2003 Saturn Ion

Description and Operation

General Body Construction (Unibody) Description

This information pertains to unitized body construction. The engine and transaxle, front suspension control arms, and rack and pinion steering are supported by the engine frame which is bolted to the vehicle at six locations. Each mounting location is cushioned by a thick rubber insulator. These insulators are specifically designed for each location to give the proper amount of structural strength while providing maximum road noise isolation. Different insulators are used at the various frame-to-body attaching points to change ride and handling characteristics of the vehicle.

Mounting provisions for the front suspension system are also shared by the body components through the suspension strut towers. The towers must be dimensionally correct in relation to the underbody to maintain proper suspension geometry.

With unitized body construction, underbody components must be properly aligned to assure correct suspension location. In case of collision damage, it is important that the body dimensions be checked thoroughly, and if necessary, realigned in order to accurately establish proper dimensions.

Since the individual underbody components also contribute directly to the overall strength of the body, it is essential that the proper welding techniques be observed during service repair operations. The underbody components should be properly sealed and rustproofed whenever body repair operations destroy or damage the original sealing and rustproofing. When rustproofing critical underbody components, it is essential to use a quality air dry primer such as corrosion-resistant chromate or equivalent material. Combination type primer-surfacers are not recommended.

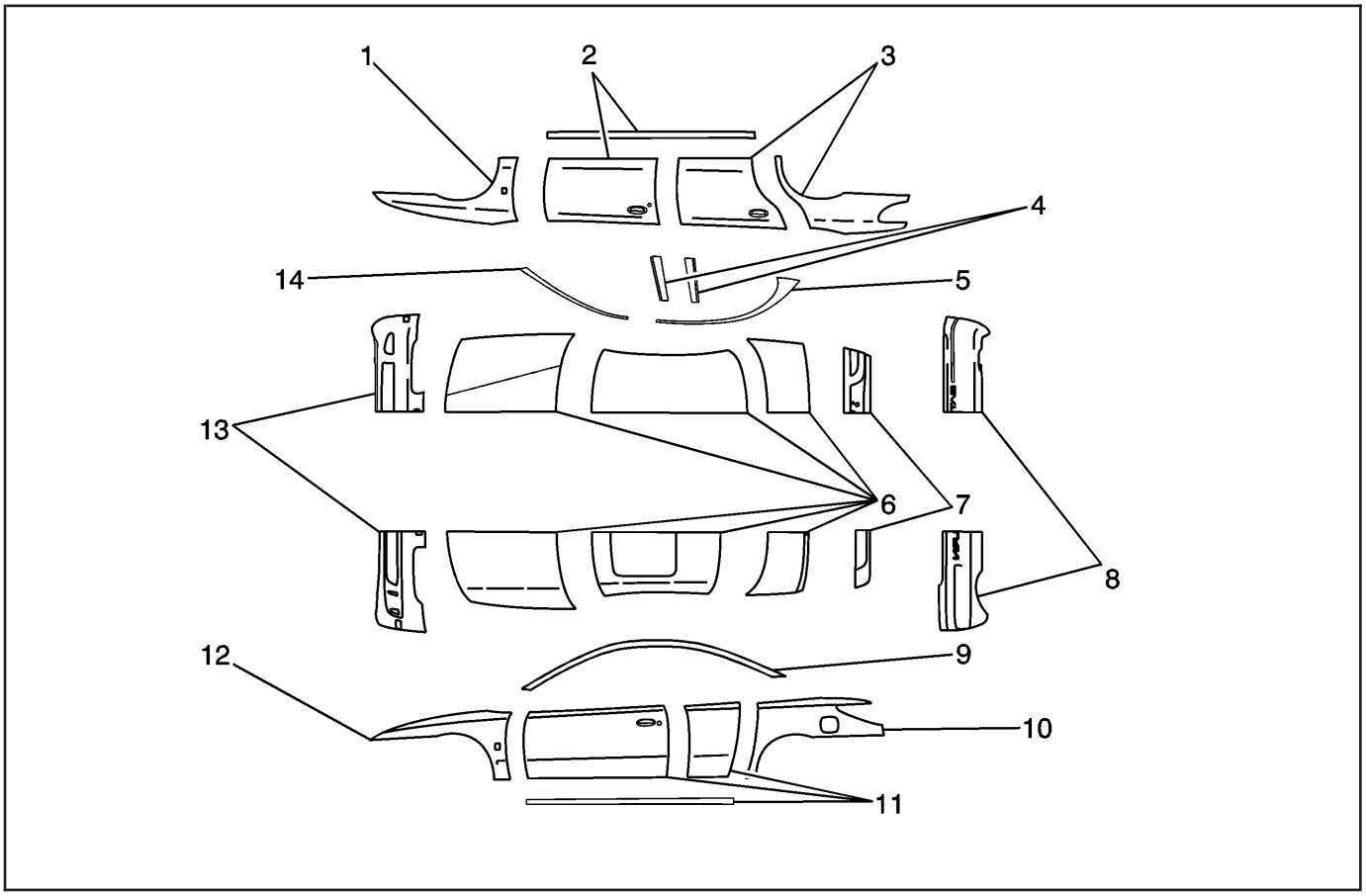
Door Frame Description

The side door frame openings feature a unique modular build sub-assembly design in order to improve manufacturing quality. The openings are composed of numerous individual components that are pre-assembled and attached to the vehicle as a single unit.

You may replace the door frame as a complete unit. Various segments of the door frame may be sectioned, which is usually much faster and more cost effective. A front and rear half also are available for complete or sectioning procedures. There are some key structural areas where sectioning should not take place. Service parts for sectioning must be cut from the service assembly and modified as necessary.

Component Locator

Panel Identification



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Legend

(1) PA + PPE
(2) ABS + PC
(3) PA + PPE
(4) ABS + PC
(5) PET
(6) Steel
(7) ABS + PC
(8) TPO
(9) PET
(10) PA + PPE
(11) ABS + PC
(12) PA + PPE
(13) TPO
(14) PET

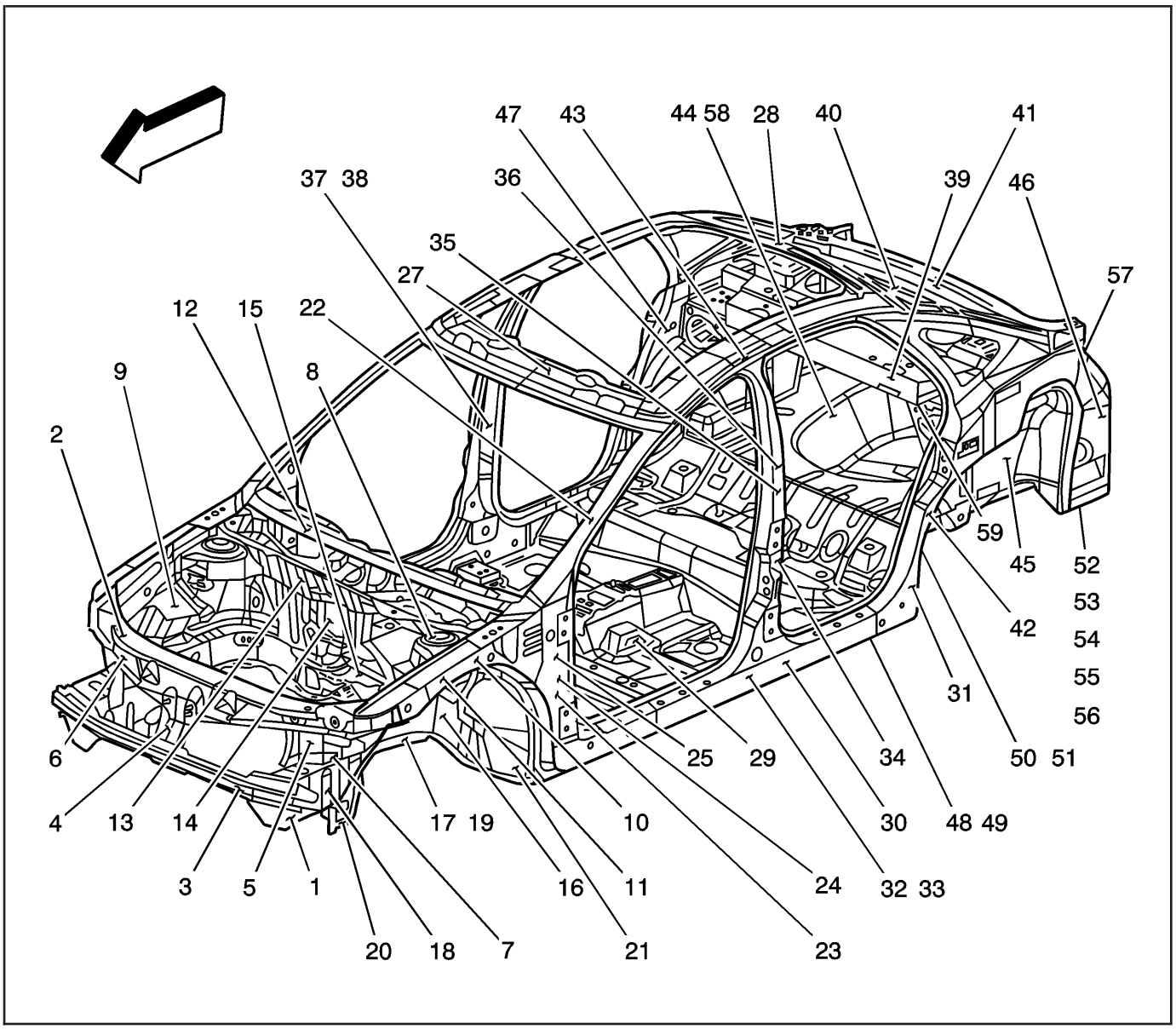
Exterior body panels are constructed of various materials, due to the increased dent and corrosion resistance of modern composites. All vertical panels, such as fenders, doors, quarters, and rocker panels, are made from rigid thermoplastic. Front and rear fascias are constructed of thermoplastic olefin (TPO). The hood, roof, and deck are steel.

Different materials require different procedures for preparing and refinishing. Before beginning any repair, identify the type of material involved.

Panel Identification

Identifying Symbol	Chemical Composition or Plastic "Family" Name	Typical Area where Used	Common or Trade Names
PE	Polyethylene	Inner Fender Panels, Valances, Spoilers, Inner Trim Panels, Seatbelt Covers, Gas Tank Shields	Dylan, Fortiflex, Marlex, Alathon, Hi-Fax, Hosalen, Paxon
PP	Polypropylene	Kick Panels, Deflector Panels, Cowl Panels, Interior Moldings, Radiator Shrouds, Inner Fenders, Bumper Covers	Profax, Oleflo, Marlex, Azdel, Novolen, Tenite, Daplen, Escorene
ABS	Acrylonitrite/Butadine/Styrene	Instrument Clusters, Trim Moldings, Consoles, Armrest Supports, Steering Column Jackets	ABS, Cycolac, Abson, Kralastic, Lustran, Absafil, Dyel
ABS + PC	Acrylonitrite/Butadine-Styrene + Polycarbonate	Instrument Panels, Exterior Door Panels, Rocker Panel Covers	Babyland, Proloy, Cycoloy, KHA
E/P/TPO	Ethylene/Polypropylene (Rubber)	Bumper Covers	TPO, TPR (Thermoplastic Rubber) EPI, EPII
PA + PPE	Polyamide + Polyphenylene Ether	Fenders	GTX

Structure Identification



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Structure Identification

Number	Description	Procedure
1	Impact Bar Bracket Replacement – Front Bumper	*Impact Bar Bracket Replacement - Front Bumper on page 3-15*
2	Tie Bar Replacement	*Tie Bar Replacement on page 3-17*
3	Tie Bar Replacement – Lower	*Tie Bar Replacement - Lower on page 3-21*
4	Latch Primary Support Replacement – Hood	*Latch Primary Support Replacement - Hood on page 3-26*
5	Tie Bar Replacement – Left	*Tie Bar Replacement - Left on page 3-19*
6	Tie Bar Replacement – Right	*Tie Bar Replacement - Right on page 3-23*
7	Bracket Replacement Side Rail – Front Compartment	*Bracket Replacement Front Compartment - Side Rail on page 3-30*

Structure Identification (cont'd)

Number	Description	Procedure
8	Wheelhouse Replacement – Front	*Wheelhouse Replacement - Front on page 3-32*
9	Wheelhouse Extension Replacement – Front	*Wheelhouse Extension Replacement - Front on page 3-34*
10	Rail Replacement Front Compartment – Side Upper	*Rail Replacement Front Compartment - Side Upper on page 3-36*
11	Rail Sectioning Front Compartment – Side Upper	*Rail Sectioning Front Compartment - Side Upper on page 3-39*
12	Plenum Panel Replacement – Upper	*Plenum Panel Replacement - Upper on page 3-43*
13	Plenum Panel Replacement – Lower	*Plenum Panel Replacement - Lower on page 3-45*
14	Dash Panel Replacement	*Dash Panel Replacement on page 3-48*
15	Cross Bar New Replacement – Floor Panel	*Cross Bar No.1 Replacement - Floor Panel on page 3-51*
16	Rail Replacement Front Compartment – Front	*Rail Replacement Front Compartment - Front on page 3-53*
17	Rail Replacement Front Compartment – Front Half	*Rail Replacement Front Compartment - Front Half on page 3-55*
18	Rail Sectioning Front Compartment – Front	*Rail Sectioning Front Compartment - Front on page 3-59*
19	Rail Replacement Front Side Underbody – Outer	*Rail Replacement Front Side Underbody - Outer on page 3-63*
20	Suspension Support Replacement – Front	*Suspension Support Replacement - Front on page 3-66*
21	Extension Replacement Front Compartment Side Rail – Rear	*Extension Replacement Front Compartment Side Rail - Rear on page 3-68*
22	Windshield Frame Reinforcement Replacement – Inner Upper	*Windshield Frame Reinforcement Replacement - Inner Upper on page 3-70*
23	Hinge Pillar Body Replacement – Front Inner	*Hinge Pillar Body Replacement - Front Inner on page 3-75*
24	Hinge Pillar Body Reinforcement Replacement – Front Inner	*Hinge Pillar Body Reinforcement Replacement - Front Inner on page 3-73*
25	Hinge Pillar Body Sectioning – Front	*Hinge Pillar Body Sectioning - Front on page 3-78*
26	Roof Panel Replacement – Outer	*Roof Panel Replacement - Outer on page 3-81*
27	Windshield Frame Header Panel Replacement – Front	*Windshield Frame Header Panel Replacement - Front on page 3-85*
28	Rear Window Frame Header Panel Replacement – Rear	*Rear Window Frame Header Panel Replacement - Rear on page 3-87*
29	Floor Panel Replacement – Center	*Floor Panel Replacement - Center on page 3-89*
30	Rocker Panel Replacement – Inner	*Rocker Panel Replacement - Inner on page 3-93*
31	Rocker Panel Extension Replacement – Inner	*Rocker Panel Extension Replacement - Inner on page 3-95*
32	Rocker Panel Reinforcement Replacement – Inner	*Rocker Panel Reinforcement Replacement - Inner on page 3-97*
33	Rocker Panel Reinforcement Sectioning – Inner	*Rocker Panel Reinforcement Sectioning - Inner on page 3-100*

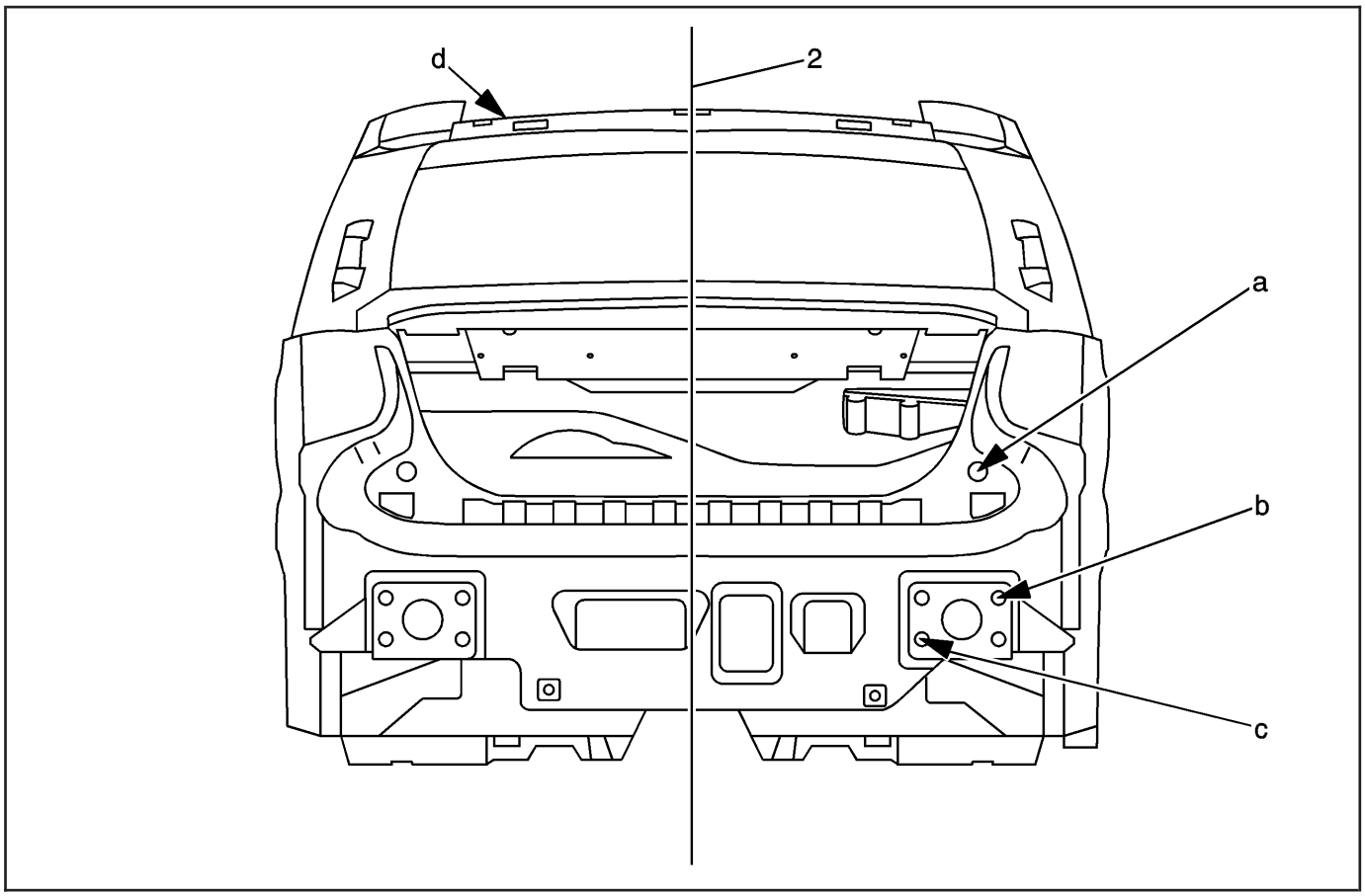
Structure Identification (cont'd)

Number	Description	Procedure
34	Pillar Lock Front Door Sectioning – Outer	*Pillar Lock Front Door Sectioning - Outer on page 3-103*
35	Pillar Lock Front Door Reinforcement Replacement – Outer	*Pillar Lock Front Door Reinforcement Replacement - Outer on page 3-107*
36	Pillar Lock Front Door Reinforcement	*Pillar Lock Front Door Reinforcement Sectioning - Outer on page 3-109*
37	Pillar Lock Front Door Replacement – Inner	*Pillar Lock Front Door Replacement - Inner on page 3-112*
38	Pillar Lock Front Door Sectioning Replacement – Outer	*Pillar Lock Front Door Reinforcement Sectioning - Outer on page 3-109*
39	Rear Window Reinforcement Replacement – Lower Front	*Rear Window Reinforcement Replacement - Lower Front on page 3-114*
40	Rear Window Panel Replacement	*Rear Window Panel Replacement on page 3-116*
41	Rear Window Reinforcement – Rear	*Rear Window Reinforcement Replacement - Rear on page 3-119*
42	Pillar Lock Rear Door Replacement – Inner	*Pillar Lock Rear Door Replacement - Inner on page 3-121*
43	Body Side Panel Replacement – Outer	*Body Side Panel Replacement - Outer on page 3-123*
44	Rear Compartment Floor Panel Sectioning	*Rear Compartment Floor Panel Sectioning on page 3-126*
45	Wheelhouse Replacement – Rear Inner	*Wheelhouse Replacement - Rear Inner on page 3-130*
46	Quarter Panel Sectioning – Outer	*Quarter Panel Sectioning - Outer on page 3-133*
47	Quarter Panel Replacement – Inner	*Quarter Panel Replacement - Inner on page 3-136*
48	Cross Bar No. 4 Replacement – Floor Panel	*Cross Bar No.4 Replacement - Floor Panel on page 3-140*
49	Cross Bar No. 4 Extension Replacement – Floor Panel	*Cross Bar No.4 Extension Replacement - Floor Panel on page 3-138*
50	Cross Bar No. 5 Replacement – Floor Panel Center	*Cross Bar No.5 Replacement - Floor Panel on page 3-145*
51	Cross Bar No. 5 Extension Replacement – Floor Panel	*Cross Bar No.5 Extension Replacement - Floor Panel on page 3-143*
52	Rail Replacement Rear Side Underbody	*Rail Replacement Rear Side Underbody on page 3-147*
53	Rail Sectioning Rear Side Underbody	*Rail Sectioning Rear Side Underbody on page 3-150*
54	Rail Side Underbody Gusset Replacement – Rear	*Rail Underbody Gusset Replacement - Rear on page 3-155*
55	Rail Side Underbody Reinforcement Replacement – Rear	*Rail Underbody Reinforcement Replacement - Rear on page 3-157*
56	Impact Bar Anchor Plate Replacement – Rear Bumper	*Impact Bar Anchor Plate Replacement - Rear Bumper on page 3-160*
57	Body Rear End Panel Replacement	*Body Rear End Panel Replacement on page 3-162*
58	Battery Tray Replacement	*Battery Tray Replacement on page 3-28*

Specifications

Dimensions - Body

Rear End



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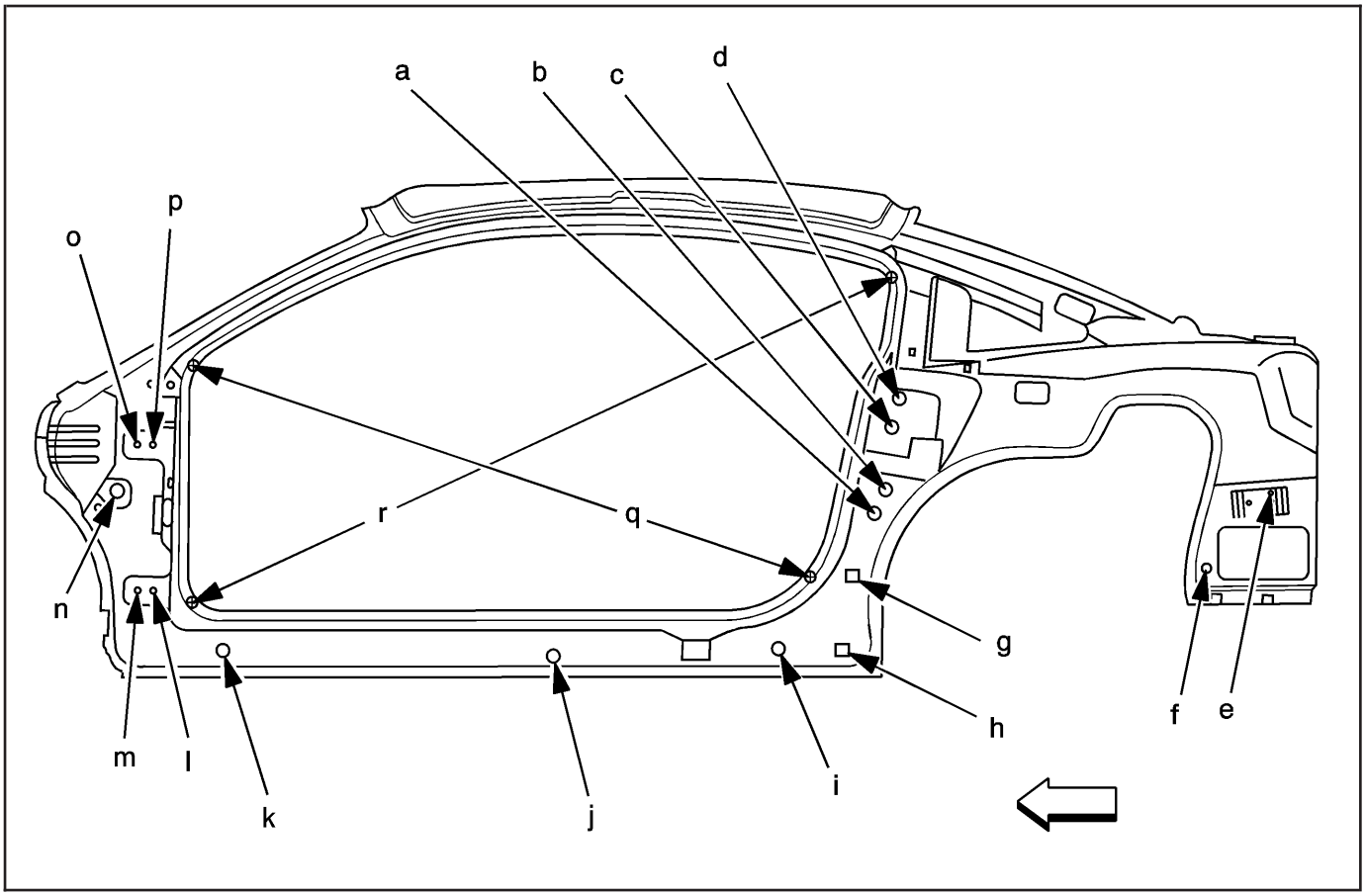
Location	Description	Length = x	Width = y	Height = z	Point to Point
2	Center Line	—	—	—	x
a	Rear Tail Lamp Pocket Hole	5162	532	683	x
b	Rear Impact Beam Upper Outer Attach Hole	5149	587	447	x
c	Rear Impact Beam Lower Outer Attach Hole	5176	439	327	x
d (Sedan)	Rear Header Panel Roof Attachment Hole	4133	306	1326	x
d (Coupe)	Rear Header Panel Roof Attachment Hole	4068	306	1285	x
All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.					

Coupe Side



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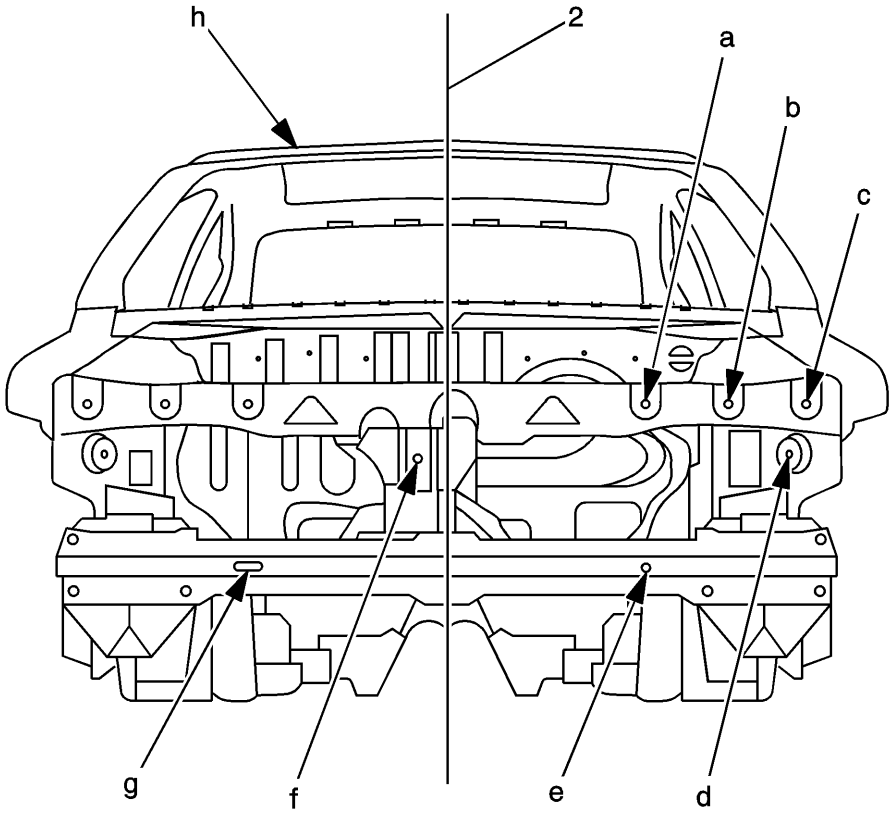
Location	Description	Length = x	Width = y	Height = z	Point to Point
a	Rear Lower Hinge Lower Hole	3996	770	555	x
b	Rear Lower Hinge Upper Hole	4046	759	649	x
c	Rear Upper Hinge Lower Hole	4067	747	758	x
d	Rear Upper Hinge Upper Hole	4056	738	863	x
e	Fascia Bracket Rear Upper Hole	4989	768	798	x
f	Quarter Panel Rear Inner Lower Hole	4822	730	445	x
g	Quarter Panel Dog Leg Outer Attach Hole	3955	762	320	x
h	Quarter Panel Dog Leg Outer Attach Hole	3961	762	235	x
i	Rocker Panel Rear Hole	3780	762	250	x
j	Rocker Panel Center Hole	3228	756	234	x
k	Rocker Panel Front Hole	2432	762	250	x
l	Front Lower Hinge Rear Hole	2260	750	396	x
m	Front Lower Hinge Front Hole	2225	750	396	x
n	Body Side Control Hole	2175	745	640	x
o	Front Upper Hinge Front Hole	2225	739	754	x
p	Front Upper Hinge Rear Hole	2260	739	754	x

Location	Description	Length = x	Width = y	Height = z	Point to Point
q	Door Opening Point to Point Measurement to Weld Flange Die Marks	x	x	x	1588
r	Door Opening Point to Point Measurement to Weld Flange Die Marks	x	x	x	1868
All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.					

Front End



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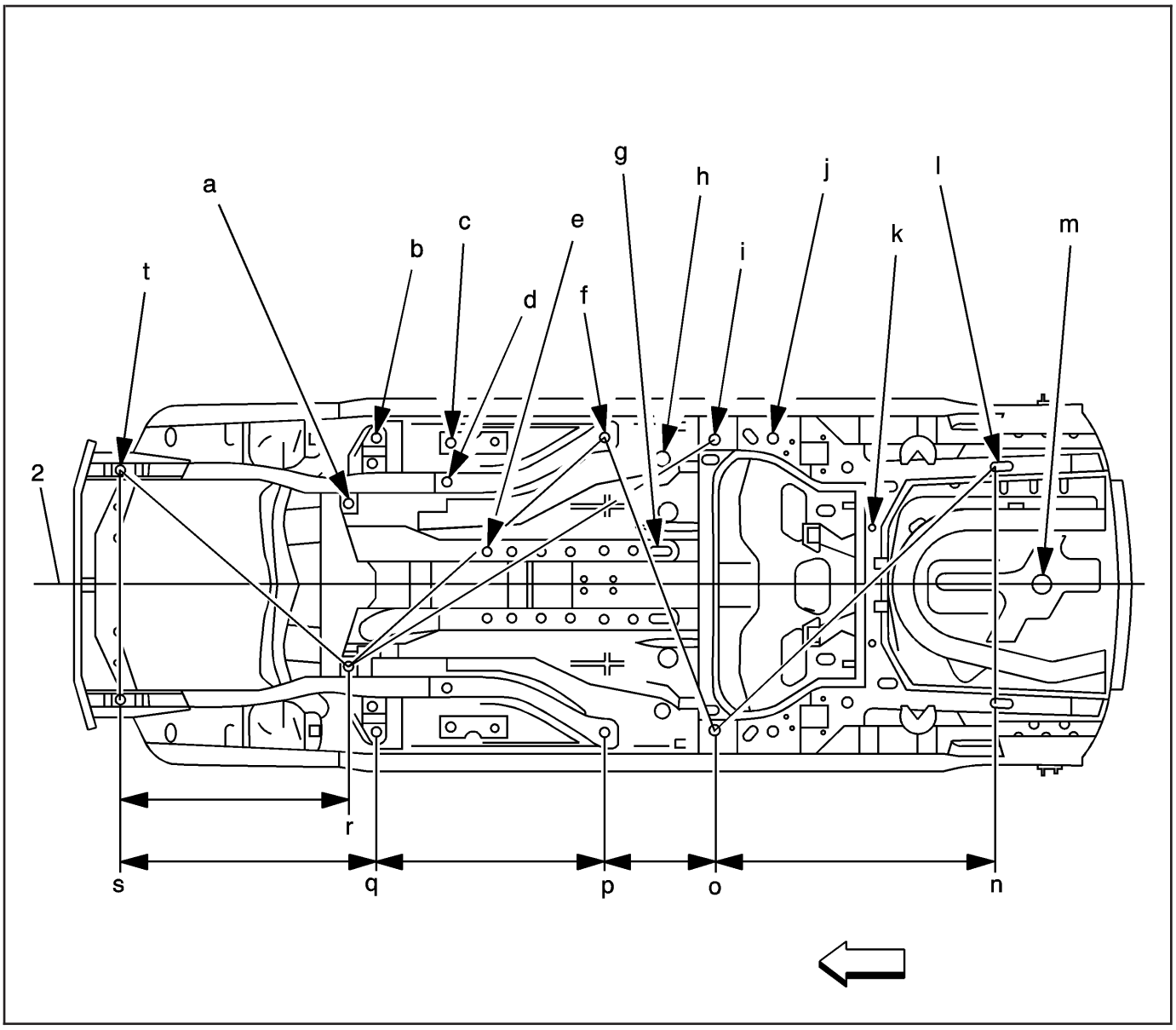
Location	Description	Length = x	Width = y	Height = z	Point to Point
2	Center Line	—	—	—	x
a	Front Lamp Assembly Inner Attach Hole	1146	327	675	x
b	Front Lamp Assembly Center Attach Hole	1208	458	682	x
c	Front Lamp Assembly Outer Attach Hole	1271	589	676	x
d	Front Lamp Assembly Lower Attach Hole	1307	561	594	x
e	Lower Tie Bar Outer Hole	998	314	428	x
f	Center Brace Hole	1089	17	568	x
g	Lower Tie Outer Slot	998	314	428	x
h	Front Header Panel Roof Attachment Hole (Sedan and Coupe)	2799	297	1307	x
All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.					

Underbody



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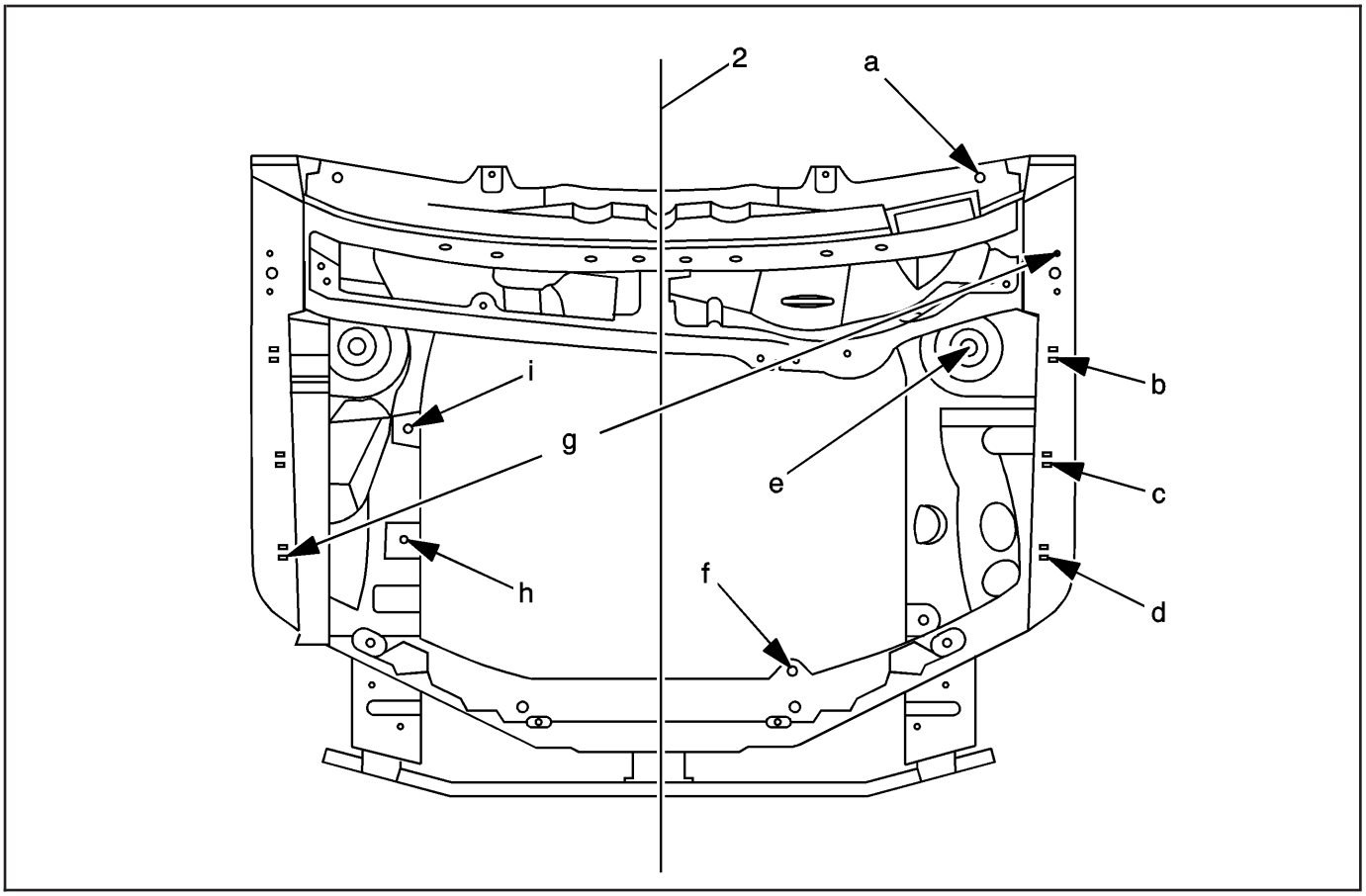
Location	Description	Length = x	Width = y	Height = z	Point to Point
2	Center Line	—	—	—	x
a	Rear Cradle Attachment Hole	2100	332	201	x
b	Front Rail Outer Torque Box Master Gage Hole	2218	600	121	x
c	Floor Pan Drain Hole Front Hole	2420	542	190	x
d	Front Rail Hole Front of Rear Portion	2675	421	134	x
e	Floor Pan Sled Rail Front Hole	2585	162	133	x
f	Front Rail Hole Rear of Rear Portion	3171	601	167	x
g	Floor Pan Sled Rail Rear Hole	3374	170	144	x
h	Floor Pan Rear Drain Hole	3378	521	190	x
i	Rear Rail Torque Box Master Gage Hole	3593	592	203	x
j	Front Rail Hole	3826	600	184	x
k	5 Bar Outer Hole	4235	180	354	x
l	Rear Rail Rear Slot	4757	487	372	x
m	Rear Compartment Floor Pan Drain Hole	5000	40	221	x
t	Front Cradle Attachment Hole	1371	474	231	x
n to o	Rear Rail Rear Hole to Rear Rail Master Gage Hole	—	—	—	1174
o to p	Rear Rail Master Gage Hole to Front Rail Rear Hole	—	—	—	419
p to q	Front Rail Rear Hole to Front Rail Master Gage Hole	—	—	—	956
q to s	Front Rail Master Gage Hole to Front Cradle Attachment Hole	—	—	—	847
r to s	Rear Cradle Attachment Hole to Front Cradle Attachment Hole	—	—	—	742
s to t	Front Cradle Attachment Hole to Front Cradle Attachment Hole	—	—	—	948
t to r	Front Cradle Attachment Hole to Opposite Rear Cradle Attachment	—	—	—	1087
r to f	Rear Cradle Attachment Hole to Opposite Rear Rail Rear Hole	—	—	—	1756
r to i	Rear Cradle Attachment Hole to Rear Rail Master Gage Hole	—	—	—	1756
f to o	Front Rail Rear Hole to Opposite Rear Rail Master Gage Hole	—	—	—	1243
o to l	Rear Rail Master Gage Hole to Opposite Rear Rail Rear Hole	—	—	—	1591
l to n	Rear Rail Rear Hole to Rear Rail Rear Hole	—	—	—	974
All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.					

Engine Compartment



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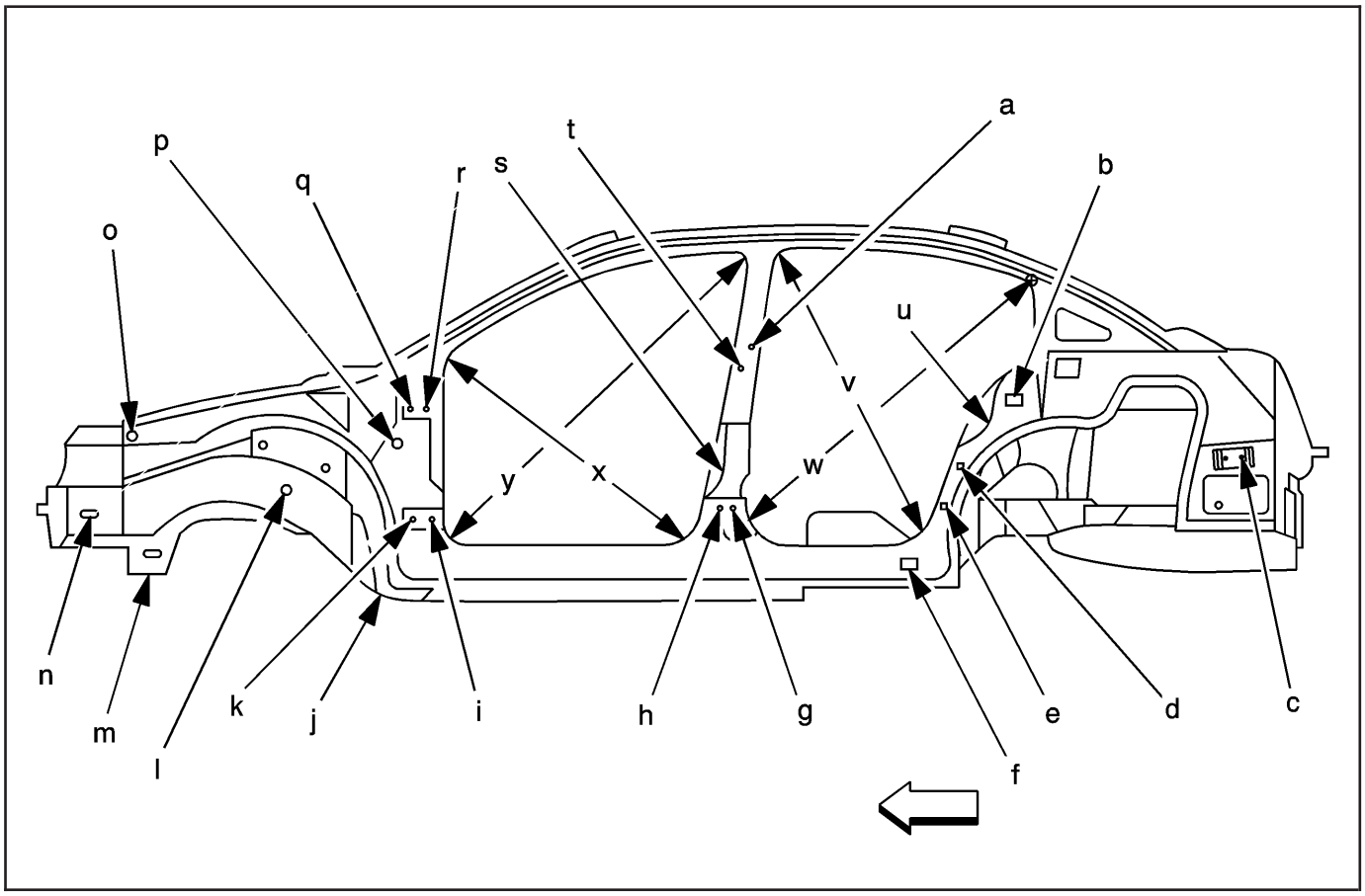
Location	Description	Length = x	Width = y	Height = z	Point to Point
2	Center Line	—	—	—	x
a	Upper Cowl Panel Rear Flange Hole	2115	590	873	x
b	Front Upper Rail Rear Fender Attach	1786	698	805	x
c	Front Upper Rail Center Fender Attach	1594	688	773	x
d	Front Upper Rail Front Fender Attach	1425	681	739	x
e	Strut Tower Center Hole	1811	553	815	x
f	Front Upper Tie Bar Rear Flange Hole	1226	232	700	x
g	Point to Point Front Fender Attach Hole to Rear Hinge Attach Hole	—	—	—	1499
h	Front Engine Mount Hole Rail Surface Not Top of Stud	1461	470	515	x
i	Rear Engine Mount Hole Rail Surface Not Top of Stud	1657	465	515	x
All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.					

Sedan Side



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Location	Description	Length = x	Width = y	Height = z	Point to Point
a	Rear Upper Hinge Upper Hole	3301	746	776	x
b	Quarter Panel Dog Leg Outer Attachment Hole	4226	779	768	x
c	Fascia Bracket Rear Upper Hole	4974	746	596	x
d	Quarter Panel Dog Leg Outer Attach Hole	4068	767	617	x
e	Quarter Panel Dog Leg Outer Attachment Hole	3991	767	437	x
f	Quarter Panel Dog Leg Outer Attachment Hole	3780	762	250	x
g	Rear Lower Hinge Rear Hole	3289	746	430	x
h	Rear Lower Hinge Front Hole	3254	747	430	x
i	Front Lower Hinge Rear Hole	2259	748	396	x
j	Rear Cradle Attachment Hole	2100	332	201	x
k	Front Lower Hinge Front Hole	2225	740	396	x
l	Front Rail Outer Panel Hole	1840	463	430	x
m	Front Cradle Attachment Hole	1371	500	280	x
n	Weld Nut Hole Washer Bottle Attachment	1222	540	409	x
o	Front Upper Outer Rail Front Hole	1880	743	760	x
p	Body Side Control Hole	2175	745	640	x
q	Front Upper Hinge Front Hole	2224	737	754	x
r	Front Upper Hinge Rear Hole	2260	737	754	x
s	Front Door Latch Striker Upper Hole	3263	748	574	x
t	Rear Upper Hinge Lower Hole	3299	754	741	x
u	Rear Latch Striker Upper Hole	4145	739	736	x
v	Rear Door Opening Point to Point Measurements to Weld Flange Die Marks	—	—	—	1015
w	Rear Door Opening Point to Point Measurement to Weld Flange Die Marks	—	—	—	1188
x	Front Door Opening Point to Point Measurement to Weld Flange Die Marks	—	—	—	970
y	Front Door Opening Point to Point Measurement to Weld Flange Die Marks	—	—	—	1337

All dimensions are measured from a zero line, a center line, and a common datum. All dimensions are symmetrical unless otherwise specified.

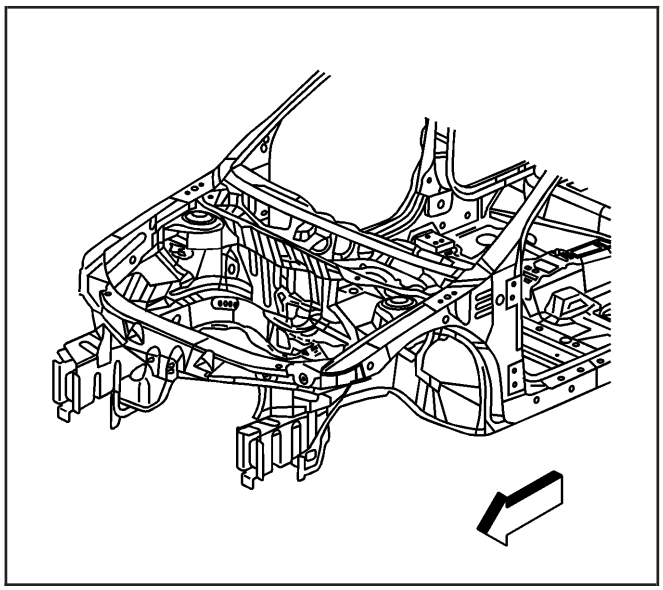
Repair Instructions

Impact Bar Bracket Replacement - Front Bumper

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

1. Disable the SIR system.
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



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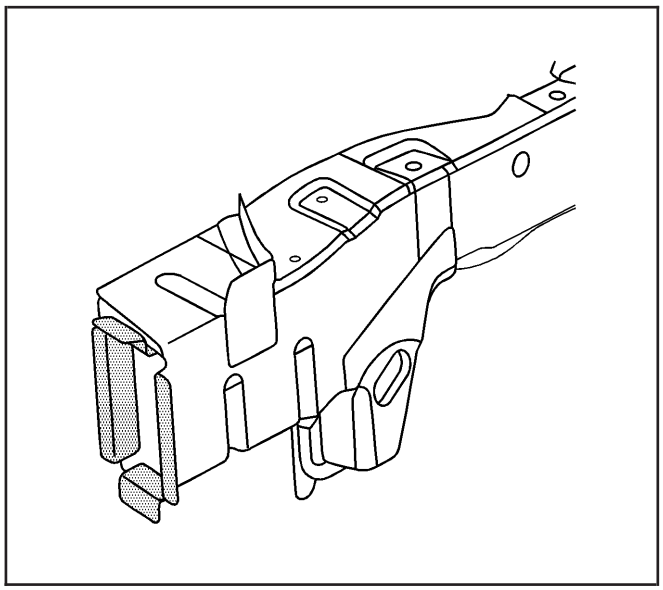
Important: Note the number and location of the factory welds for installation of the impact bar bracket - front bumper

6. Locate and drill out all the factory welds from the outside surface of the rail.



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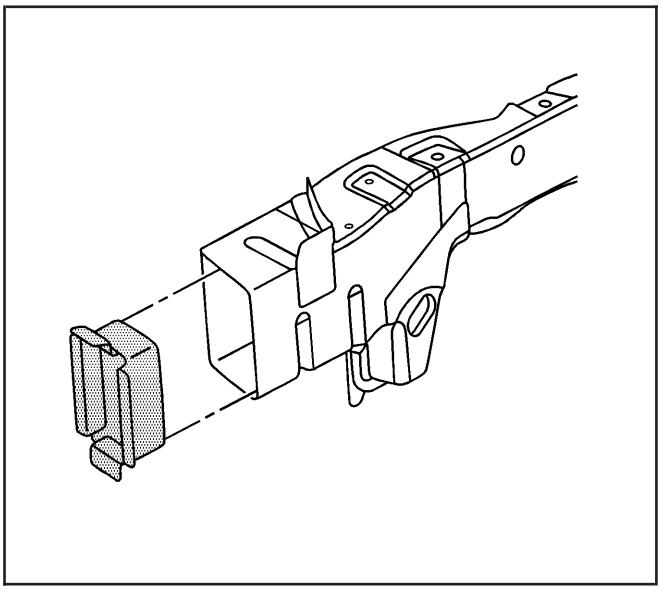

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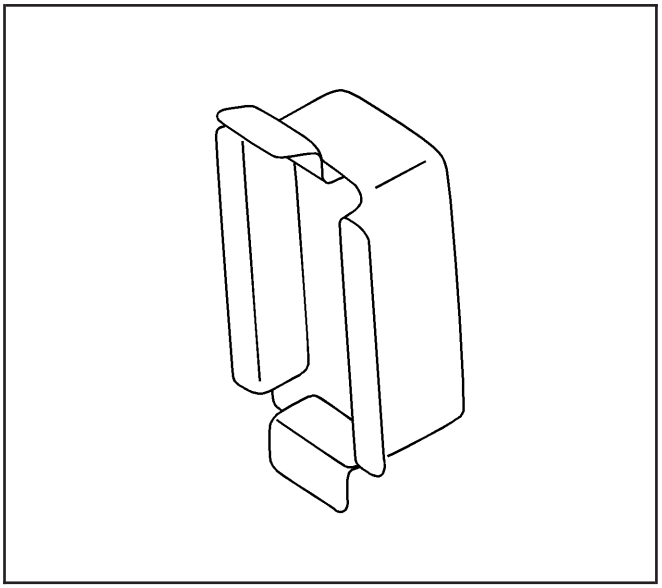
7. Remove the front bumper impact bar bracket.



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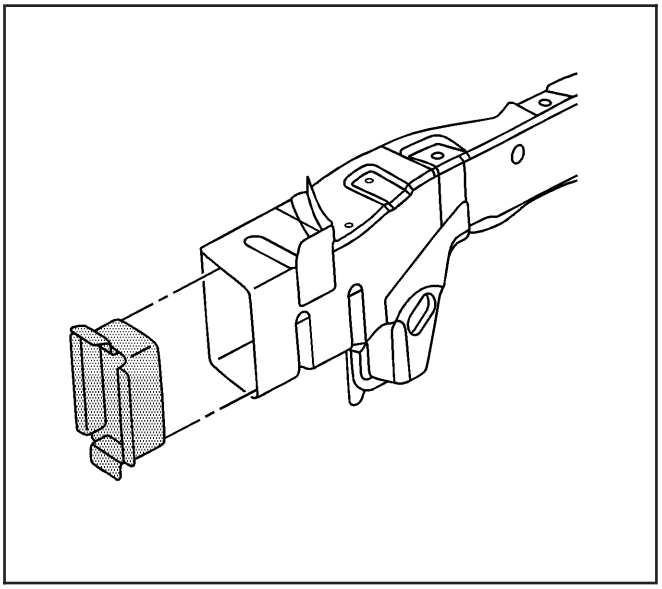
Installation Procedure

1. Prepare all mating surfaces as necessary.
2. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



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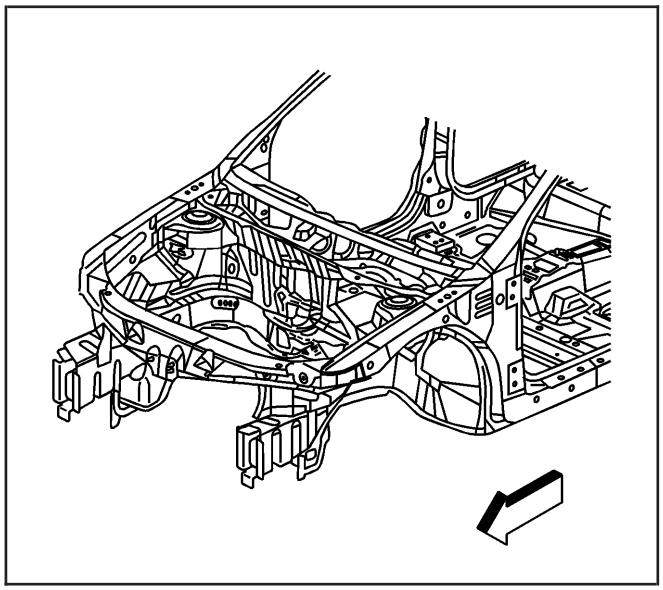
Important: Verify the location of the front rail using 3-dimensional measuring equipment.

