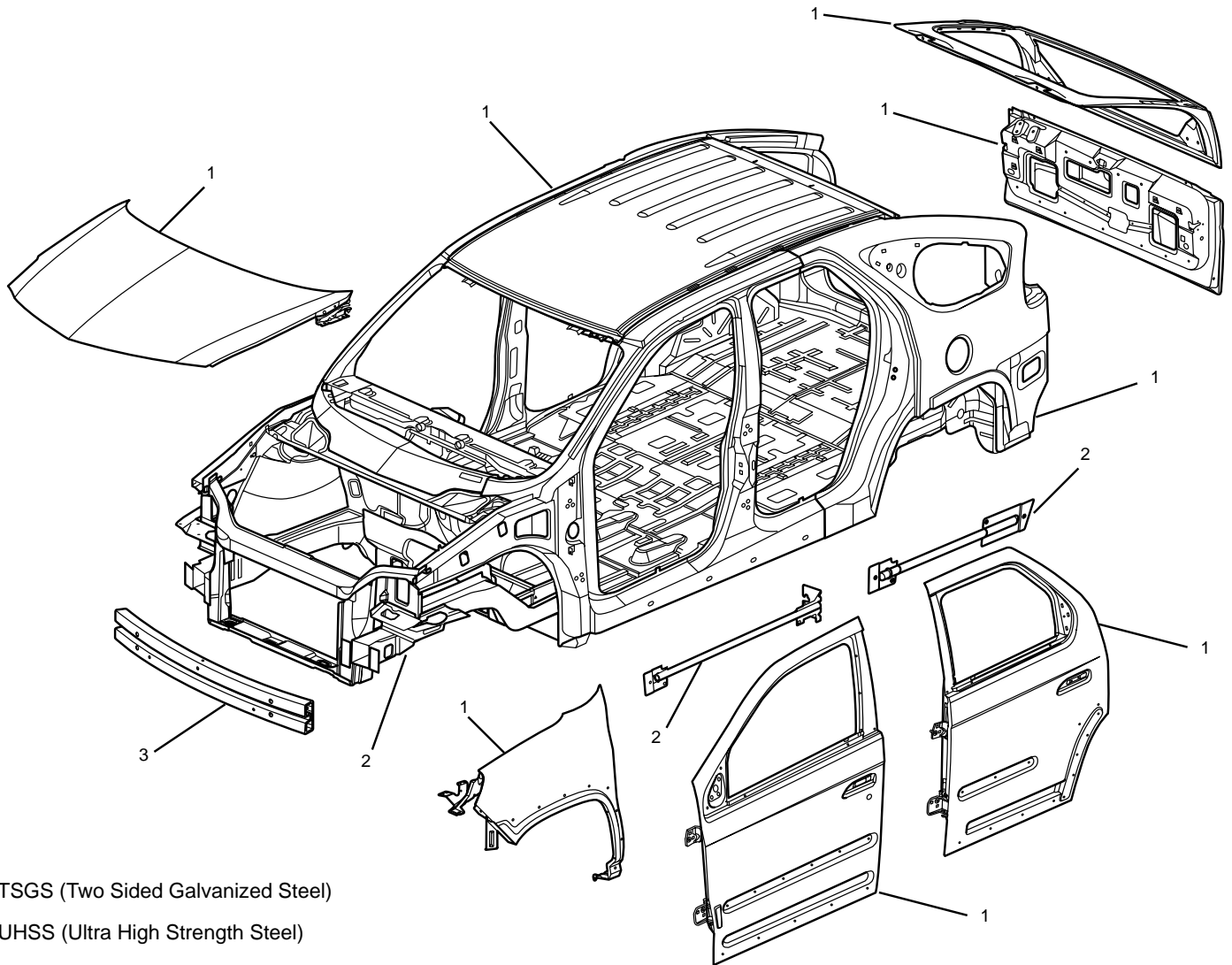
6. Clean and prepare all welded surfaces
7. Apply the following as necessary:
 - Anti-corrosion materials
 - Sound deadeners (1)
 - Sealers
8. Refinish as necessary.
9. Install all related panels and components.