3. Position the impact bar bracket on the rail and clamp in place.

4. Plug weld accordingly.
5. Clean and prepare all of the welded surfaces.
6. Install all of the related panels and components.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
8. Paint the repaired area.
9. Connect the negative battery cable.
10. Enable the SIR system.



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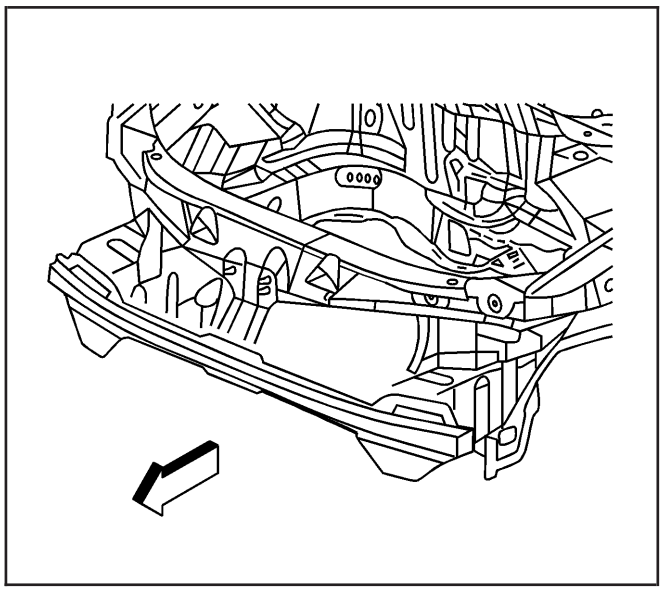
Tie Bar Replacement

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

1. Disable the SIR system.
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body on page 3-7*.
5. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary.



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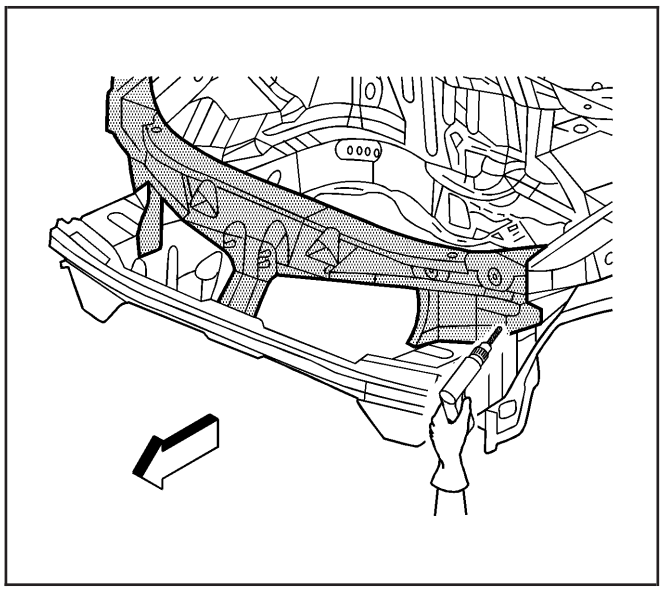
Important: Do not damage any inner panels or reinforcements.

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



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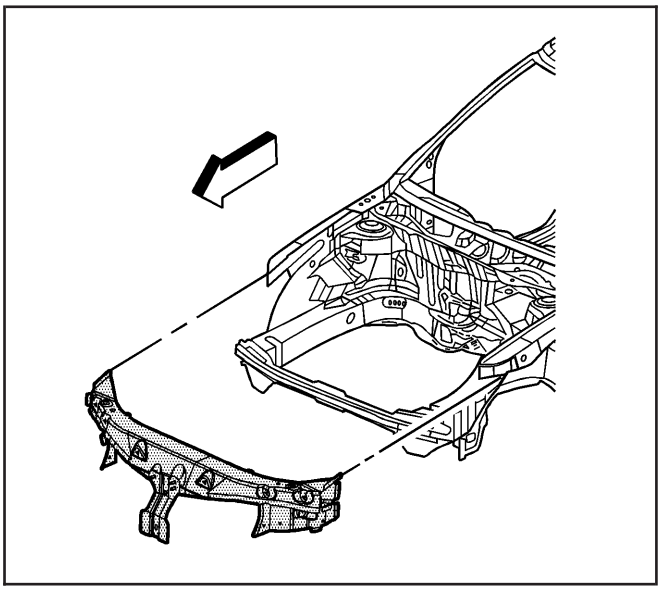
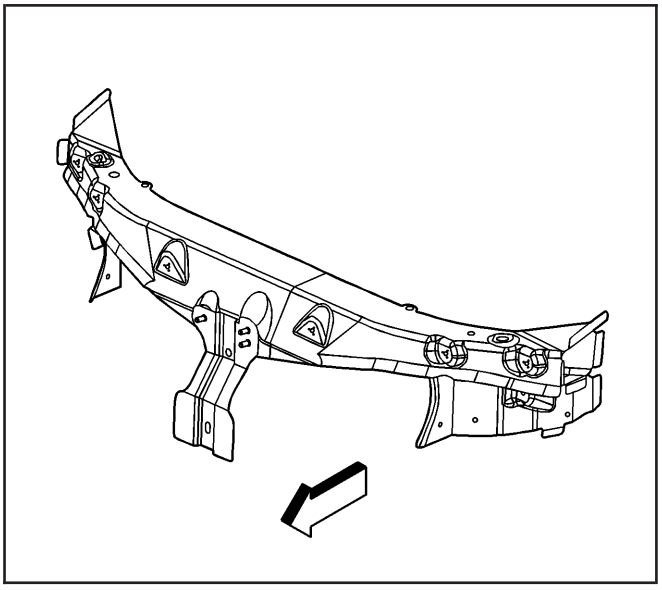


867491

7. Remove the damaged tie bar.

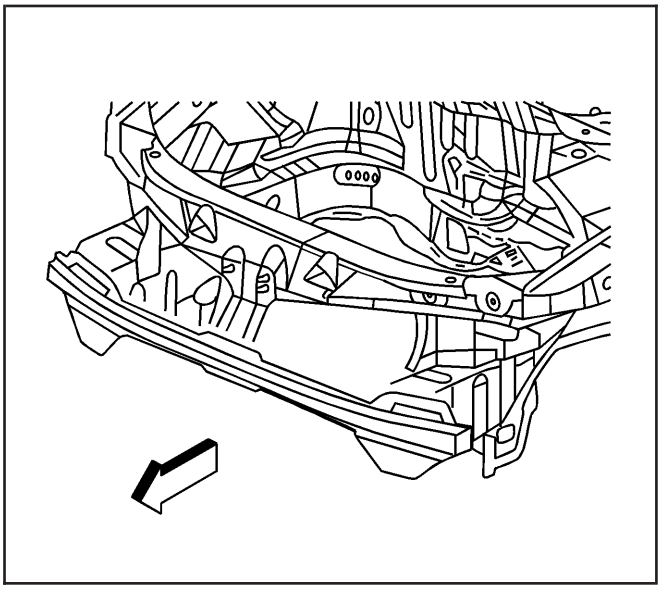


865271

Installation Procedure

Important: 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.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



867423

4. Position the tie bar to the vehicle using 3-dimensional measuring equipment. Clamp the tie bar into place.
5. Plug weld accordingly.
6. Clean and prepare all welded surfaces.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
8. Paint the repair area.
9. Install all related panels and components.
10. Connect the negative battery cable.
11. Enable the SIR system.

Tie Bar Replacement - Left

Removal Procedure

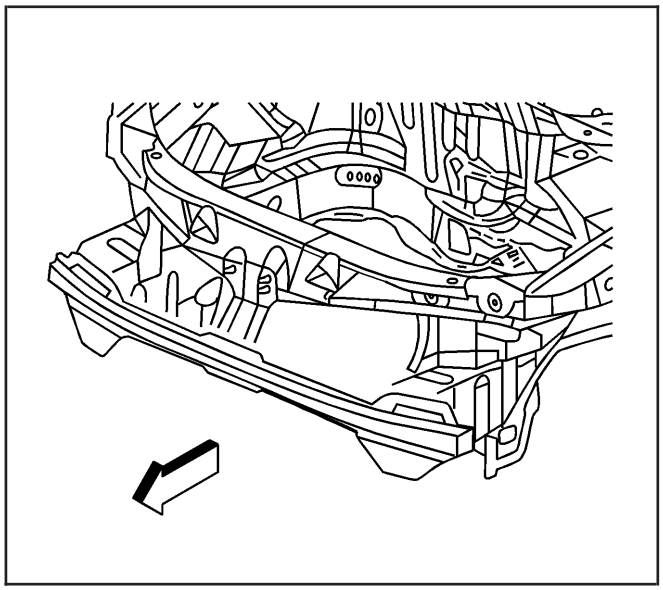
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

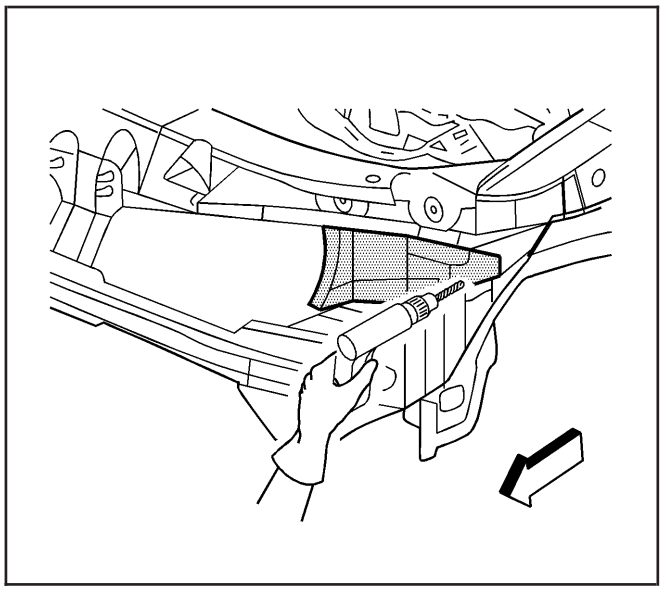
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



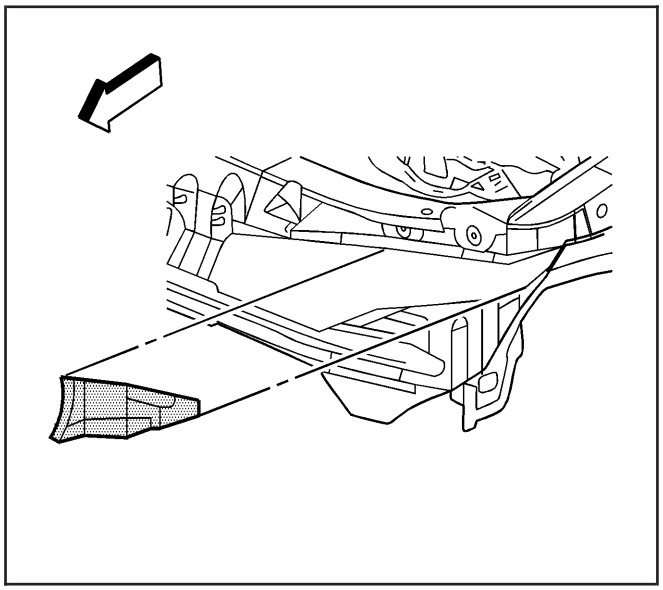
867423

Important: Note the number and location of the factory welds for installation of the tie bar-left.

6. Locate and drill out all the necessary factory welds.

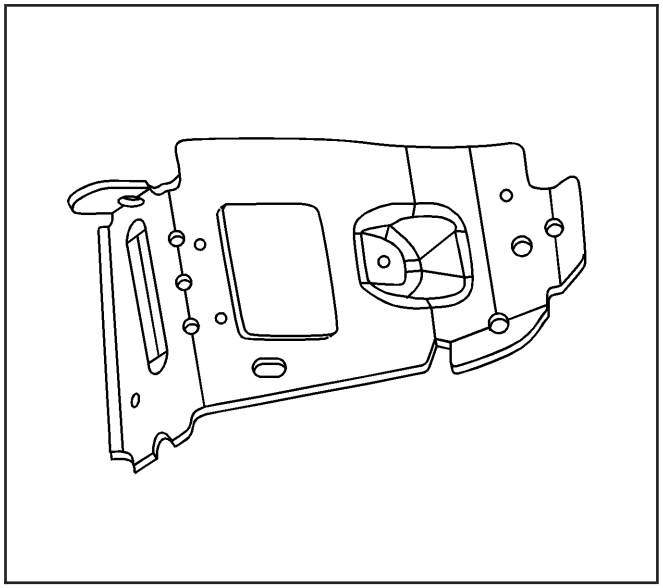


867500



867504

7. Remove the left tie bar.

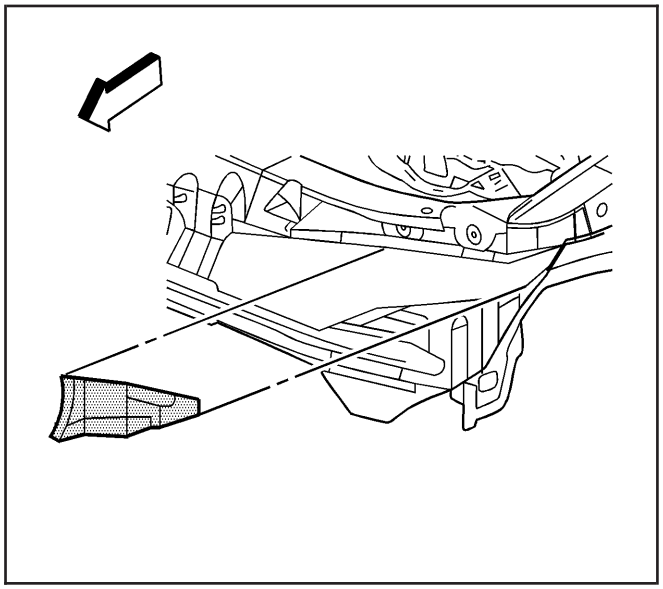


865272

Installation Procedure

Important: 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.

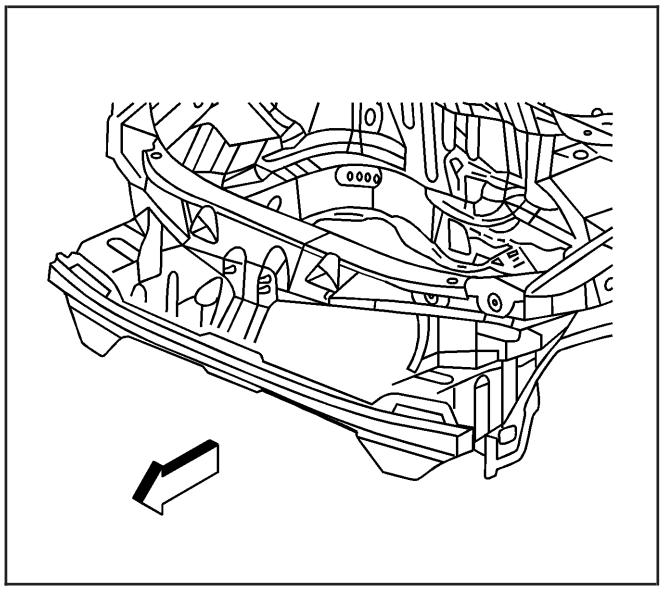
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



867504

4. Position the left tie bar to the vehicle using 3-dimensional measuring equipment. Clamp the tie bar in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



867423

Tie Bar Replacement - Lower

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

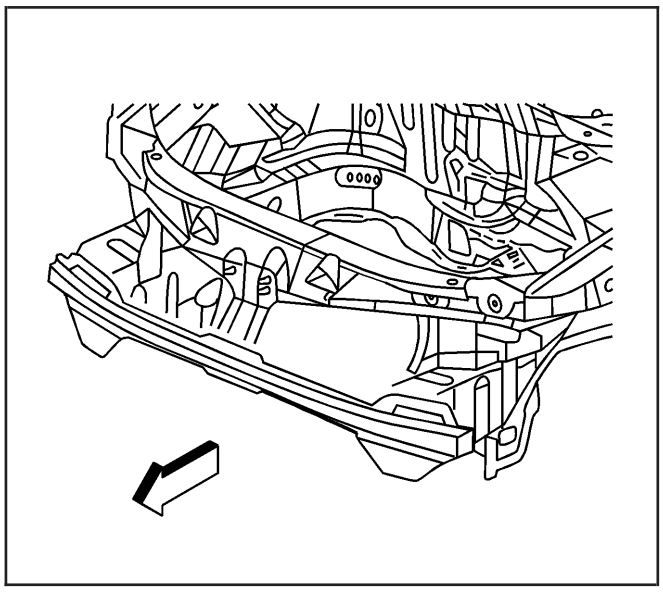
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

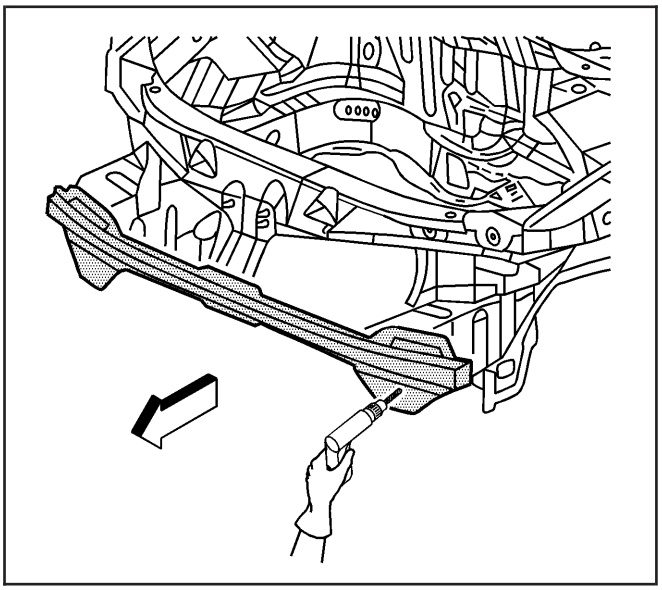
2. Disconnect the negative battery cable.

Important: This panel is replaced at factory seams or can be unbolted for removal.

3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



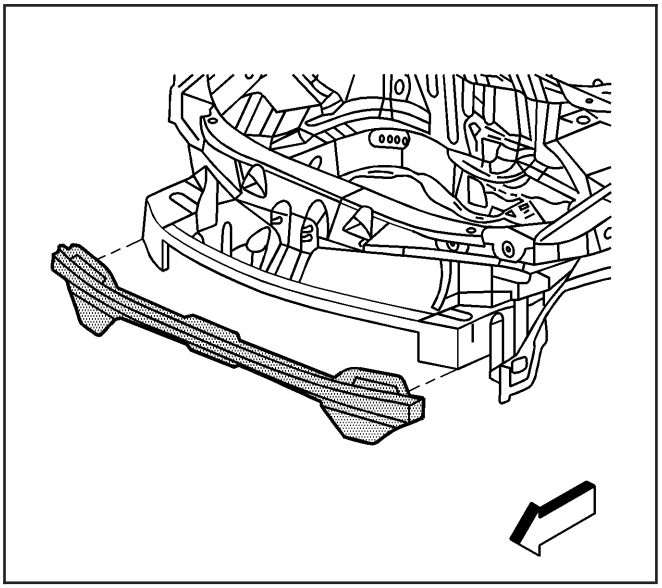
867423



867424

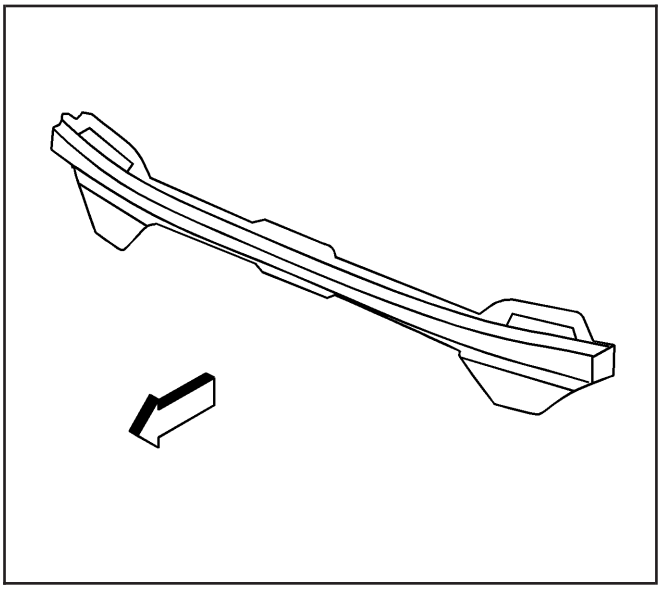
Important: Note the number and location of the factory welds for installation of the lower tie bar.

6. Locate and drill out all the necessary factory welds.



867470

7. Remove the lower tie bar.



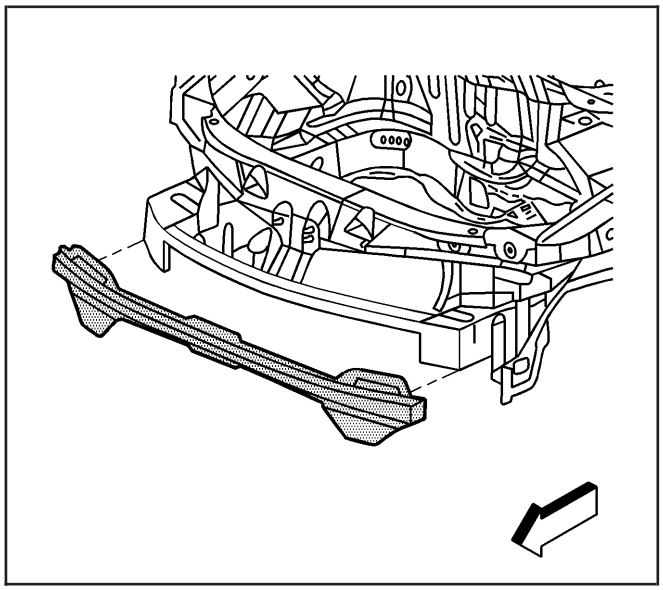
865257

Installation Procedure

Important: 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.

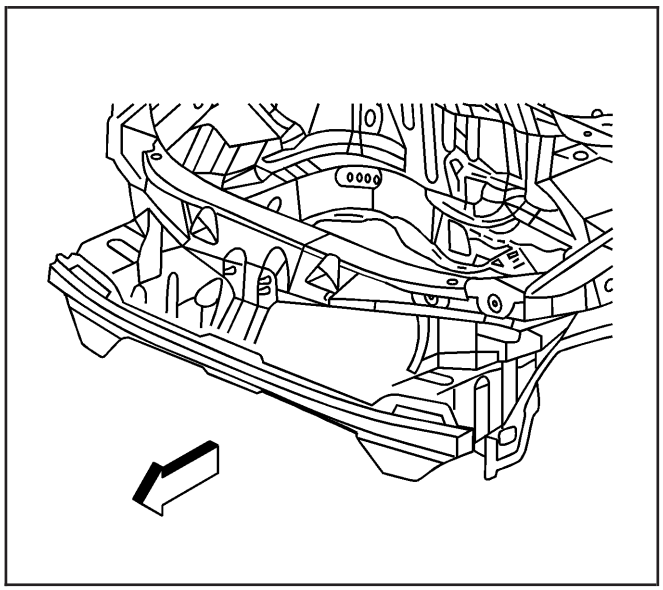
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

4. Position the tie bar on the vehicle using 3-dimensionial measuring equipment. Clamp the tie bar into place.



867470

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



867423

Tie Bar Replacement - Right

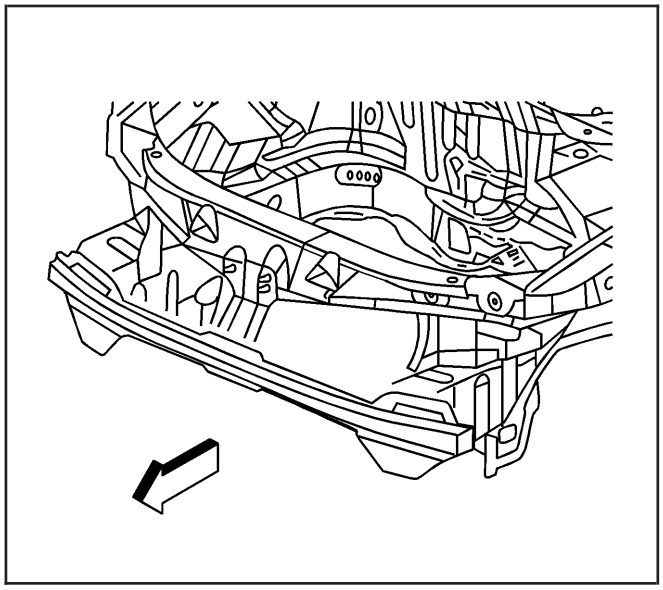
Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

Important: The graphic shows the left hand procedure. The right hand procedure is similar.

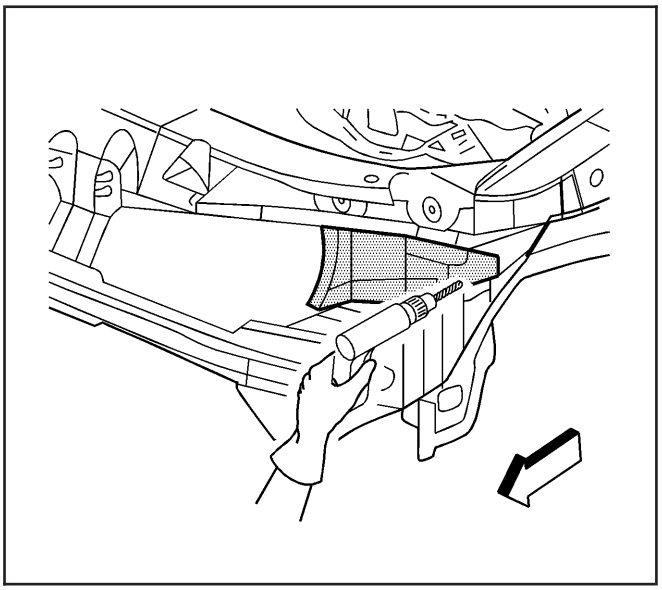
1. Disable the SIR system.



867423

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

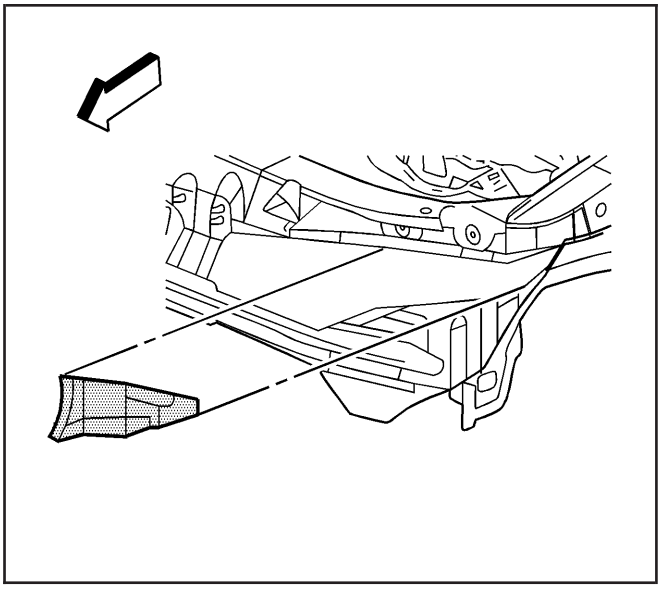
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



867500

Important: Note the number and location of the factory welds for installation of the right tie bar.

6. Locate and drill out all the necessary factory welds.
7. Remove the right tie bar panel from the vehicle.

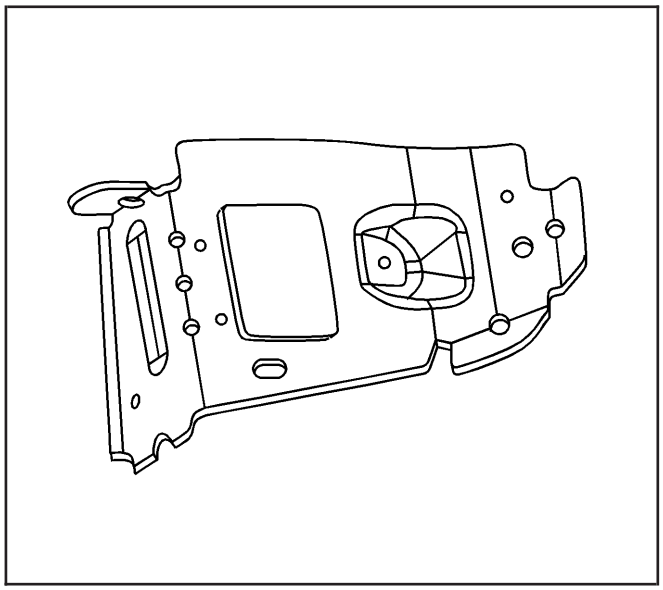


867504

Installation Procedure

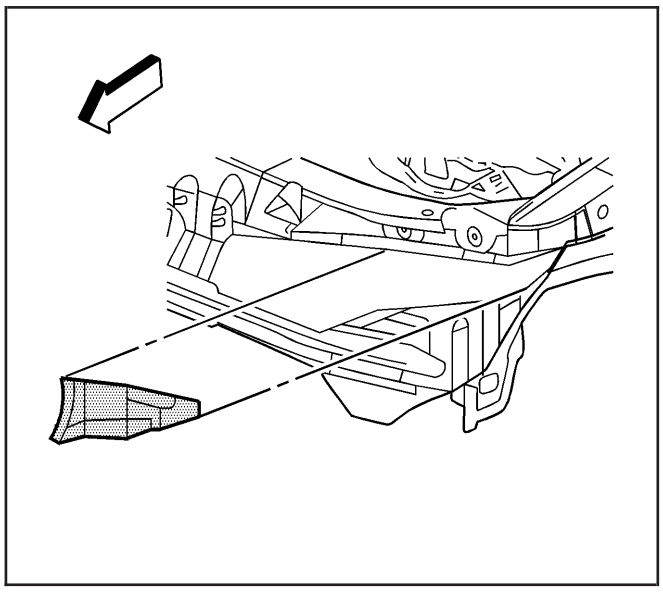
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



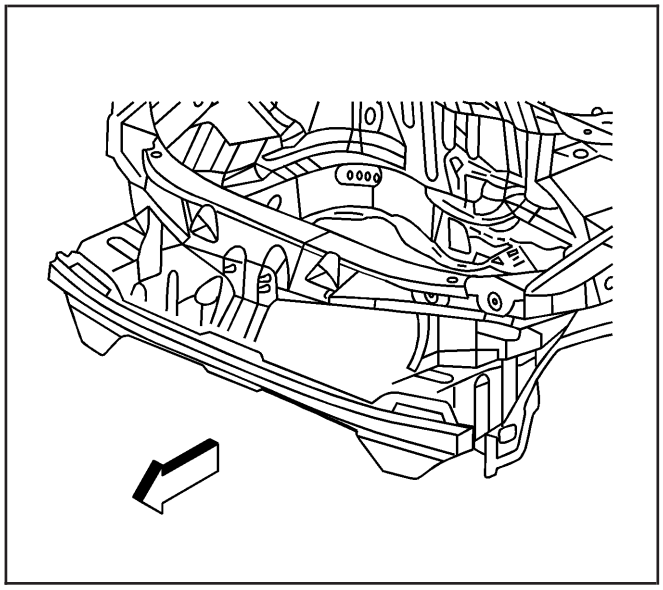
865272

4. Position the right tie bar panel to the vehicle using 3-dimensional measuring equipment. Clamp the tie bar in place.

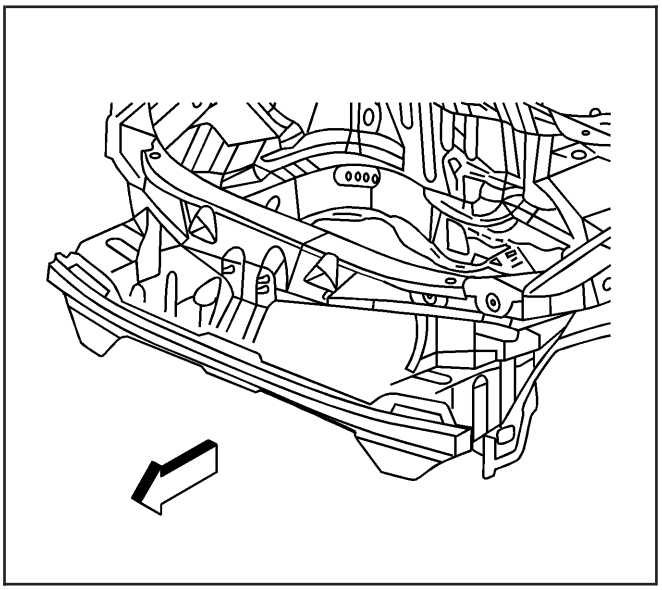


867504

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



867423



867423

Latch Primary Support Replacement - Hood

Removal Procedure

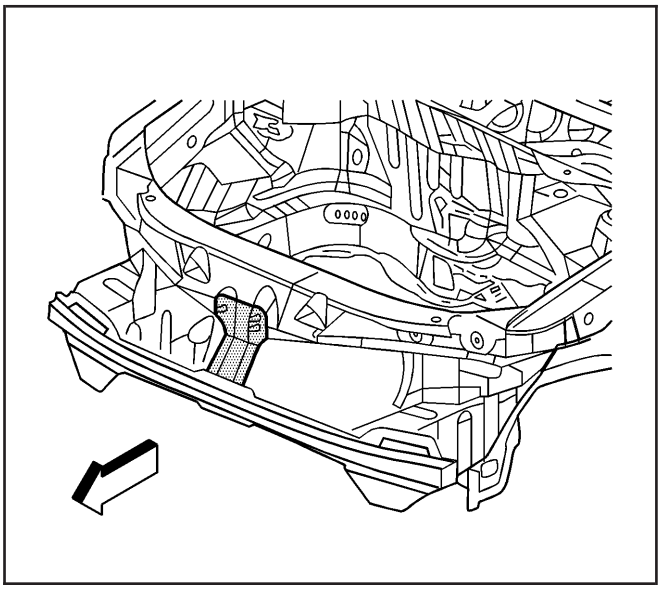
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

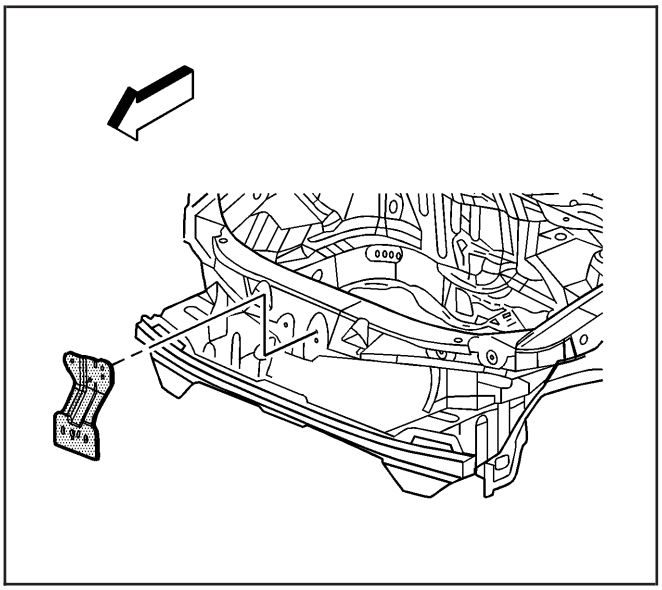


867511

Important: Note the number and location of the factory welds for installation of the latch primary support.

6. Locate and drill out all the necessary factory welds.

7. Remove the latch primary support.

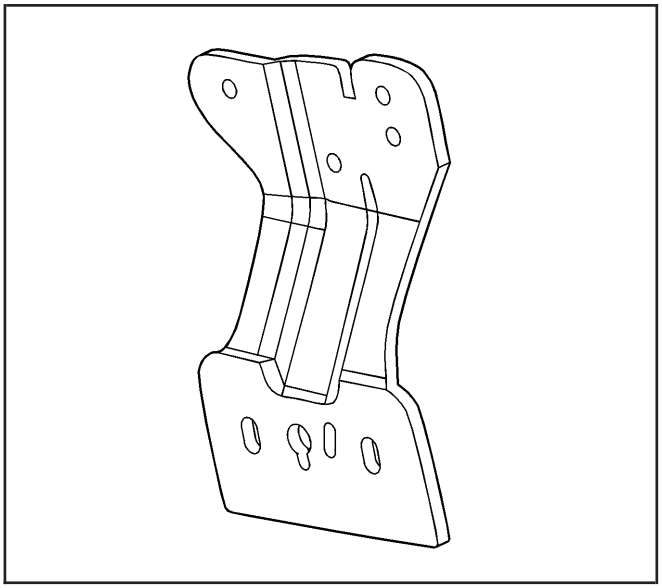


867514

Installation Procedure

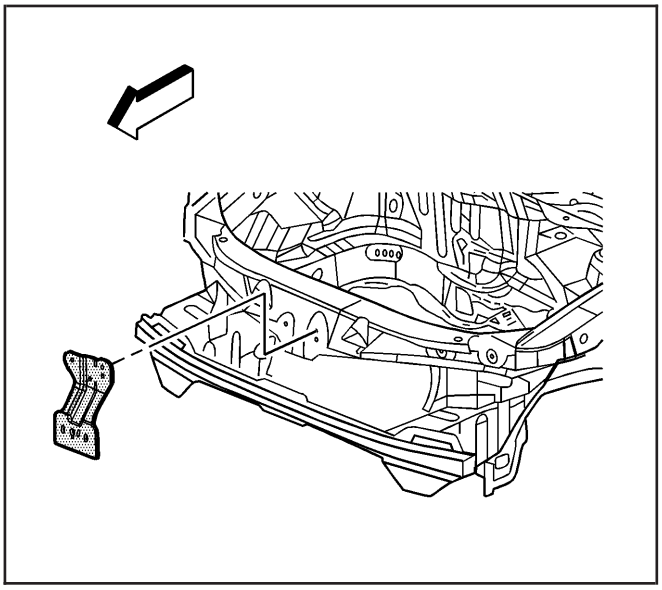
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

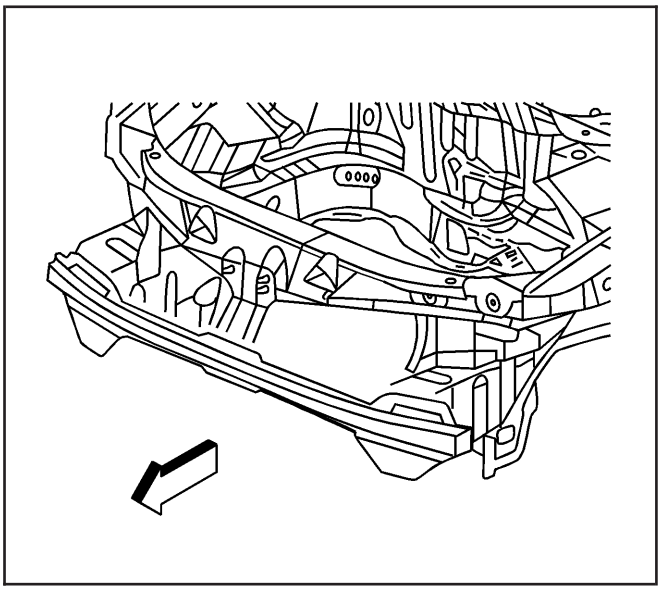


865273

4. Position the latch primary support on the vehicle using 3-dimensional measuring equipment. Clamp the support into place.

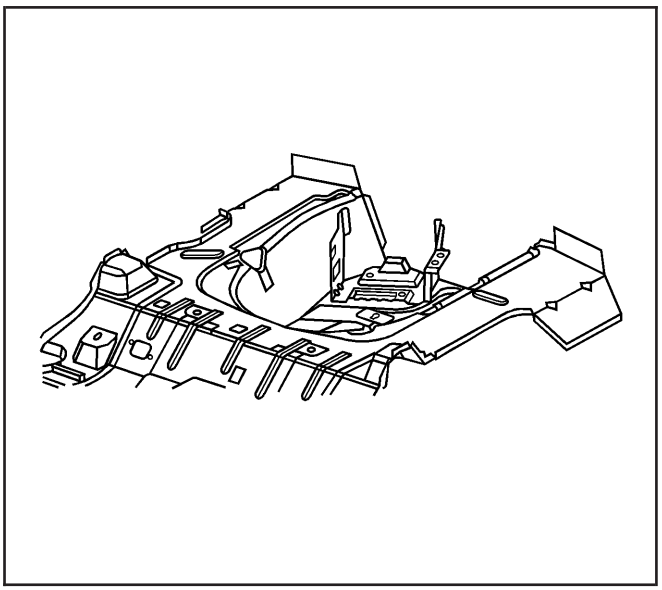


867514



867423

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872730

Battery Tray Replacement

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

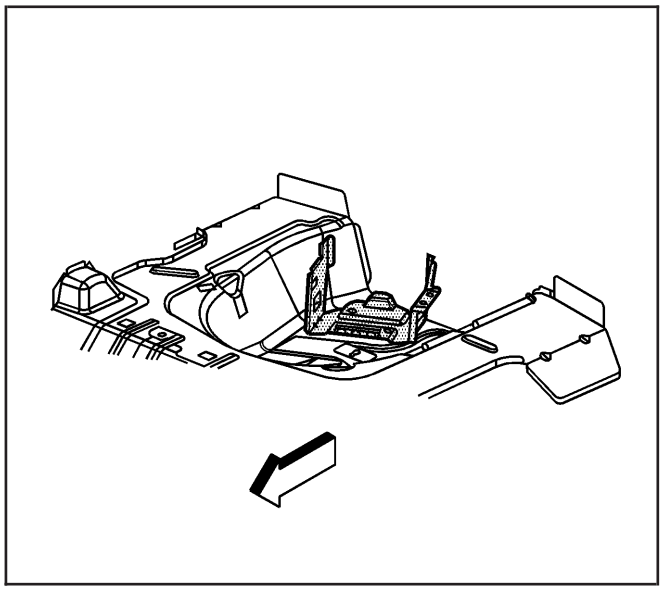
2. Disconnect the negative battery cable.

Important: This panel is replaced at factory seams.

3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the battery tray.

6. Locate and drill out all the necessary factory welds.
7. Remove the battery tray.

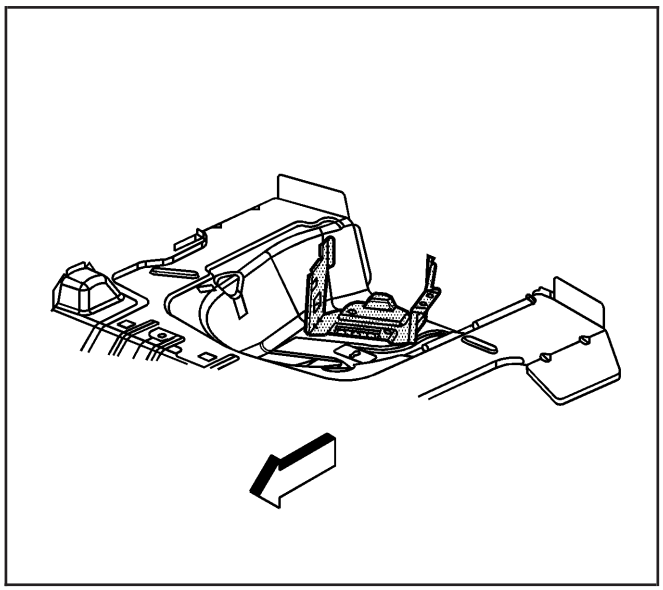


872732

Installation Procedure

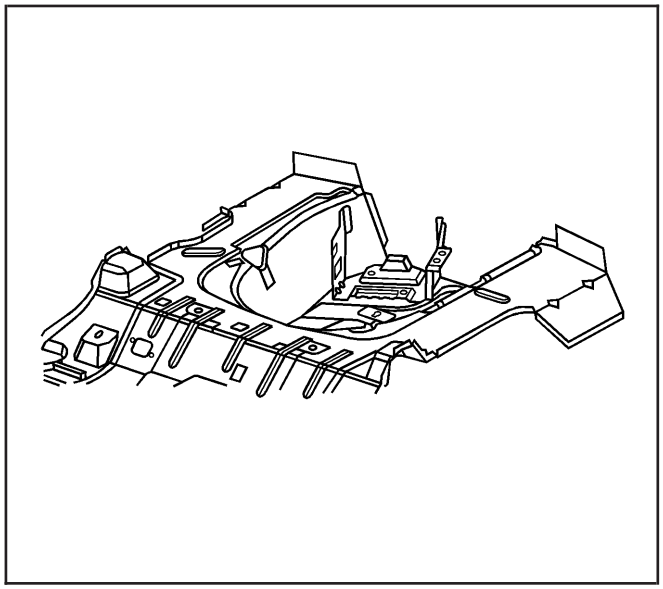
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the battery tray to the vehicle. Clamp the battery tray in place.

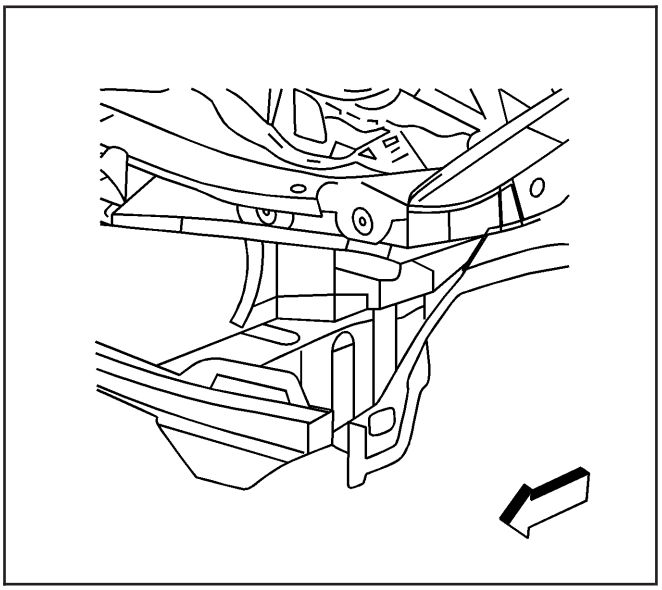


872732

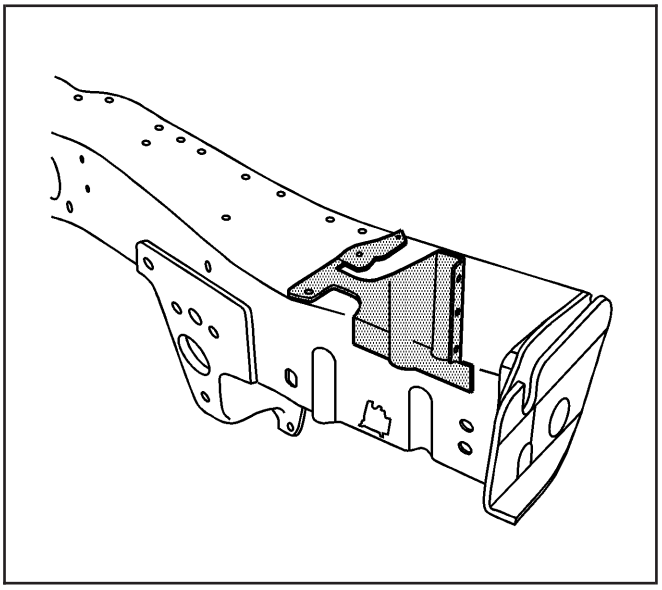
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872730



867612



867617

Bracket Replacement Front Compartment - Side Rail

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

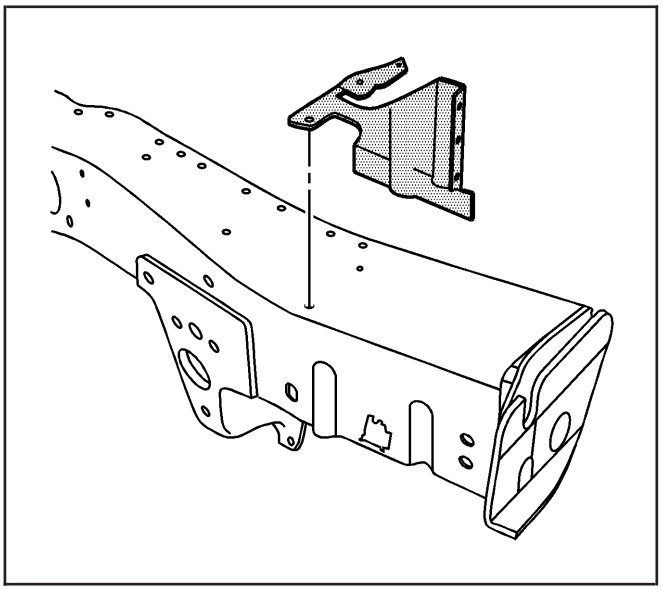
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the bracket side rail-front compartment.

6. Locate and drill out all the necessary factory welds.

7. Remove the side rail bracket from the front compartment lower rail.

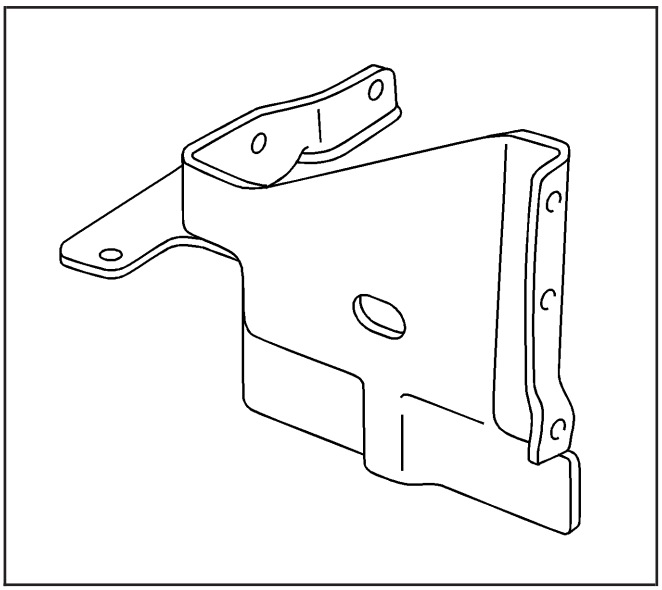


867618

Installation Procedure

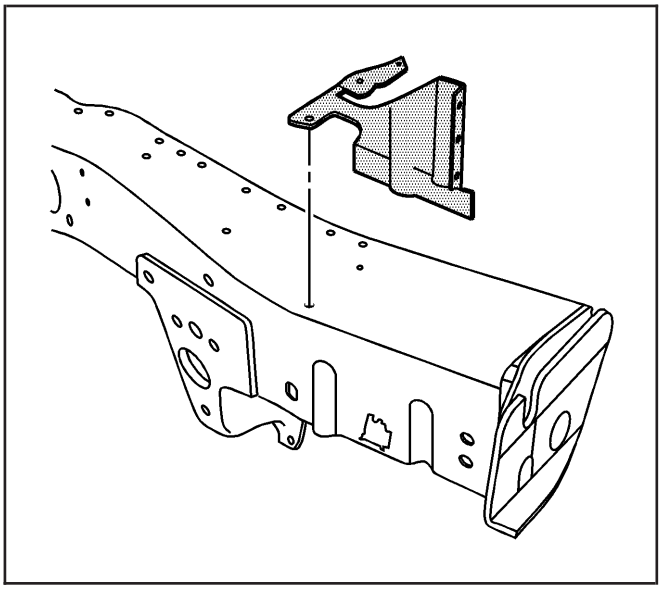
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

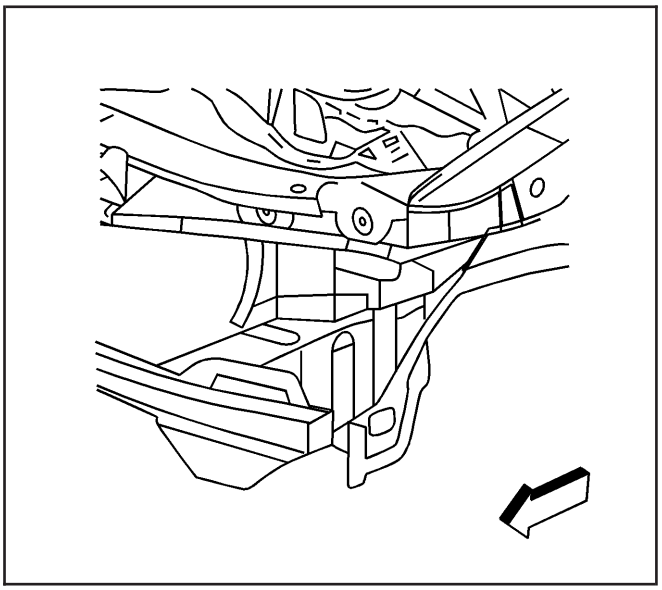


865267

4. Position the side rail bracket to the front compartment lower rail and tie bar side panel. Clamp the bracket in place.



867618



867612

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

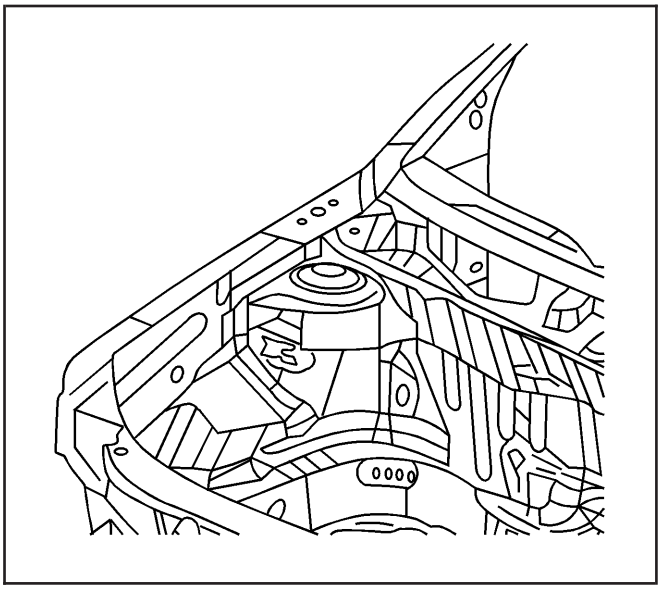
Wheelhouse Replacement - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.
2. Disconnect the negative battery cable.



867478

Important: The upper strut mounting surface is a dimensionally critical area, and 3-dimensional measuring equipment should be used to locate the front wheelhouse assembly. The front wheelhouse can be serviced as a complete assembly for both the left and right wheelhouses. A wheelhouse front panel is also available to service separately on the left or the right sides.

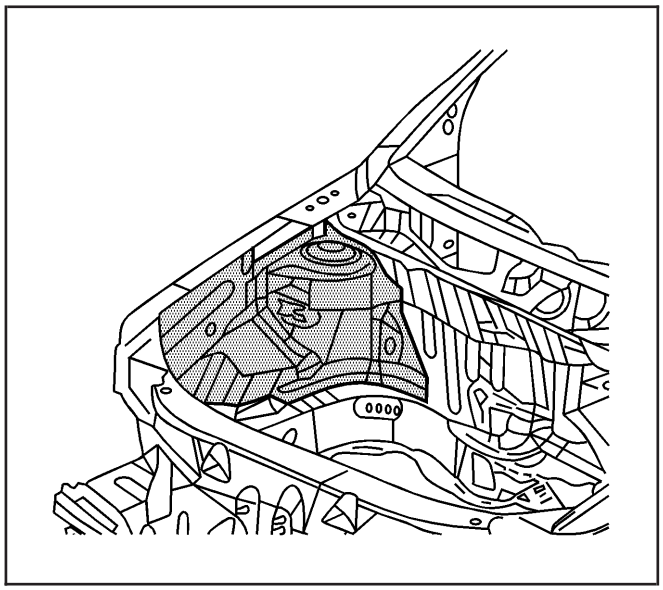
3. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Be sure to inspect the front of the cowl and dash panel for damage. If the metal surface is damaged, the cowl panel must be repaired to restore the structural integrity of the vehicle.

4. Visually inspect the damaged area. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.

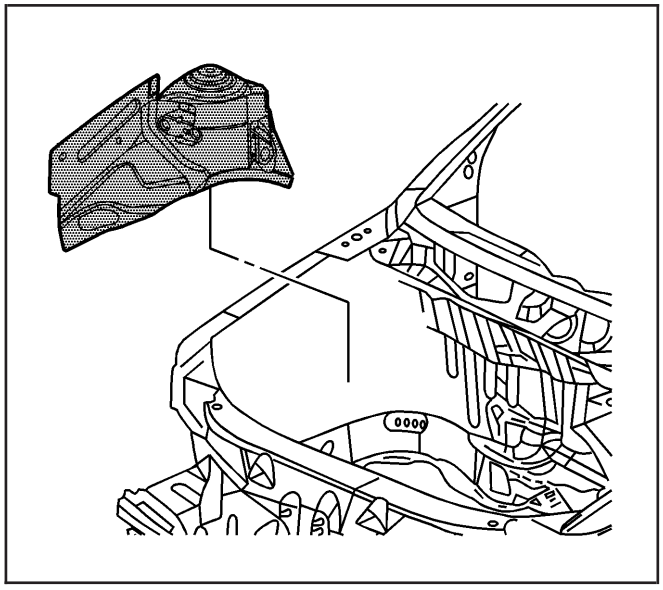
5. Locate and drill out all factory welds.

Important: Note the number and location of welds for installation of the front wheelhouse.



867495

6. Remove the front wheelhouse from the vehicle.

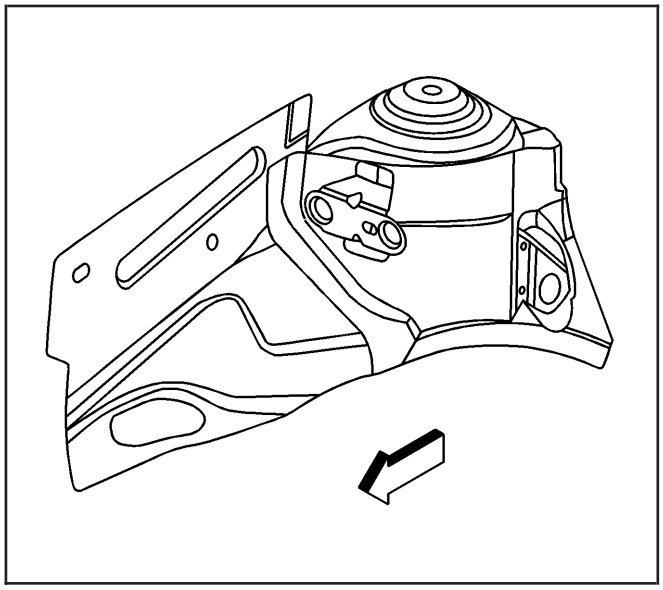


867507

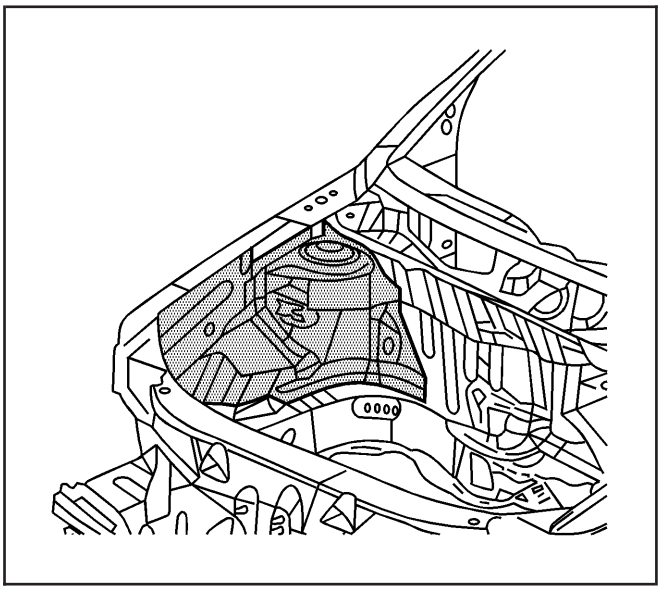
Installation Procedure

Important: 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.

1. Drill 8 mm (5/16 in) plug weld holes as necessary in the locations noted from the original assembly.
2. Prepare the mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the front wheelhouse in the vehicle using 3-dimensional measuring equipment. Clamp the wheelhouse in place.

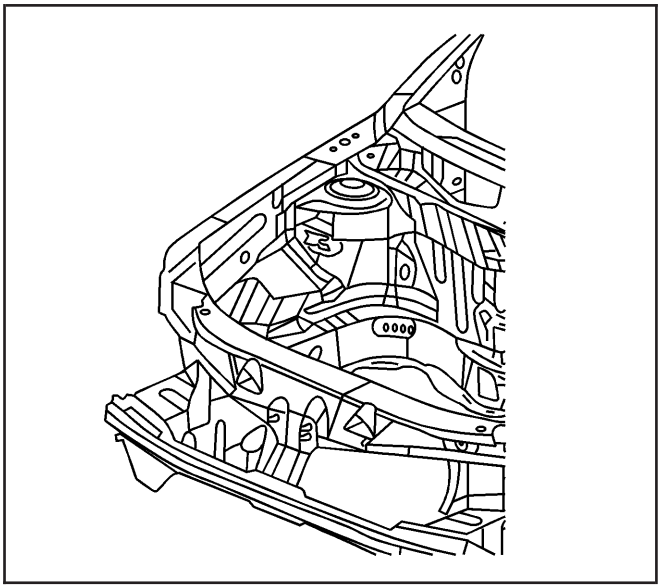


865277



867495

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



868716

Wheelhouse Extension Replacement - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

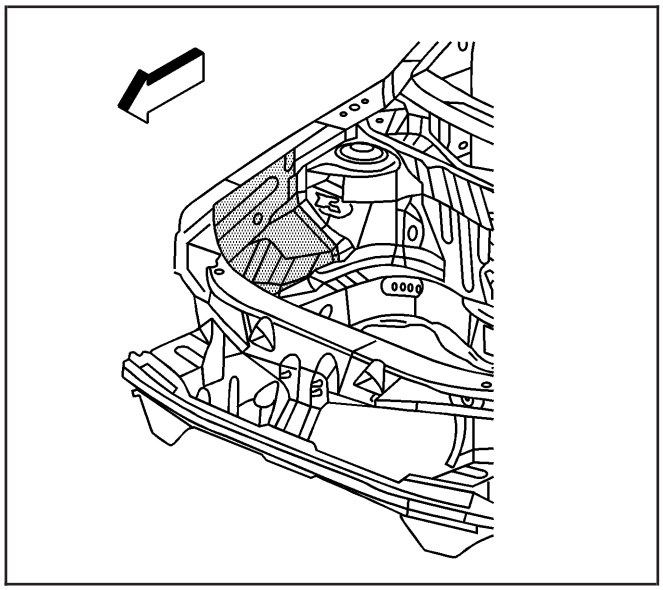
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

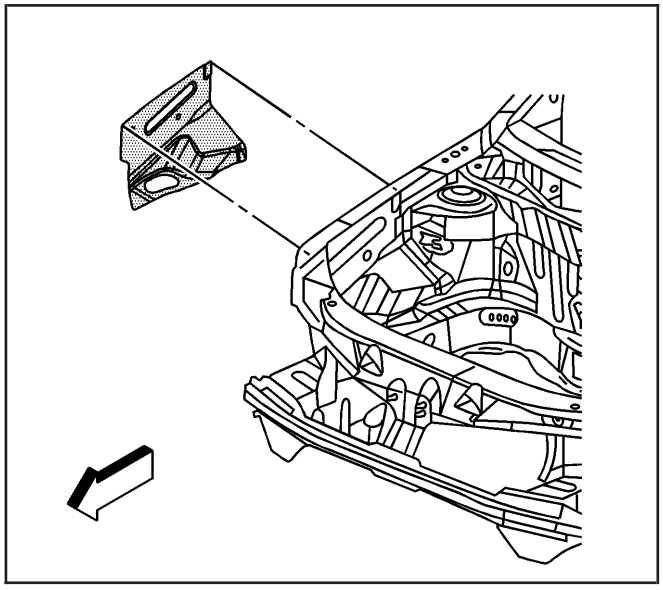
Important: Note the number and location of the factory welds for installation of the front wheelhouse extension.

6. Locate and drill out all the necessary factory welds.



868717

7. Remove the front wheelhouse extension.

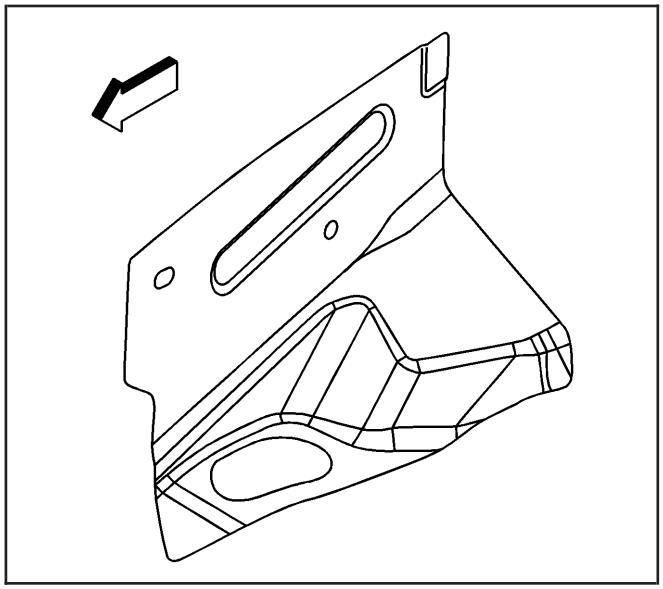


868718

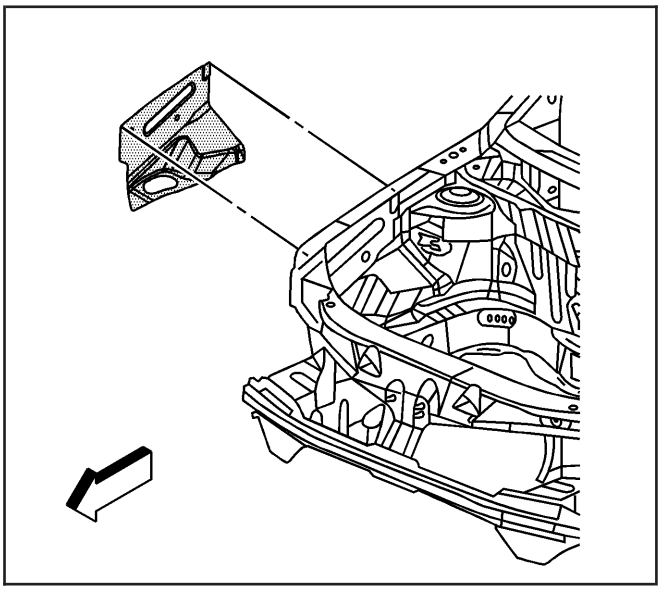
Installation Procedure

Important: 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.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

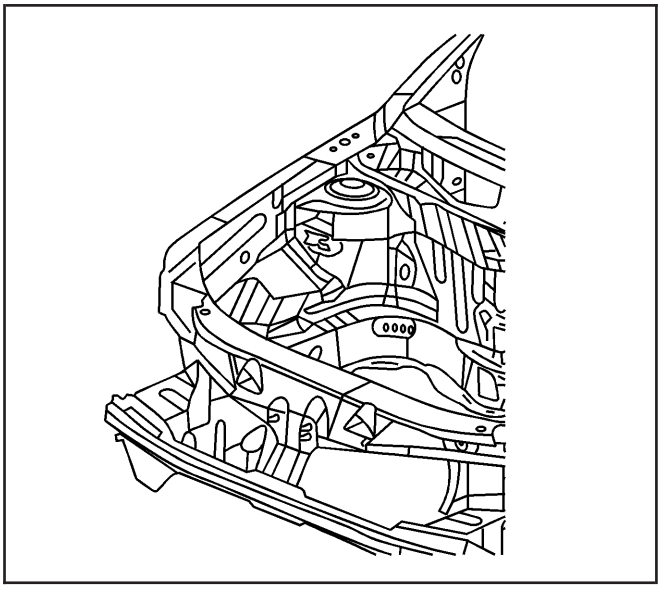


865281



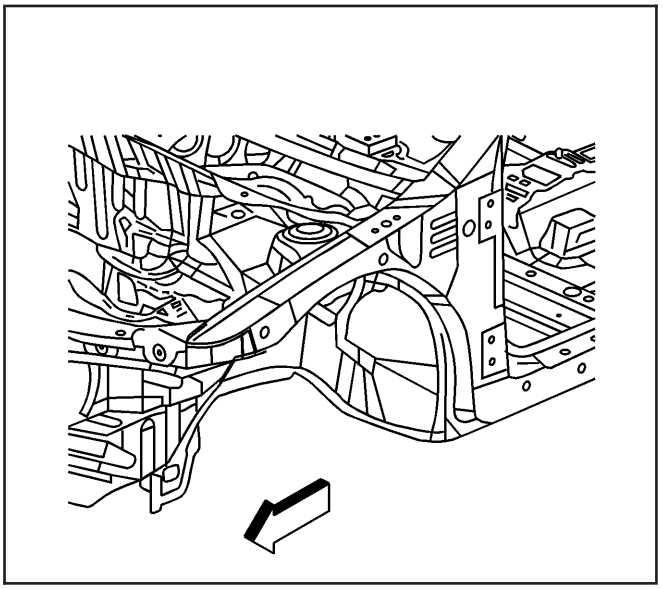
868718

4. Position the front wheelhouse extension to the vehicle using 3-dimensional measuring equipment. Clamp the extension in place.



868716

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



868719

Rail Replacement Front Compartment - Side Upper

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

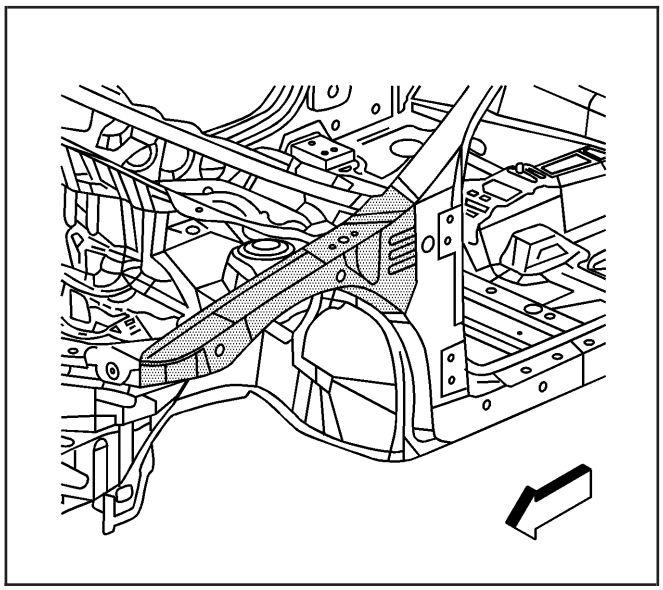
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

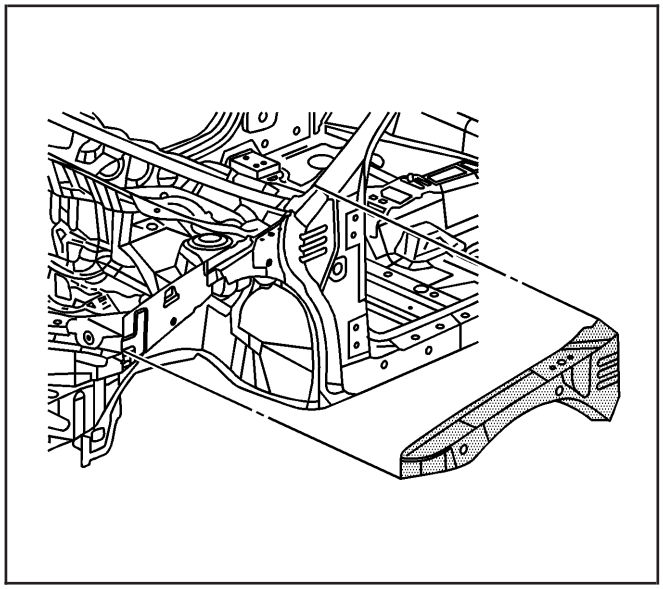
Important: Do not damage any inner panels or reinforcements.

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

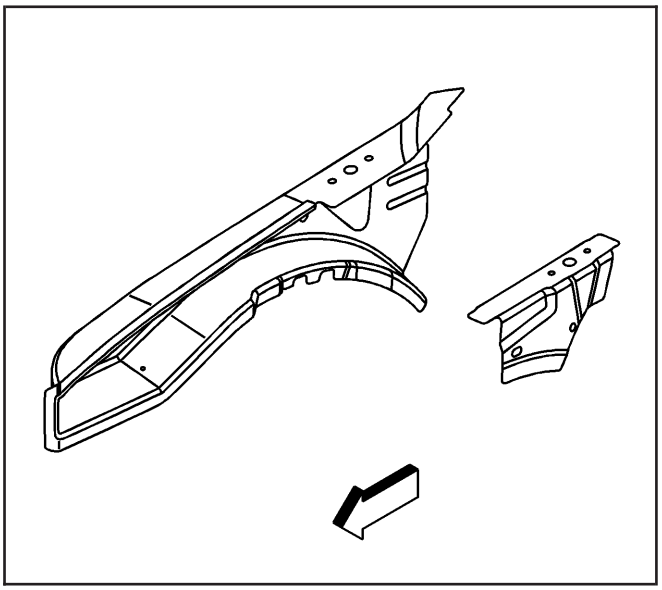


868721

7. Remove the damaged front upper rail.



868722

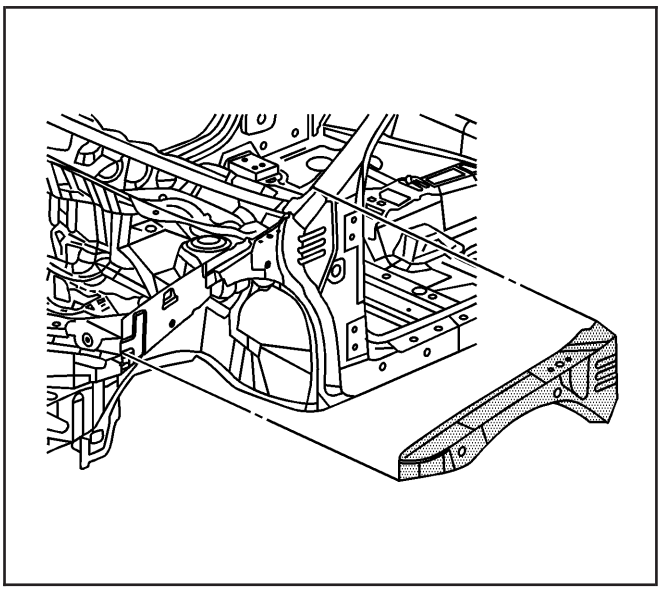


868720

Installation Procedure

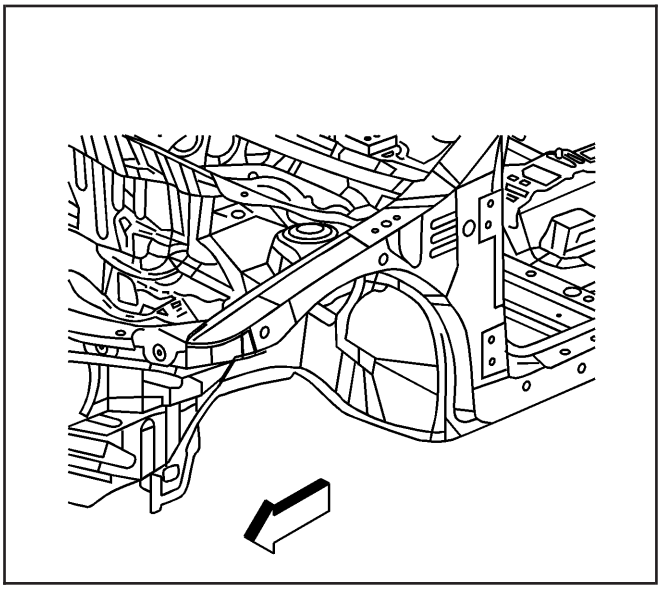
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



868722

4. Position the front upper rail on the vehicle using 3-dimensional measuring equipment. Clamp the rail in place.



868719

5. Plug weld 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.
9. Paint the repair area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Rail Sectioning Front Compartment - Side Upper

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: Refer to SIR Caution on page 1-1 in General Information.

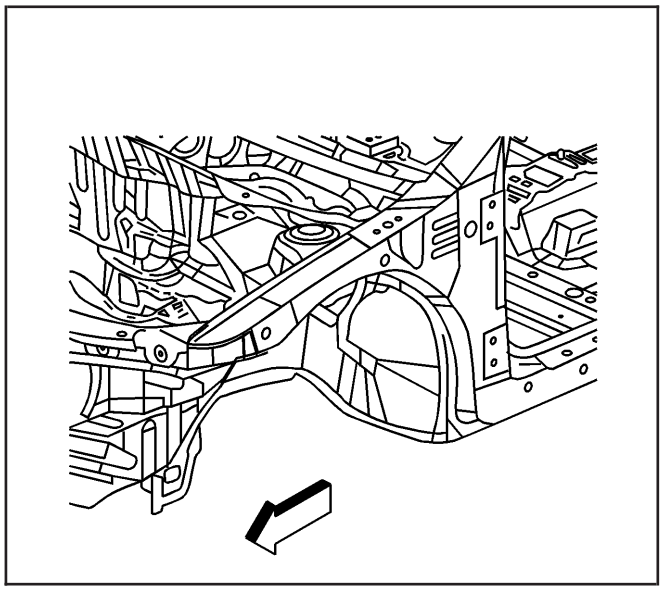
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

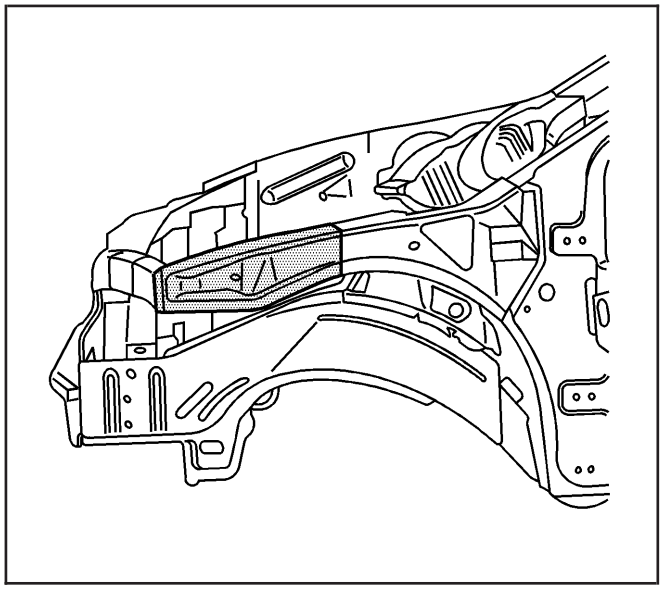
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the front compartment of the side upper rail.

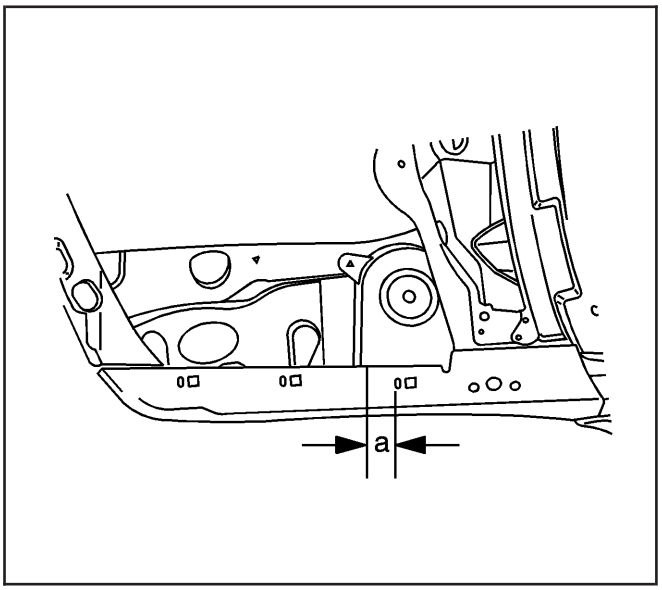
6. Locate and drill out all the necessary factory welds.



868719

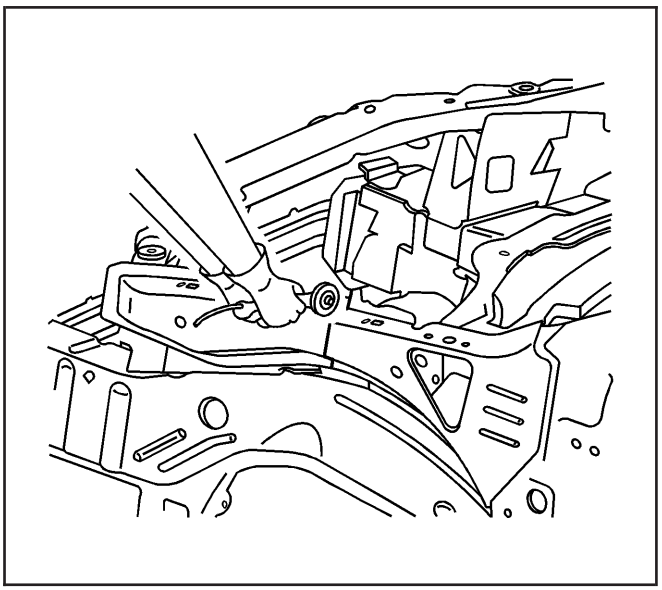


874293



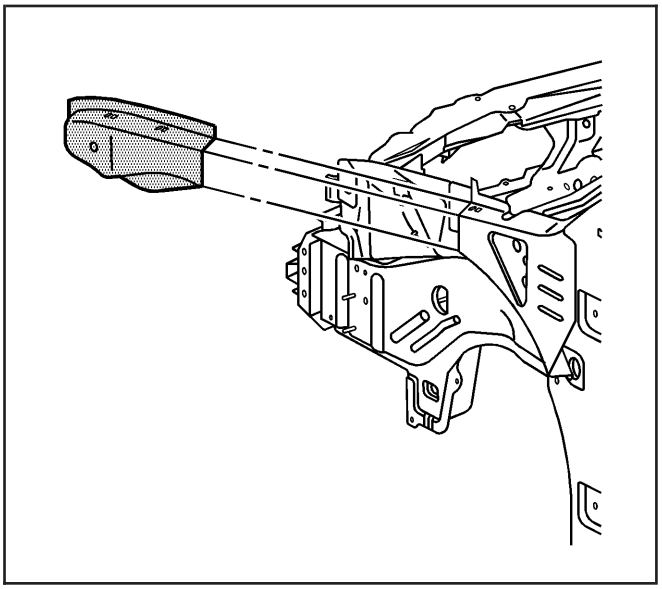
874296

7. Measure forward 50 mm (2 in) (a) of the center of the third fender bolt hole location. Mark the location.
8. Using the mark made in the previous step as a starting point, use a sliding square to transfer a line on the top, side, and bottom of the rail.



874298

9. Cut the side upper rail at the marked location.

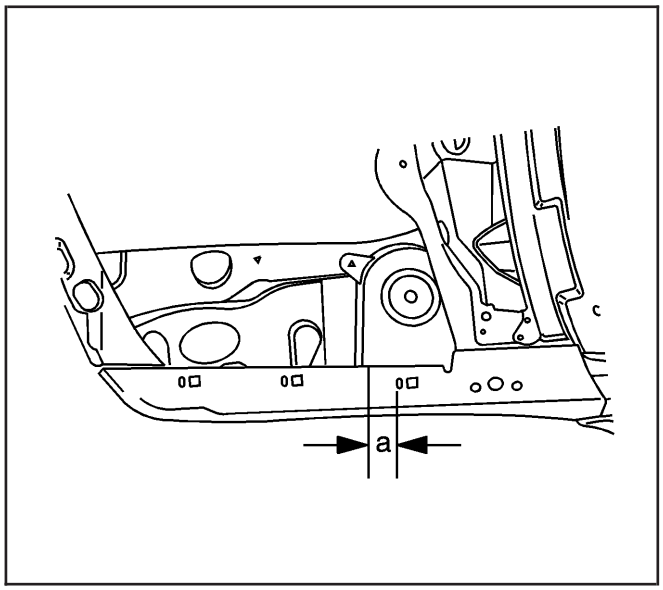


874299

10. Remove the front portion of the side upper rail.
11. Drill 2 8 mm (5/16 in) plug weld holes 10 mm (1/2 in) rearward from the edge of the top, bottom, and outer side on the front edge of the remaining portion of the side upper rail on the vehicle.

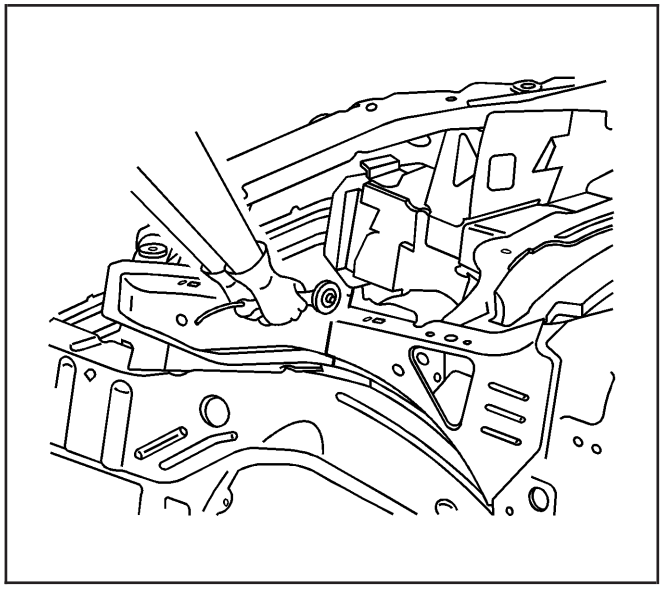
Installation Procedure

1. Measure a section on the service part that is 25 mm (1 in) (a) forward of the third fender bolt hole. Mark this section.
2. Using the mark made in the previous step as a starting point, use a sliding square to transfer a line on the top, side, and bottom of the rail.



874296

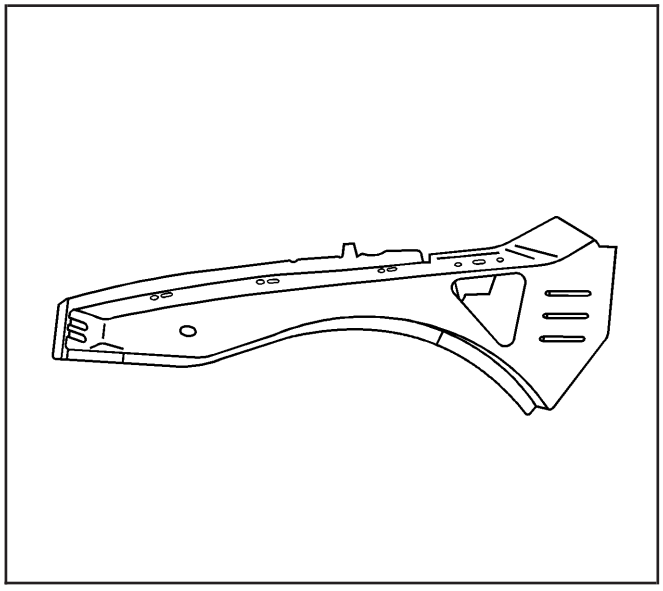
3. Cut the service part at the marked location.



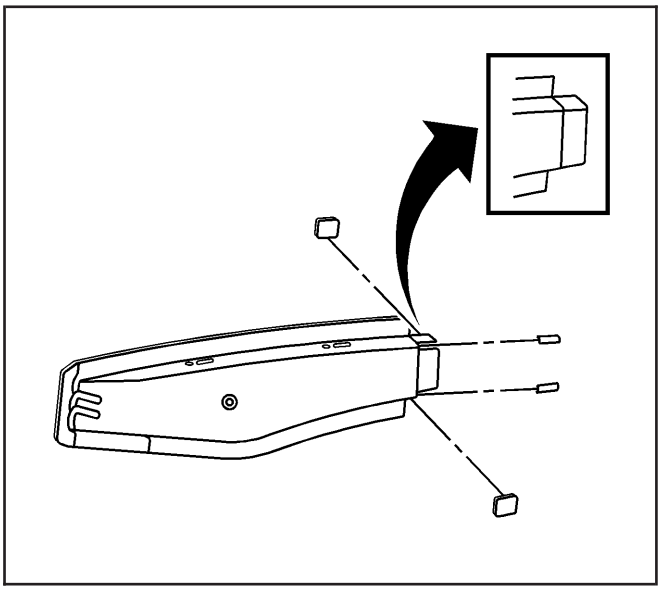
874298

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

4. Drill 8 mm (5/16 in) plug weld holes as necessary in the locations noted on the original panel.
5. Prepare all mating surfaces as necessary.
6. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
7. Measure 25 mm (1 in) forward from the cut area. Mark the location on top of the rail.
8. Using the mark made in the previous step as a starting point, use a sliding square to transfer a line on the top, side, and bottom of the rail.



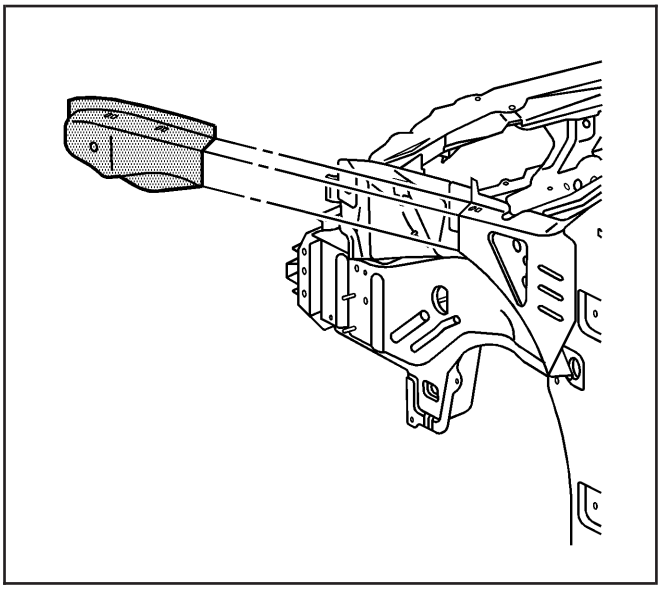
874290



875630

Important: Do not cut past the scribed line.

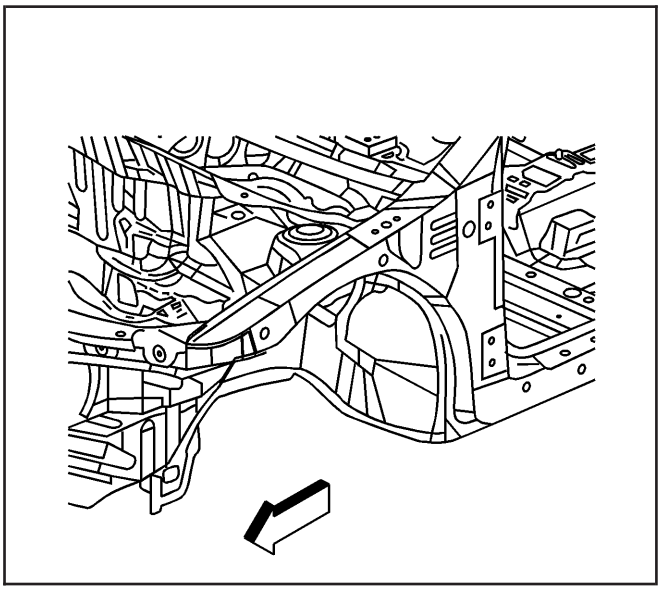
9. At the weld flange areas of the rail and at each radius, cut toward the scribed line. This will aid in the flange-forming process.
10. Bend the cut area of the rail inward to create a 25 mm (1 in) step flange for the weld joint.



874299

Important: Flanges on the service part will slide inside the rail portion of the vehicle.

11. Position the side upper rail to the vehicle using 3-dimensional measuring equipment. Clamp the rail in place.



868719

12. Stitch and plug weld accordingly.
13. Clean and prepare all of the welded surfaces.
14. Install all of the related panels and components.
15. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
16. Paint the repaired area.
17. Connect the negative battery cable.
18. Enable the SIR system.

Plenum Panel Replacement - Upper

Removal Procedure

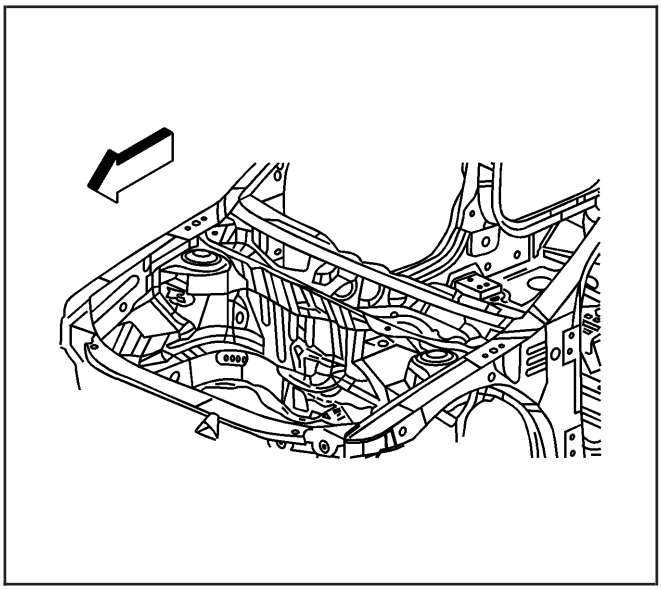
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

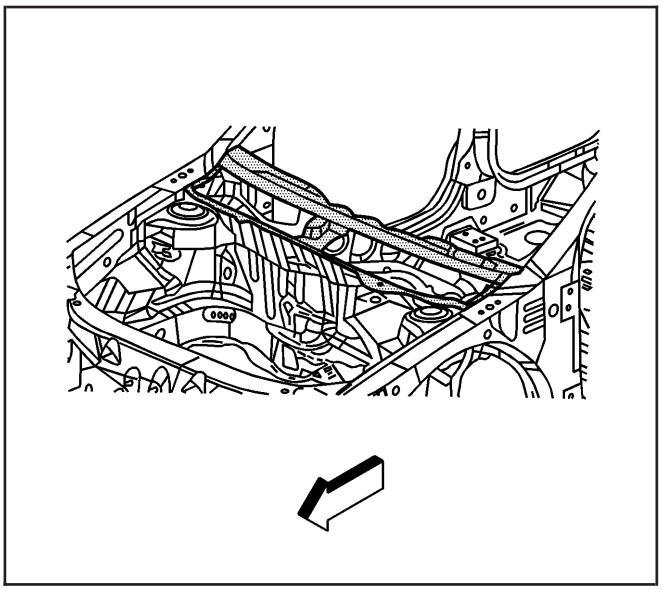
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



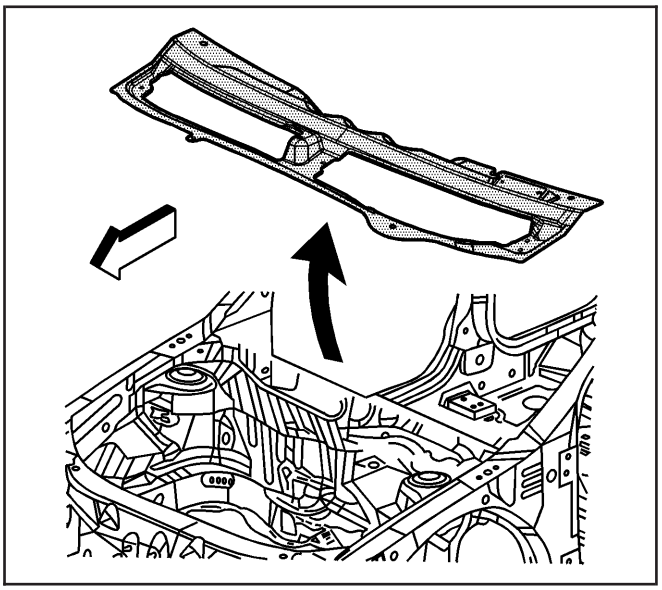
870823

Important: Note the number and location of the factory welds for installation of the upper plenum panel.

6. Locate and drill out all the necessary factory welds.

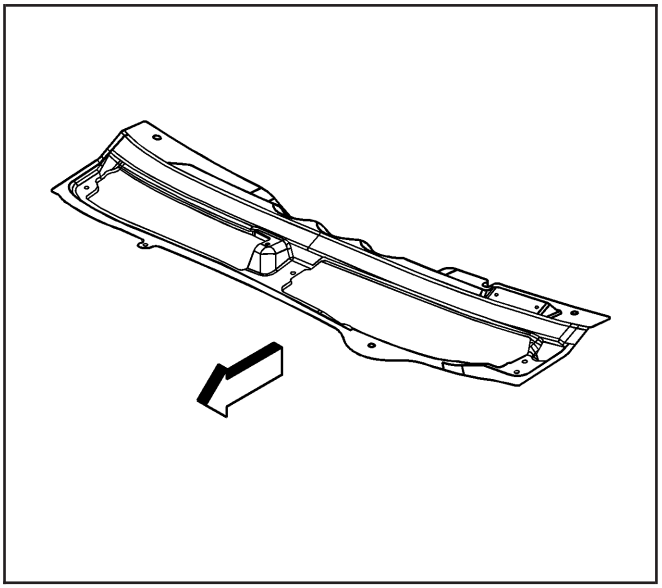


870852



870855

7. Remove the upper plenum panel.

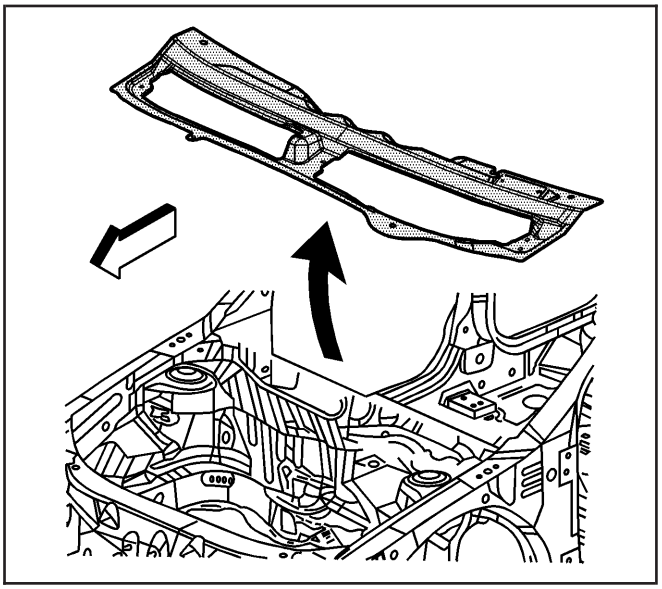


870847

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

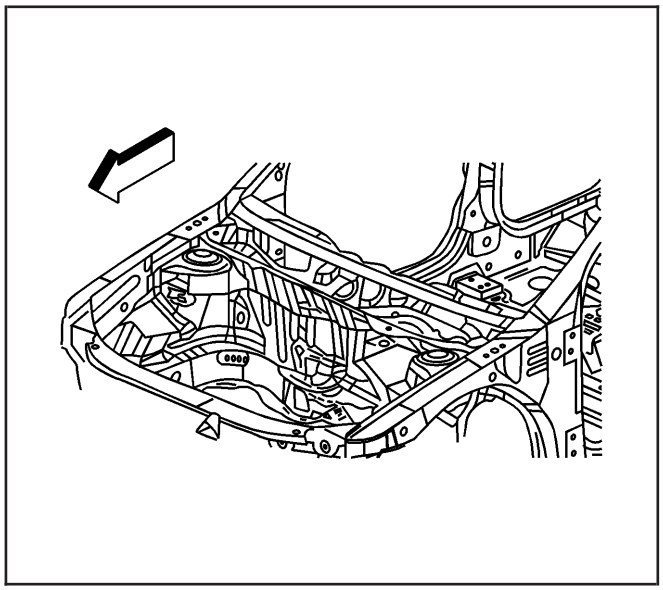
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



870855

4. Position the upper plenum panel to the vehicle using 3-dimensional measuring equipment. Clamp the panel in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870823

Plenum Panel Replacement - Lower

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

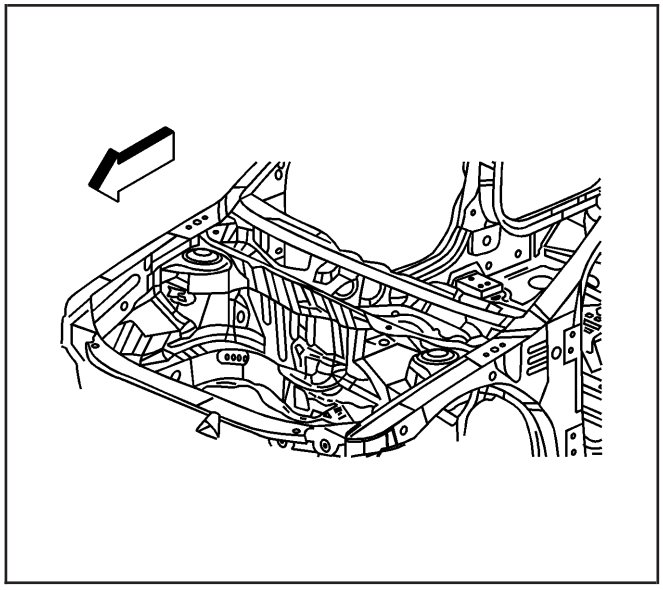
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.

Important: This panel is replaced at factory seams.

3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



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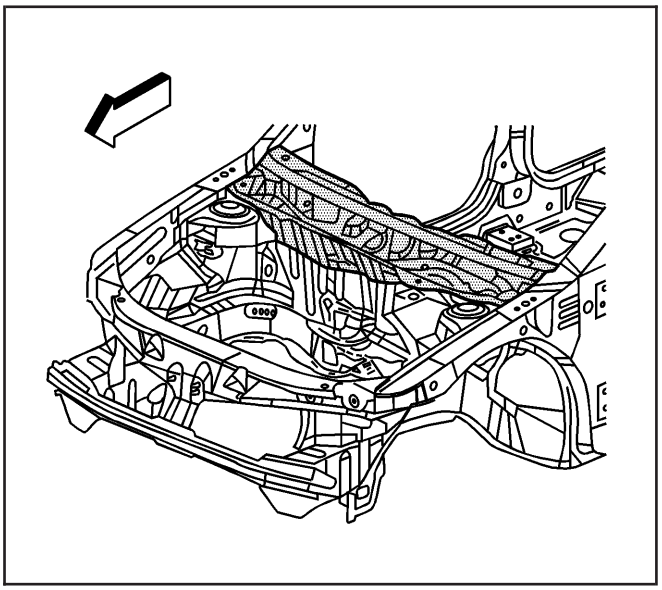
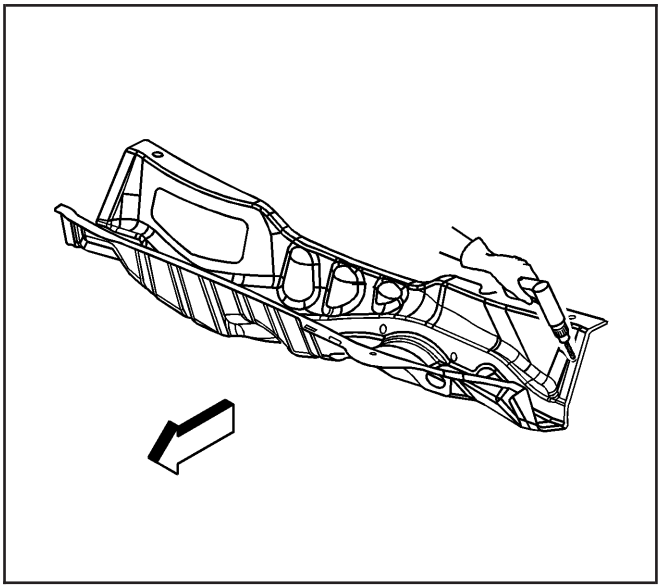


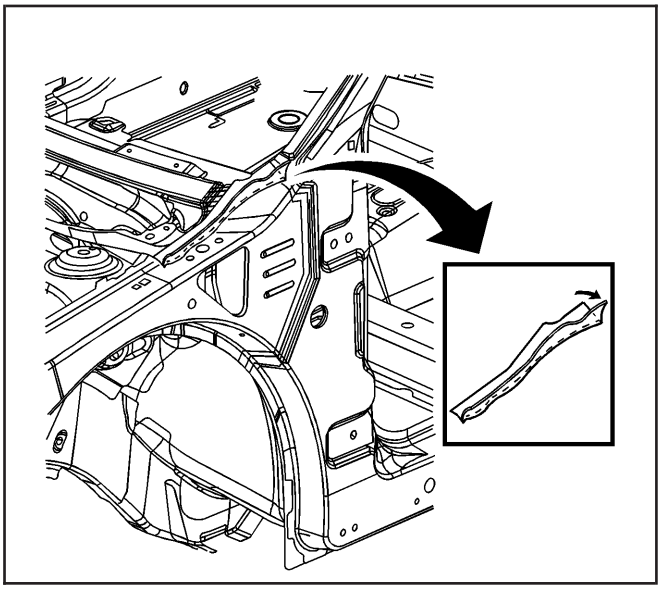
870828

6. Locate and drill out all the necessary factory welds.



870842

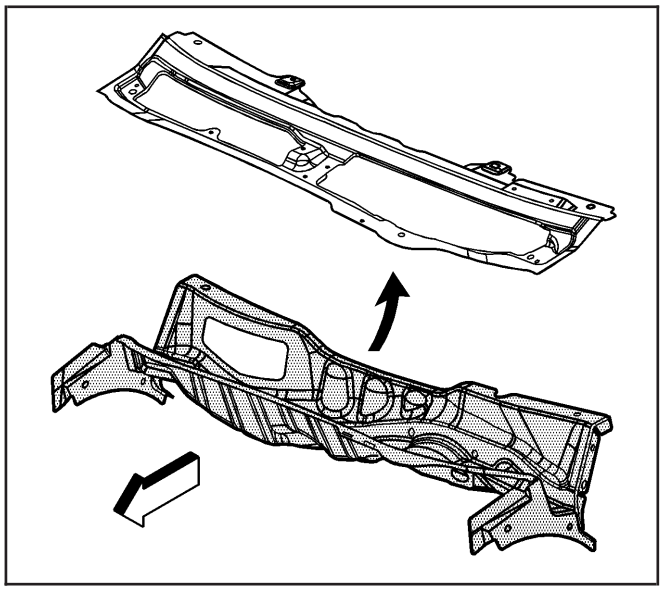
7. Locate and drill out all of the necessary factory welds at the following locations:
   - The dash panel to the lower plenum
   - The inside ends of the lower plenum
   - On the top rear portion of the front upper rail to the plenum



870838

8. Pull the body side panel outward and upward.

9. Remove the lower plenum panel from the vehicle.



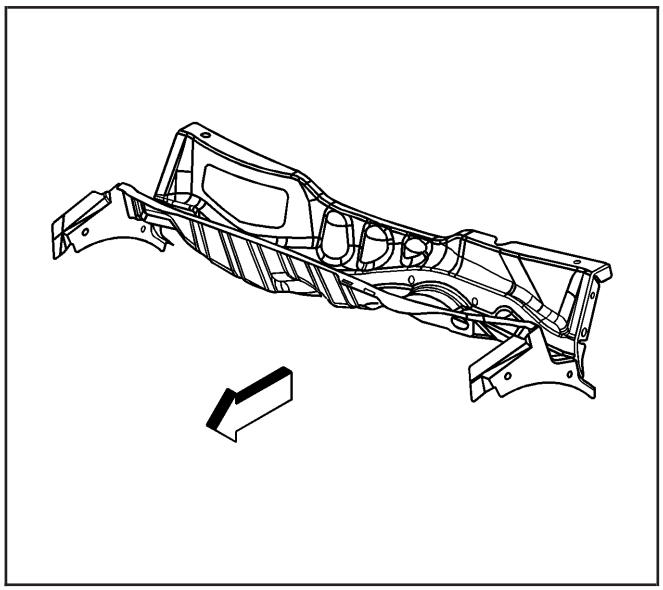
870834

Installation Procedure

Important: The service part comes as an assembly that includes the lower dash panel. If the repair does not require the dash panel, remove the dash panel before you install the lower plenum panel.