Aztek Plastic Panel Identification



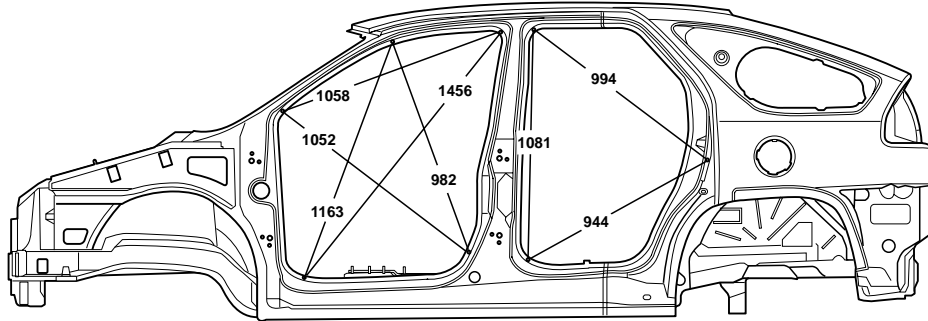
- 1. TPO (Thermoplastic Olefin)
- 2. Xenoy
- 3. Polypropylene Energy Foam

Aztek Metal Panel Identification

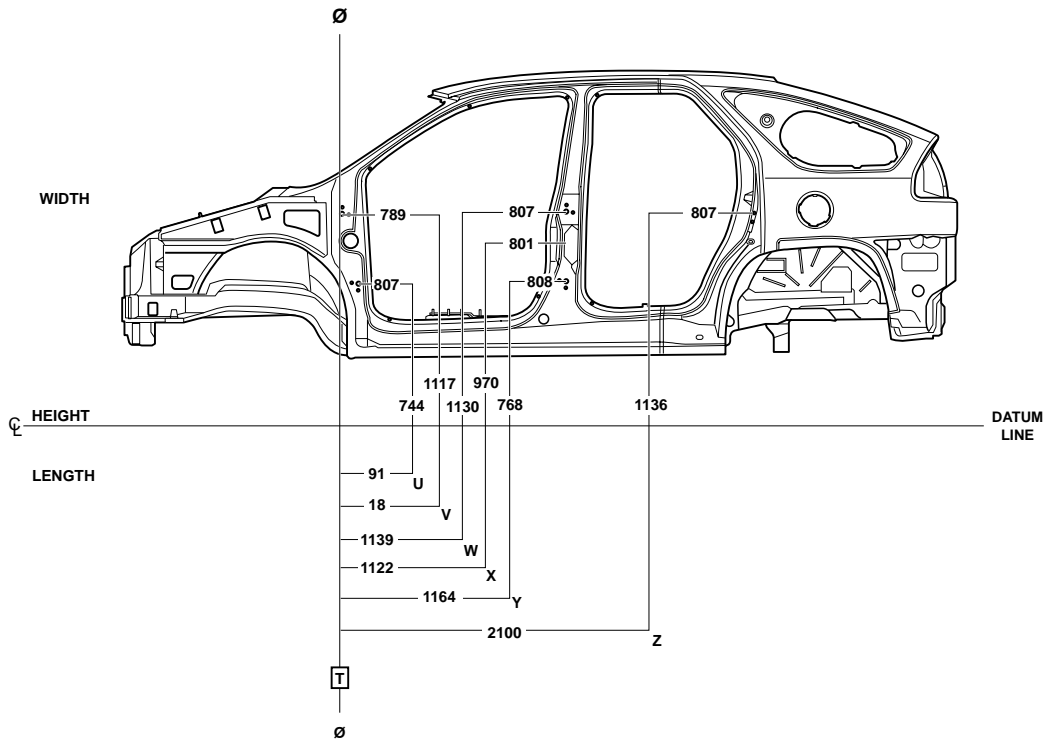


- 1. TSGS (Two Sided Galvanized Steel)
- 2. UHSS (Ultra High Strength Steel)
- 3. AL (Aluminum)