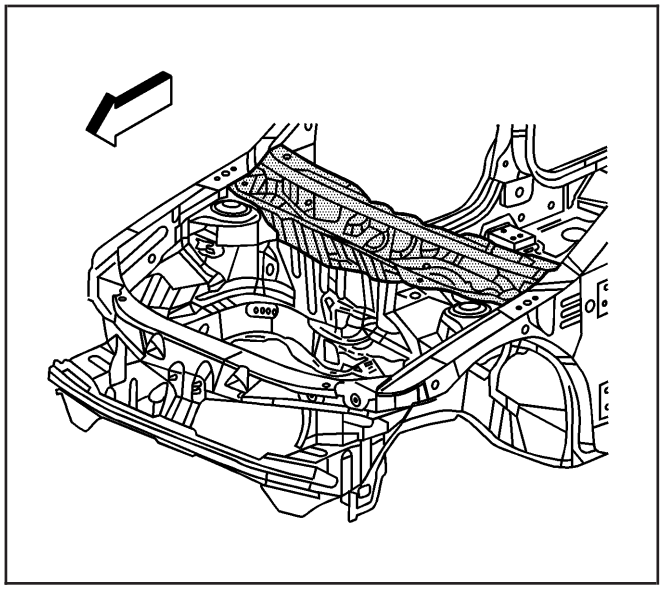
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

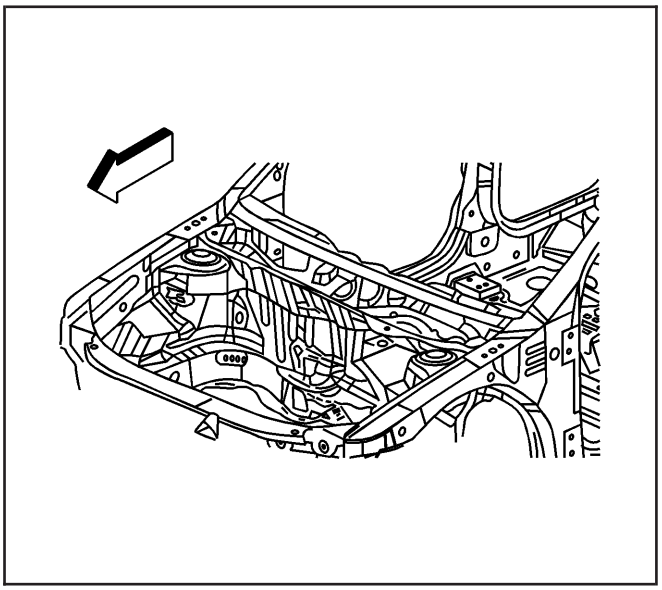


870826

4. Position the lower plenum panel to the vehicle.

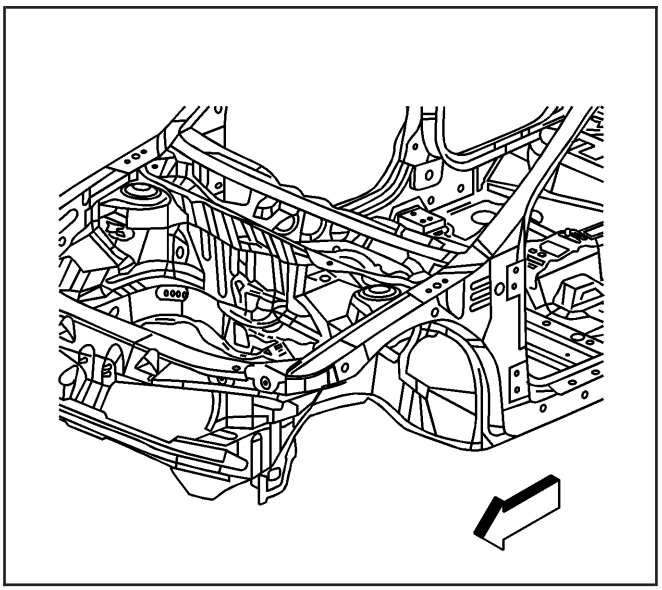


870828



870823

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



868877

Dash Panel Replacement

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

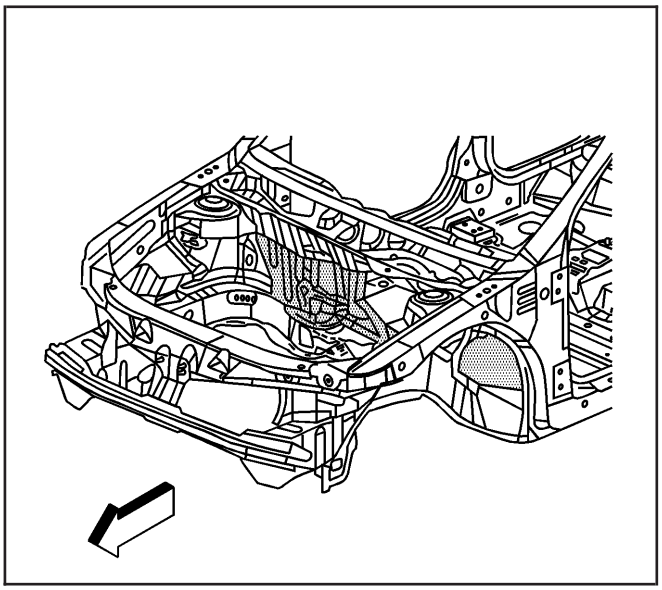
2. Disconnect the negative battery cable.

Important: This panel is replaced at factory seams.

3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

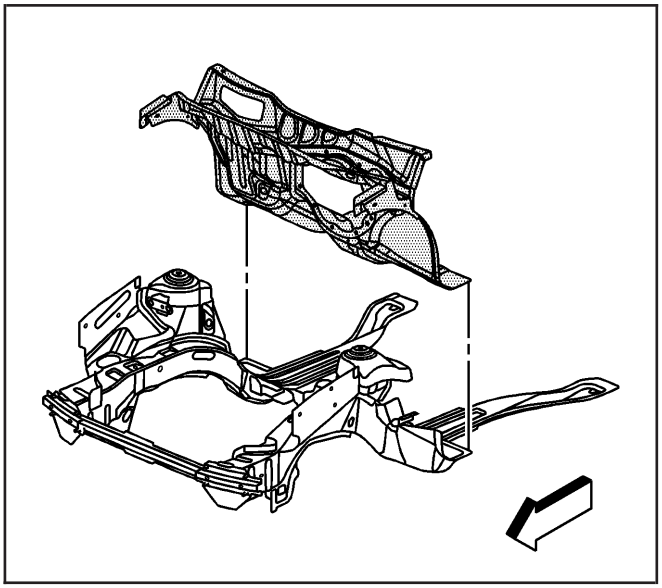
Important: Note the number and location of the factory welds for installation of the dash panel.

6. Locate and drill out all the necessary factory welds.



870810

7. Remove the dash panel.



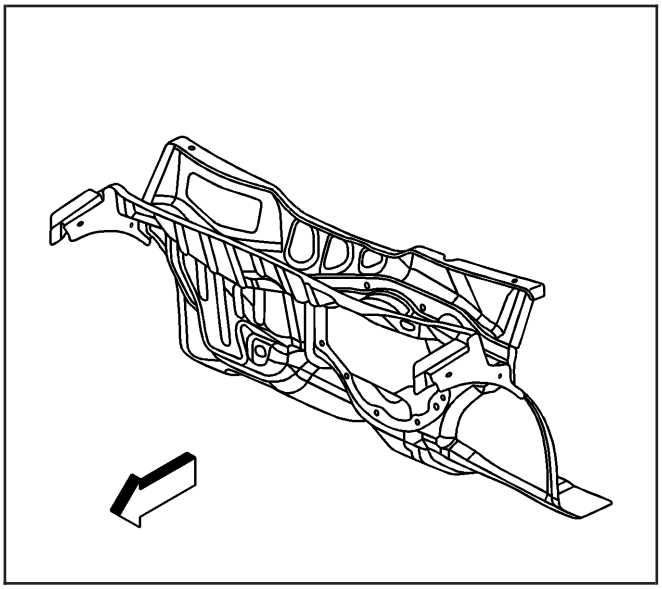
870809

Installation Procedure

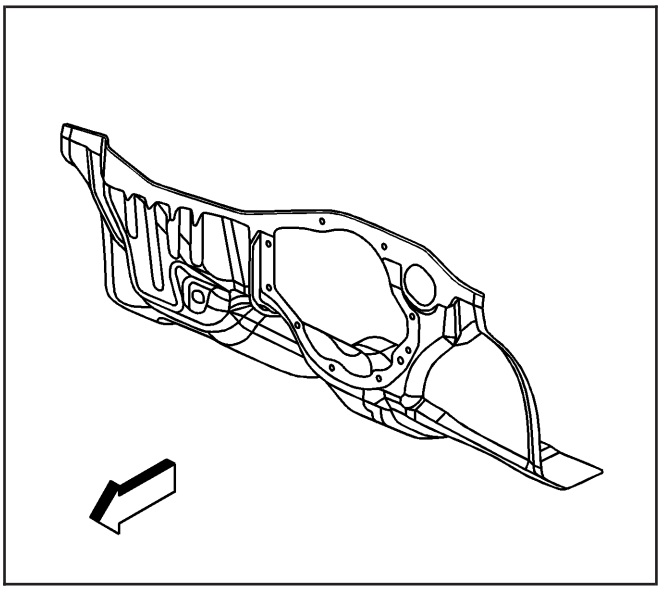
Important: The service part comes as an assembly that includes the plenum lower panel. If the repair does not require the plenum, remove the plenum before you install the dash panel.

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

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

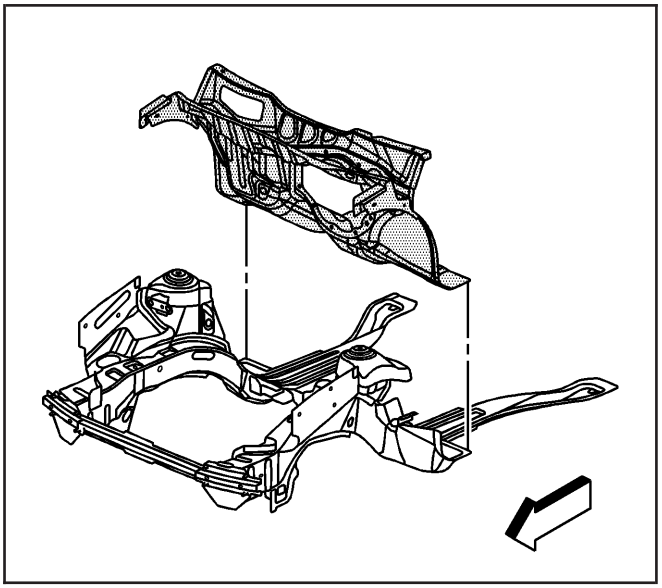


865505



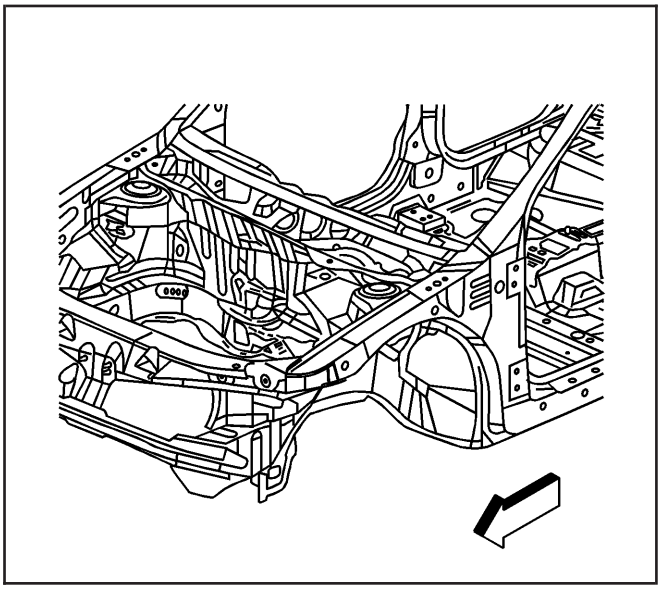
870805

2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



870809

4. Position the dash panel. Clamp the dash panel in place.



868877

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Cross Bar No.1 Replacement - Floor Panel

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

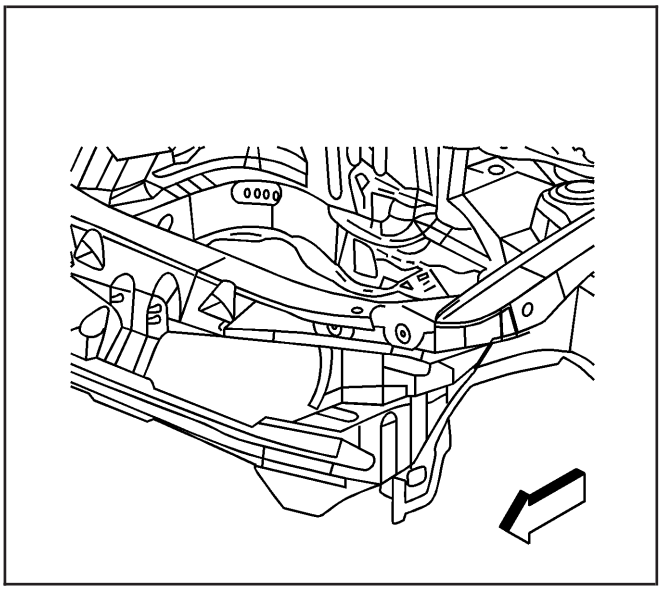
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

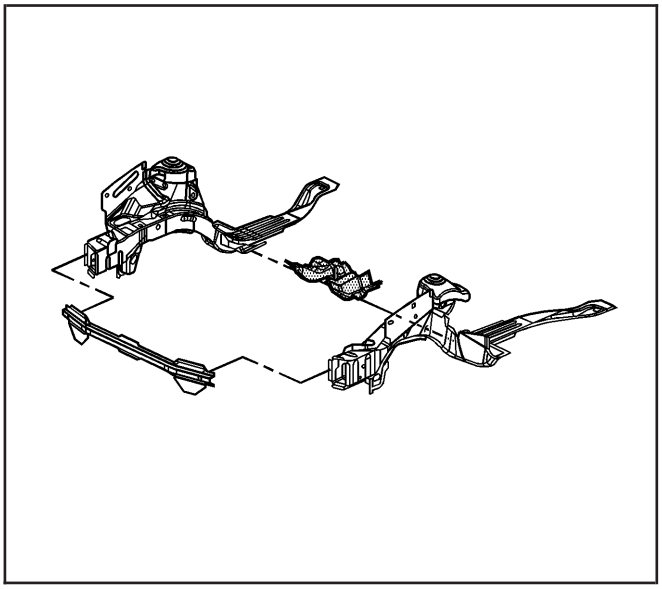
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the cross bar #1 to the floor panel.

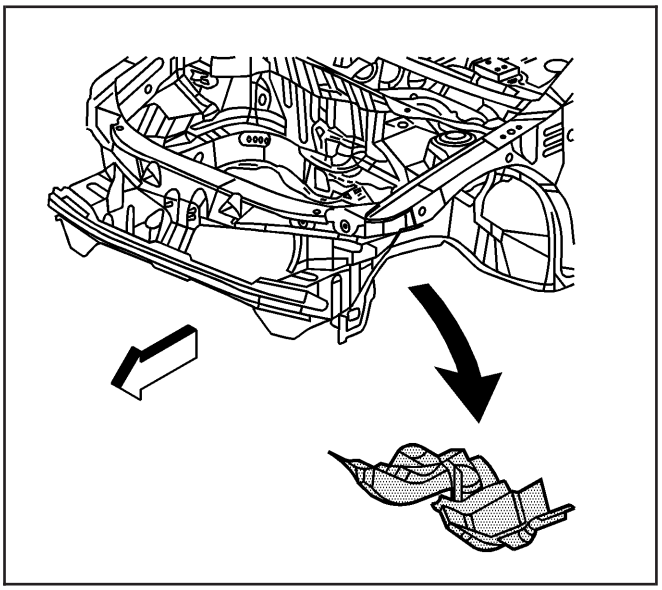
6. Locate and drill out all the necessary factory welds.



870812

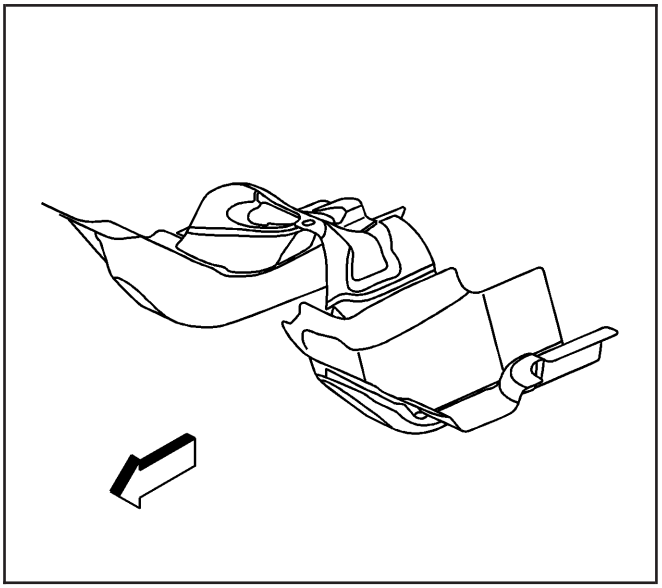


870816



870819

7. Remove the cross bar.

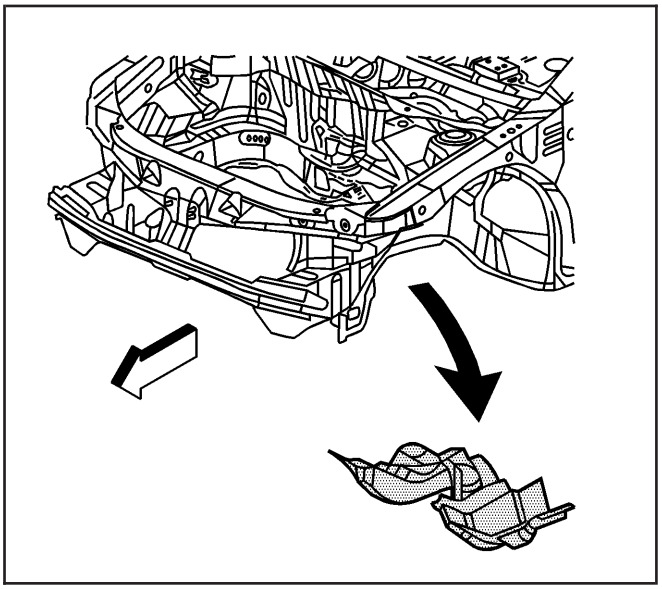


870815

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

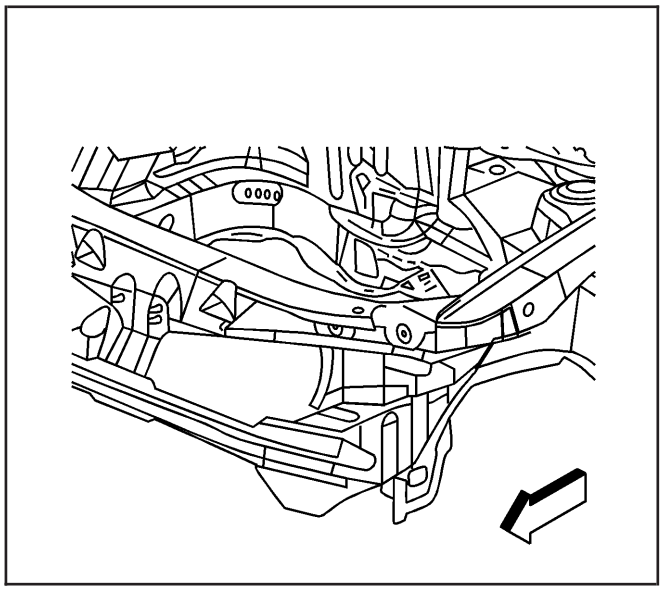
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



870819

4. Position the cross bar. Clamp the cross bar in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870812

Rail Replacement Front Compartment - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

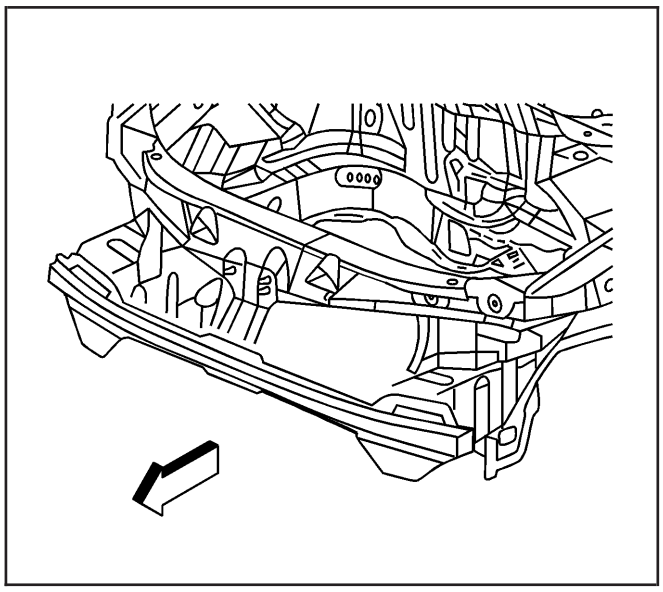
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

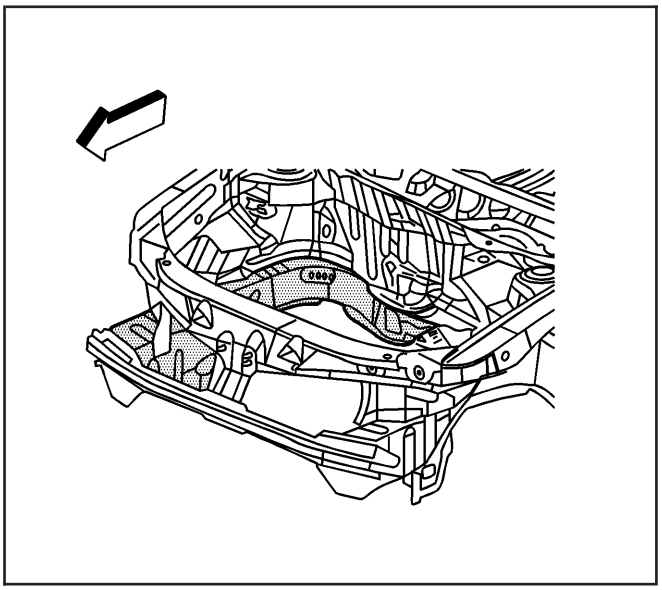
2. Disconnect the negative battery cable.

Important: This assembly is replaced at factory seams.

3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



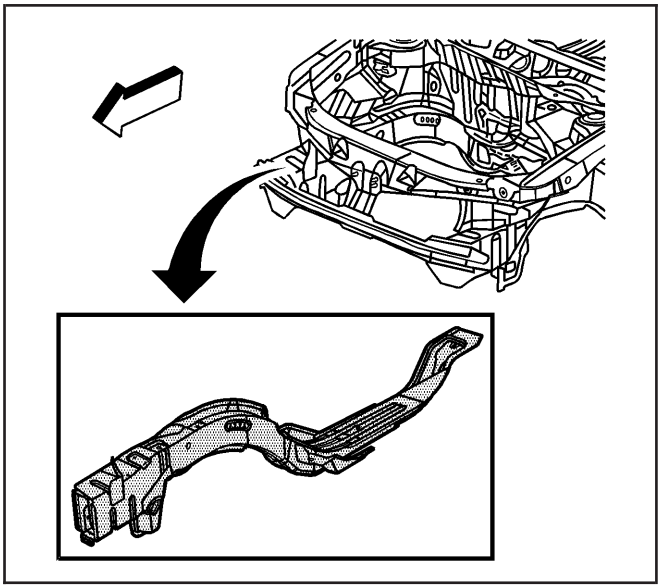
867423



867533

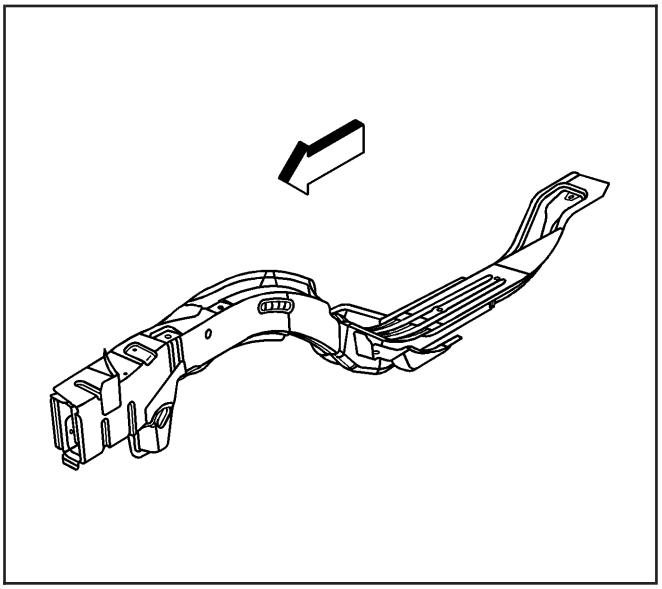
Important: Note the number and location of the factory welds for installation of the full rail service part.

6. Locate and drill out all the necessary factory welds.



867535

7. Remove the full rail.



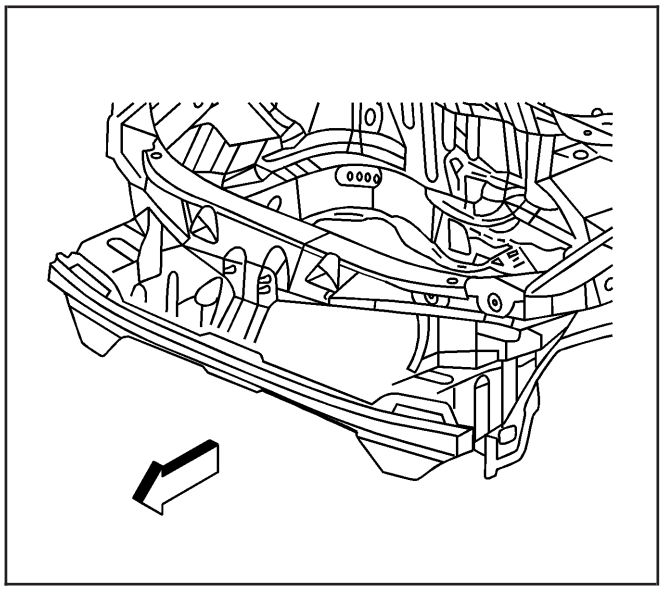
865235

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the full rail service part to the vehicle using 3–dimensional measuring equipment. Clamp the rail in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
8. Paint the repaired area.
9. Install all of the related panels and components.
10. Connect the negative battery cable.
11. Enable the SIR system.



867423

Rail Replacement Front Compartment - Front Half

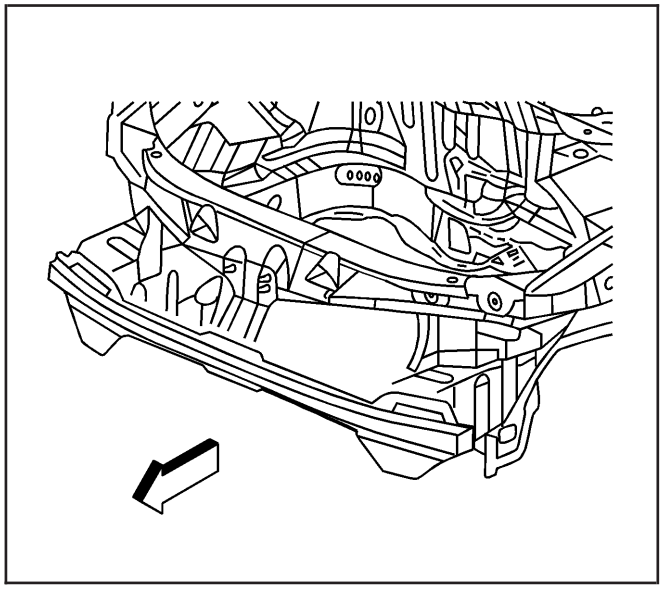
Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

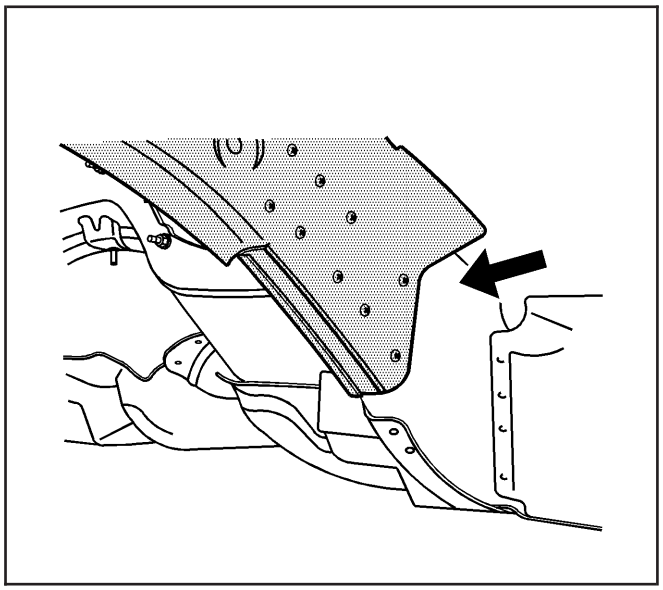
Important: The service part is developed from a complete assembly and will require the spot weld removal at the rail mid joint. The lower rail service part comes as a complete front rail assembly, including all the brackets and the reinforcements.

Important: Loosen and protect the fuel and brake lines during rail replacement.

1. Support the engine and the transmission with suitable equipment.
2. Remove the fasteners to the engine and the transmission.
3. Remove all the other related panels and components as necessary, including the suspension and the crossmember,.
4. Visually inspect the damaged area. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

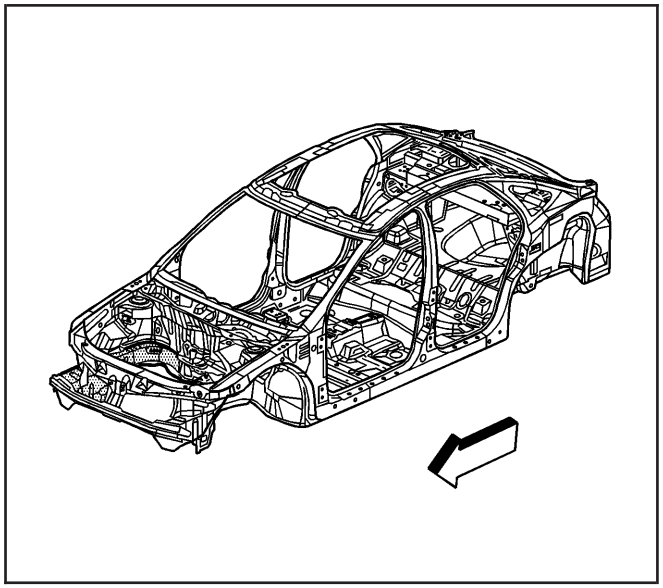


867423



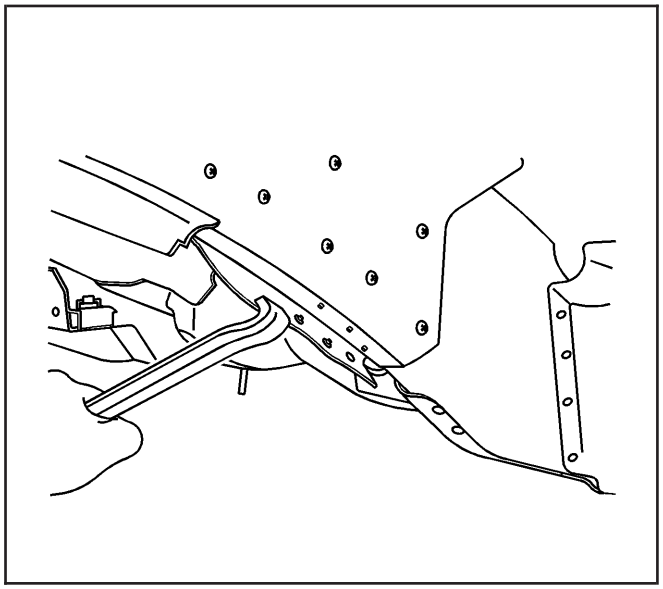
872672

6. Locate the area where the front compartment will be separated from the rail.



867545

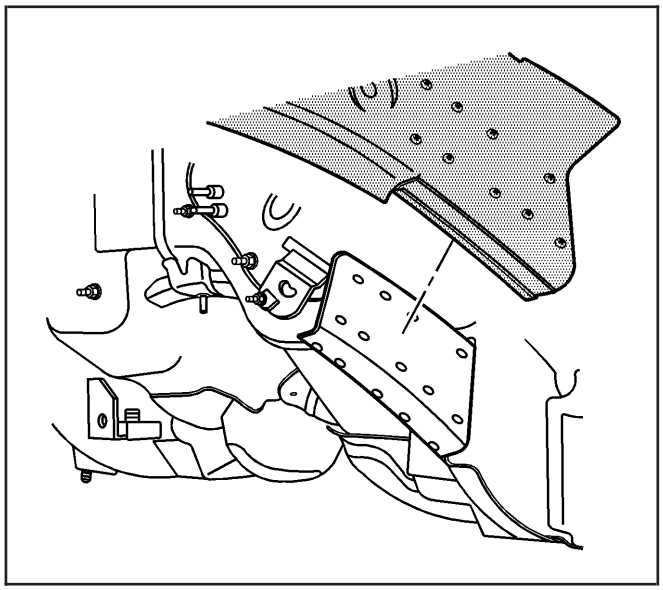
7. Locate and drill the factory welds along the flanges of the rail, only up to and including the rail mid joint just forward of the dash panel.
8. Drill out the factory welds.



867551

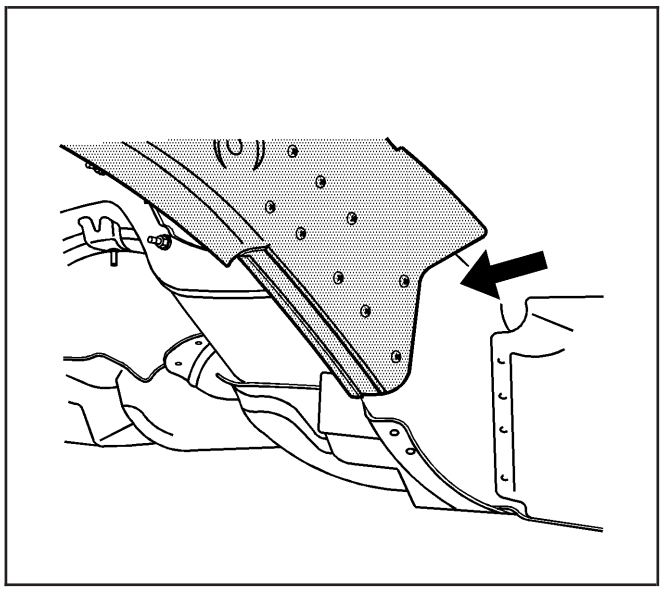
9. Pry open the outer layer of the rail at the front rail mid joint to allow the front portion of the rail to be removed from the vehicle.

10. Remove the damaged front lower rail.



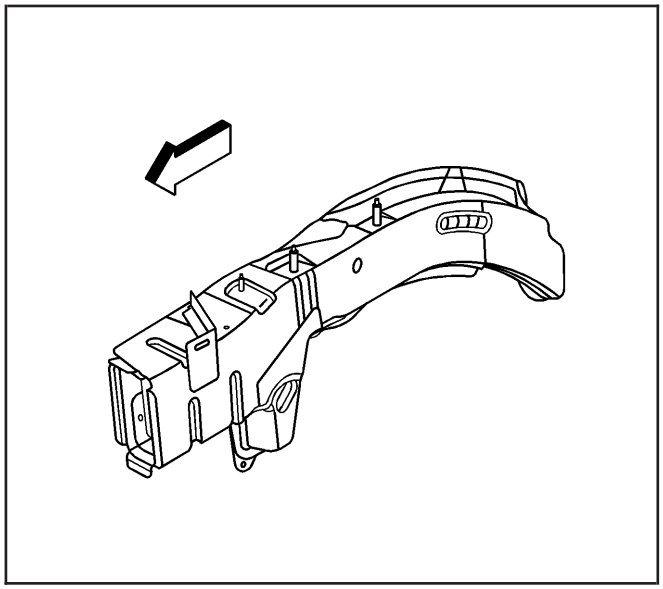
867552

11. Drill out the factory welds at the service rail assembly mid joint.
12. Remove the forward portion of the front rail assembly at the mid joint.

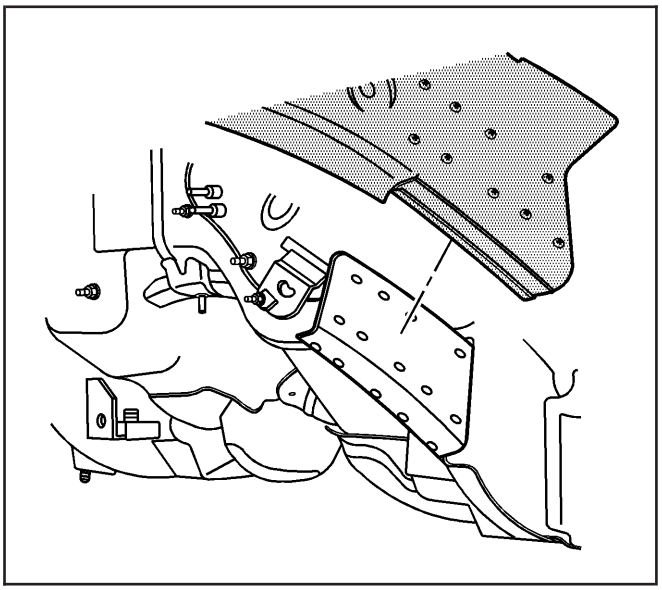


872672

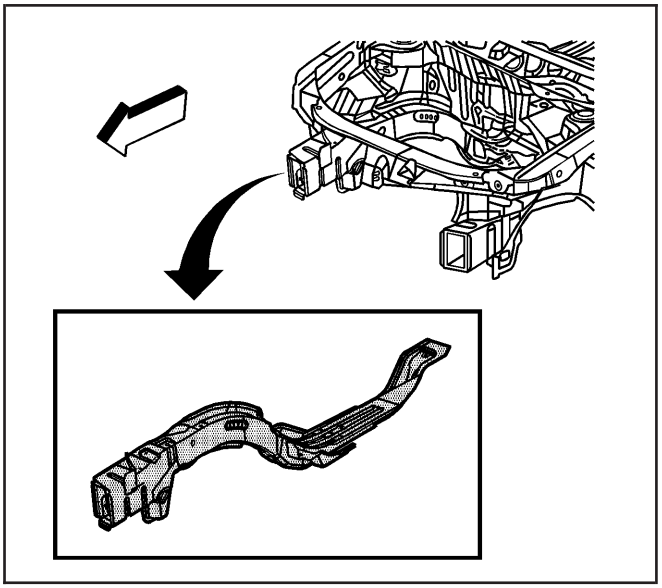
13. Prepare the mating surfaces as necessary.
14. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



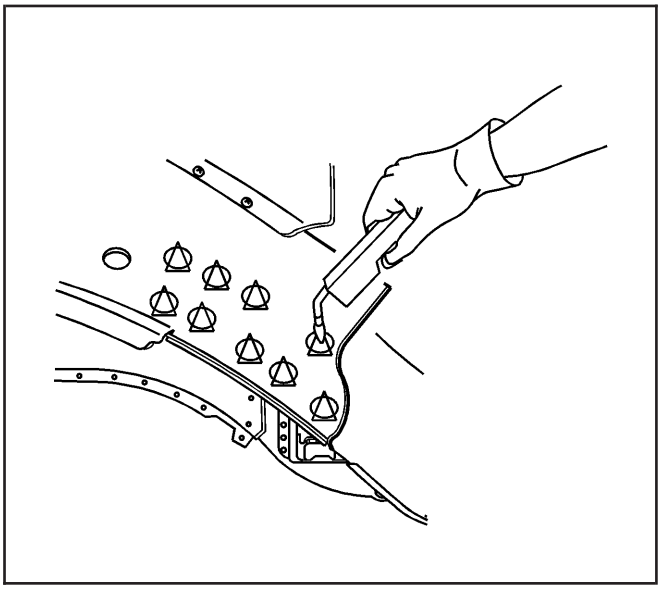
865237



867552



867548



867521

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the rail to the vehicle.
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all related panels and components.
8. Apply sealers and anti-corrosion materials to the repair area, as necessary.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

9. Install the suspension crossmember.

   Tighten

   Tighten the fasteners to 100 N·m (74 lb ft) + 180 degrees.

Rail Sectioning Front Compartment - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

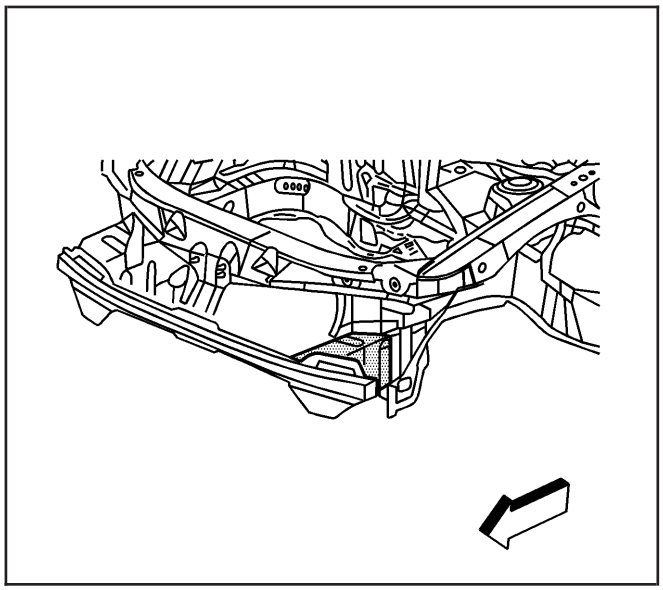
Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: Refer to SIR Caution on page 1-1 in General Information.

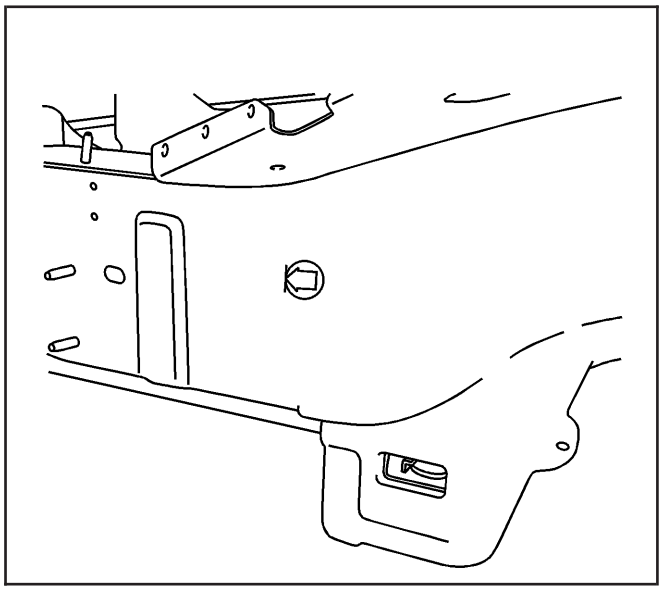
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all of the related panels and the components.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
5. Repair as much of the damage as possible to factory specifications. Refer to *Dimensions - Body on page 3-7*.

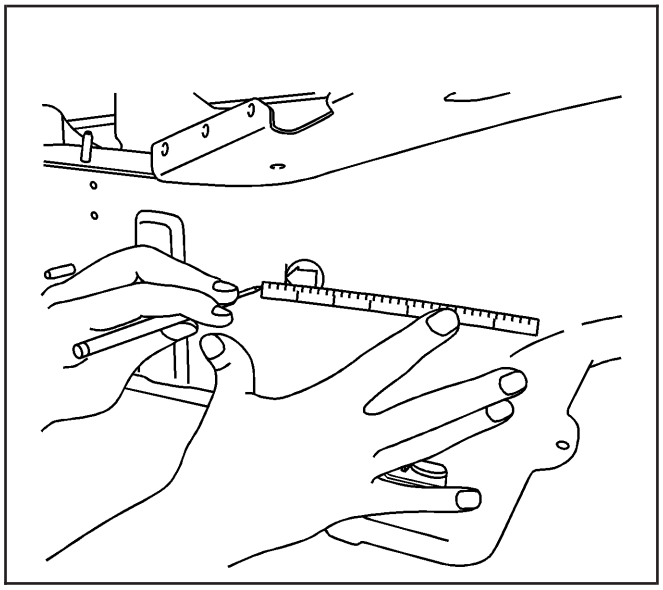


867588



867581

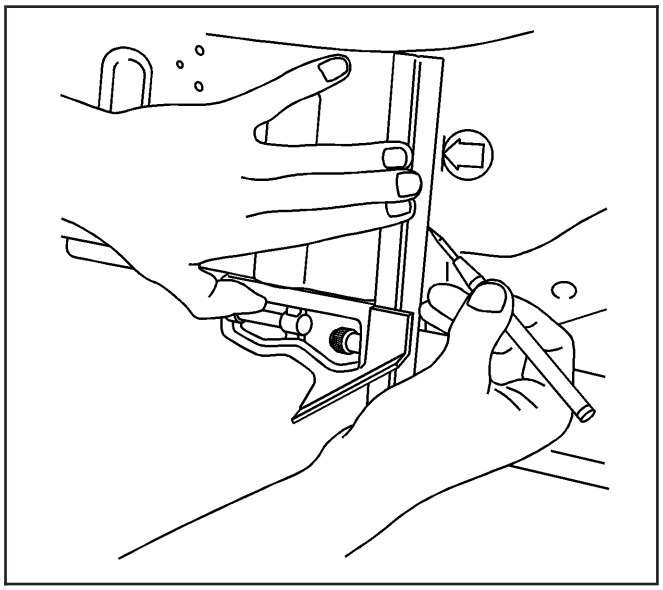
6. Locate the die marks on the inner and outer halves of the front rail.



867583

Important: Do not section the rail except where indicated.

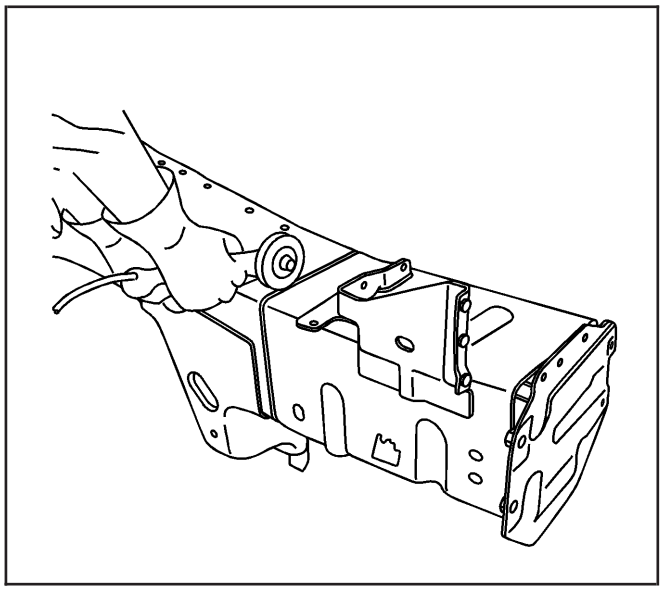
7. Measure forward of the straight line shown on the die marks 7 mm (¼ in). Mark the rail at both die mark locations.



867585

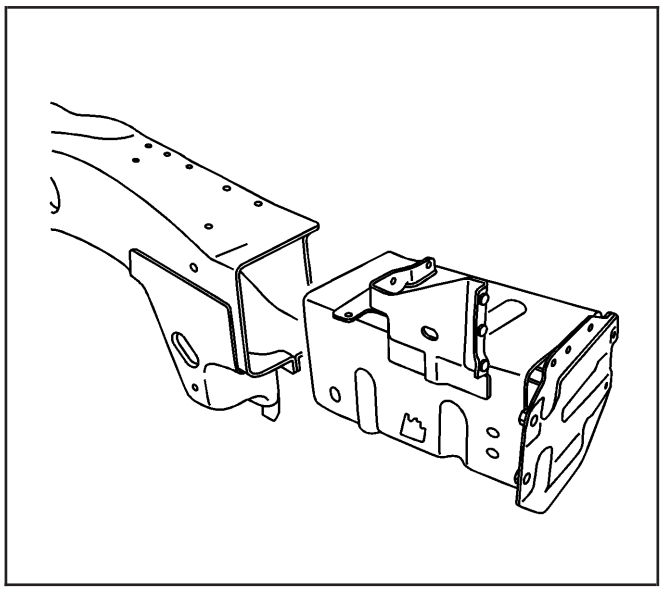
8. At the marks made forward of the die marks, align a sliding square or similar tool to the bottom side of the front rail. Scribe a line 360 degrees around the frame rail, 7 mm (¼ in) forward of the die marks.

9. Cut the rail at the marked location.



867537

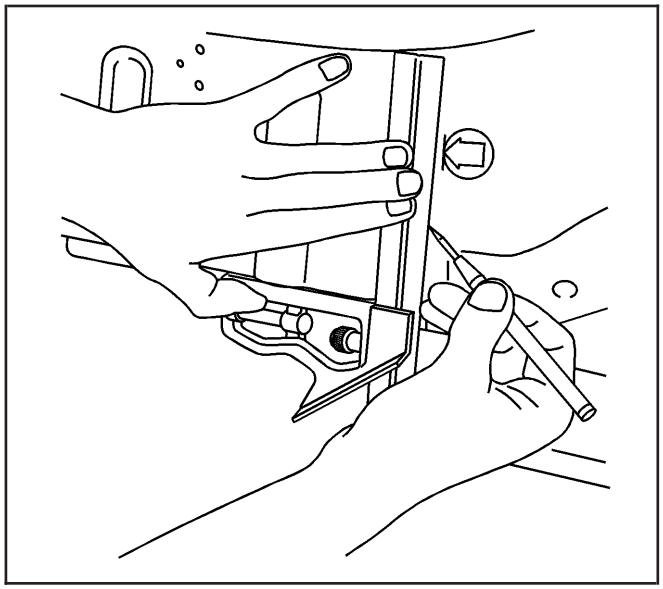
10. Remove the damaged component from the vehicle.



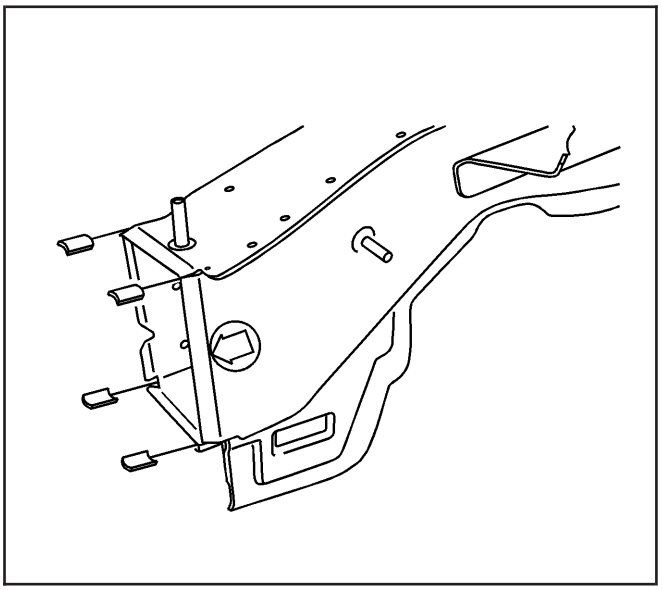
867586

Installation Procedure

1. At the straight line on the die mark, align a sliding square or similar tool to this line and the bottom side of the front lower rail. Scribe a line completely around the frame rail.

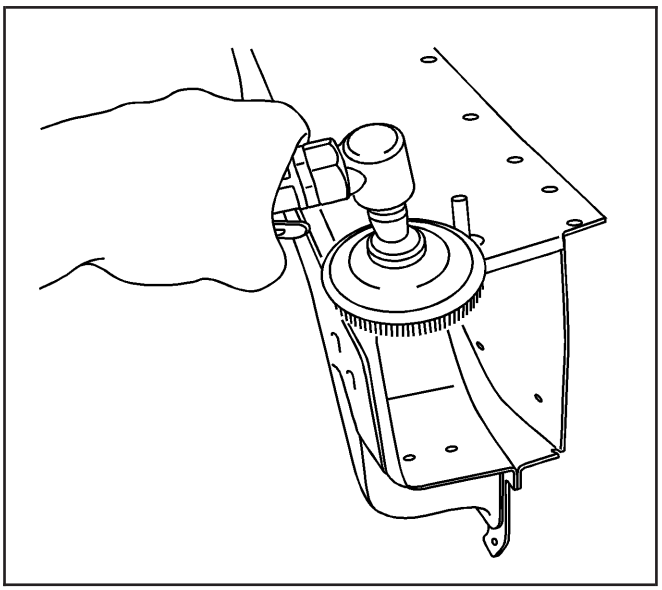


867585



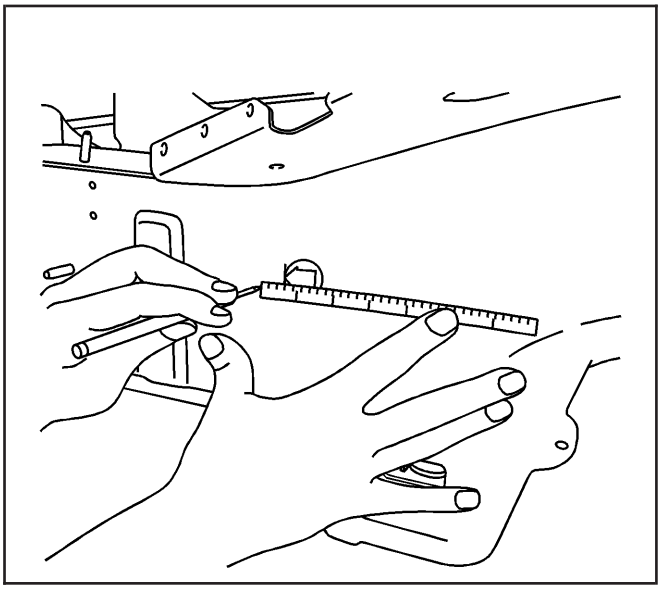
867590

2. Cut the upper and lower inner and outer corners of the frame rail. Cut at the beginning and the end of the radius at each corner rearward 7 mm (¼ in) to the scribe line.
3. Bend each side of the rail inward by aligning a vice grip flanging tool or similar tool to the scribe line. Bend a 7 mm (¼ in) flange inward slightly. This flange is the welding backer.



867591

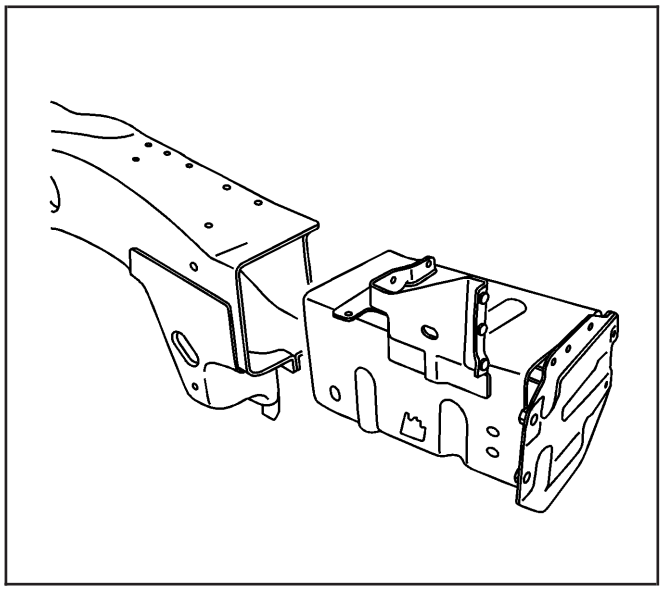
4. Prepare the sectioning weld area as necessary for welding.



867583

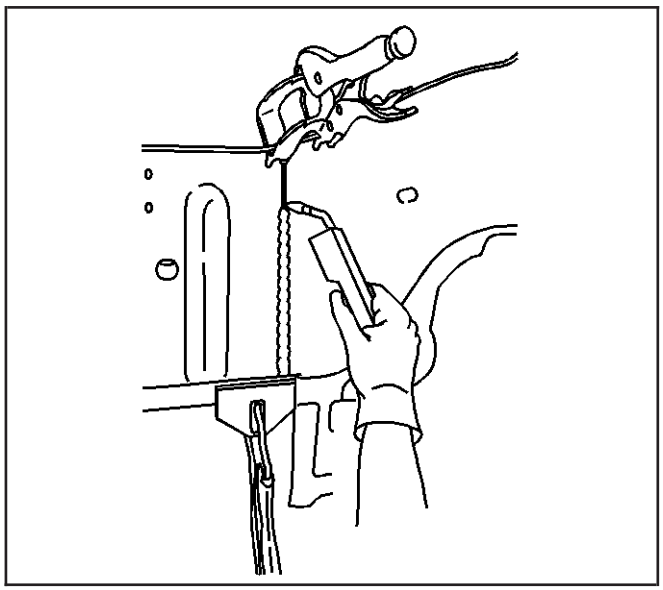
5. Locate the die marks on the service part front rail.
6. Scribe a line completely around the service rail at the line in the die mark by aligning a sliding square or similar tool to the bottom edge of the front rail service part.
7. Cut at the marked location. Remove the front portion of the rail.
8. Prepare the cut edge of the front rail section for welding.
9. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

10. Position the front rail section using 3-dimensional measuring equipment. Clamp the service part in place.



867586

11. Tack weld the part into position.
12. Inspect the service rail for proper dimensions using 3–dimensional measuring equipment.
13. Stitch weld along the entire sectioning joint. Make 25 mm (1 in) welds along the seam with 25 mm (1 in) gaps between.
14. Complete the stitch weld.
15. Clean and prepare the welded surfaces.
16. Install all of the related panels and components.
17. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
18. Paint the repaired area.
19. Enable the SIR system.
20. Connect the negative battery cable.



876346

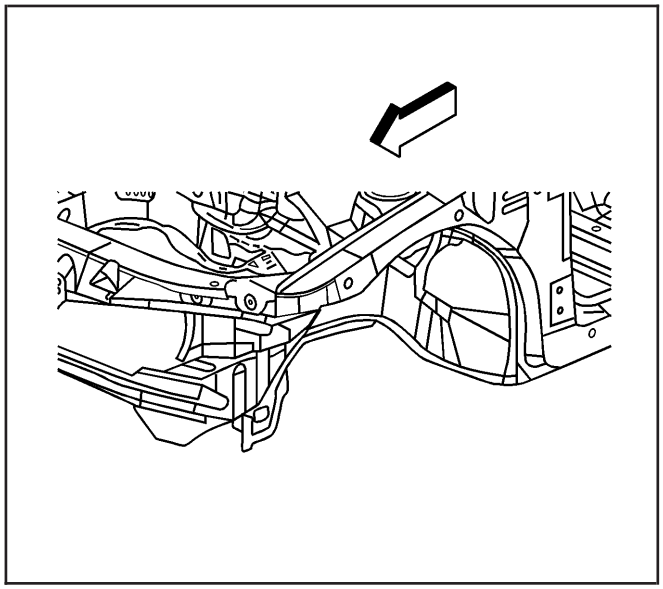
Rail Replacement Front Side Underbody - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

1. Disable the SIR system.



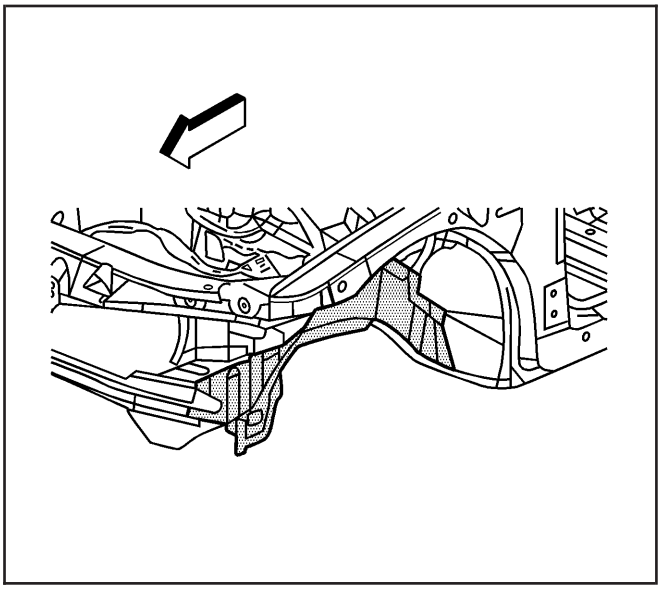
867556

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

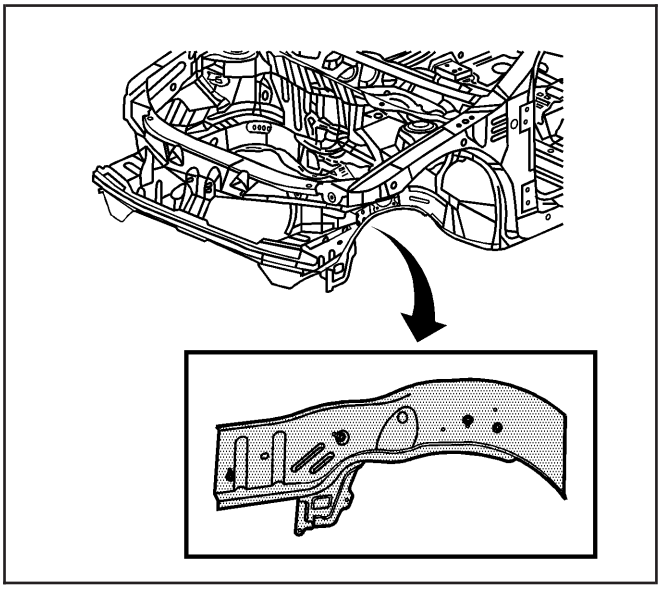
Important: Note the number and location of the factory welds for installation of the outer rail.

6. Locate and drill out all the necessary factory welds.



867560

7. Remove the outer rail from the vehicle.

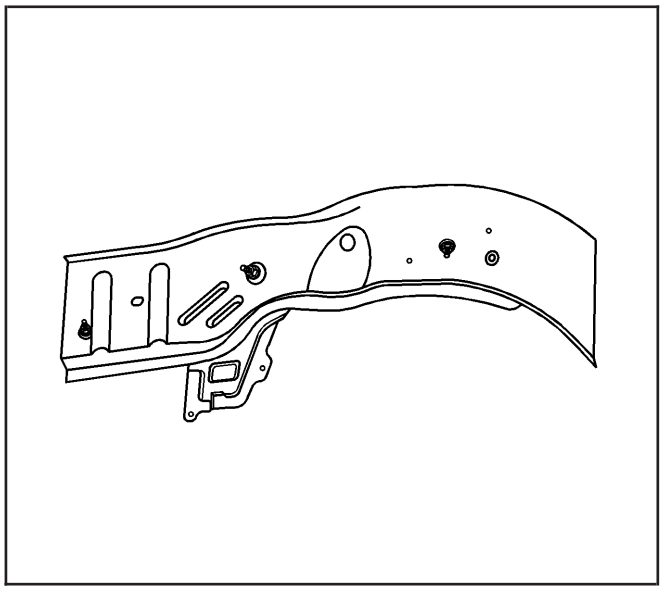


867565

Installation Procedure

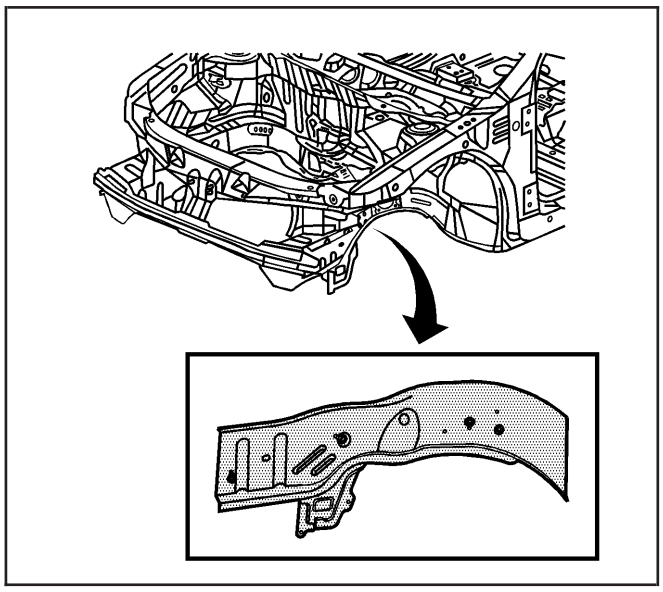
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



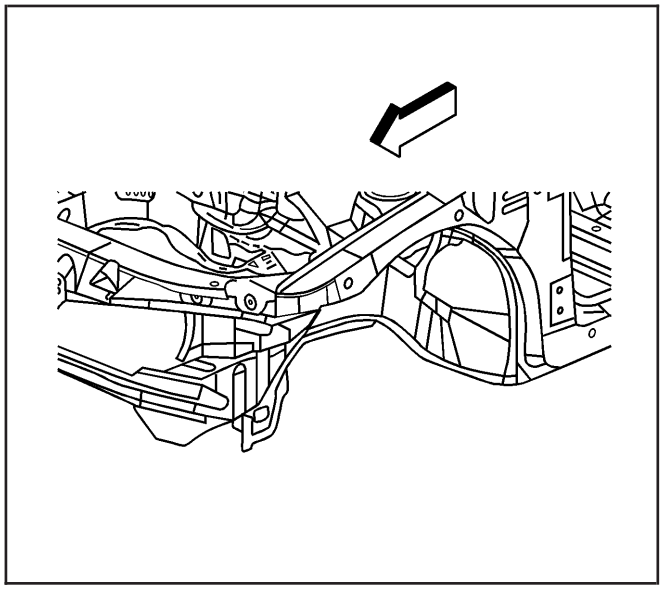
865261

4. Position the outer rail to the vehicle using 3–dimensional measuring equipment. Clamp the outer rail in place.

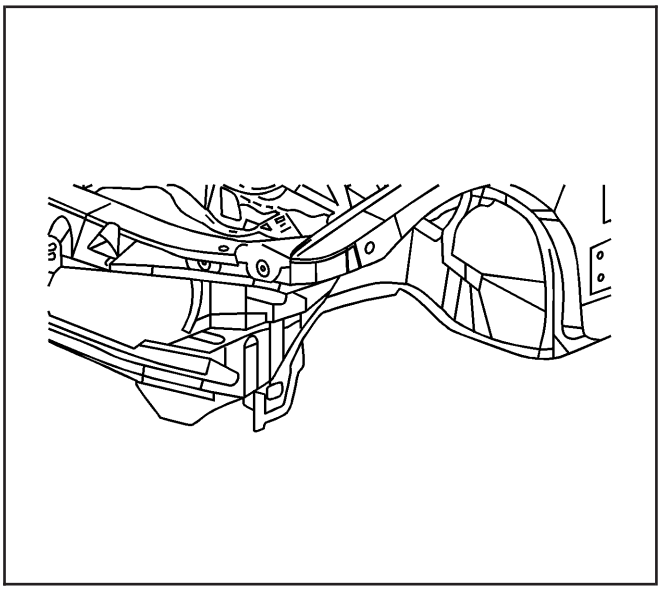


867565

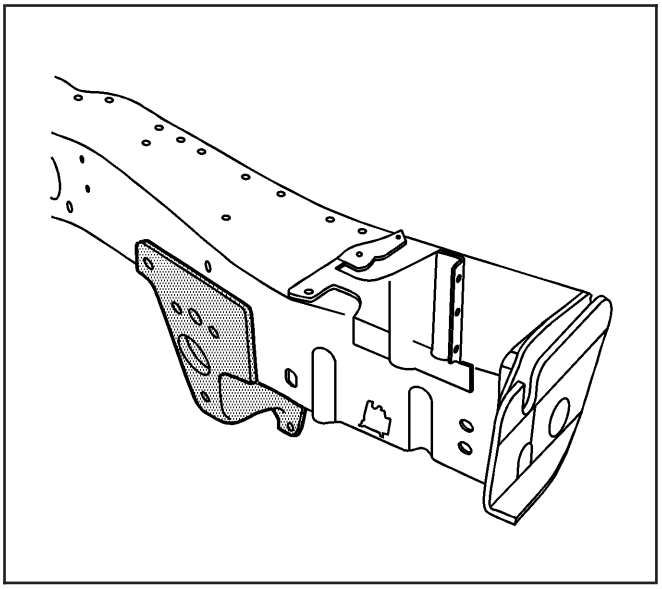
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



867556



867622



867626

Suspension Support Replacement - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

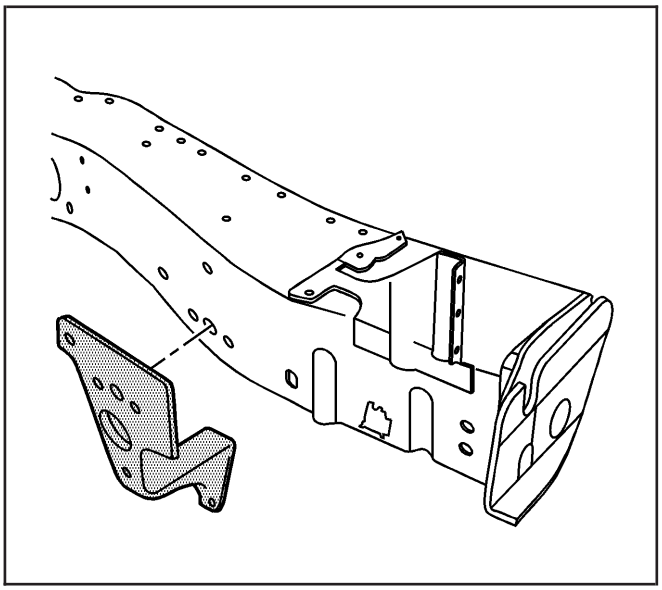
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the front suspension support.

6. Locate and drill out all the necessary factory welds.

7. Remove the front suspension support.

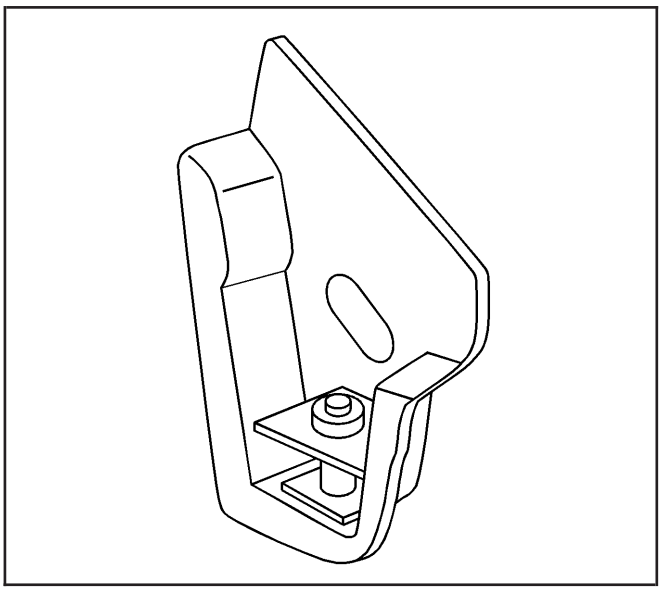


867629

Installation Procedure

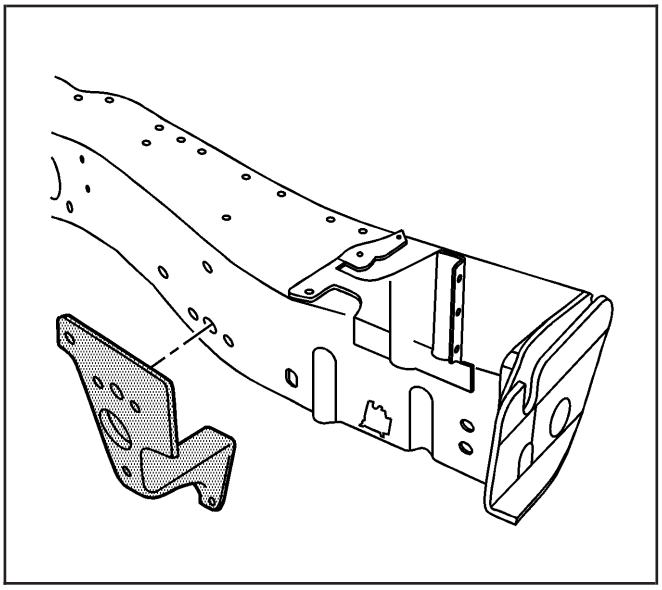
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

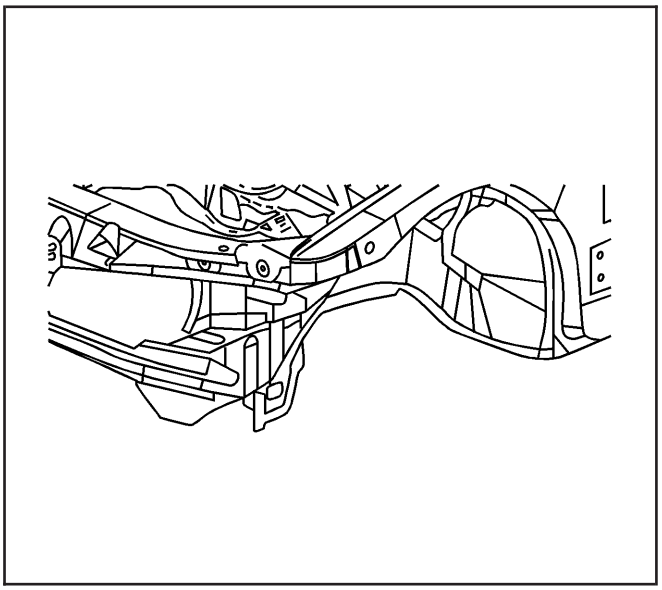


865265

4. Position the front suspension support to the vehicle using 3–dimensional measuring equipment. Clamp the support into place.

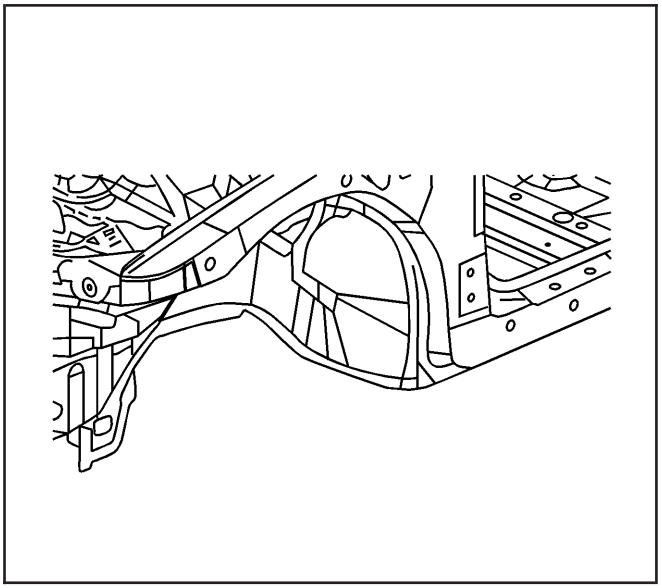


867629



867622

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



867632

Extension Replacement Front Compartment Side Rail - Rear

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

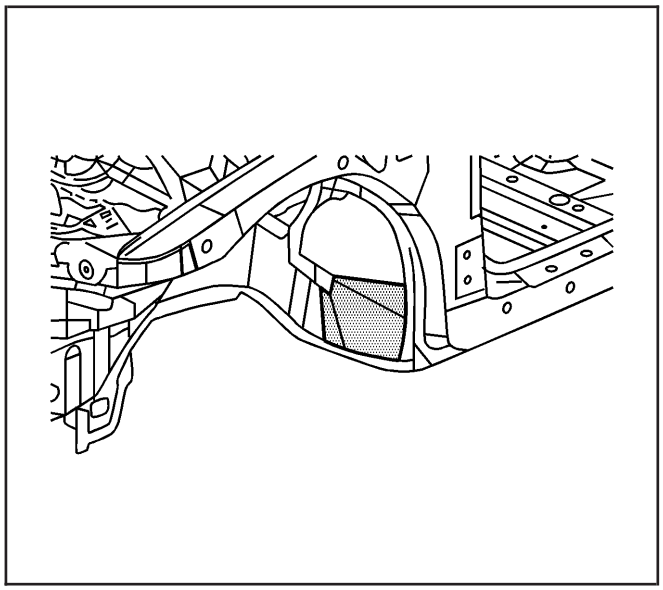
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.

5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

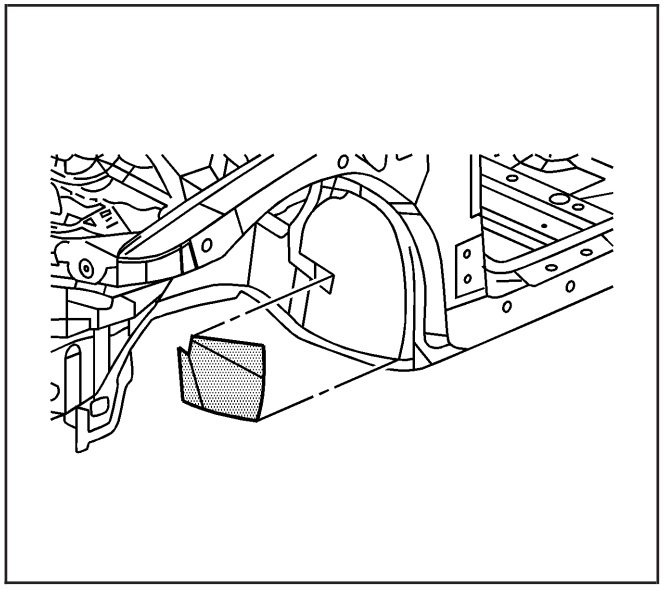
Important: Note the number and location of the factory welds for installation of the rear extension of the front compartment side rail.

6. Locate and drill out all the necessary factory welds.



867635

7. Remove the rear extension.

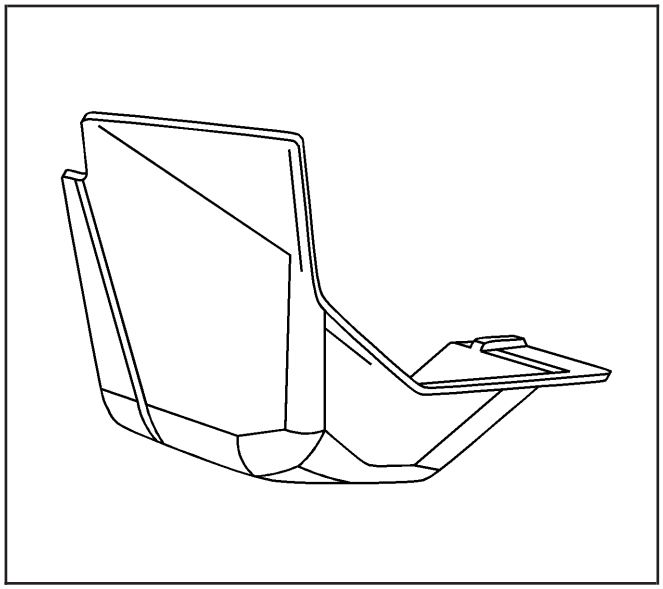


867636

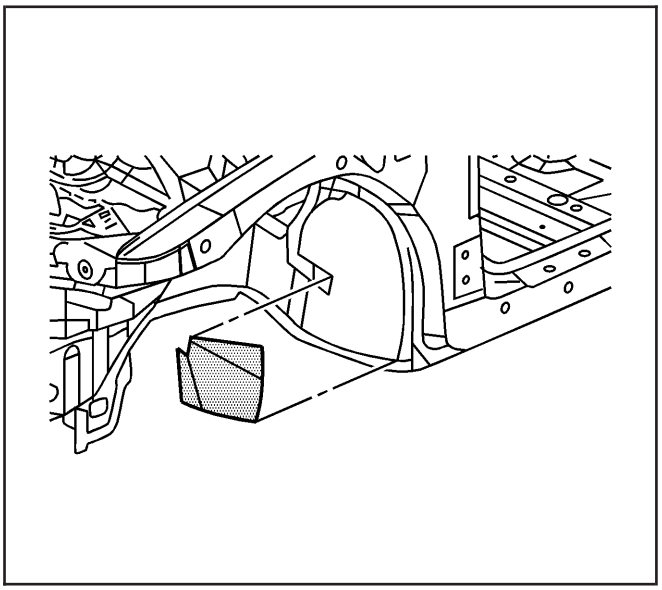
Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

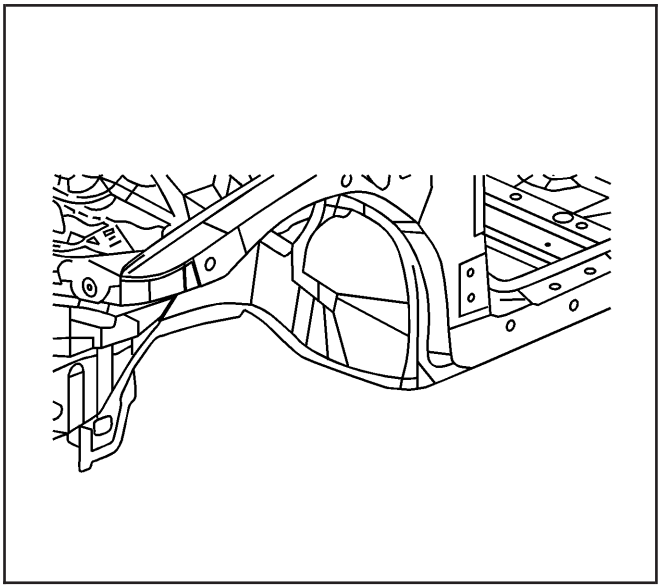


865268



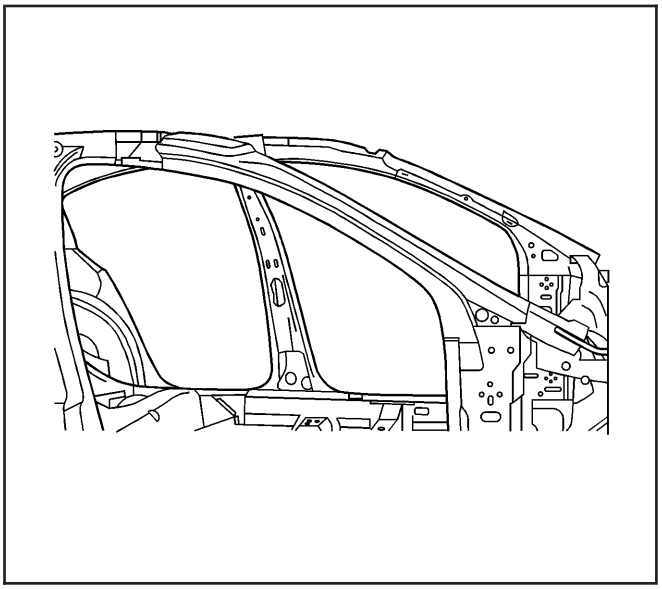
867636

4. Position the rear extension to the vehicle using 3–dimensional measuring equipment. Clamp the support into place.



867632

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



875595

Windshield Frame Reinforcement Replacement - Inner Upper

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

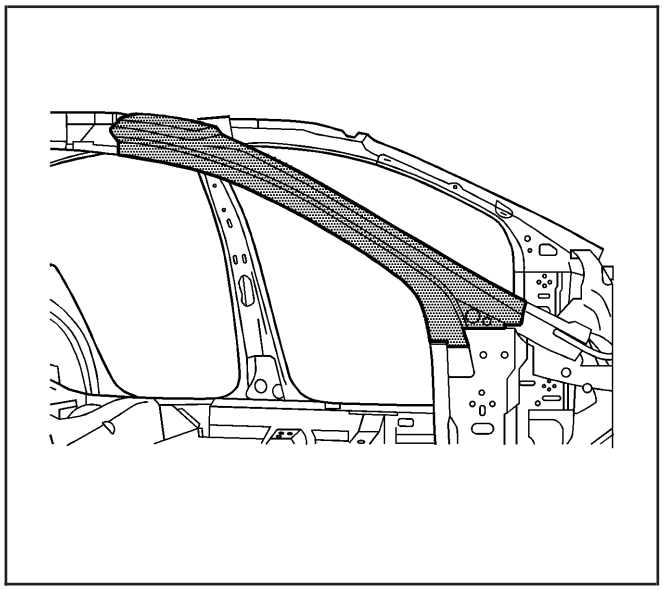
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

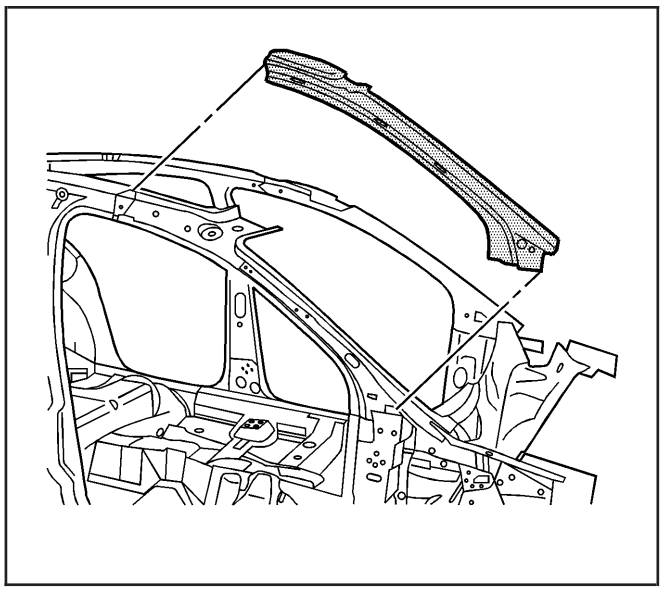
Important: Note the number and location of the factory welds for installation of the windshield frame reinforcement.

6. Locate and drill out all the necessary factory welds.

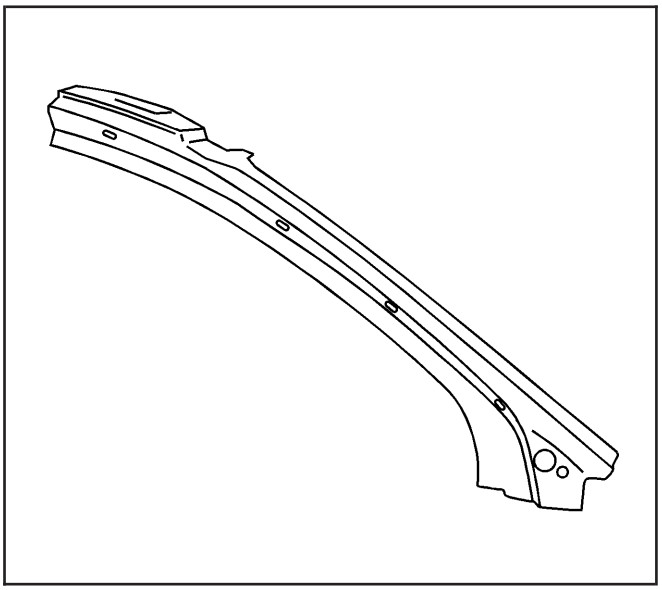


875601

7. Remove the windshield frame reinforcement.



875604

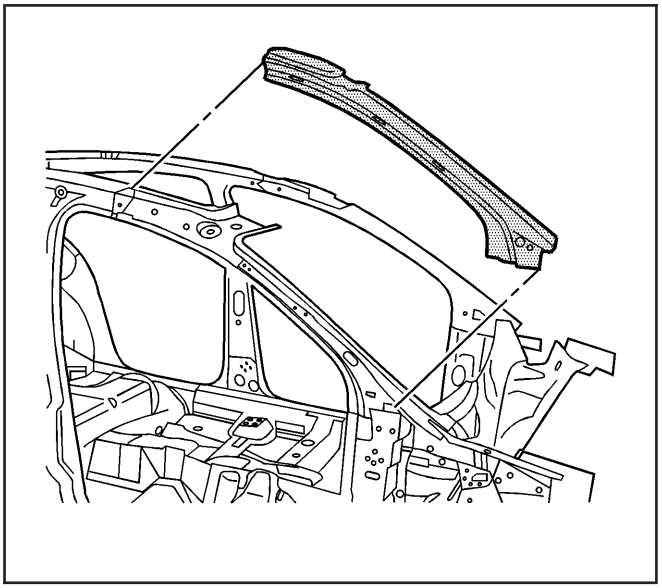


875599

Installation Procedure

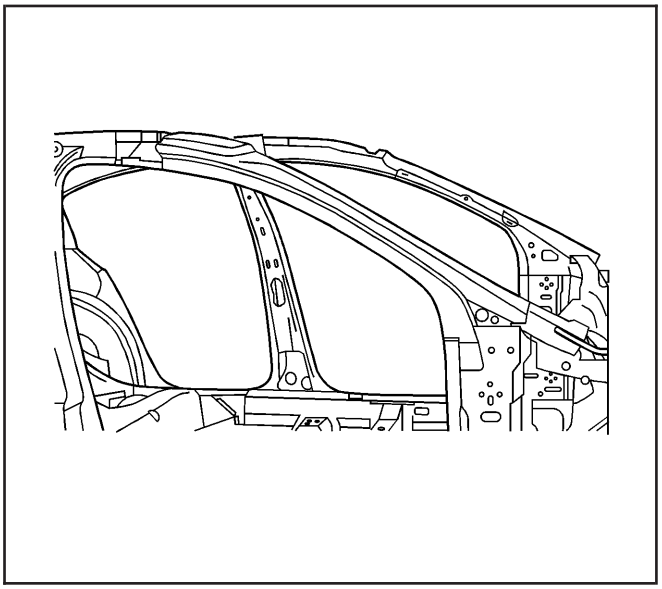
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

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 mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



875604

4. Position the windshield frame reinforcement to the vehicle.



875595

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Hinge Pillar Body Reinforcement Replacement - Front Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

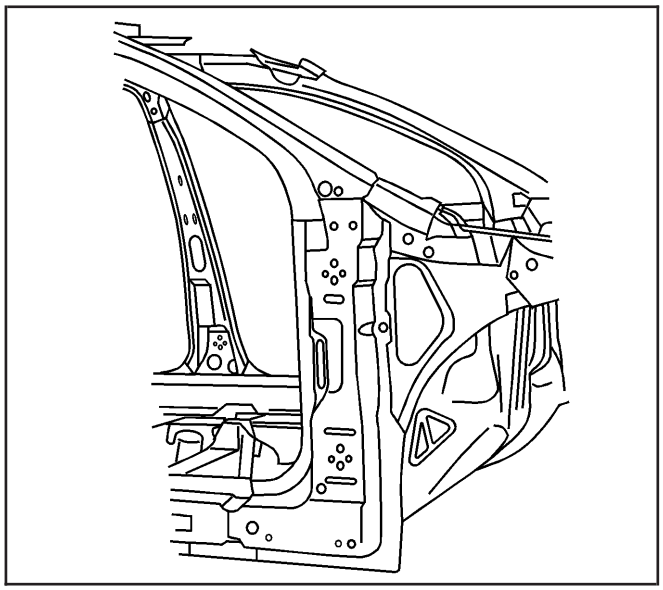
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
5. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.

Important: Note the number and location of the factory welds for installation of the hinge pillar.

6. Locate and drill out all factory welds



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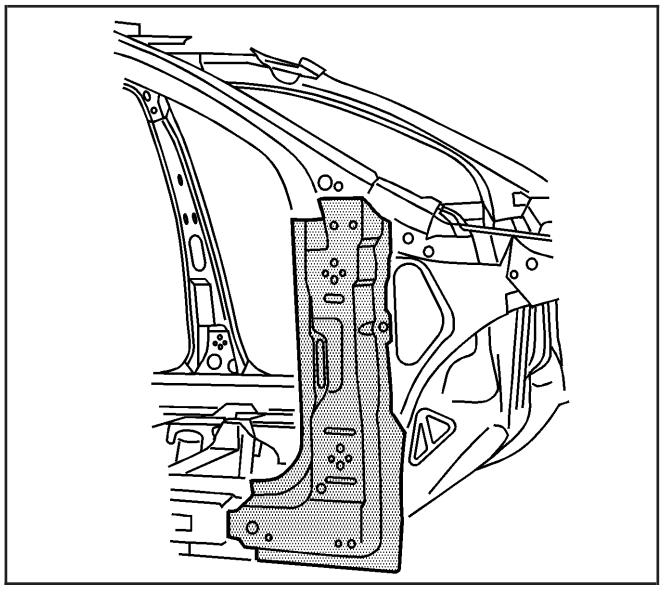

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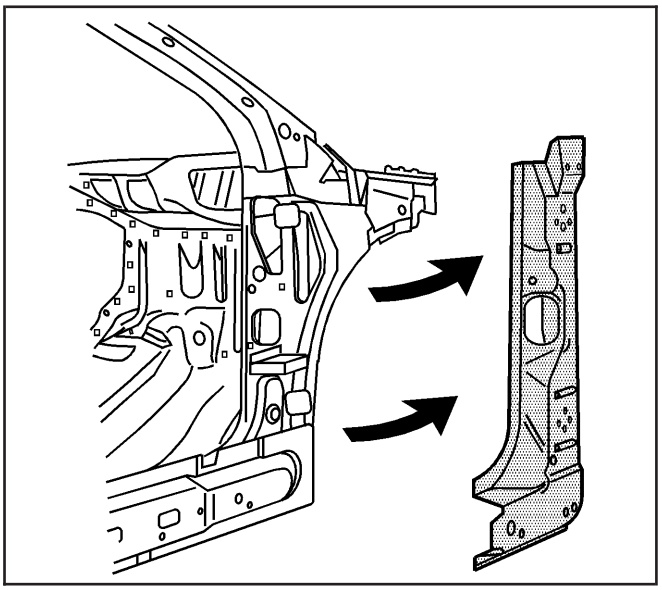
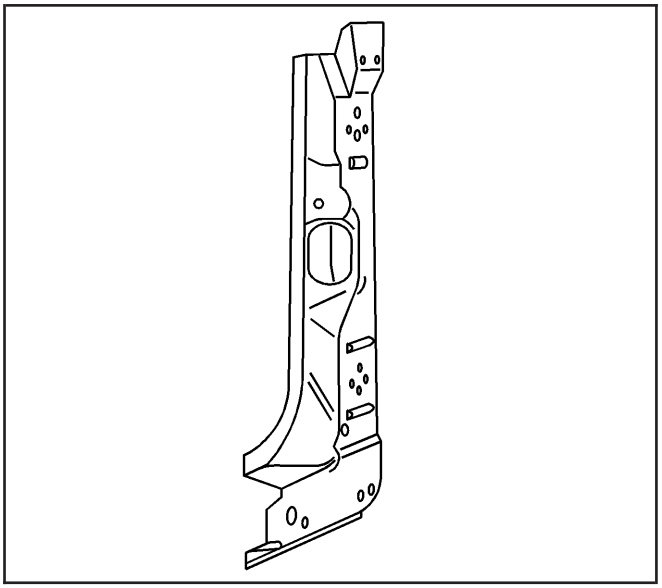


875623

7. Remove the damaged hinge pillar reinforcement.

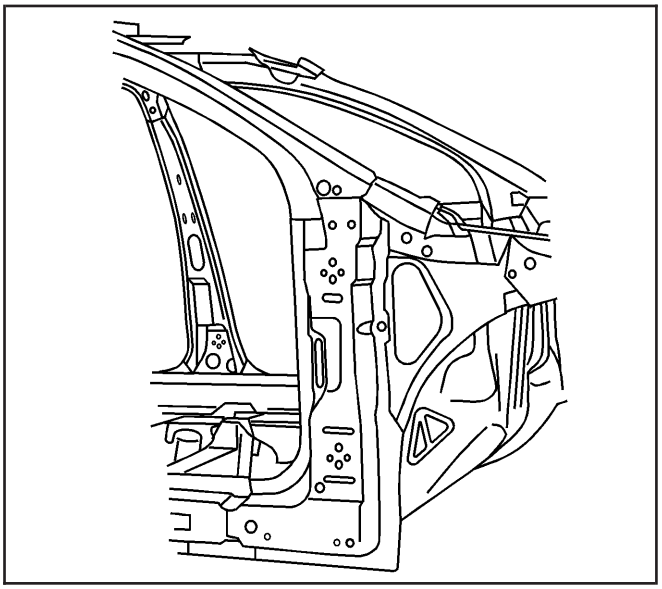


875621

Installation Procedure

Important: 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.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary as noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Align the service part using 3-dimensional measuring equipment. Clamp in place.



875620

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
8. Paint the repaired area.
9. Install all of the related panels and components.
10. Connect the negative battery cable.
11. Enable the SIR system.

Hinge Pillar Body Replacement - Front Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

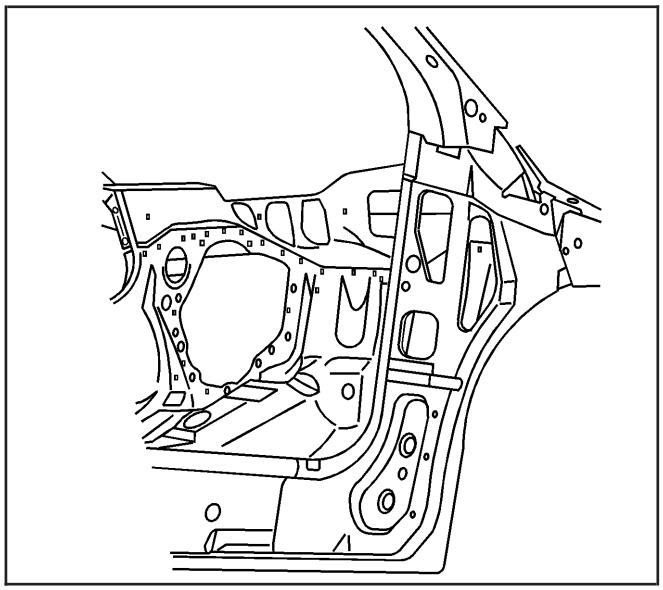
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the inner hinge pillar.

6. Locate and drill out all the necessary factory welds.



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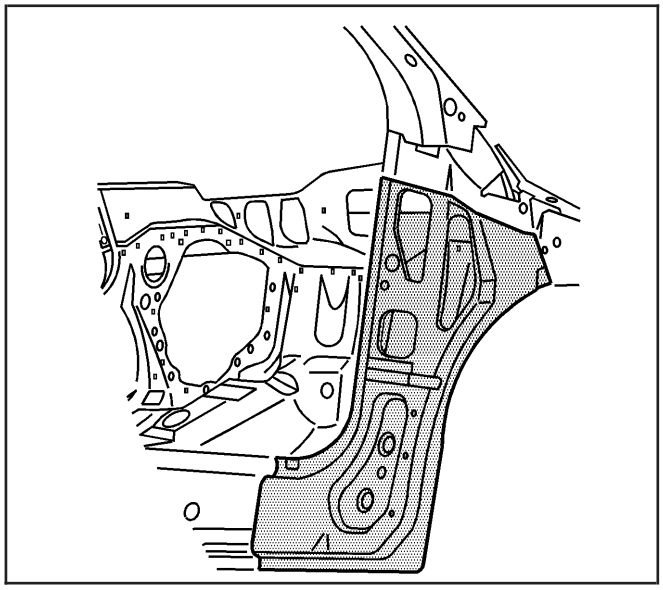

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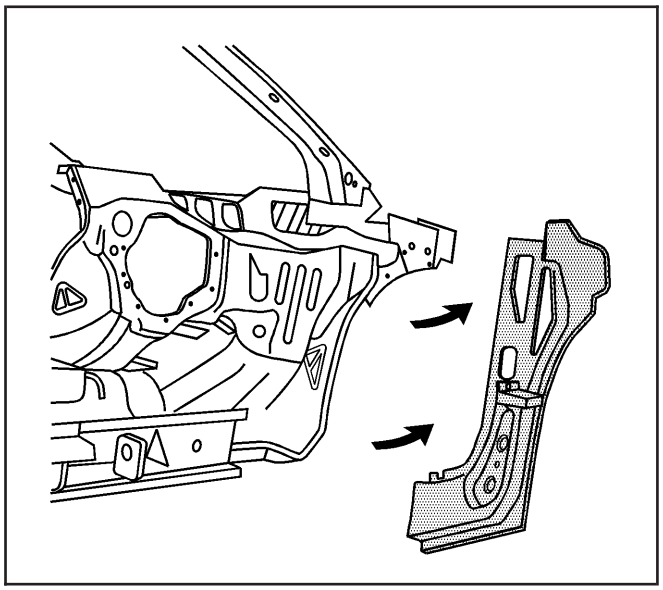
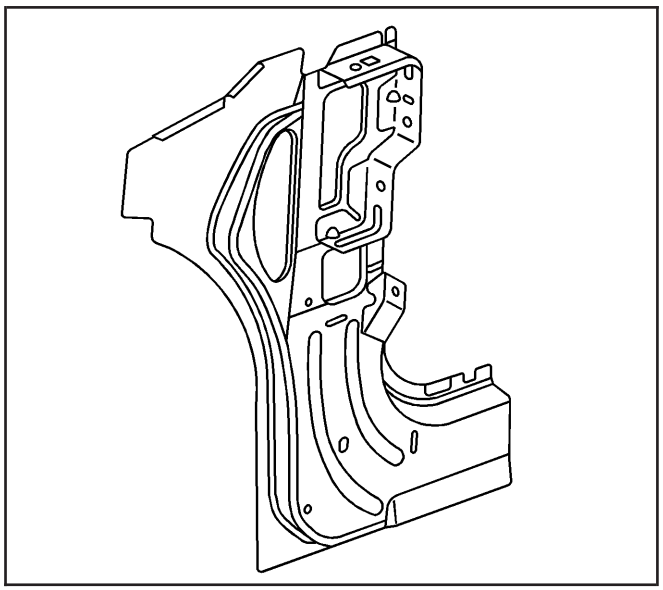


870901

7. Remove the inner hinge pillar.

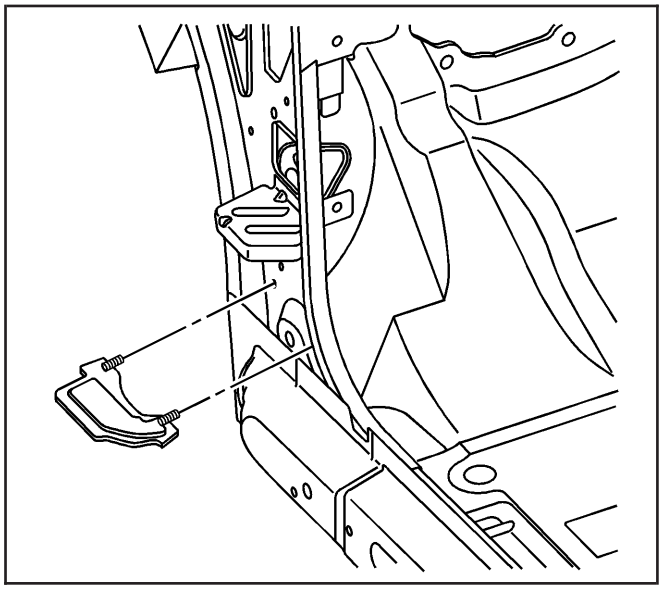


870898

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

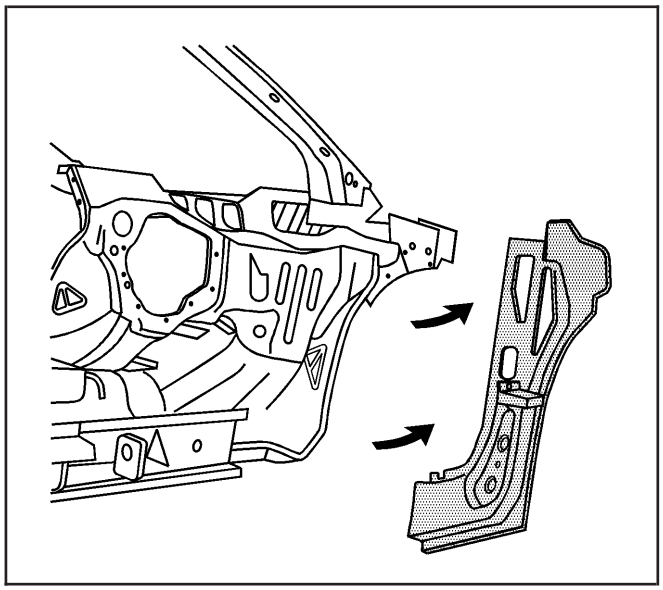
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



870903

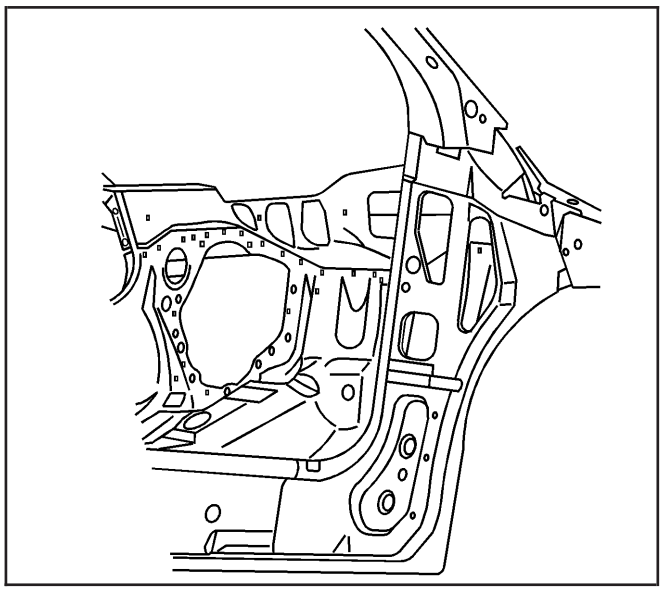
4. Install the baffle in the inner portion of the front inner hinge pillar.

5. Position the hinge pillar body to the vehicle.



870901

6. Plug weld accordingly.
7. Clean and prepare all of the welded surfaces.
8. Install all of the related panels and components.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
10. Paint the repaired area.
11. Connect the negative battery cable.
12. Enable the SIR system.



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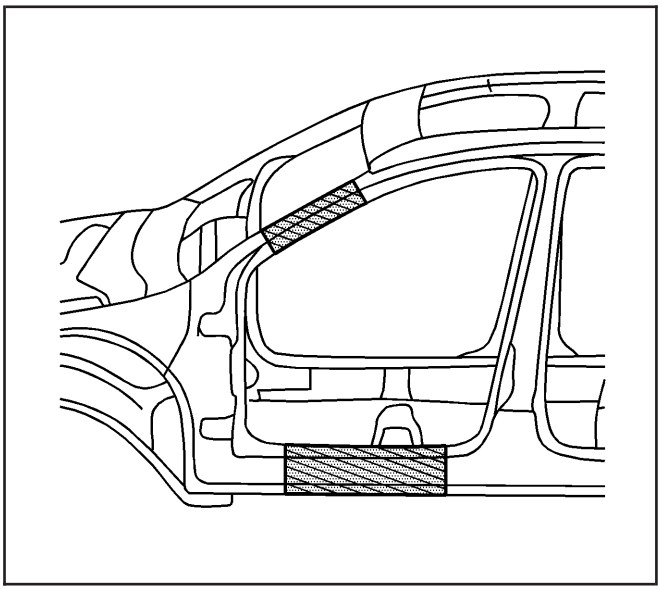

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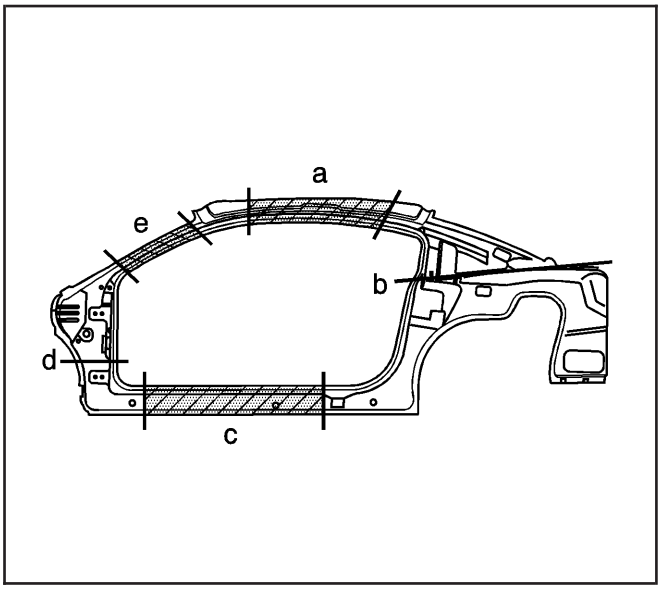


874304

Hinge Pillar Body Sectioning - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

The sedan body side outer panel is available either in one piece or in front or rear portions. The front and the rear halves are cut about half way across the rear door opening. You can perform any one of these replacement procedures separately or in any combination, depending upon the extent of damage to the vehicle. Sectioning must take place in specified areas only. Stay away from the door and window opening radius areas. Section only in straight areas of the openings.

The coupe body side outer panel is available as a one-piece panel only. You can perform any one of these replacement procedures separately or in any combination, depending upon the extent of the damage to the vehicle. Sectioning must take place in specified areas only. Stay away from the door and window opening radius areas. Section only in straight areas of the openings.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

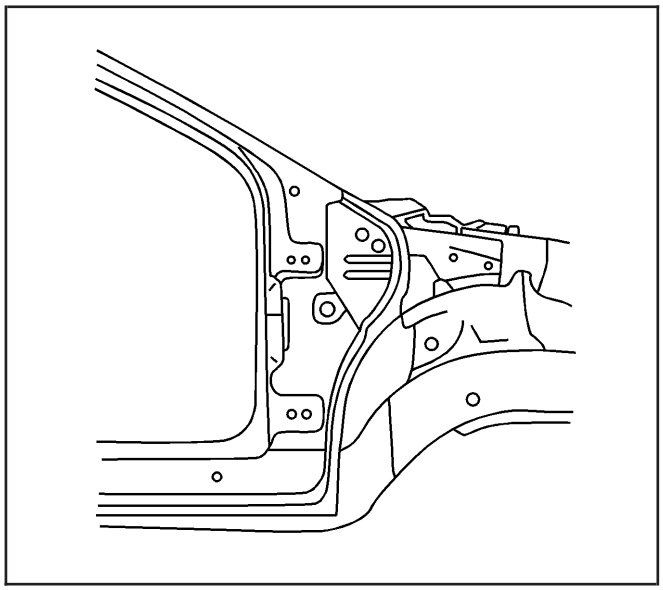
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Sectioning can be done anywhere in the straight areas of the windshield pillar and along the rocker panel.