Body Dimensions

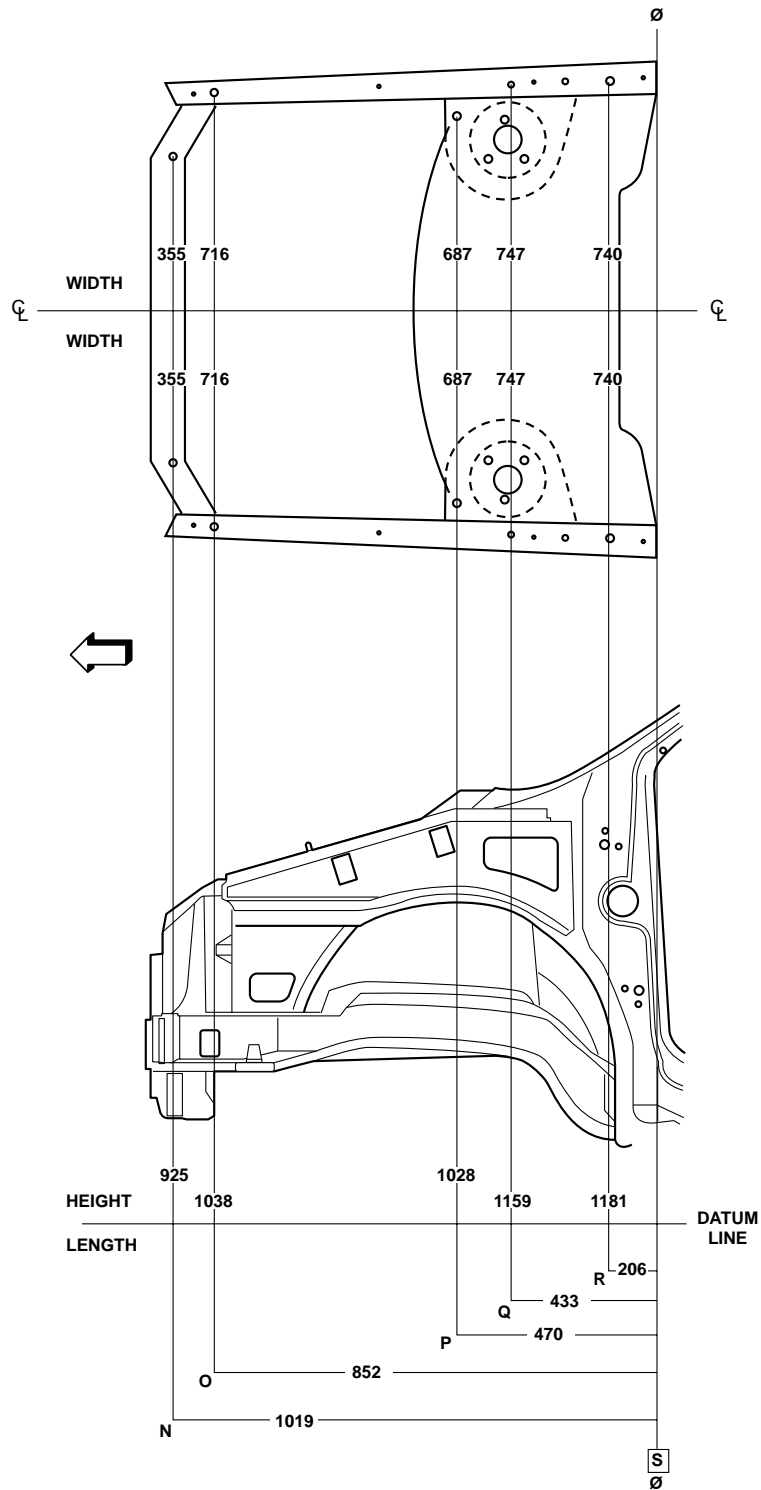


Point-to-Point



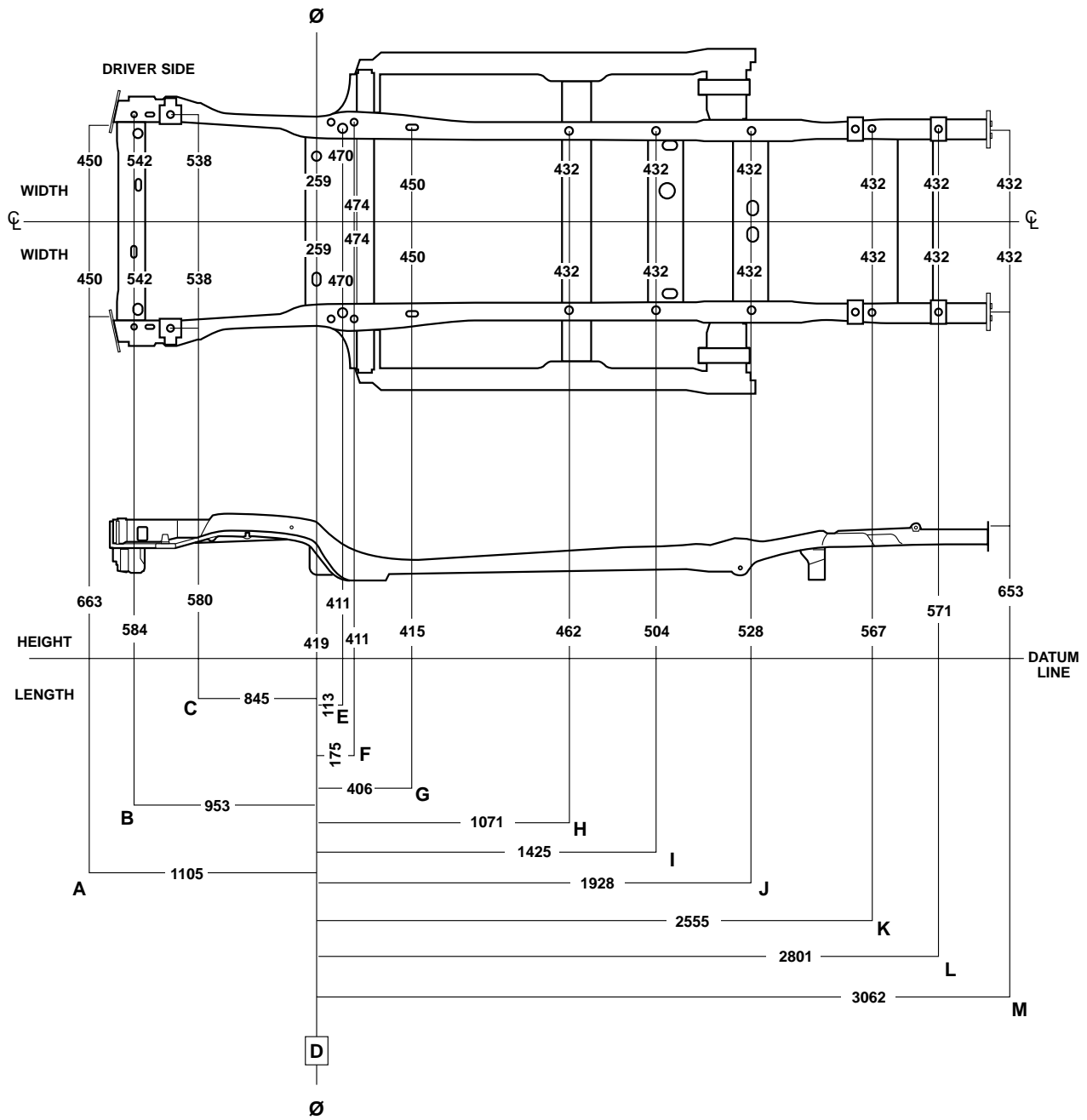
Body Side