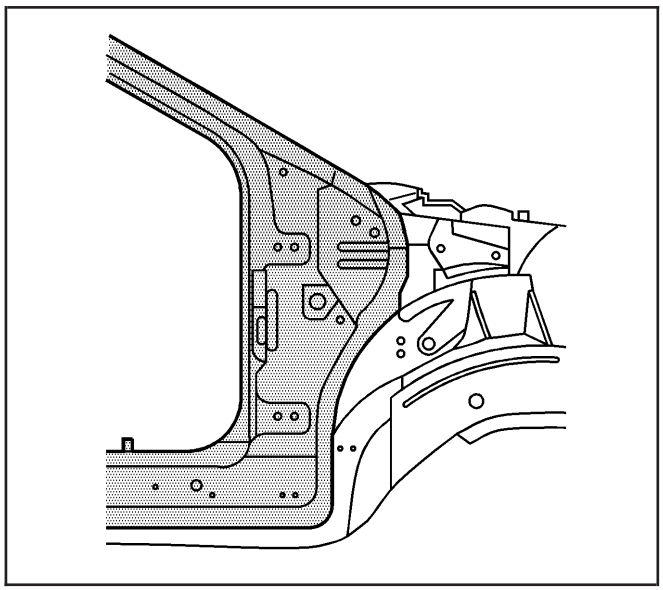
6. Locate the area on the panel where sectioning will be performed.
7. Measure from any trim attachment hole within the recommended sectioning areas. Mark the location for section cutting on the vehicle at the windshield pillar and rocker panel locations.

Important: Note the number and location of the factory welds for installation of the hinge pillar.

8. Locate and drill out all factory welds.



876963



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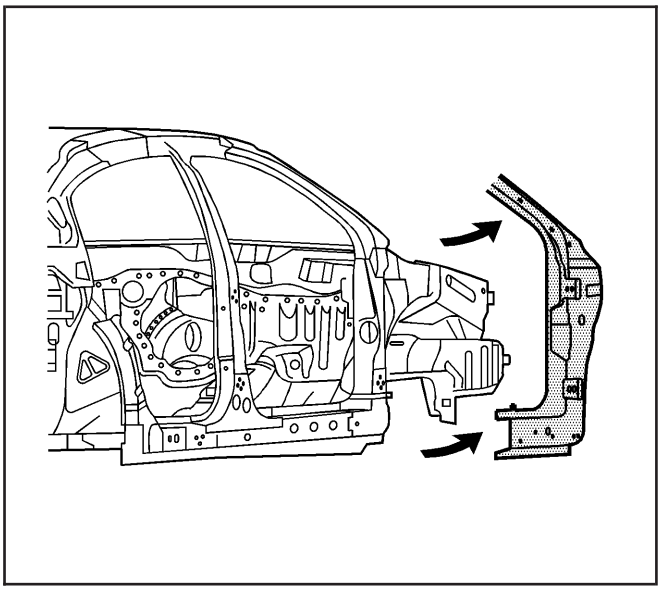
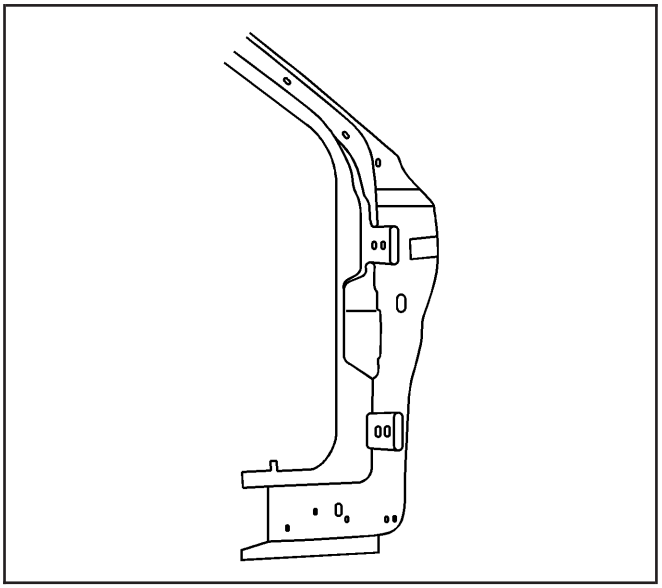


876966

Important: Do NOT damage any other panels or reinforcements when cutting at the marked locations.

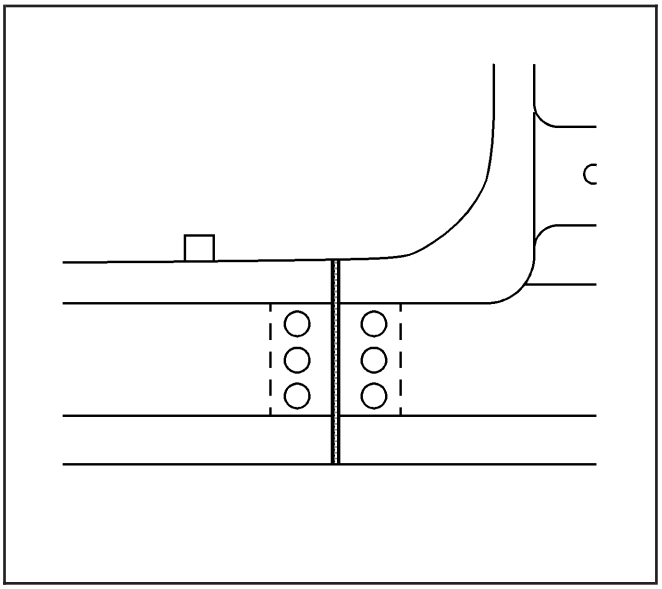
9. Cut the panel at the location laid out in the previous steps.
10. Remove the damaged hinge pillar.



876964

Installation Procedure

1. Locate the area on the service panel where you will perform sectioning.
2. Measure and mark the cut line location on the service part at the same location as on the vehicle layout.
3. Cut the outer front hinge pillar in corresponding locations to fit the remaining original panel. The sectioning joint should be trimmed to allow a gap of 1½ times the metal thickness at the sectioning joint.



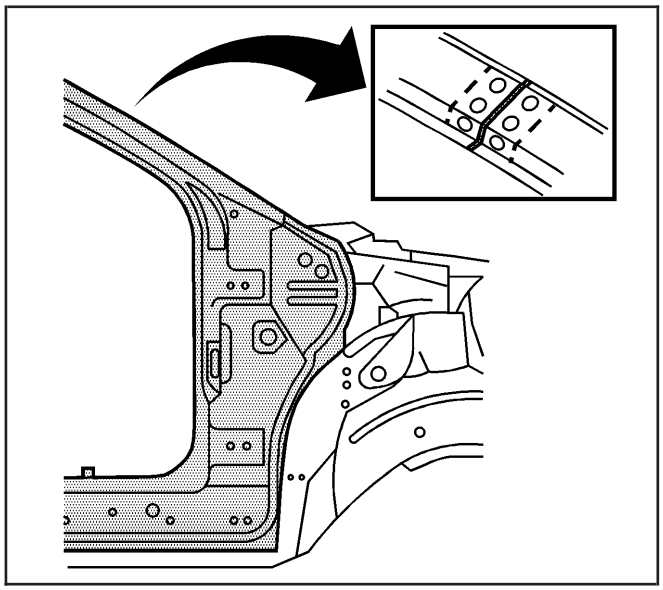
876967

4. Create a 50 mm (2 in) backing plate from the unused portion of the service part for the windshield area.
5. Create a 100 mm (4 in) backing plate from the unused portion of the service part for the rocker area.
6. Trim the backing plates as necessary to fit behind the panel at the sectioning joint.

Important: 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.

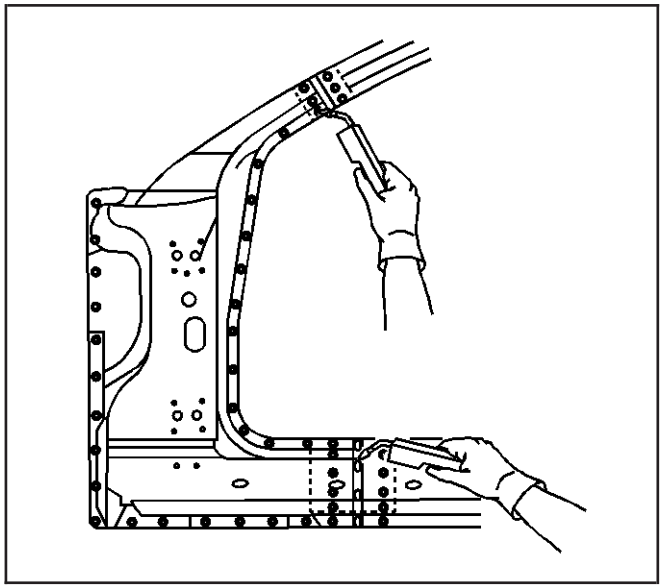
7. Drill 8 mm (5/16 in) plug weld holes along the sectioning area in the service part, and at the locations noted from the original panel.

8. Prepare all mating surfaces as necessary.
9. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
10. Fit the backing plates halfway into the sectioning joints, 25 mm (1 in) at the windshield pillar and 50 mm (2 in) at the rocker panel areas. Clamp the plates in place, and plug weld to the section joint
11. Position the outer front pillar to the vehicle using 3-dimensional measuring equipment. Clamp the pillar in place.
12. Plug weld accordingly.



876968

13. Plug weld accordingly.
14. Stitch weld the butt weld locations.
15. To create a solid weld with minimum heat distortion, make a 25 mm (1 in) stitch weld along the seam with gaps of 25 mm (1 in). Go back and complete the stitch weld.
16. Clean and prepare all of the welded surfaces.
17. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
18. Paint the repaired area.
19. Install all of the related panels and components.
20. Connect the negative battery cable.
21. Enable the SIR system.



787665

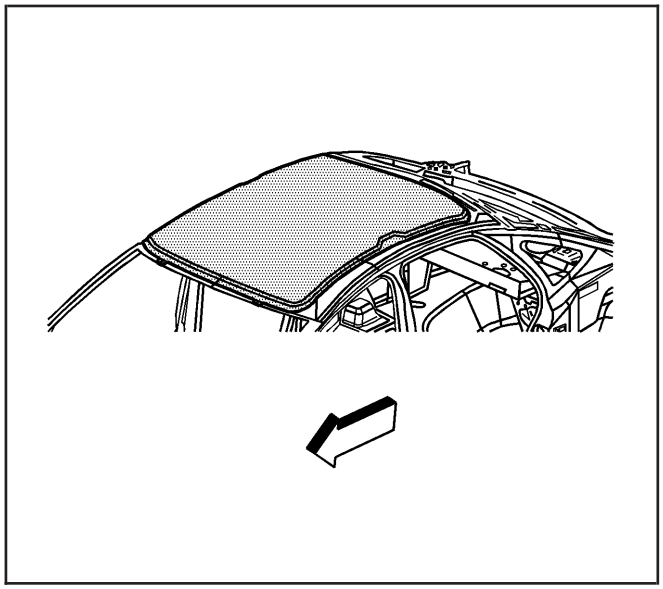
Roof Panel Replacement - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

1. Disable the SIR system.



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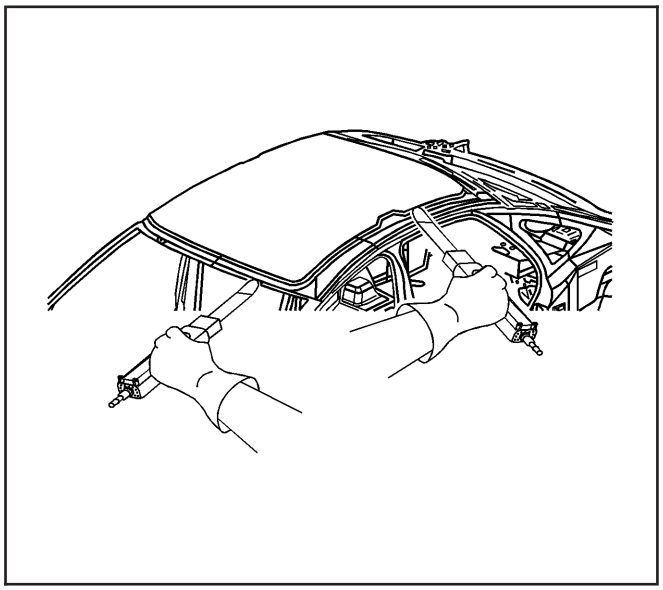
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Take note of the gap sizes along the perimeter of the roof panel to the headers, the glass, and the doors.
4. Remove all related panels and components.
5. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
6. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary.
7. Remove the 4 nuts that retain the front and rear of the roof panel to the front and rear header panels.

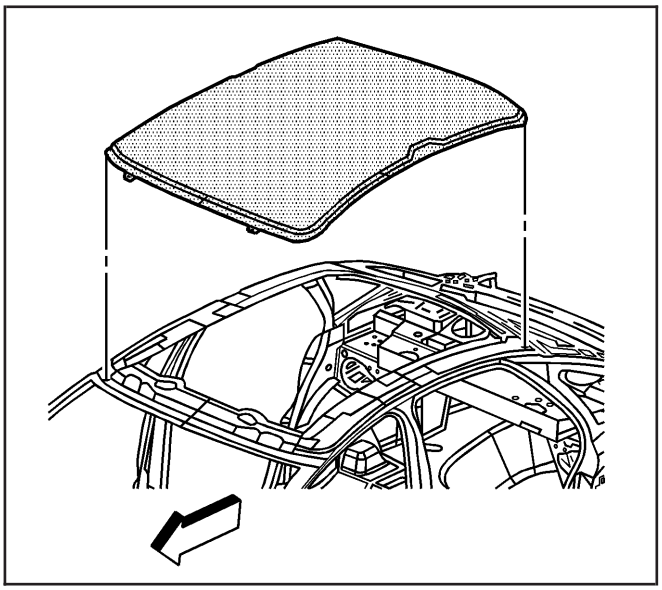


874270

Important: Do not damage any inner panels or reinforcements.

8. Locate and cut the urethane adhesive holding the roof panel to the vehicle. Note the location of the adhesive for installation of the roof panel.

9. Remove the damaged roof panel.



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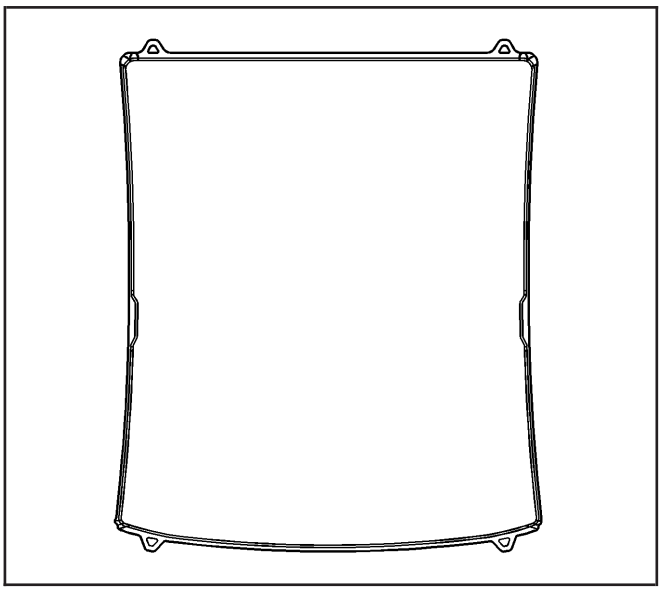
Installation Procedure

1. Prepare all mating surfaces as necessary.
2. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



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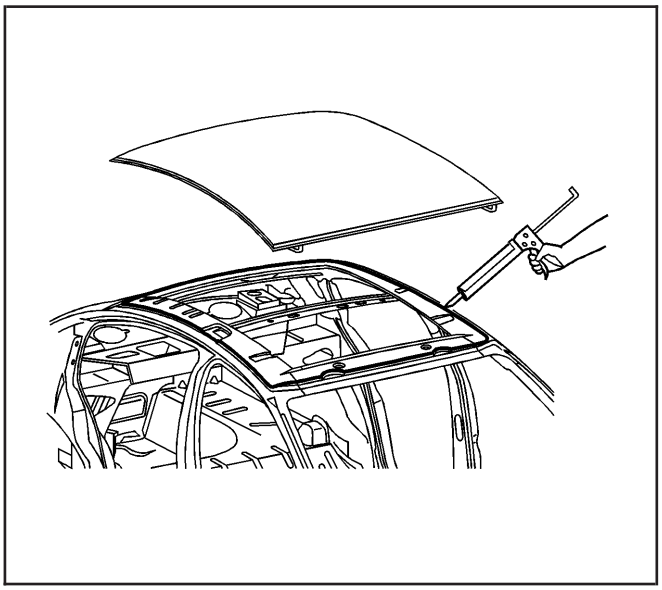
Important: Place the urethane adhesive on the outboard side of the roof panel stud hole locations.

3. Place a 10 mm (3/8 in) diameter bead of urethane adhesive GM P/N 12346392 on the perimeter of the vehicle roof attachment points.



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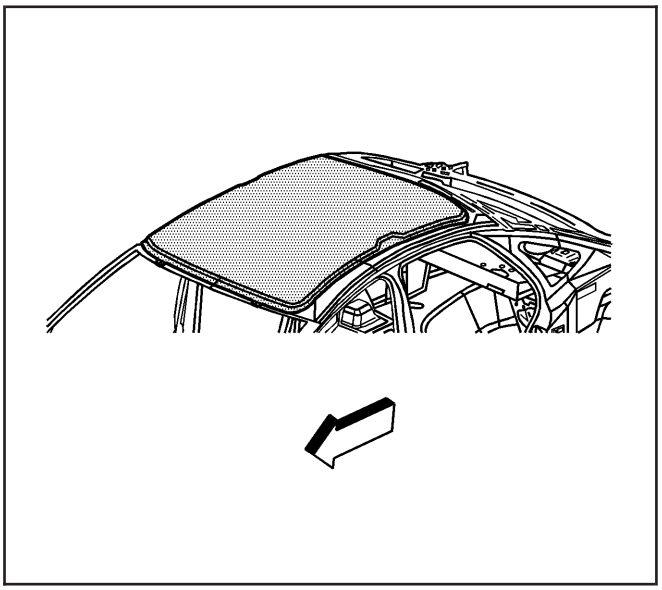

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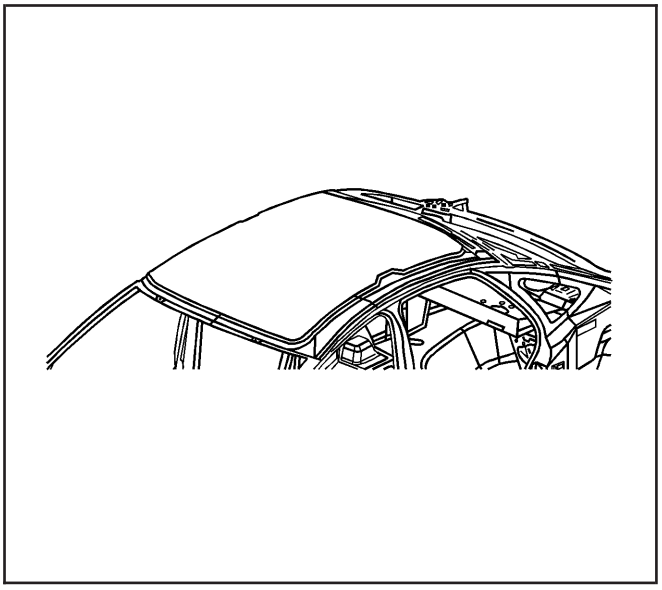


870875

4. Position the roof panel on the vehicle.
5. Verify the fit of the roof panel to the front edge of the front header panel and to the rear edge of the rear header panel.
6. Verify the fit of the roof panel at the gap along the top of the door frame to the roof panel. Adjust the panel if necessary.

Notice: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

7. Install the 4 nuts at the front and rear header panels.

   Tighten

   Tighten the nuts to 8–12 N·m (3.1–4.7 lb in).
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repair area.
10. Install all related panels and components.
11. Connect the negative battery cable.
12. Enable the SIR system.

Windshield Frame Header Panel Replacement - Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

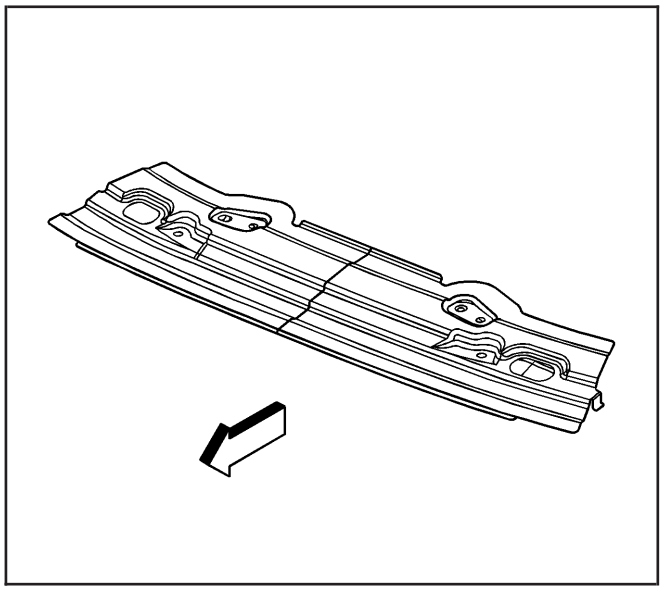
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the header panel.

6. Locate and drill out all the necessary factory welds.



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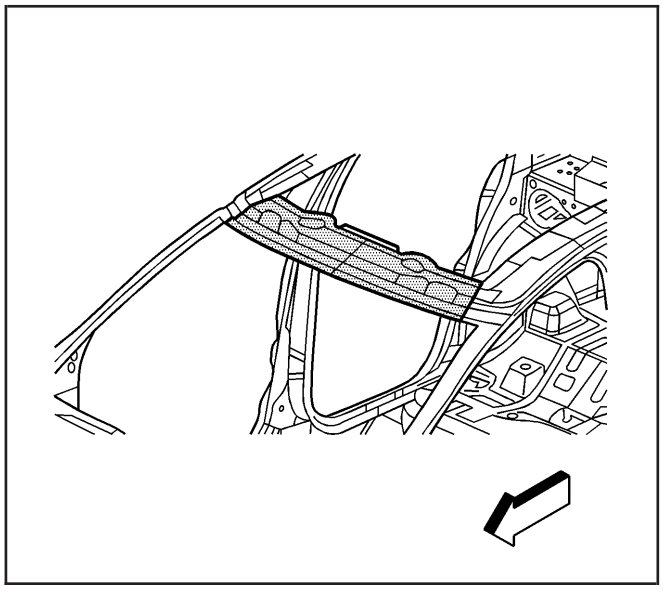

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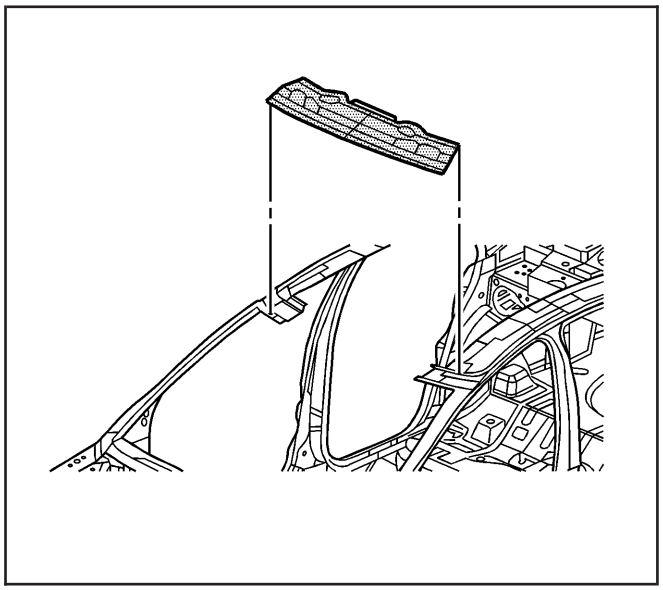

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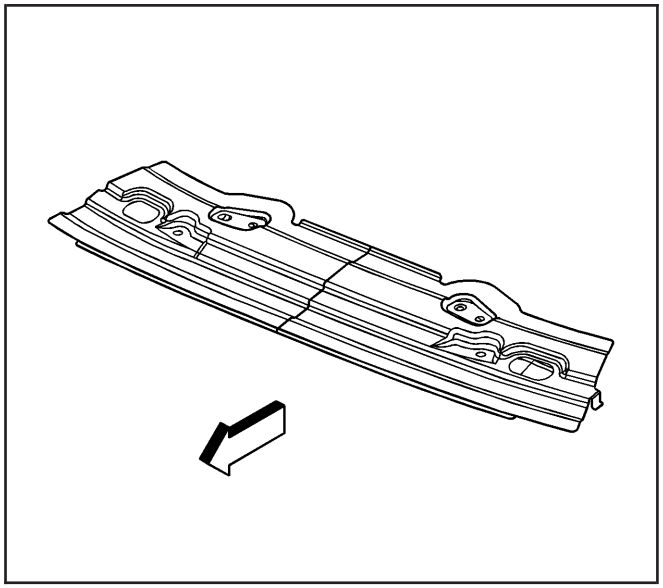
7. Remove the header panel.

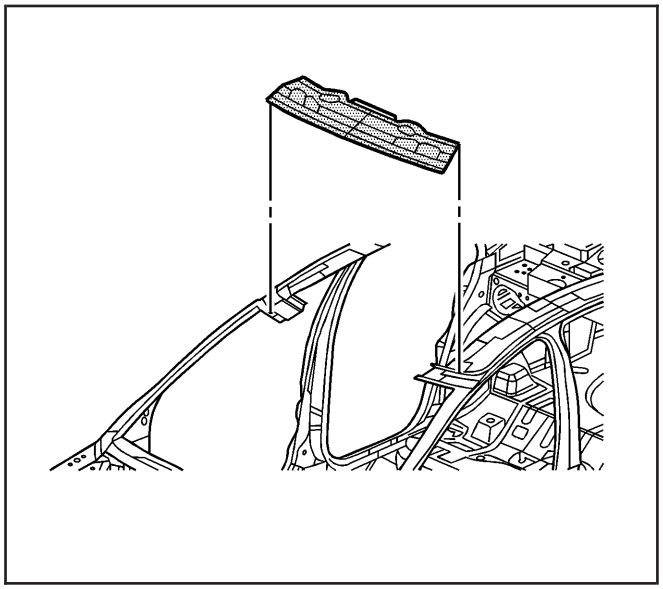


870858

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

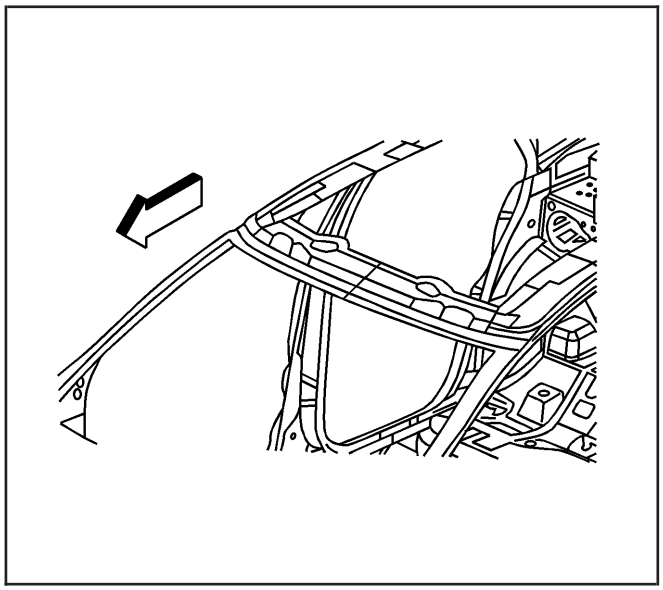
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



870867

4. Position the header panel to the vehicle using 3-dimensional measuring equipment. Clamp the front header panel in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870857

Rear Window Frame Header Panel Replacement - Rear

Removal Procedure

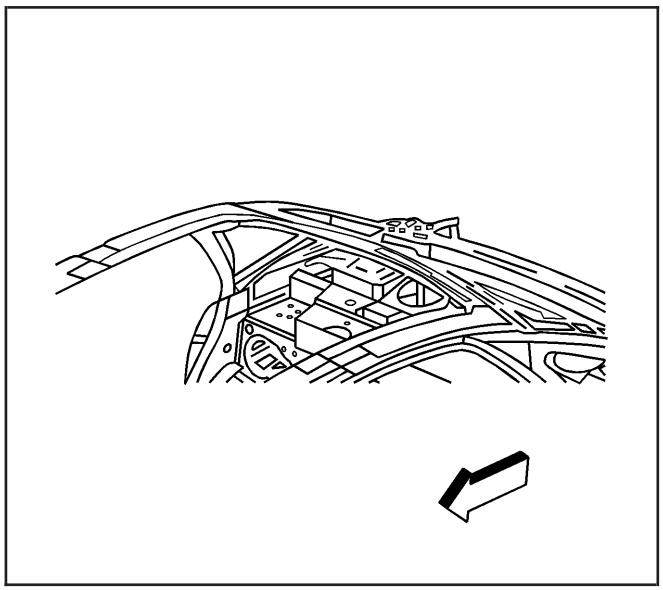
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

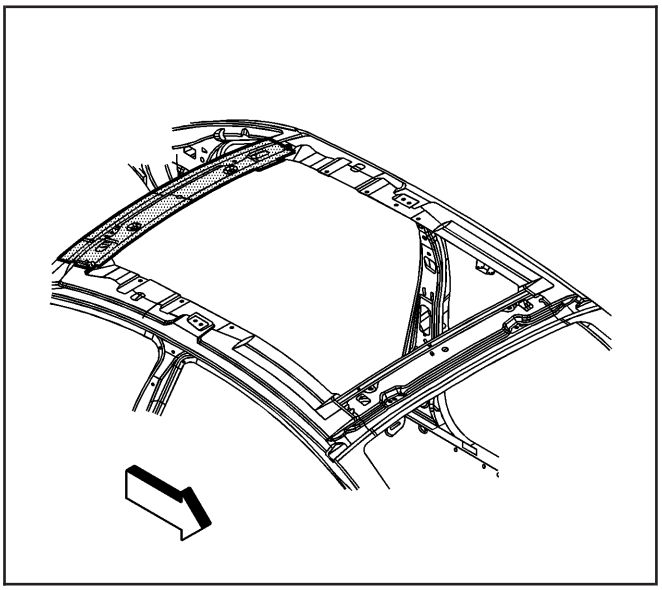
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.



870868

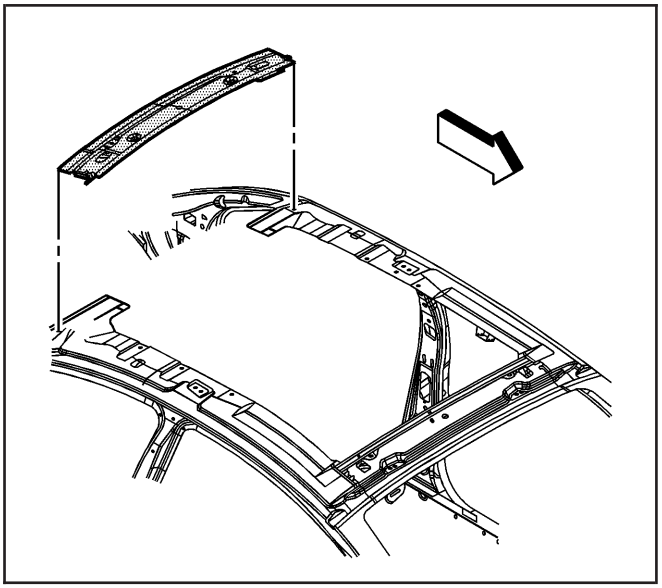


870870

5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

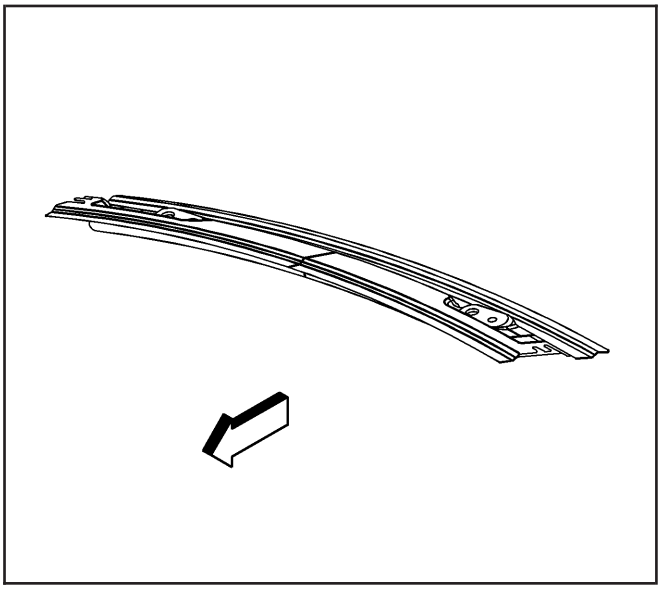
Important: Note the number and location of the factory welds for installation of the rear window frame header panel.

6. Locate and drill out all the necessary factory welds.



870872

7. Remove the rear window frame header panel.



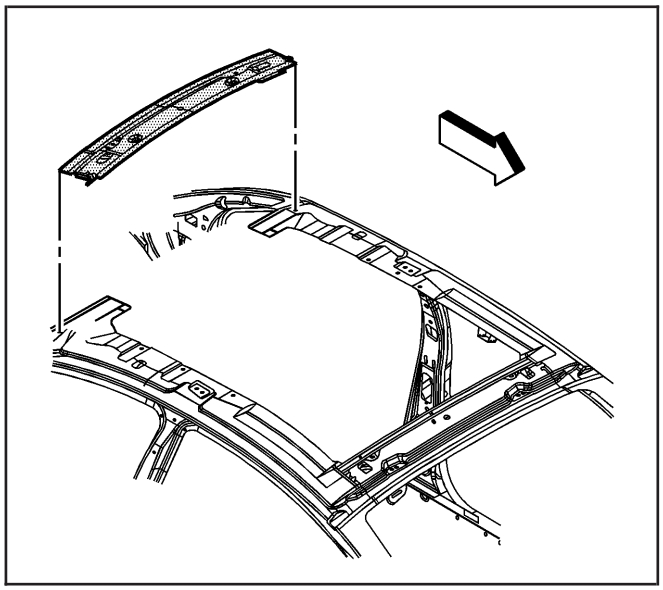
870869

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

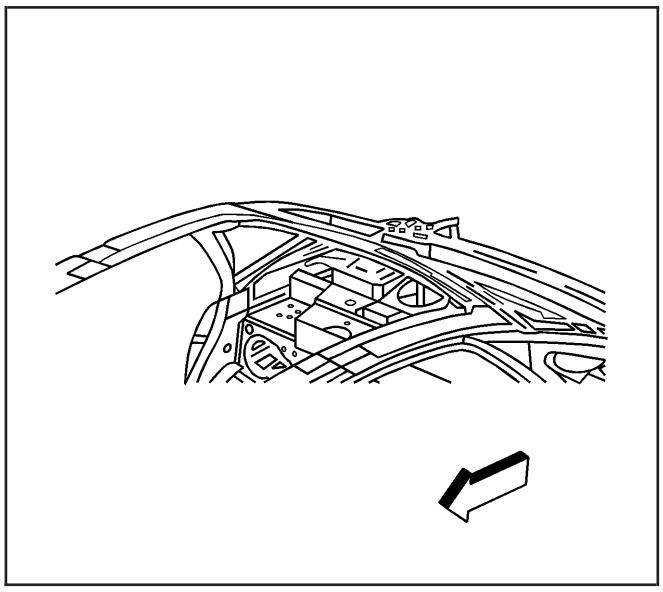
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.

4. Position the rear window frame header panel to the vehicle using 3-dimensional measuring equipment. Clamp the rear header panel in place.



870872

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870868

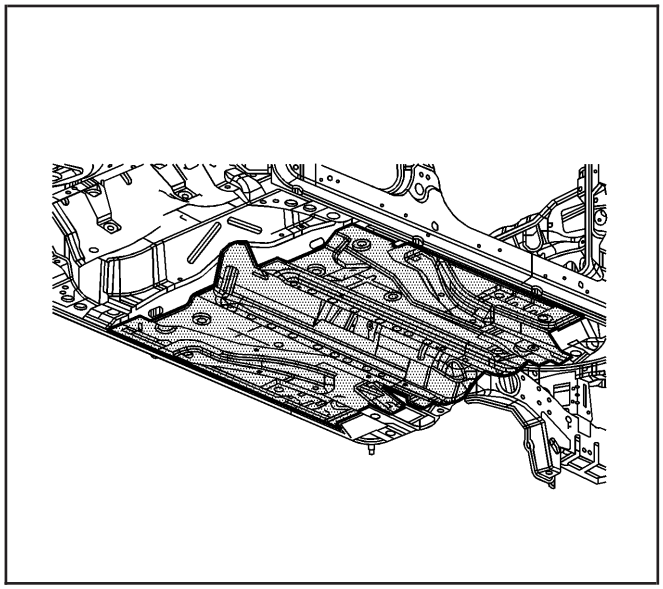
Floor Panel Replacement - Center

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

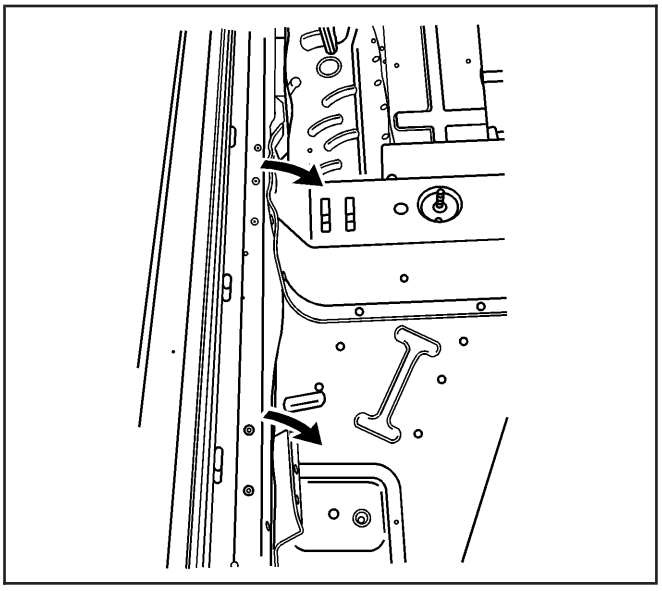
1. Disable the SIR system.



870895

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

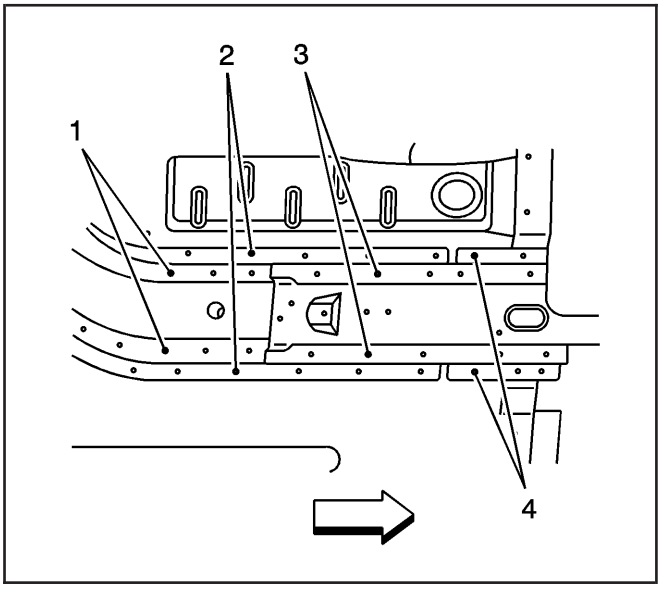


870890

Important: Note the number and location of the factory welds for installation of the center floor panel.

Important: Do NOT damage or drill through adjacent panels.

6. Locate and drill out the #2 and #3 bar attachments to the inner rocker panel.
7. Bend the upper weld flange up and away from the inner rocker panel.

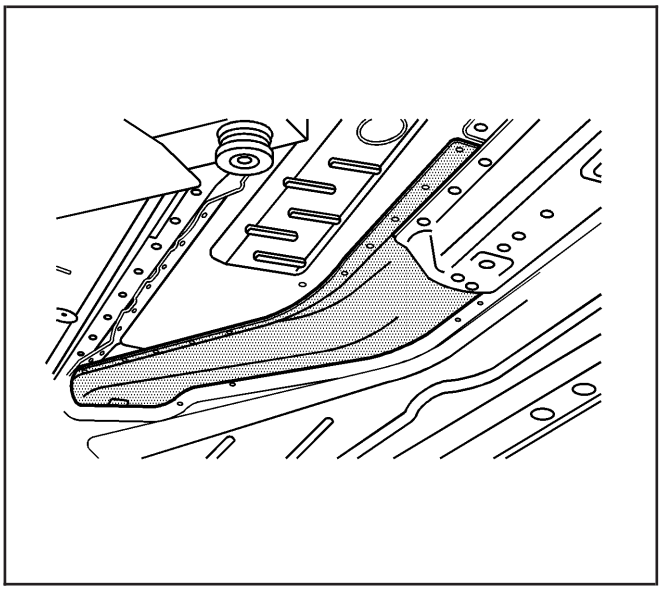


870892

Important: The rear portion of the front compartment lower rail is a multi-layered assembly.

8. Note the layering (1,2,3,4) of the weld flanges.
   - The rear portion of the front rail to rail assembly
   - The rear upper reinforcement of the front rail to floor pan
   - The intermediate portion of the front rail to rear upper reinforcement of the front rail
   - The intermediate reinforcement to the floor pan

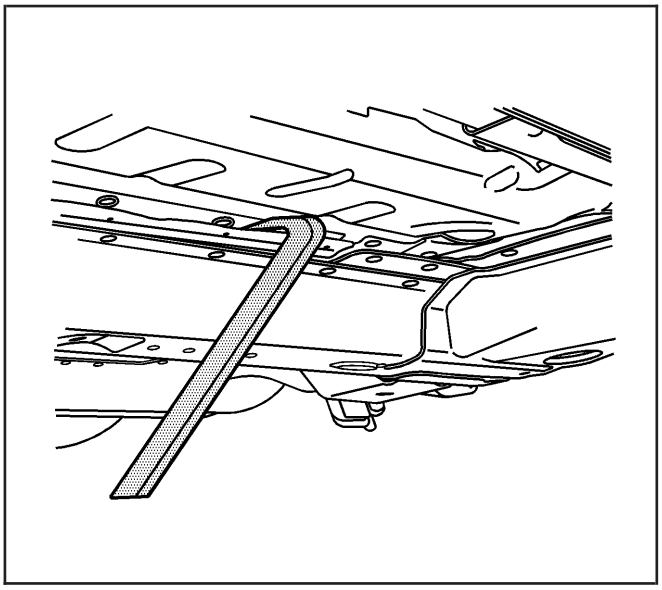
9. Drill out all plug welds in the rear portion of the front rail connected to the center floor panel. If the rail portion is undamaged, keep the portion for reinstallation.
10. Drill out all plug welds that attach the rear portion of the front rail to the intermediate portion of the front rail.



870893

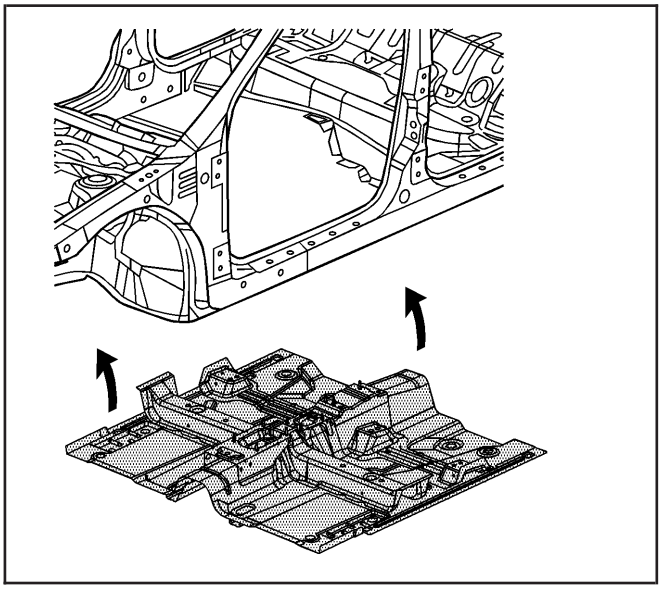
Important: Remove the rear section of the rail before you remove the center floor panel.

11. Using a 90 degree bent pry tool, pry the intermediate portion of the front rail apart from the rear portion of the rail far enough to allow the rear portion to slide free of the intermediate portion. Remove the rear portion of the front compartment rail.

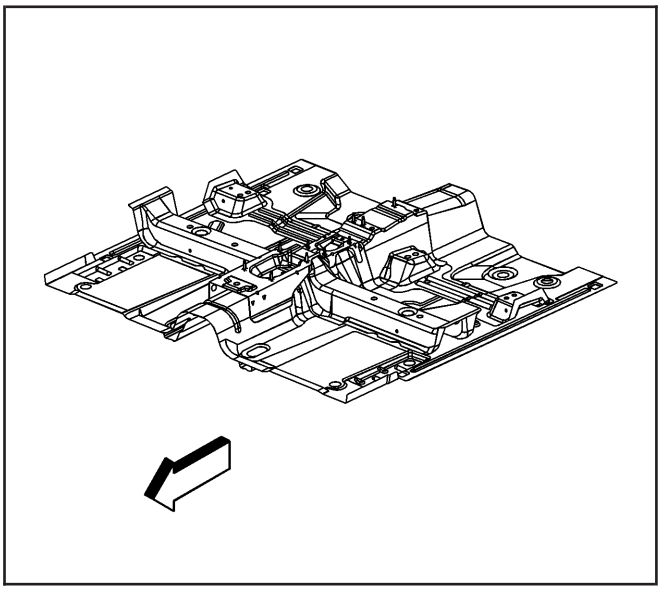


870891

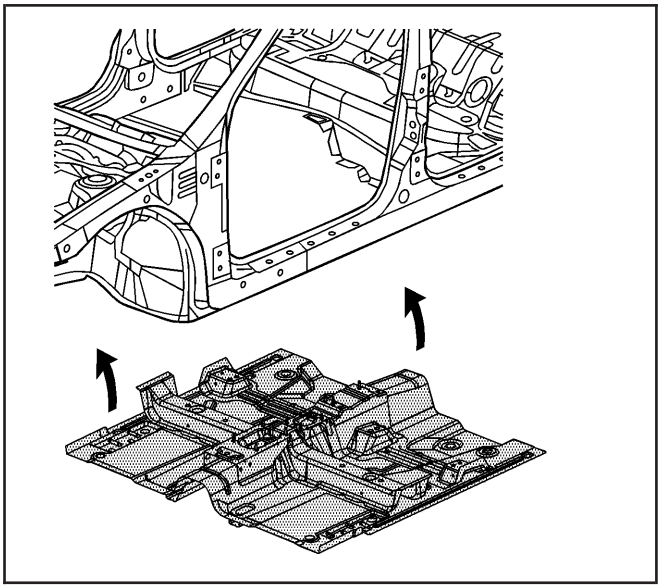
12. Locate and drill out all of the spot welds that attach the center floor pan to the following components:
    - The dash and panel
    - The #1 bar area
    - The lower inner rockers
    - The rear floor pan
13. Remove the center floor panel by lowering the rear edge first and pulling down and rearwards until the floor pan is free from the vehicle.



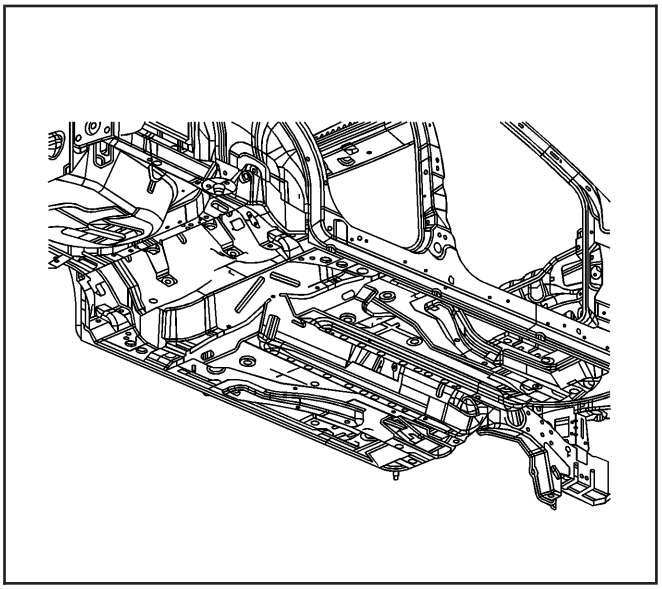
870894



870888



870894



870886

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.
4. Position the center floor panel to the vehicle using 3-dimensional measuring equipment. Clamp the panel in place.
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Rocker Panel Replacement - Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

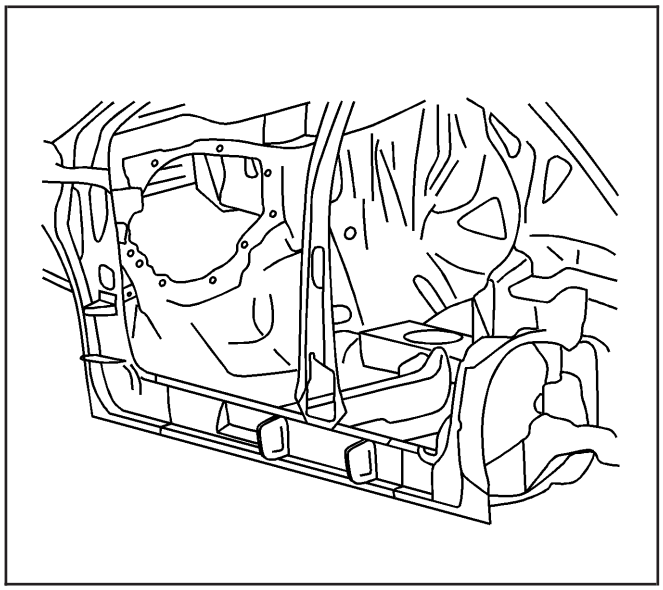
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

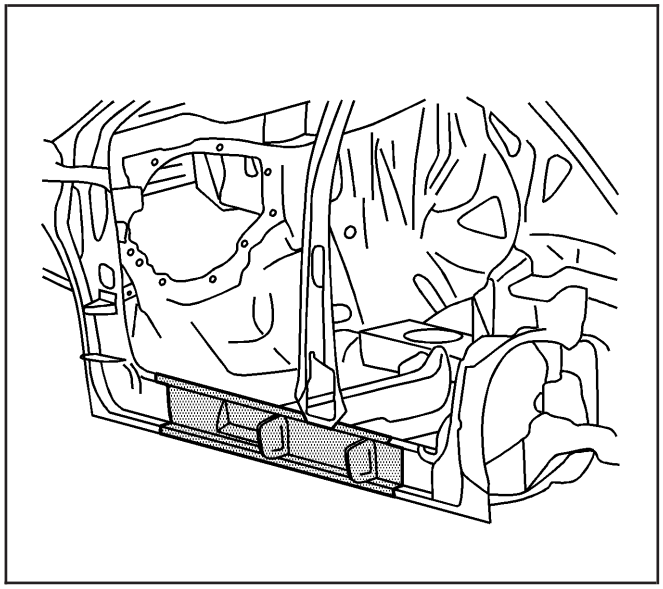
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the inner rocker panel.

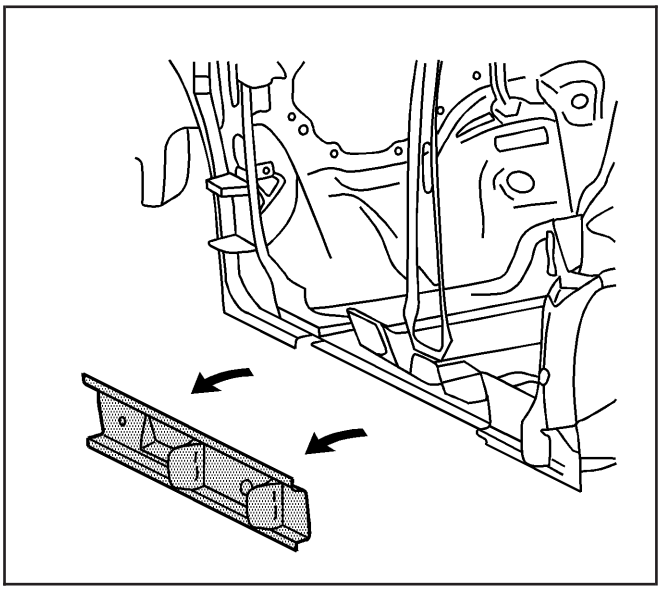
6. Locate and drill out all the necessary factory welds.



870905

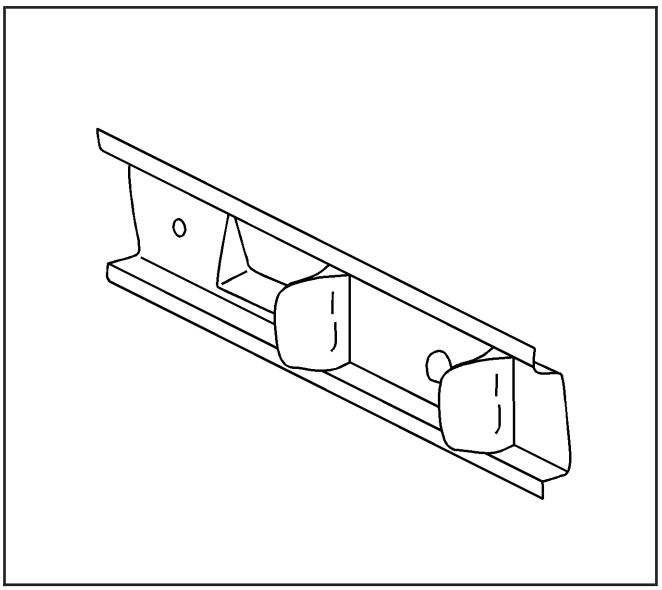


870908



870909

7. Remove the inner rocker panel.

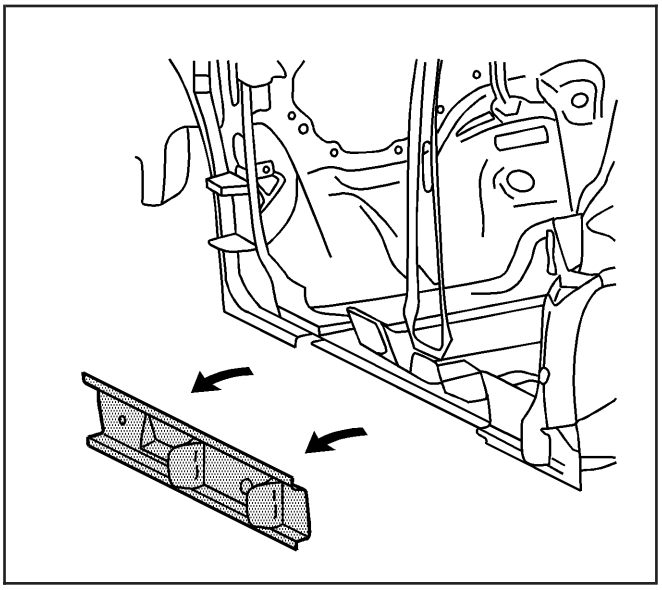


870906

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

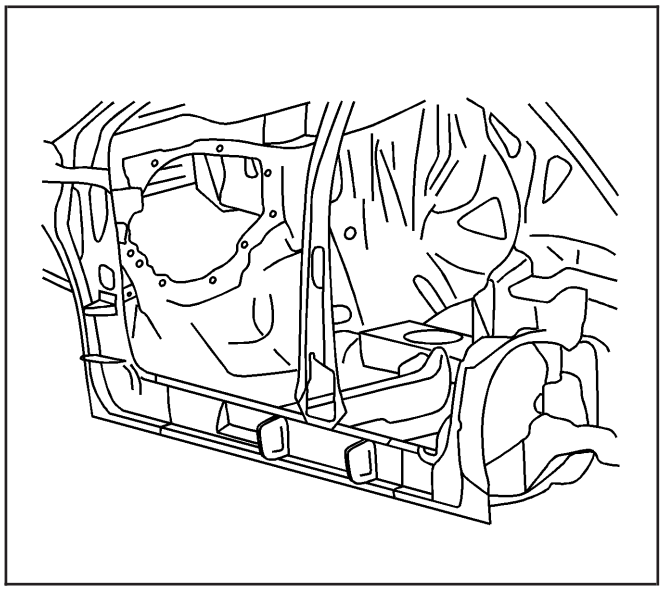
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



870909

4. Position the inner rocker panel and clamp the panel in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870905

Rocker Panel Extension Replacement - Inner

Removal Procedure

This assembly is available as part of the rear side rail underbody assembly. If only the inner rocker panel extension is required, remove the extension from the complete assembly before installation.

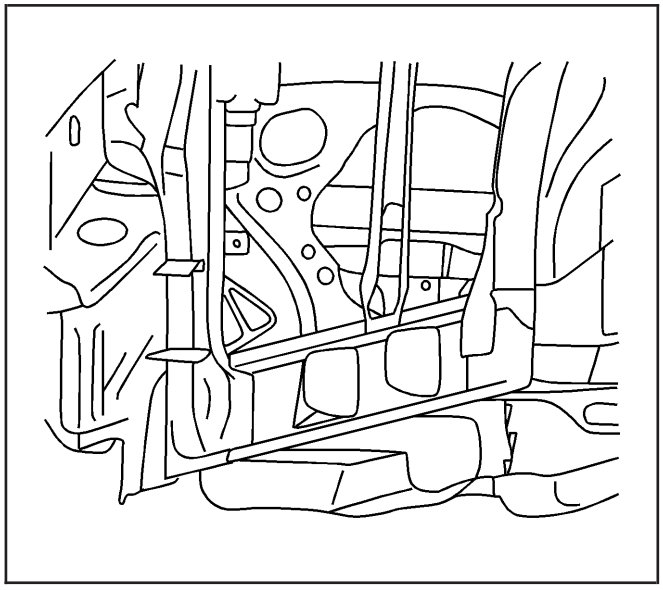
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

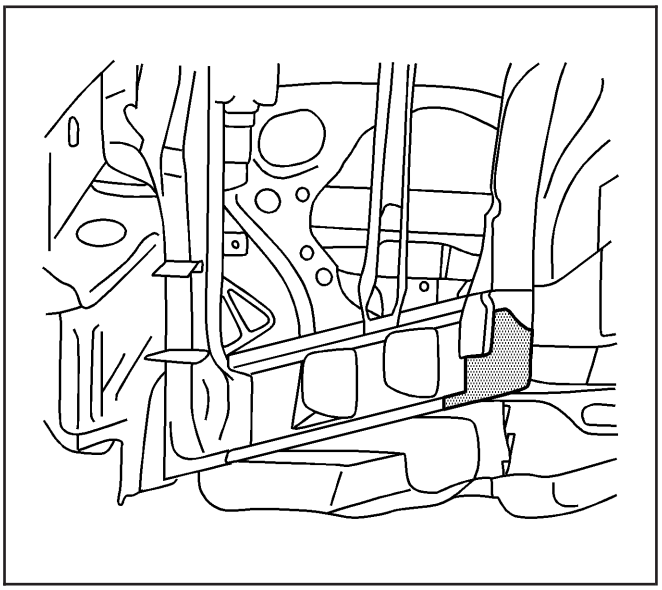
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



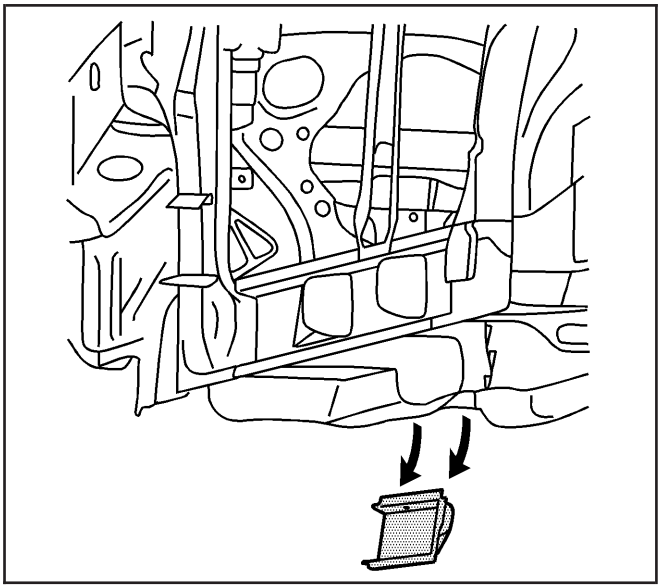
870910



870914

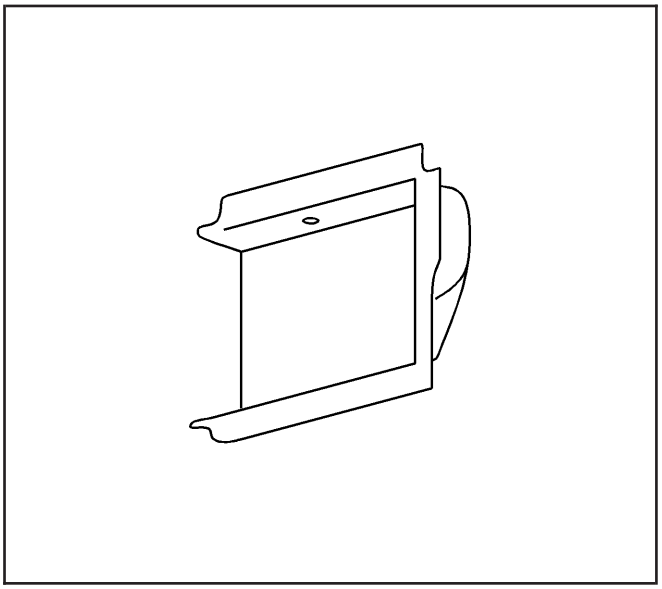
Important: Note the number and location of the factory welds for installation of the inner rocker panel extension.

6. Locate and drill out all the necessary factory welds.



870915

7. Remove the inner rocker panel extension.



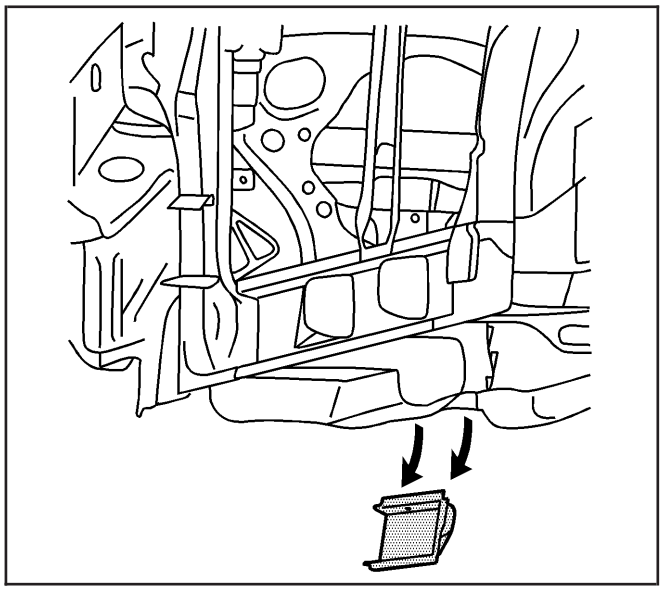
870911

Installation Procedure

Important: 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.

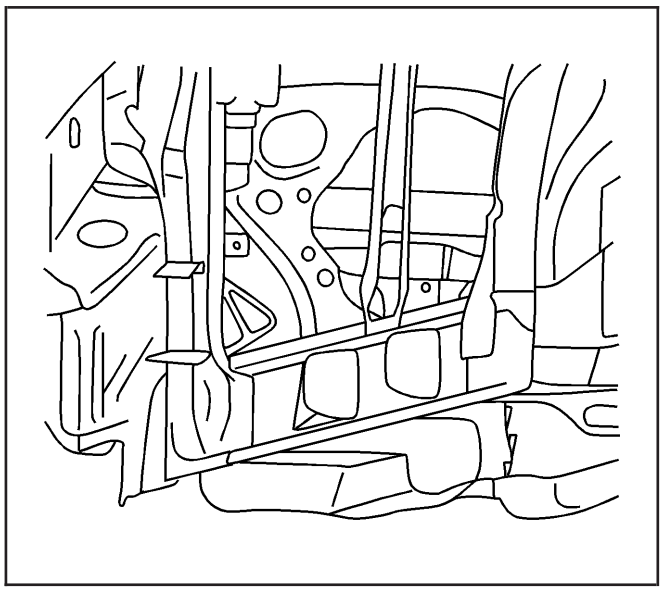
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M® Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

4. Position the inner rocker panel extension.



870915

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870910

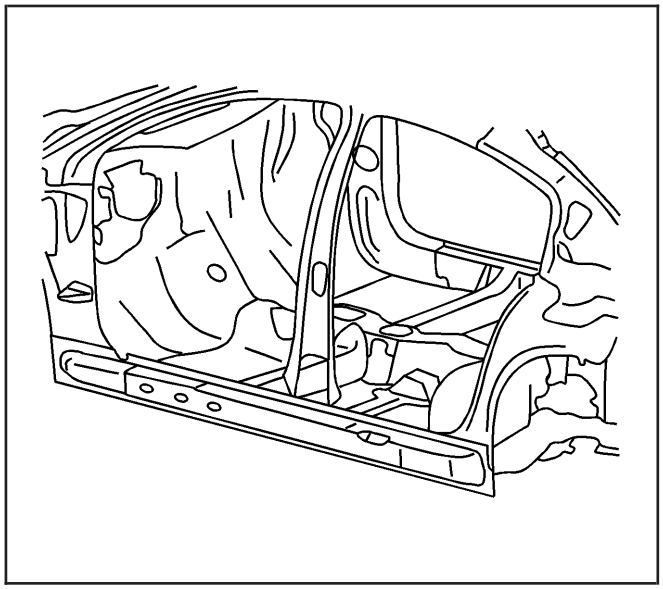
Rocker Panel Reinforcement Replacement - Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

1. Disable the SIR system.



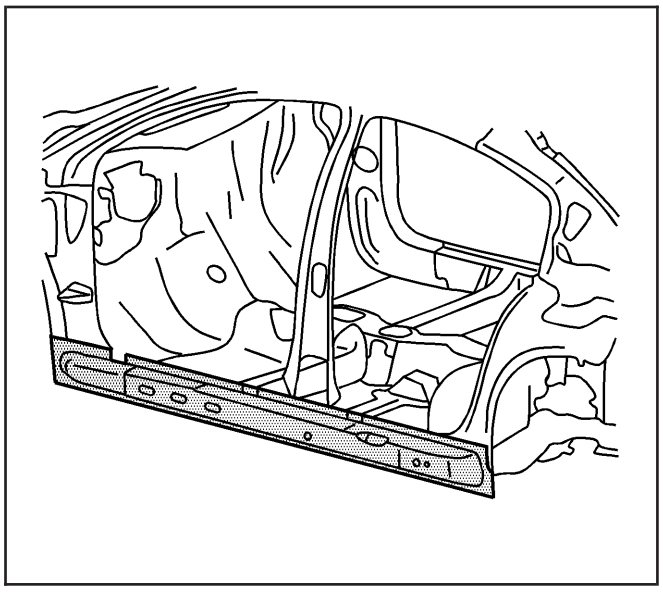
870916

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

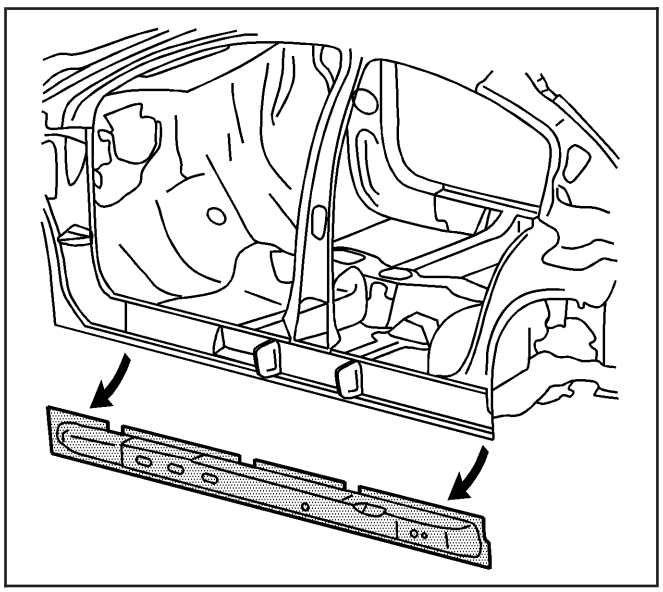
Important: Note the number and location of the factory welds for installation of the rocker panel reinforcement-inner.

6. Locate and drill out all the necessary factory welds.



870918

7. Remove the rocker panel reinforcement-inner.

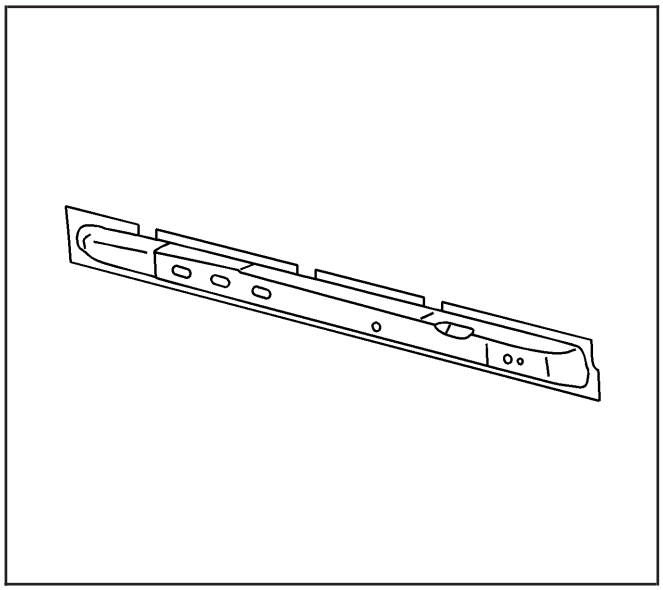


870919

Installation Procedure

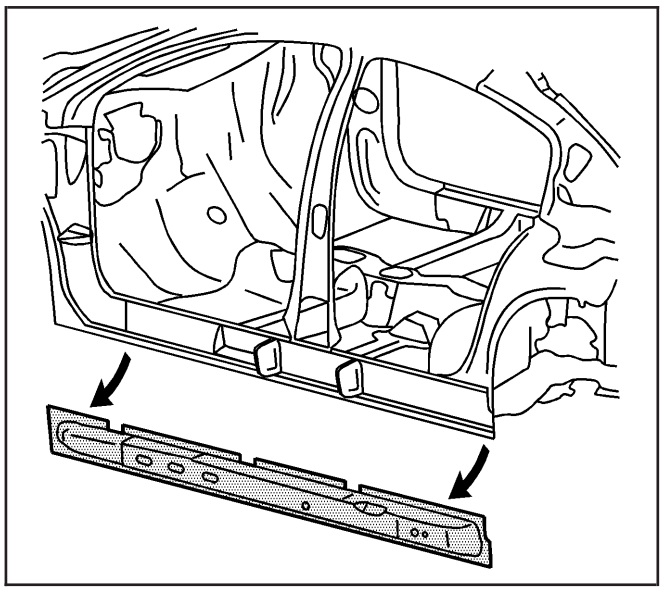
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1 1/2 in) apart.

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 mating surfaces for welding as necessary.
3. Apply 3M® Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



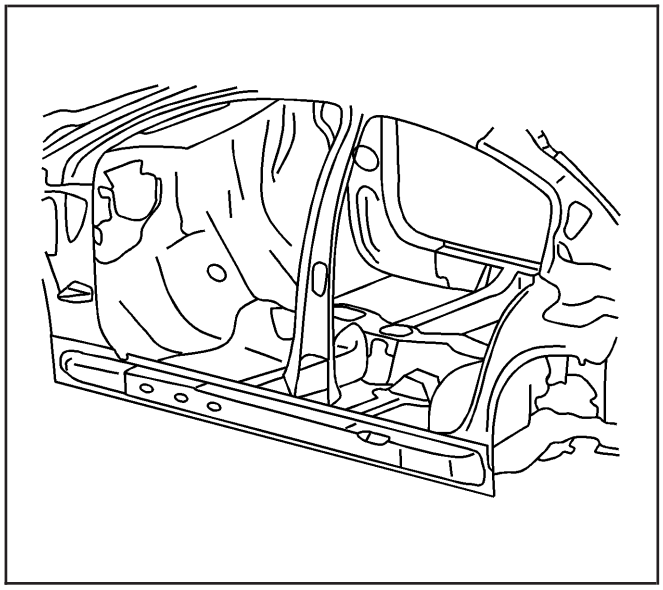
870917

4. Position the rocker panel reinforcement-inner on the vehicle. Clamp the panel in place.

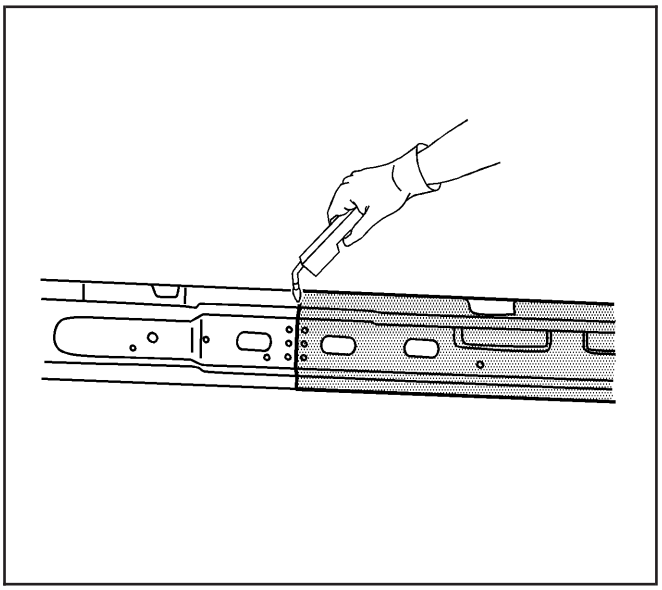


870919

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



870916



870926

Rocker Panel Reinforcement Sectioning - Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

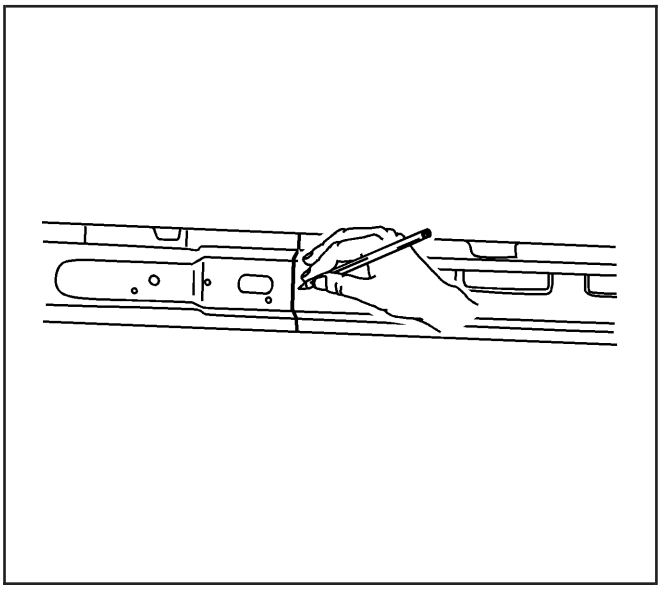
Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



870920

Important: Do NOT section through any holes in the inner rocker panel.

6. Measure from any key feature on the panel. Lay out the cut line location on the inner rocker panel reinforcement.

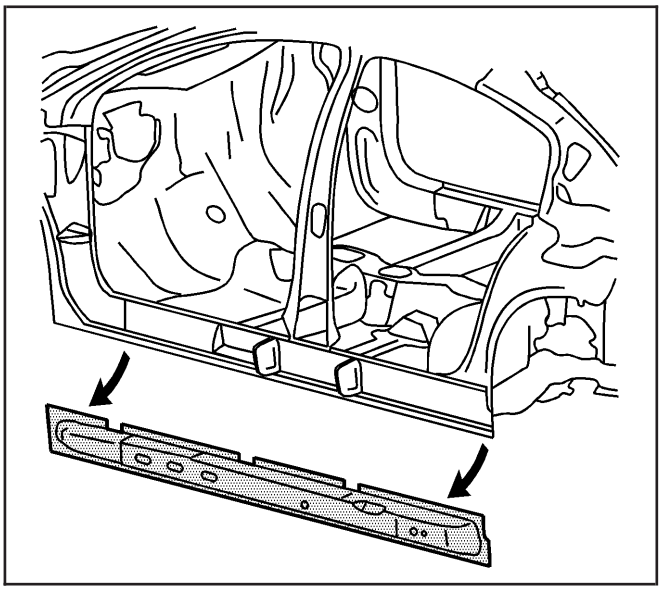
Important: Note the number and location of the factory welds for installation of the inner rocker panel reinforcement.

7. Locate and drill out all the necessary factory welds.

Important: When you multi-layer sectioning areas in 2 or more panels, place the sectioning cut lines at least 100 mm (4 in) apart.

8. Cut at the laid out cut line location.

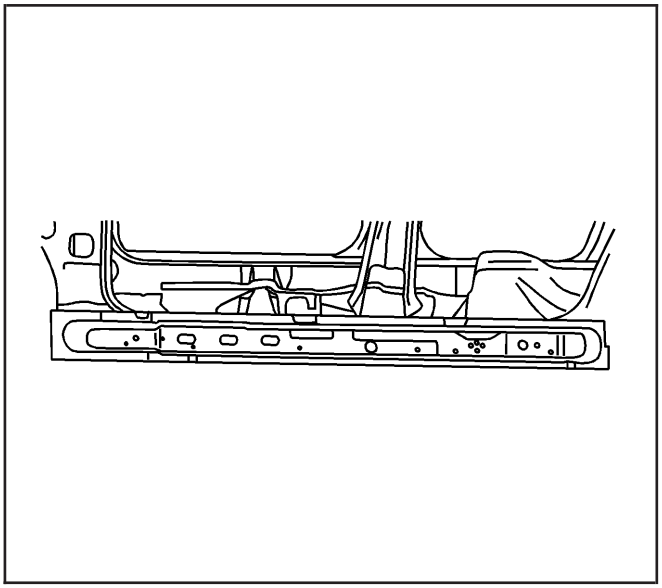
9. Remove the damaged portion of the inner rocker panel reinforcement.



870919

Installation Procedure

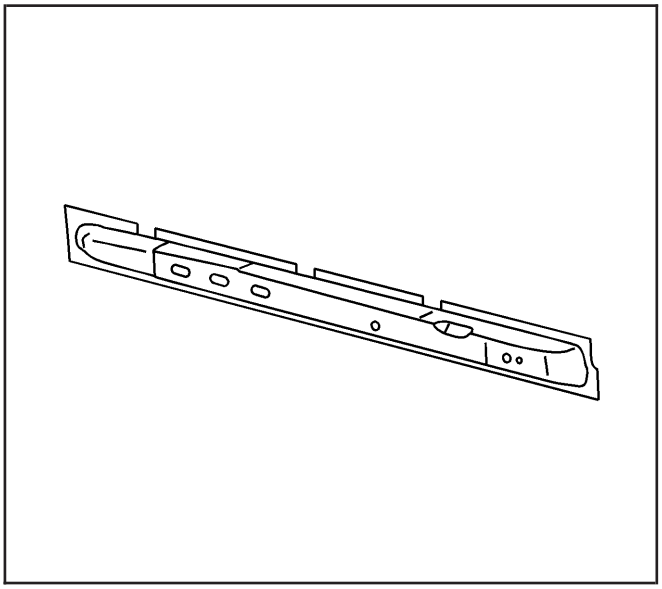
1. Measure and lay out the cut line on the service panel in the same location as the original panel.
2. Cut the panel at the lines laid out in the previous step.



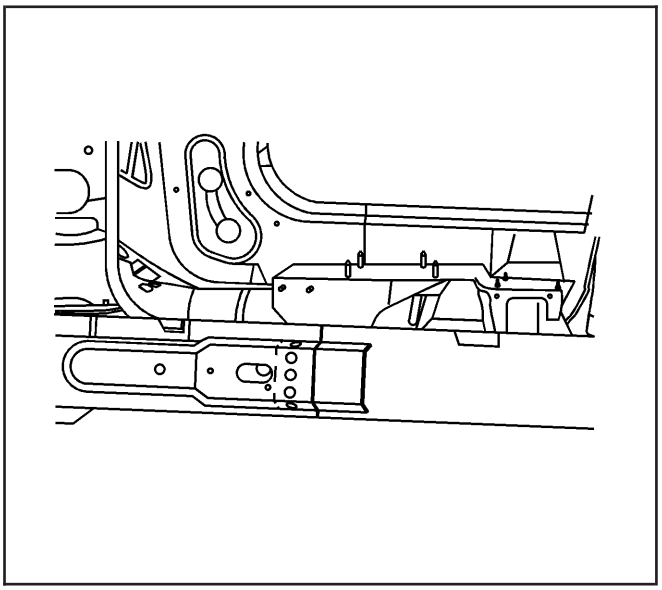
870923

Important: 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.

3. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
4. Prepare all mating surfaces for welding as necessary.
5. Apply 3M® Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
6. Drill 8 mm (5/16 in) plug weld holes in the inner rocker panel reinforcement at the cut line location and 10 mm (0.4 in) rearward of the edge of the panel.
7. Cut a 100 mm (4 in) section of reinforcement from the unused section of the service part to be used as a welding backer. Trim as necessary to ensure a snug fit.

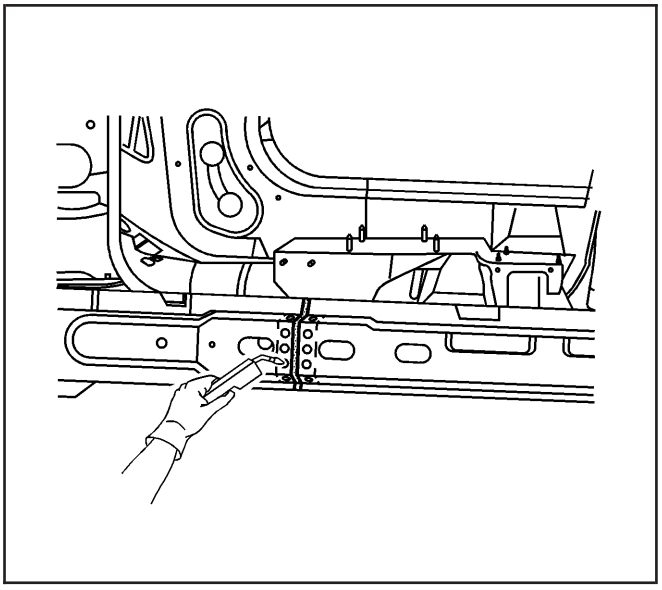


870917



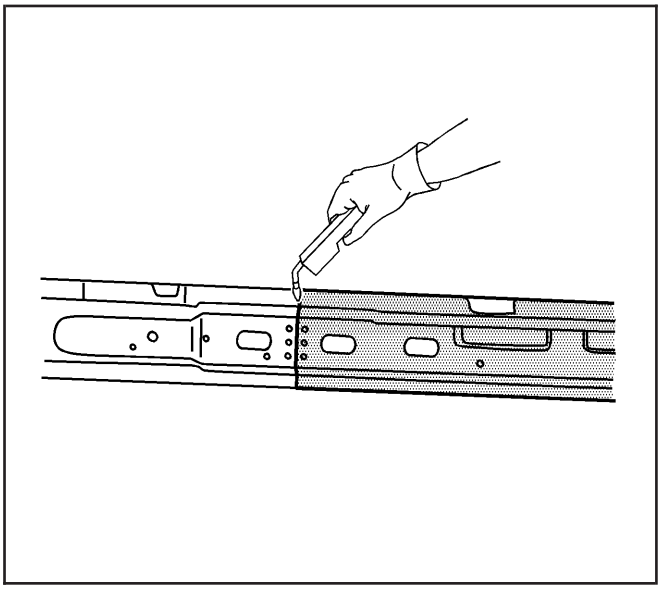
870928

8. Place the welding backer into the rocker panel backer reinforcement. Insert the welding backer about 50 mm (2 in), or about half-way.
9. Clamp the welding backer in place and weld at the plug weld locations.



870930

10. Cut the outer center pillar in corresponding locations to fit the remaining original panel. The sectioning joint should be trimmed to allow a gap of 1½ times the metal thickness at the sectioning joint.
11. Position the reinforcement to the vehicle. Clamp the reinforcement in place.
12. Stitch weld along the sectioning area at the butt weld location. Make 25 mm (1 in) stitch welds with 25 mm (1 in) between each weld. Complete the stitch weld.



870926

13. Plug weld accordingly.
14. Clean and prepare all of the welded surfaces.
15. Install all of the related panels and components.
16. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
17. Paint the repaired area.
18. Connect the negative battery cable.
19. Enable the SIR system.

Pillar Lock Front Door Sectioning - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

1. The body side outer panel is available either in one piece or in front or rear portions. The front and the rear halves are cut about half way across the rear door opening. You can perform any one of these replacement procedures separately or in any combination, depending upon the extent of the damage to the vehicle. Sectioning must take place in specified areas only.

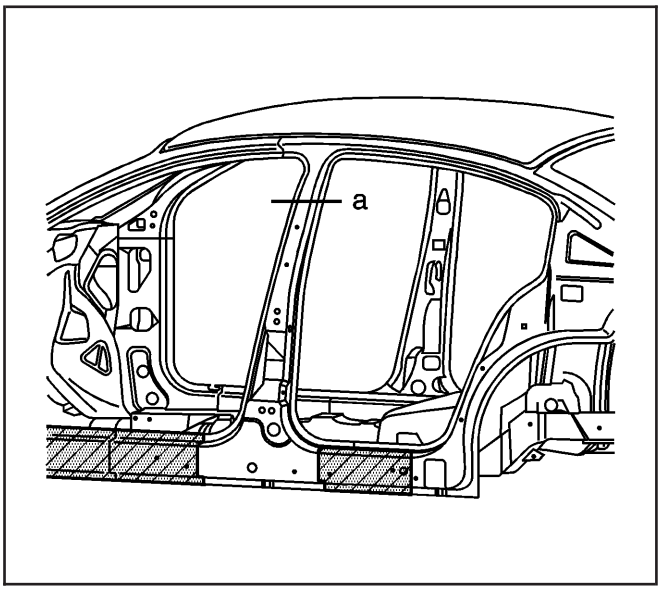
   Remove all related panels and components.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

2. Disable the SIR system.

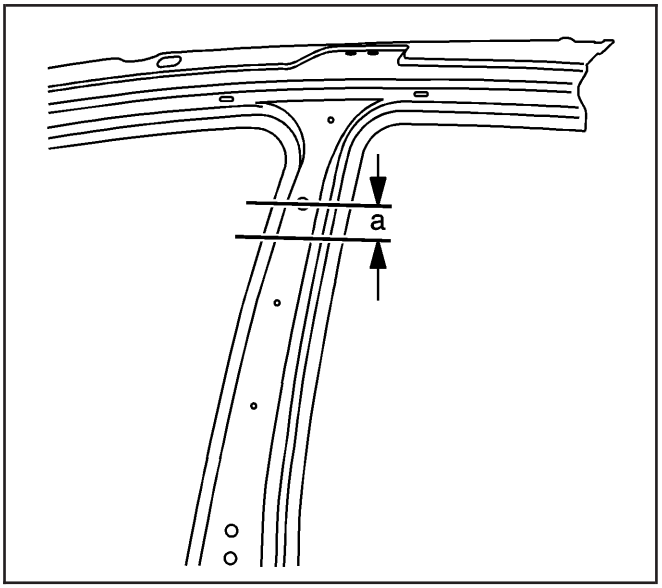
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

3. Disconnect the negative battery cable.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary and note their location.
5. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.



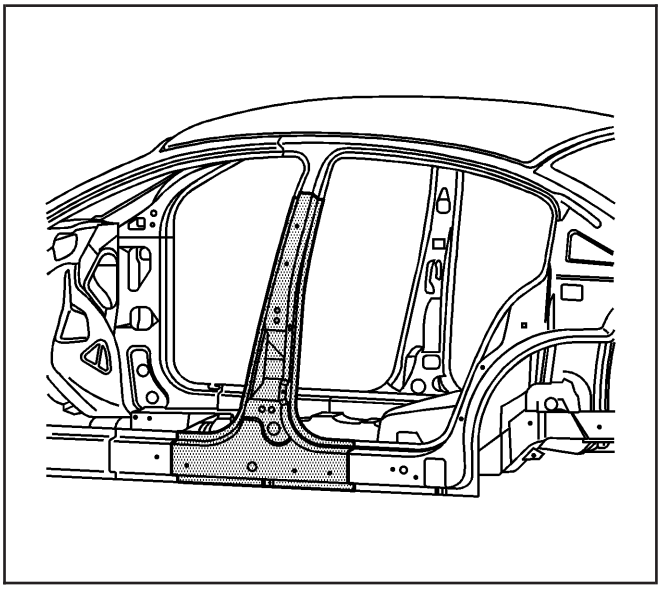
874225

6. At the top of the center pillar, mark a line (a) through the center of the second outer trim attachment hole.



875628

7. Measure down 50 mm (2 in) from the mark created in the previous step.

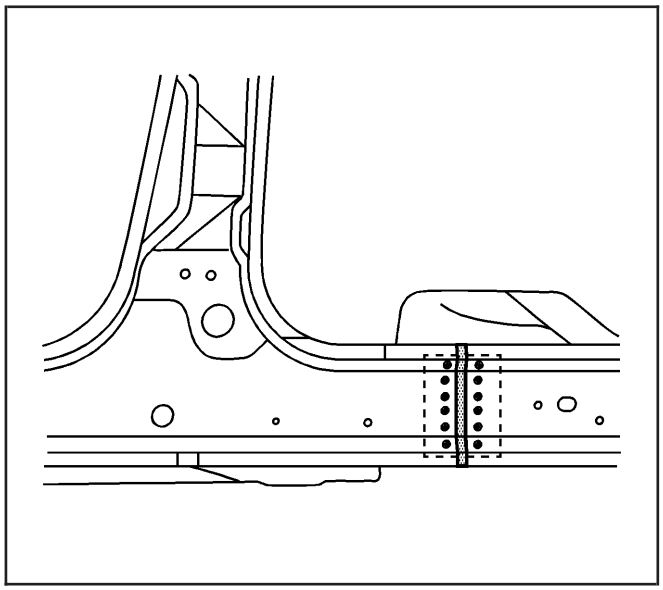


876971

Important: Sectioning procedures can only take place in the straight areas of the body side panel.

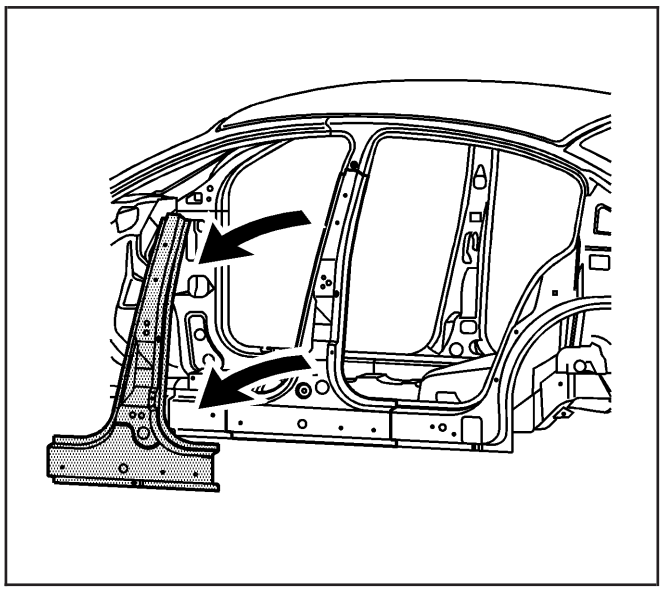
8. Measure from any key feature in the panel. Lay out the cut line location on the body side panel.
9. Create cut lines on the rocker panel within the approved sectioning locations as needed.
10. Cut the panel at the center pillar where the lay out line was previously formed.

11. Cut the panel at the rocker panel area where sectioning is to be performed, within the straight sections only.



876974

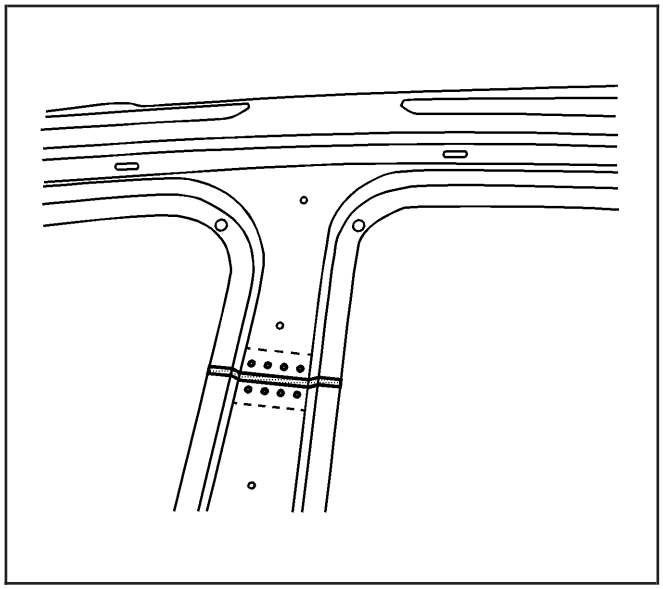
12. Locate and drill out all factory welds. Note the number and location of welds for installation of the service part.
13. Remove the damaged center pillar.



876972

Installation Procedure

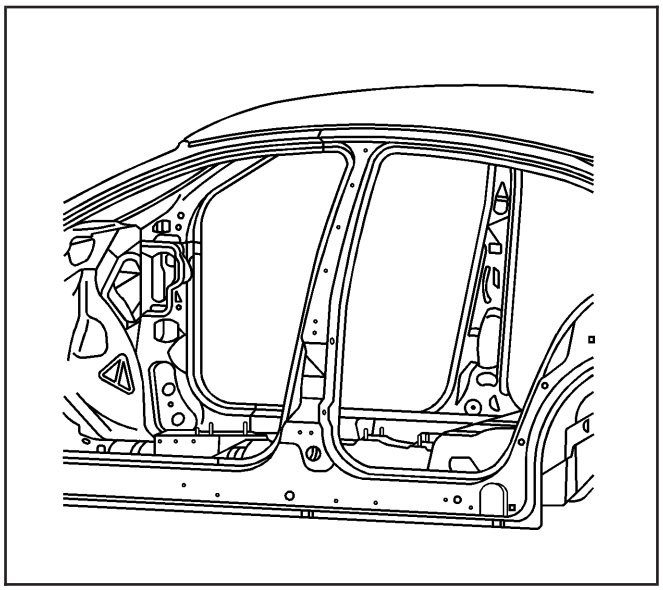
1. Cut the outer center pillar in corresponding locations to fit the remaining original panel. The sectioning joint should be trimmed to allow a gap of 1½ times the metal thickness at the sectioning joint.
2. In all the rocker panel areas, create a 100 mm (4 in) backing plate from the unused portion of the service part. Trim the backing plates as necessary to fit behind the sectioning joint.
3. In the upper center pillar area, cut a 50 mm (4 in) backing plate from the unused portion of the source part trim as necessary.



876973

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

4. Drill 8 mm (5/16 in) along the sectioning cuts on the remaining original part. Locate these holes 13 mm (½ in) from the edge of the part and spaced 40 mm (1½ in) apart.
5. Drill 8 mm (5/16- in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
6. Prepare all mating surfaces for welding as necessary.
7. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
8. Fit the backing plates into the sectioning joints for the following distances:
   - 50 mm (2 in) for the rocker section
   - 25 mm (1 in) for the center pillar section
9. Clamp the backing plates in place. Plug weld the backing plates to the vehicle.
10. Position the outer center pillar to the vehicle using 3-dimensional measuring equipment. Clamp the pillar in place.
11. Plug weld accordingly.
12. To create a solid weld with minimum heat distortion, make a 25 mm (1 in) stitch weld along the seam with gaps of 25 mm (1 in). Go back and complete the stitch weld.
13. Clean and prepare all of the welded surfaces.
14. Apply sound deadening materials as necessary.
15. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
16. Paint the repaired area.
17. Install all of the related panels and components.
18. Connect the negative battery cable.
19. Enable the SIR system.



876969

Pillar Lock Front Door Reinforcement Replacement - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

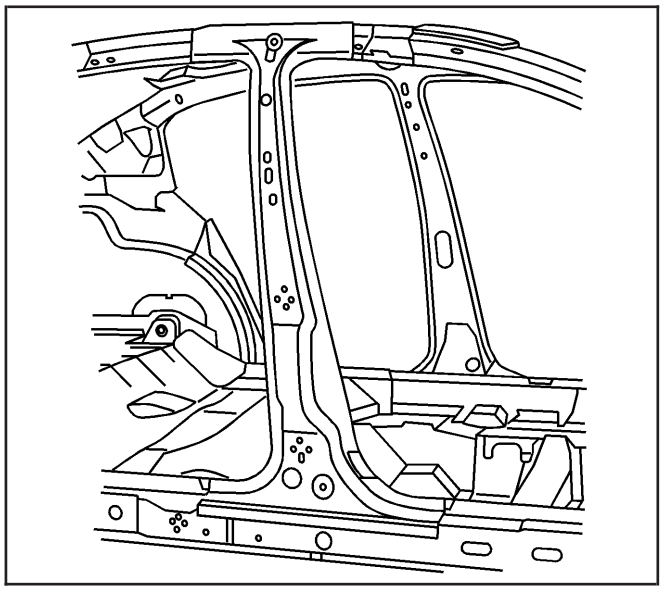
Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

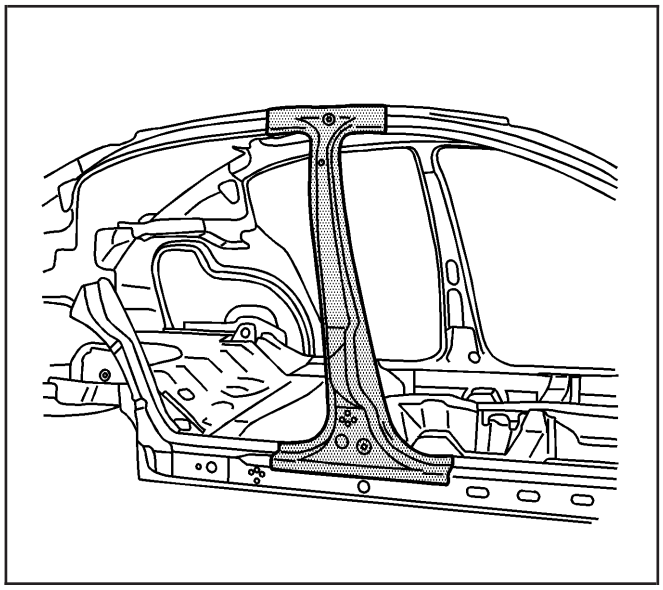
Important: Do not damage any inner panels or reinforcements.

Important: Note the number and location of the factory welds for installation of the center pillar reinforcement.

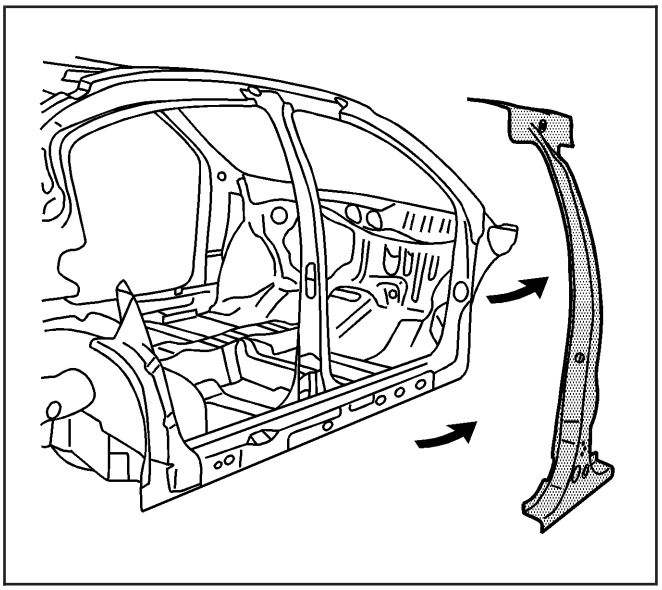
6. Locate and drill out all the necessary factory welds.



870941

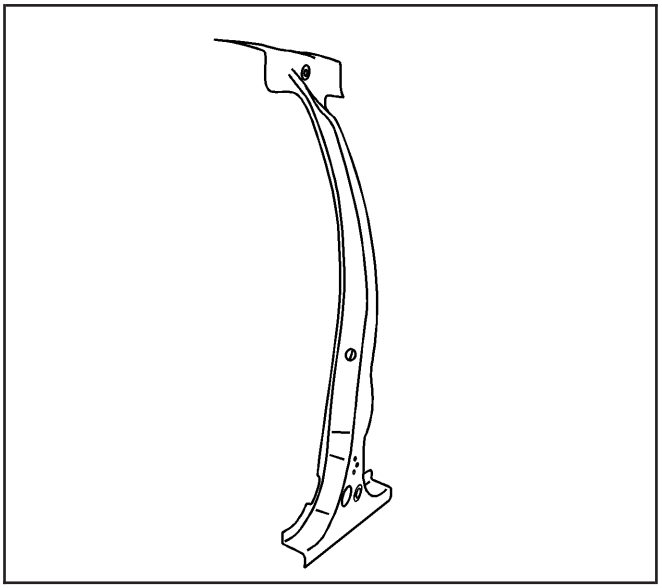


870945



870947

7. Remove the damaged front pillar.

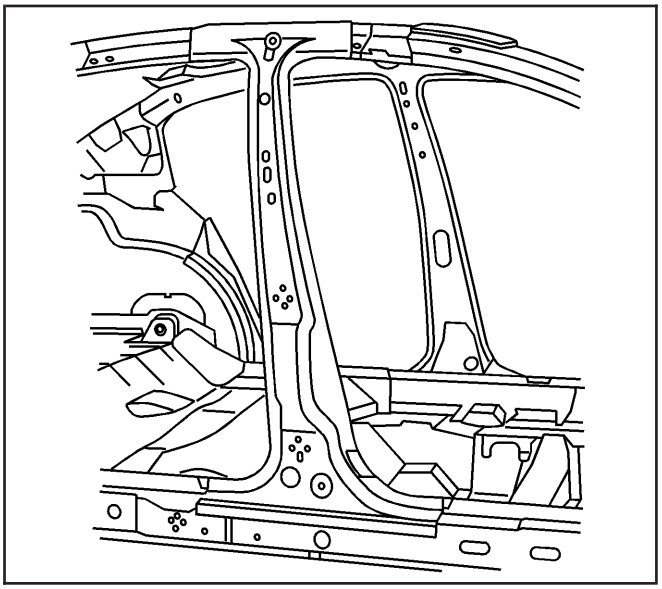


870943

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service reinforcement as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M® Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



870941

4. Position the service part on the vehicle using 3-dimensional measuring equipment. Clamp the part in place.
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
8. Paint the repaired area.
9. Install all of the related panels and components.
10. Connect the negative battery cable.
11. Enable the SIR system.

Pillar Lock Front Door Reinforcement Sectioning - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: Refer to SIR Caution on page 1-1 in General Information.

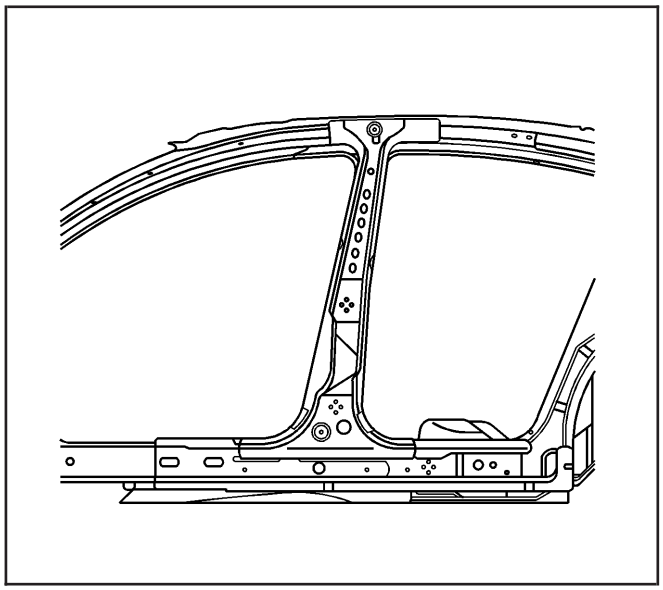
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

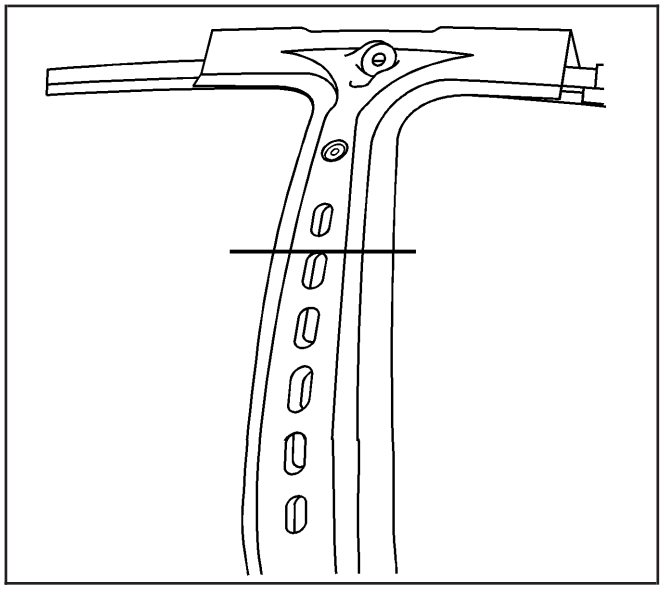
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
6. On the center pillar reinforcement, locate and mark the top of the fifth oval hole up from the bottom.

Important: Do not damage any inner reinforcements.

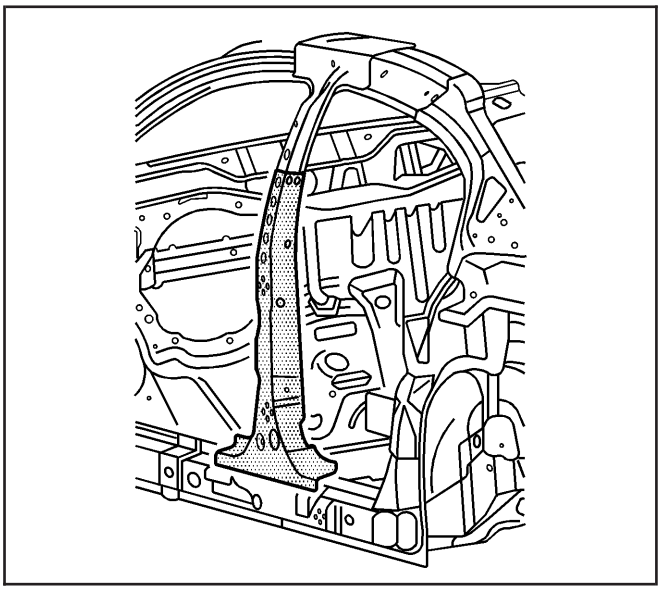
7. Cut the panel at the mark made previously.



872390

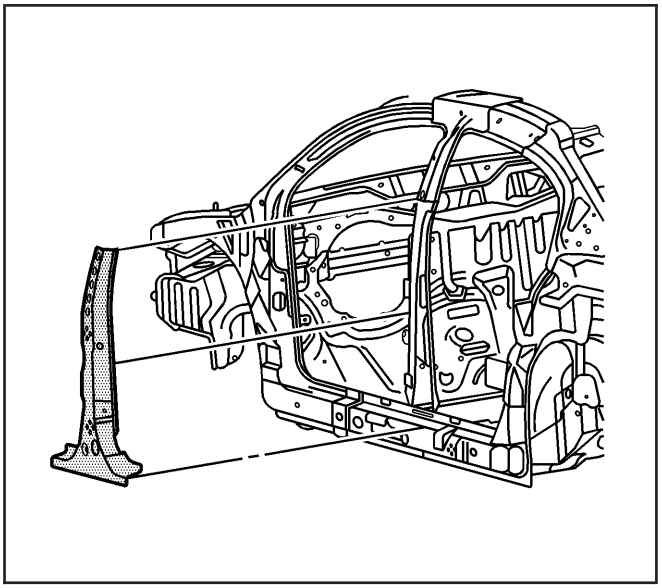


870953



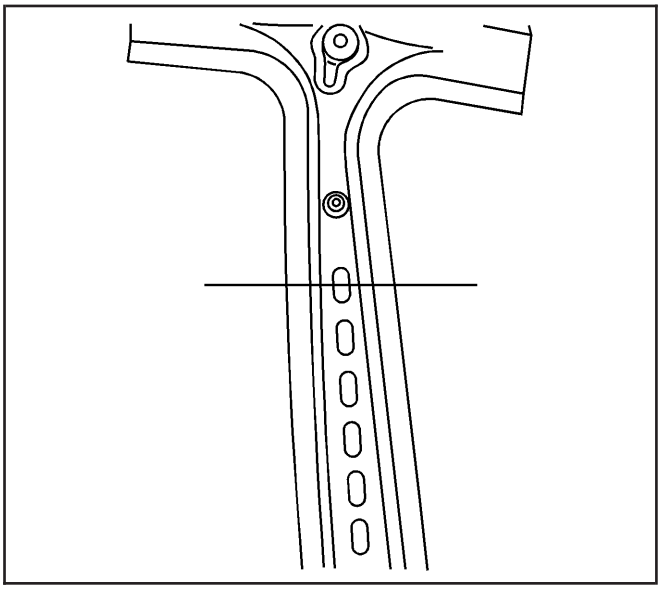
872397

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



872396

9. Remove the damaged center pillar.

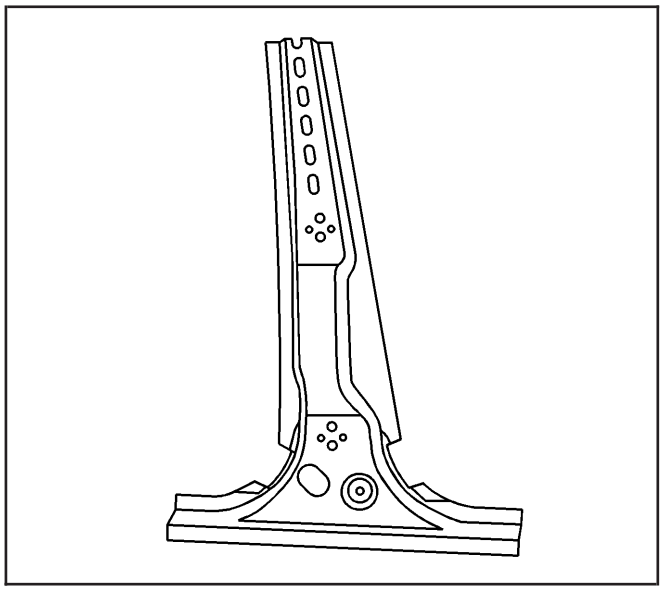


884760

Installation Procedure

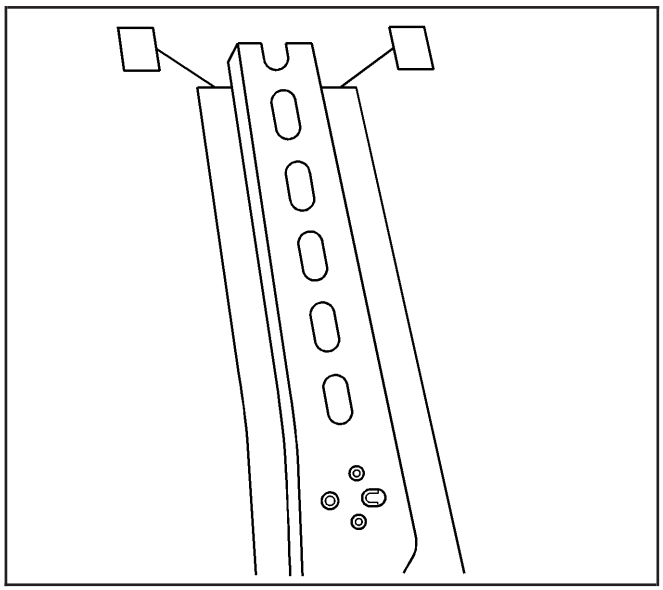
1. Mark a line through the center of the sixth oval hole from the bottom on the center pillar reinforcement service part.