Body Dimensions



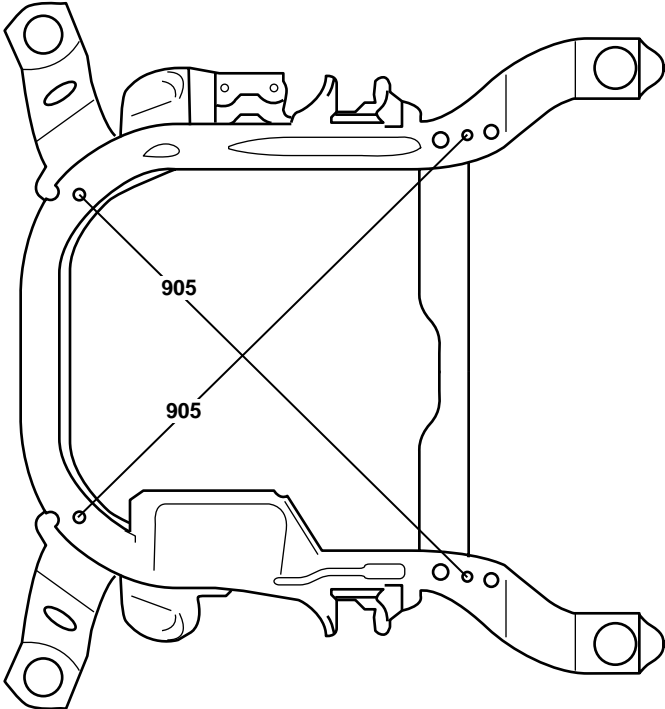
Engine Compartment

Body Measurements



Underbody

Frame Dimensions



Point-to-Point