2. Cut the replacement service part at the marked line.

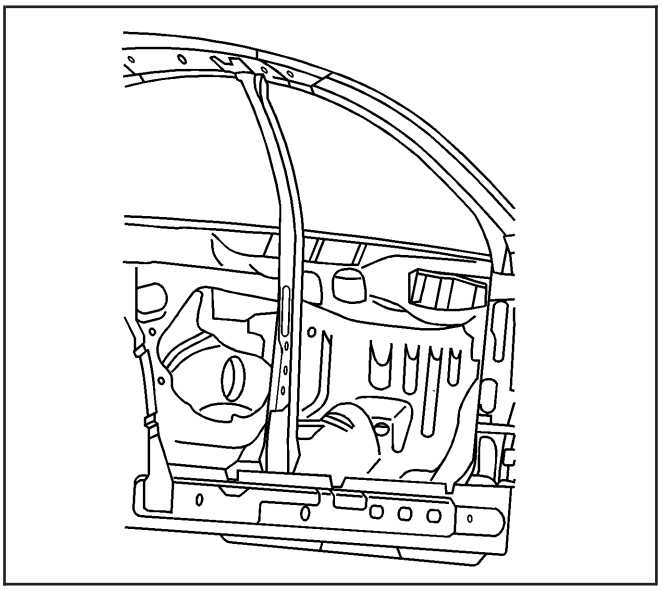


870949

3. At the cut area of the service part, notch the weld flange areas down to the top of the fifth hole from the bottom.
4. Drill 8 mm (5/16 in) plug weld holes, 2 holes on each side, along the sectioning cut on the original reinforcement. Locate these holes 10 mm (½ in) from the edge.
5. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
6. Prepare all mating surfaces for welding as necessary.
7. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
8. Slide the top sectioning joint together by sliding the service part under the original part at the sectioning area.
9. Position the service part on the vehicle using 3-dimensional measuring equipment. Clamp the part in place.
10. Plug weld accordingly.
11. To create a solid weld with minimum heat distortion, make 25 mm (1 in) stitch welds along the sectioning joint seam with gaps of 25 mm (1 in). Go back and complete the stitch weld.
12. Clean and prepare all of the welded surfaces.
13. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
14. Paint the repaired area.
15. Install all of the related panels and components.
16. Connect the negative battery cable.
17. Enable the SIR system.



872393



870934

Pillar Lock Front Door Replacement - Inner

Removal Procedure

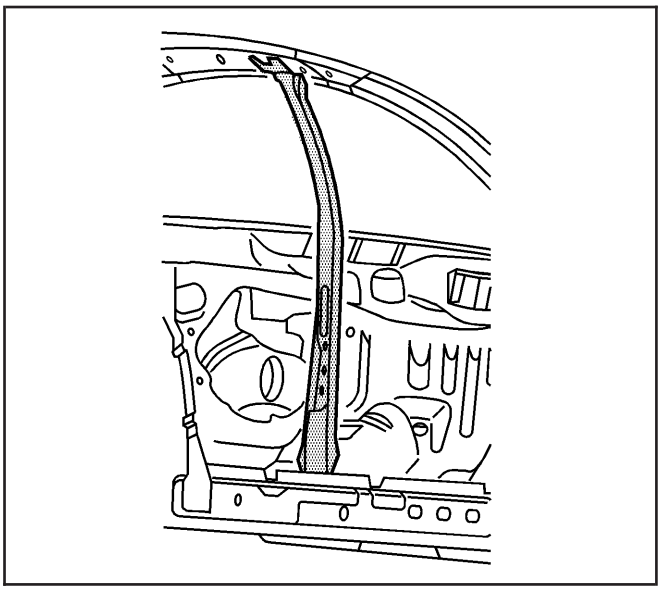
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

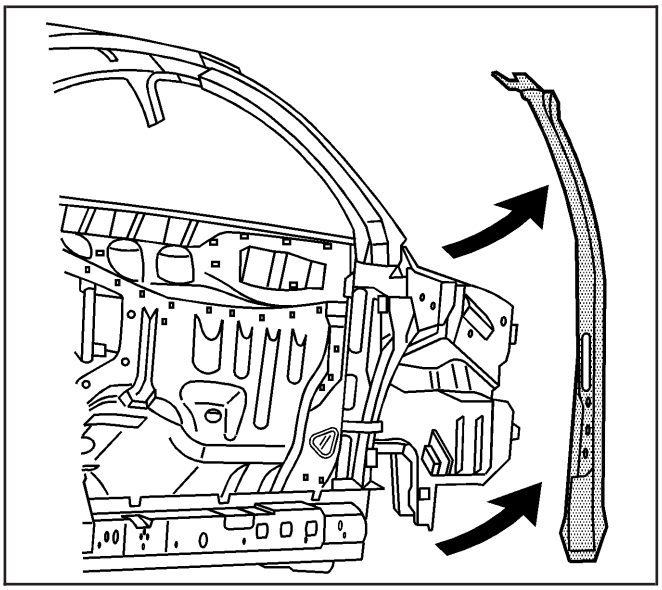


870938

Important: Note the number and location of the factory welds for installation of the inner pillar lock front door.

6. Locate and drill out all the necessary factory welds.

7. Remove the inner pillar.

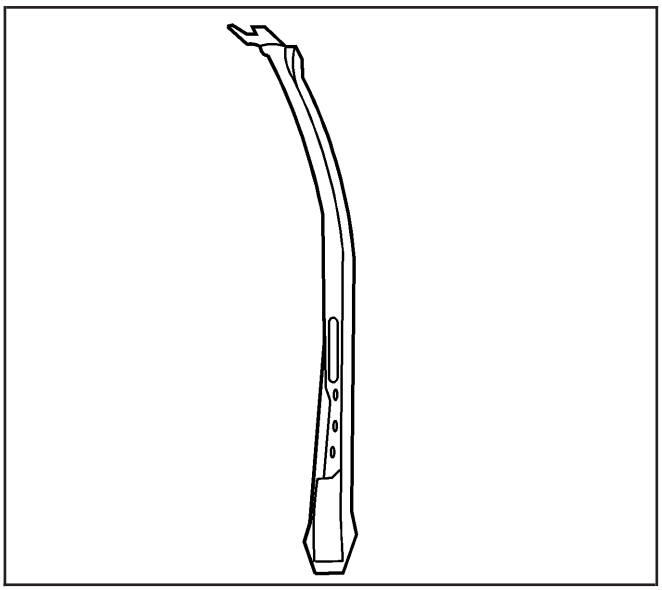


870939

Installation Procedure

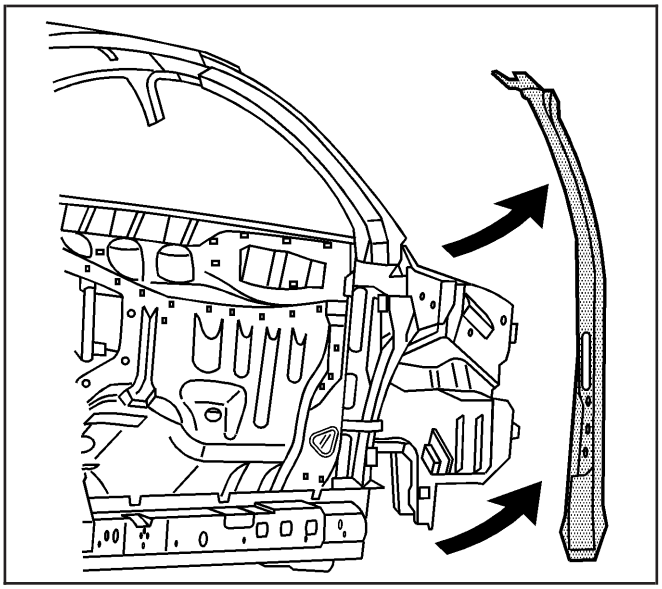
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

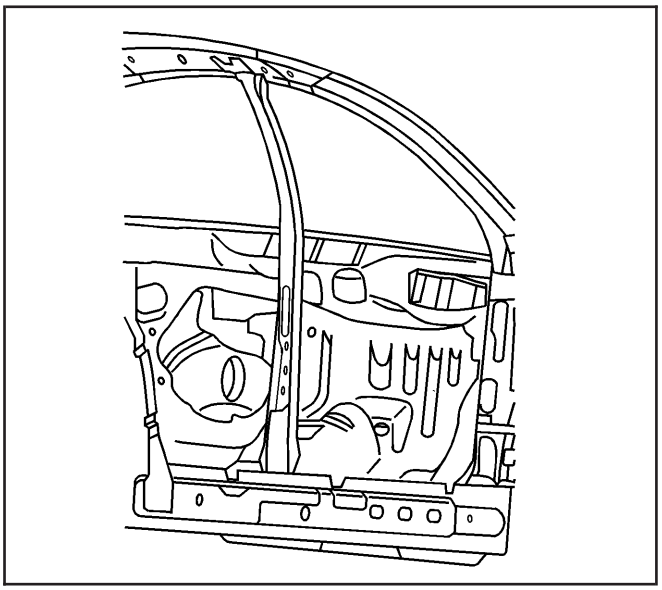


870937

4. Position the inner pillar lock front door on the vehicle. Clamp the part in place.

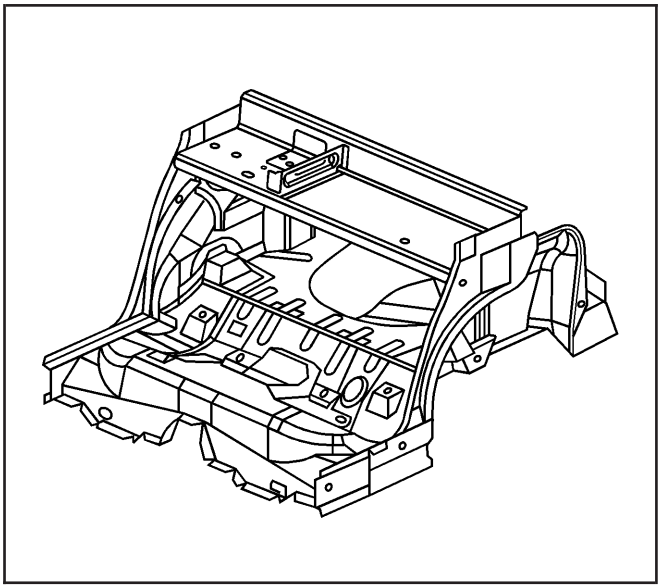


870939



870934

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872688

Rear Window Reinforcement Replacement - Lower Front

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

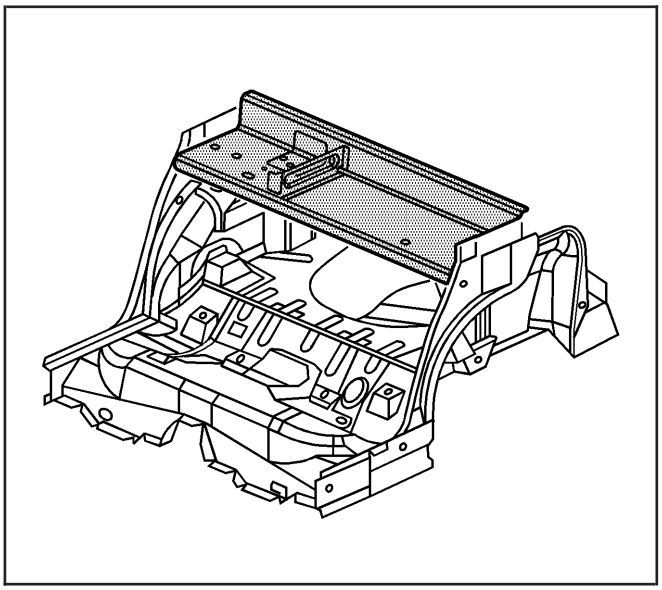
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

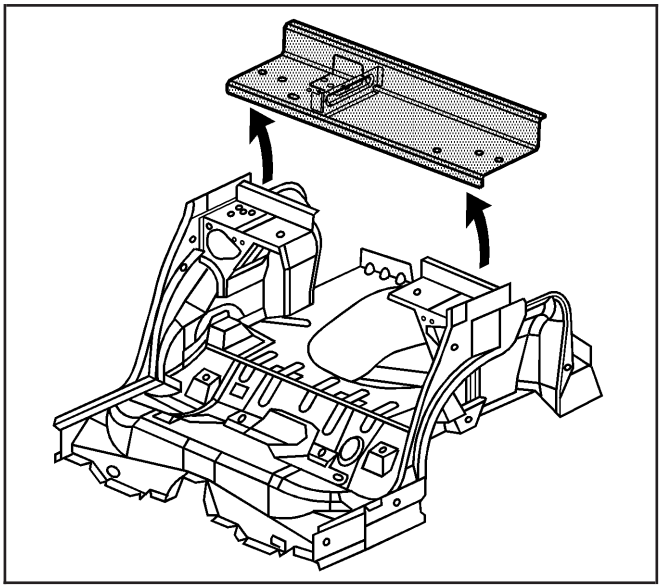
Important: Note the number and location of the factory welds for installation of the rear window reinforcement.

6. Locate and drill out all the necessary factory welds.



872697

7. Remove the rear window reinforcement.

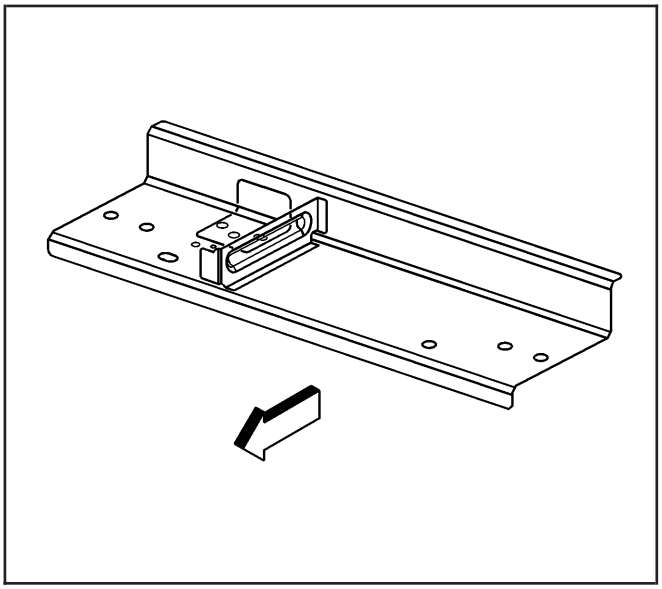


872699

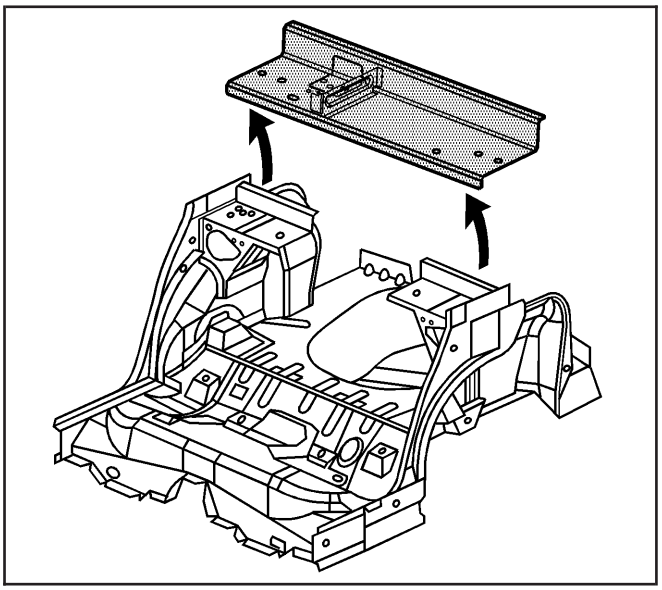
Installation Procedure

Important: 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.

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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

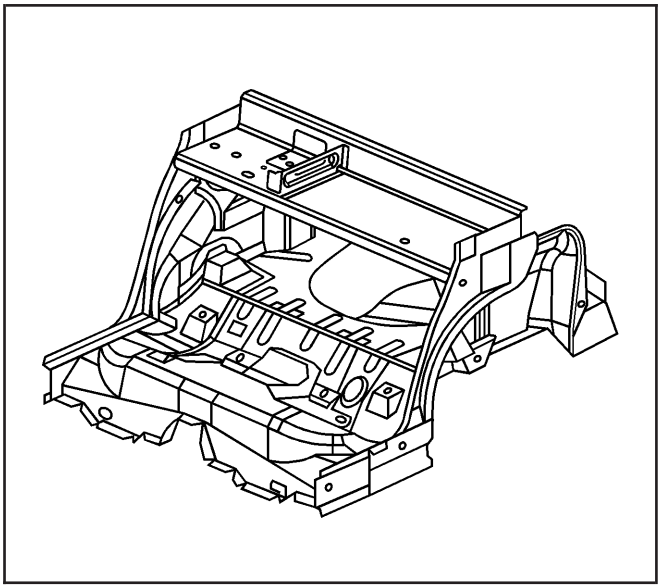


872696



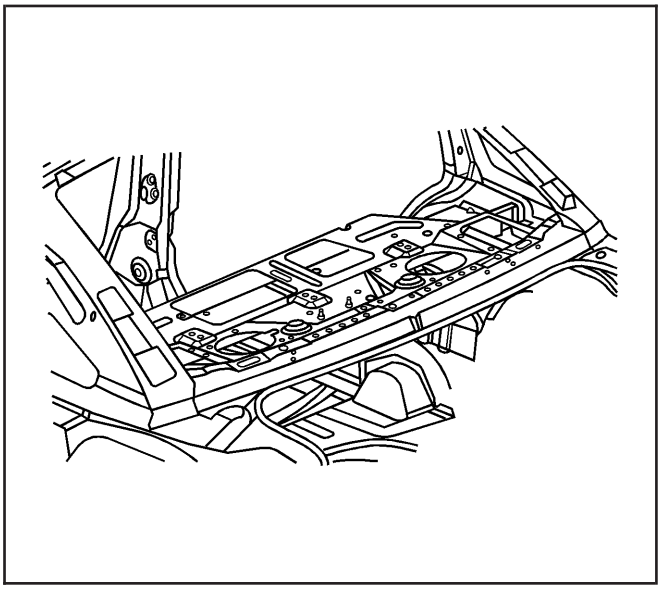
872699

4. Position the rear window reinforcement and clamp in place.



872688

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872710

Rear Window Panel Replacement

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

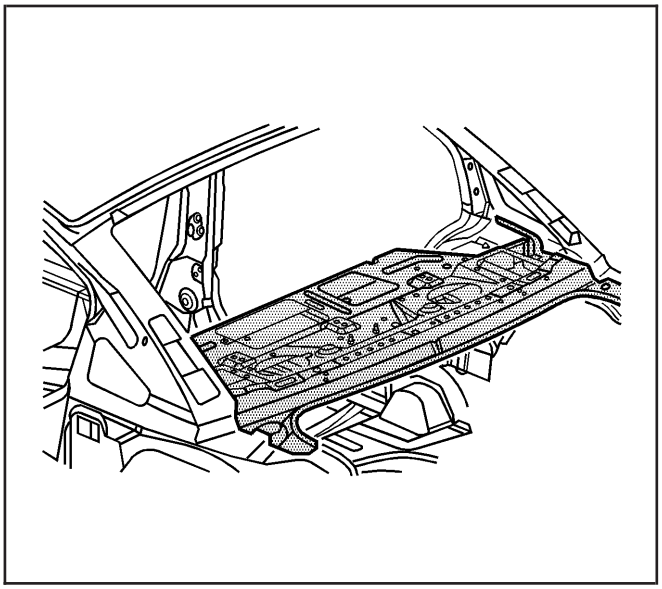
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

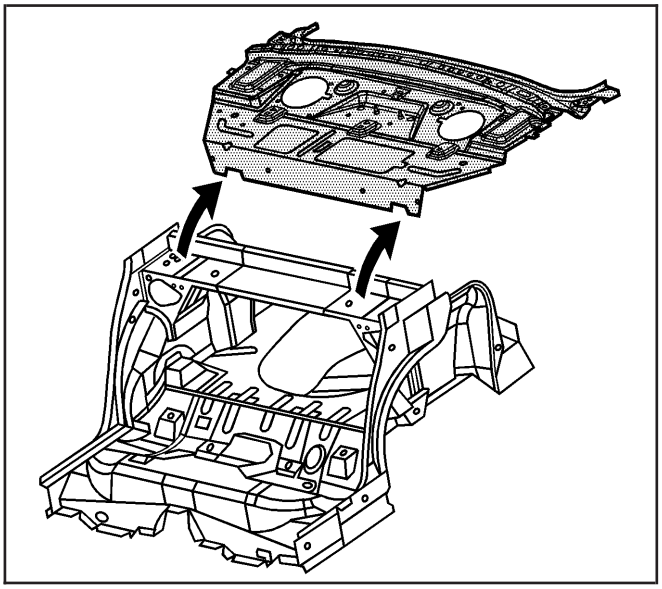
Important: Note the number and location of the factory welds for installation of the rear window panel.

6. Locate and drill out all the necessary factory welds.

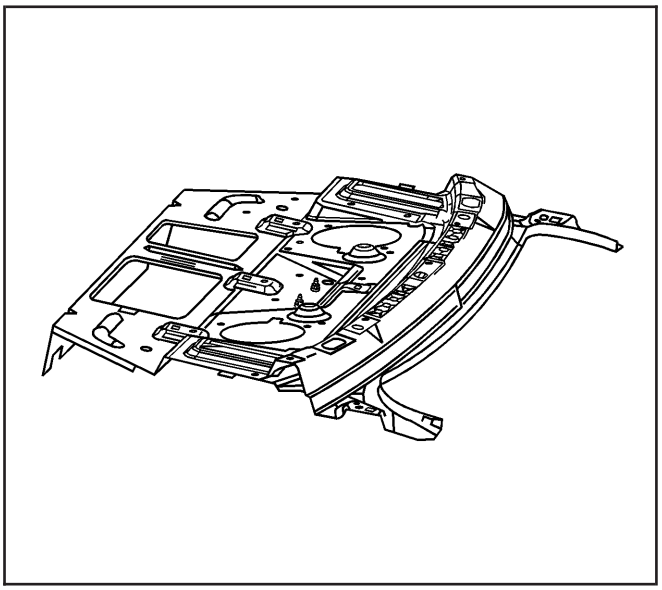


872717

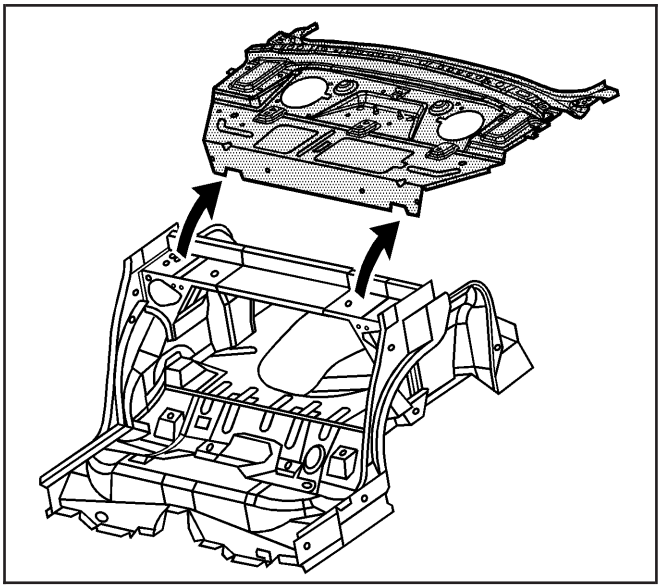
7. Remove the rear window panel.



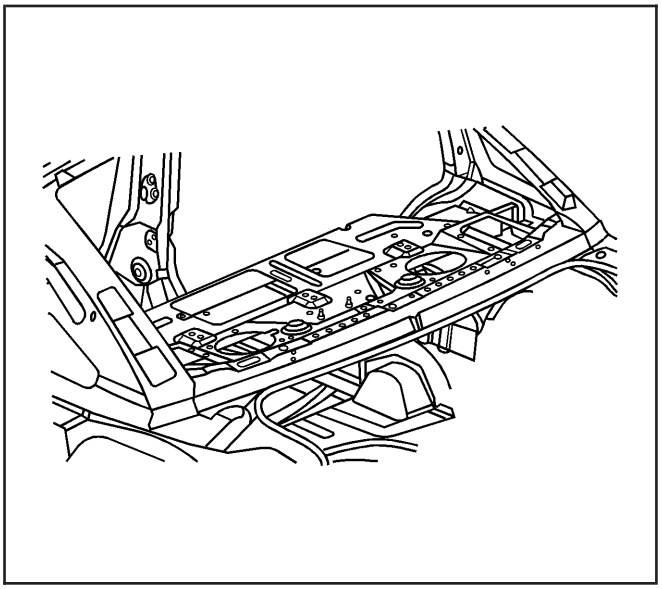
872718



872716



872718



872710

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the rear window panel.
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Rear Window Reinforcement Replacement - Rear

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

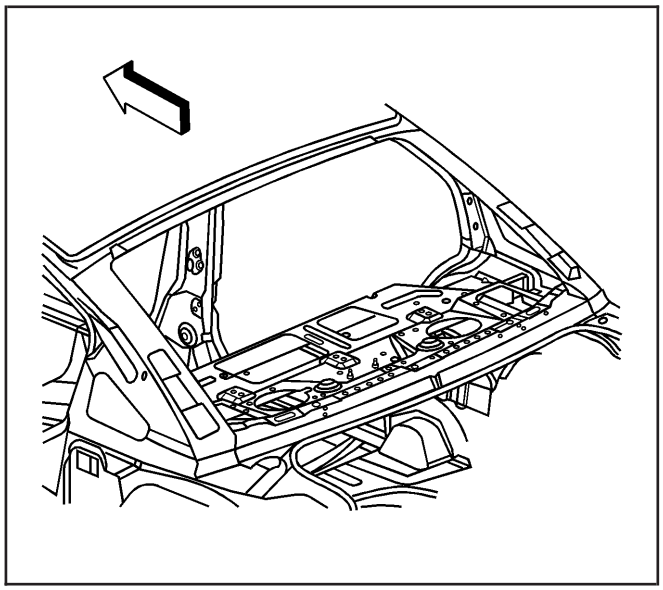
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

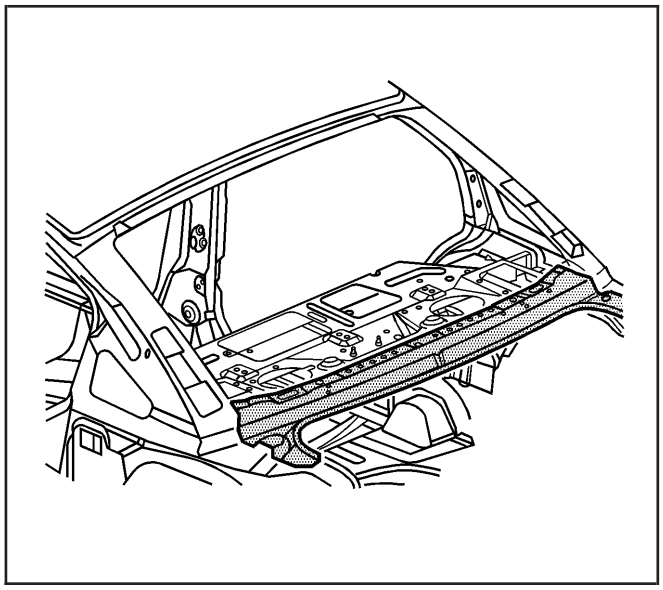
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the rear enforcement to the rear window panel.

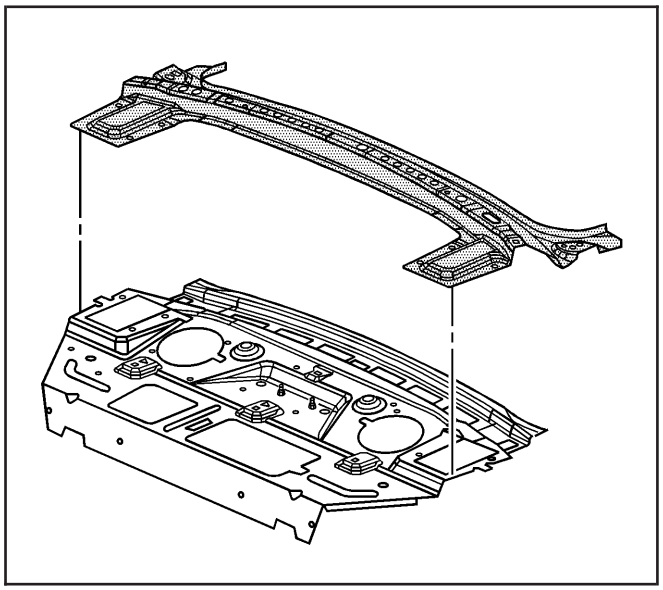
6. Locate and drill out all the necessary factory welds.



872701

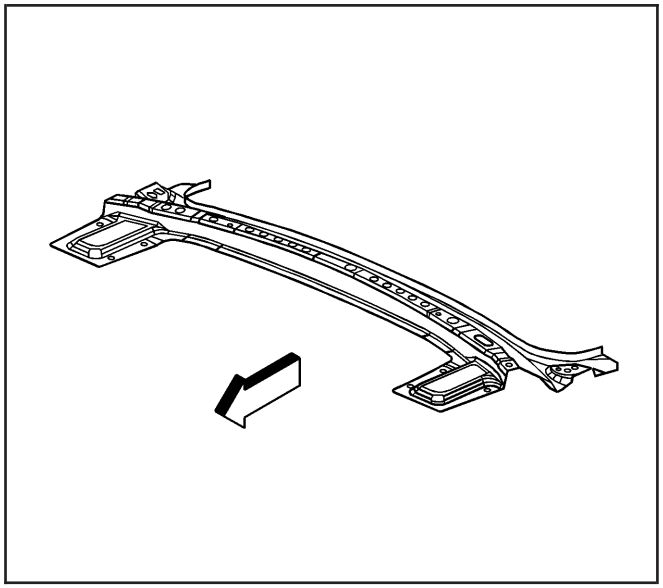


872707



872715

7. Remove the rear reinforcement to the rear window panel.

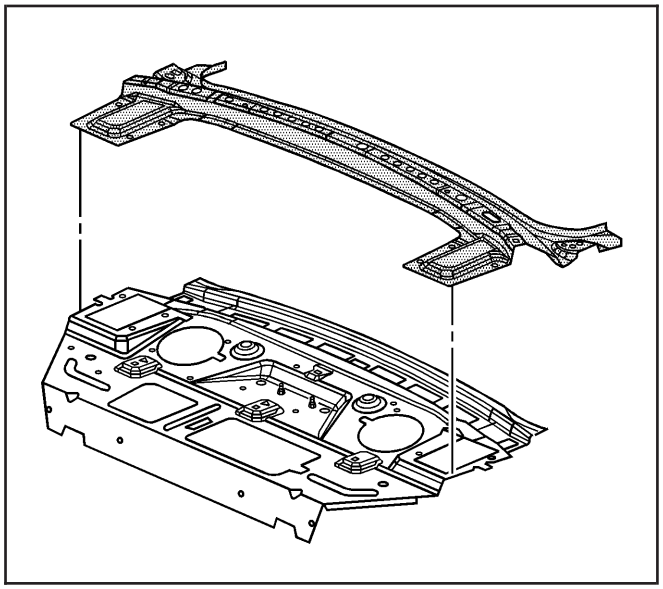


872703

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

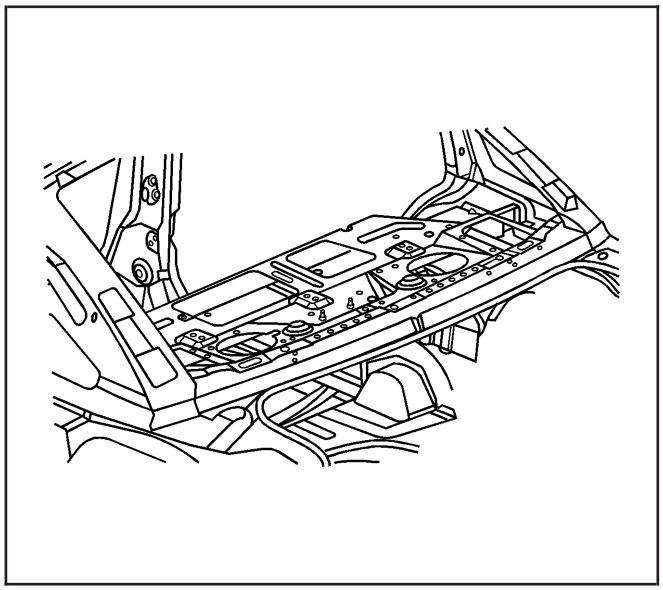
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



872715

4. Position the rear enforcement to the rear window panel.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872710

Pillar Lock Rear Door Replacement - Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

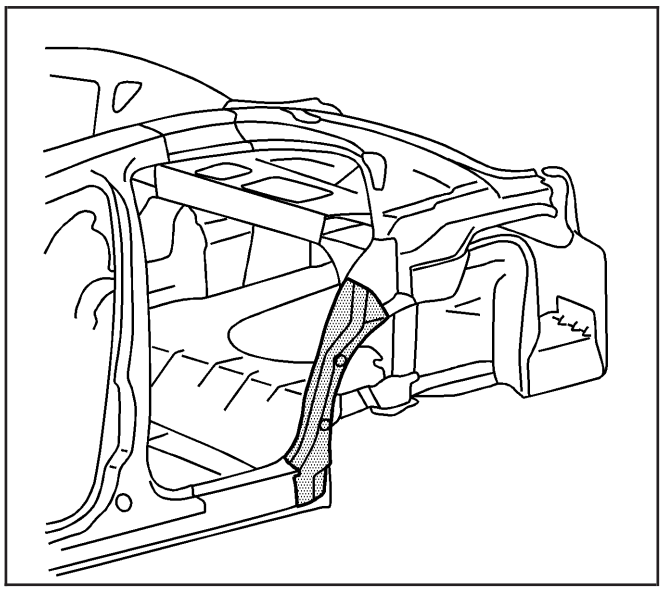
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

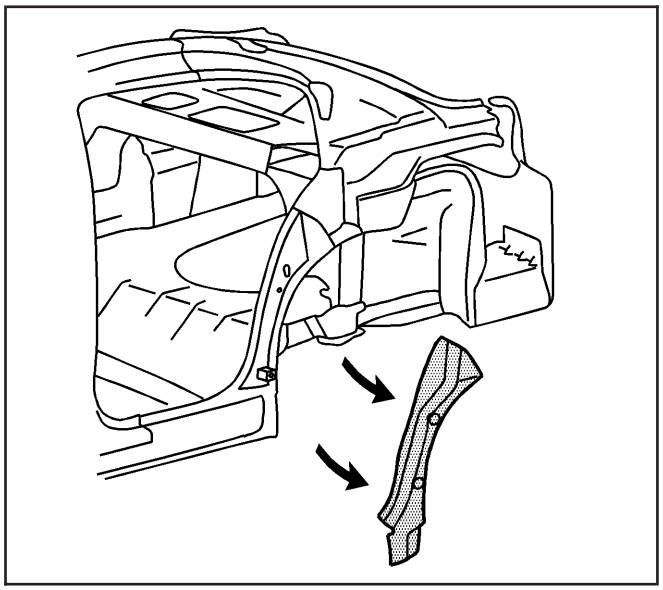
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the inner pillar lock rear door.

6. Locate and drill out all the necessary factory welds.

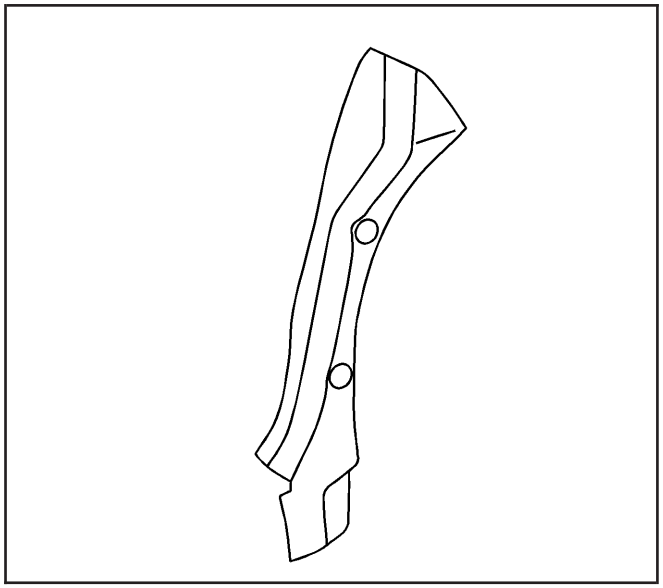


872403



872406

7. Remove the inner pillar lock rear door.

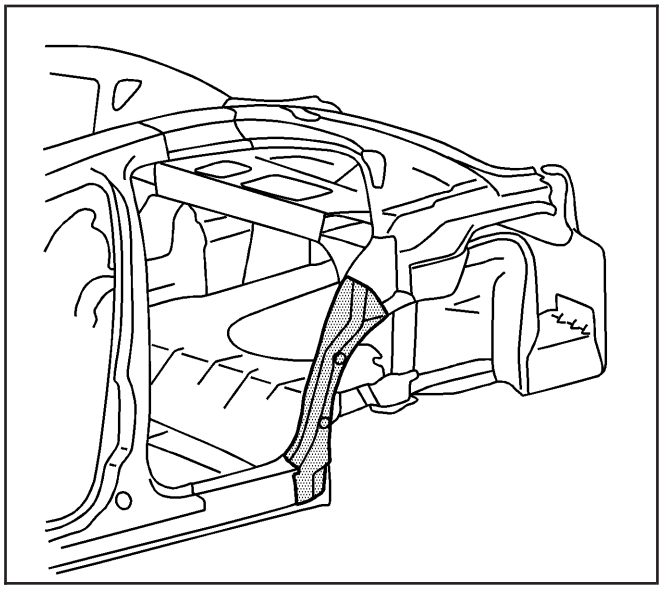


872401

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

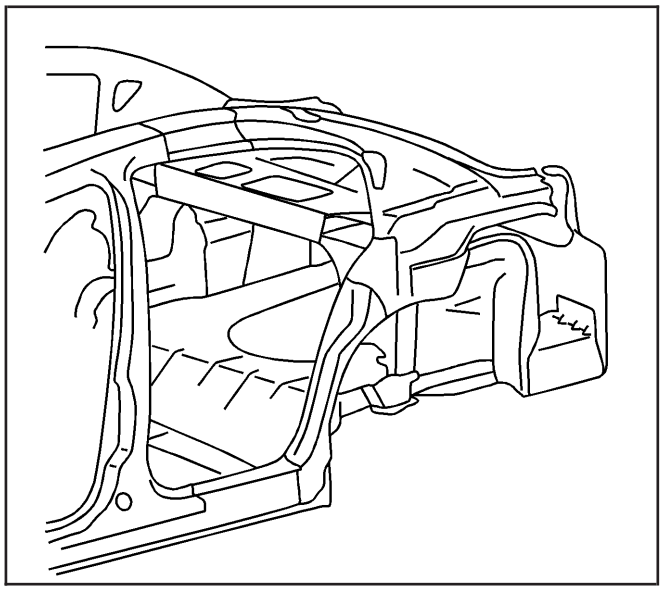
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



872403

4. Position the inner pillar lock rear door. Clamp the part in place.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



872398

Body Side Panel Replacement - Outer

Removal Procedure

The graphics in this procedure show the sedan. Procedures for the coupe are similar.

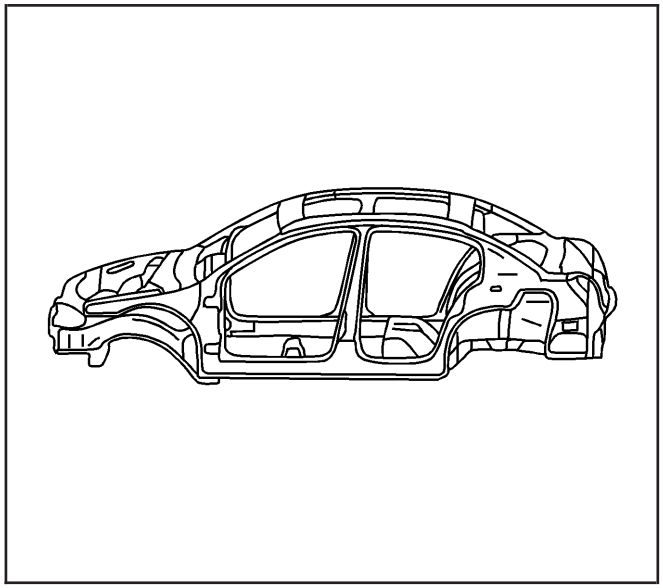
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

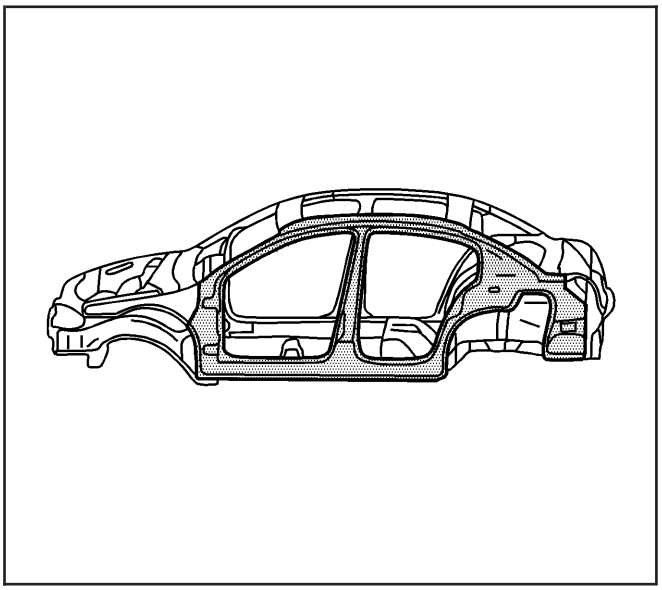
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



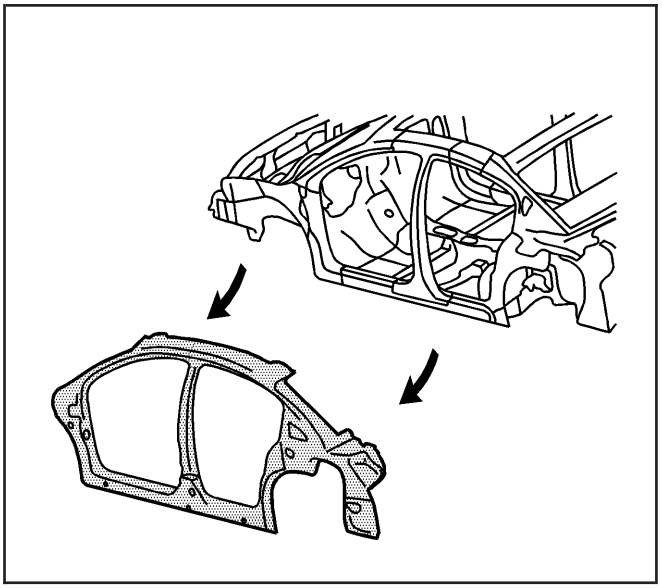
875640



875642

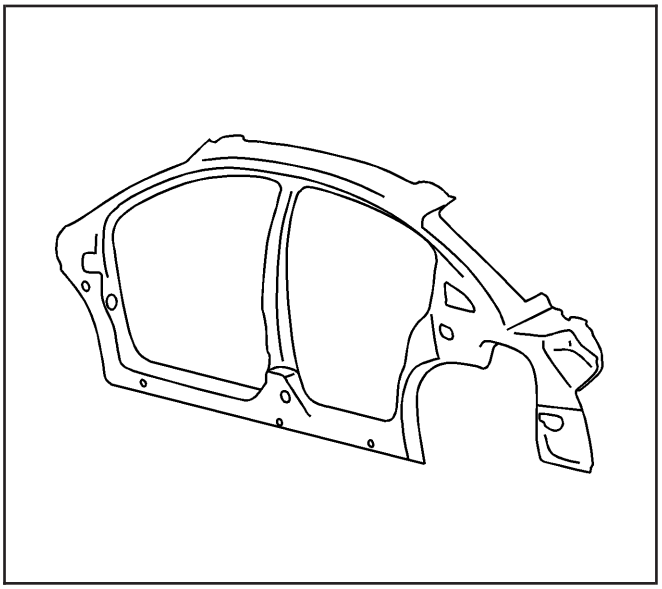
Important: Note the number and location of the factory welds for installation of the outer body side panel.

6. Locate and drill out all the necessary factory welds.



875643

7. Remove the outer body side panel.



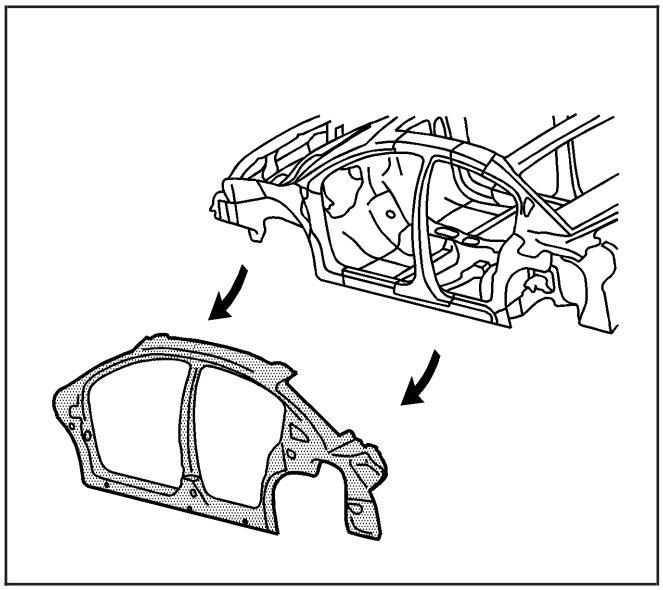
875641

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

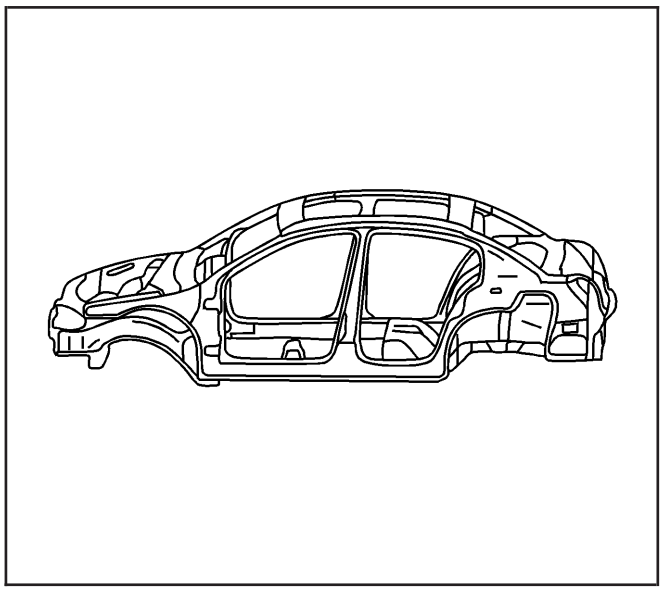
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

4. Position the outer body side panel to the vehicle. Clamp the panel in place.

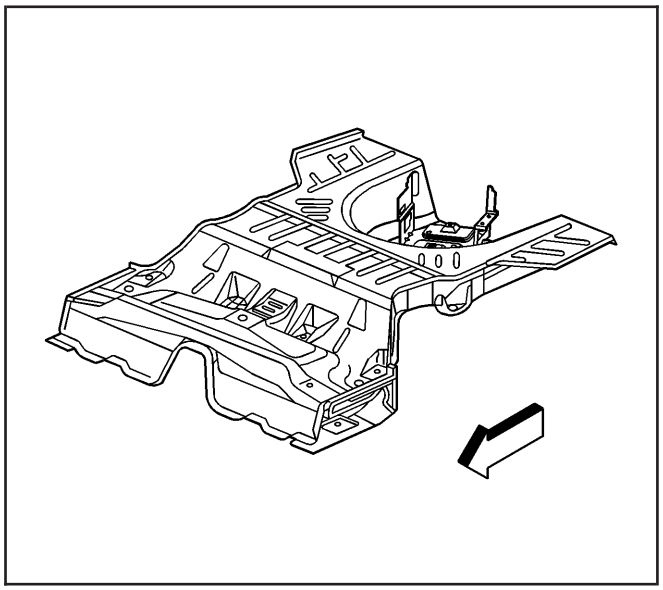


875643

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



875640



872720

Rear Compartment Floor Panel Sectioning

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

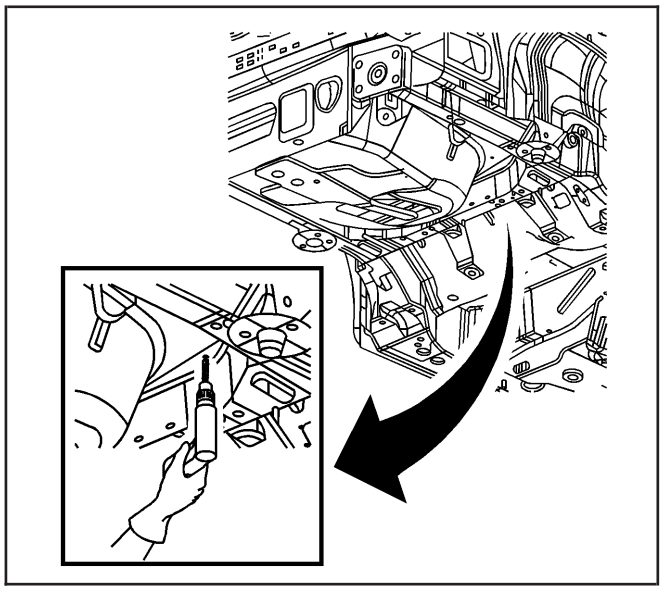
2. Disconnect the negative battery cable.

Important: The rear floor pan service part comes as a complete panel. You must make a cut to create the needed part for sectioning.

3. Remove all related panels and components.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
5. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.

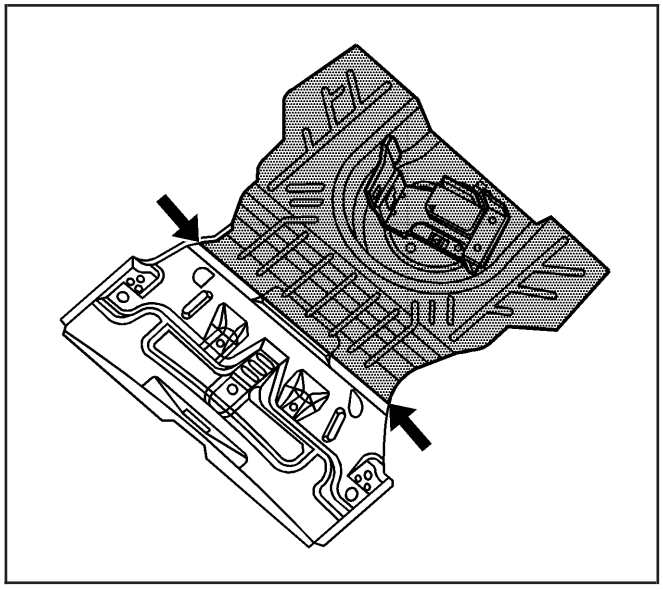
Important: Do not damage any adjacent panels or components when cutting or drilling out spot welds.

6. Locate the rear edge of cross bar #5 from under the vehicle.
7. Drill several 1/8 in holes in the floor pan only along the rear edge of the rear weld flange of cross bar #5. This will aid in identifying the location from the top side of the floor pan.



876976

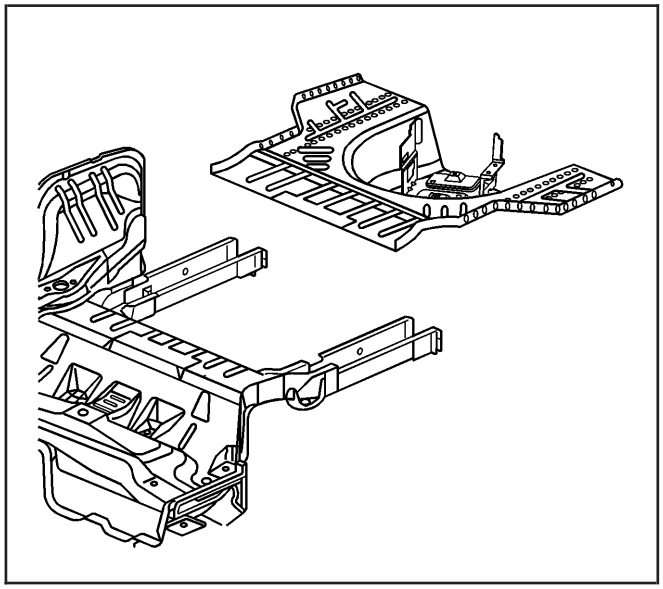
8. Apply a piece of masking tape to the top surface of the rear compartment panel along the holes drilled in the floor pan.



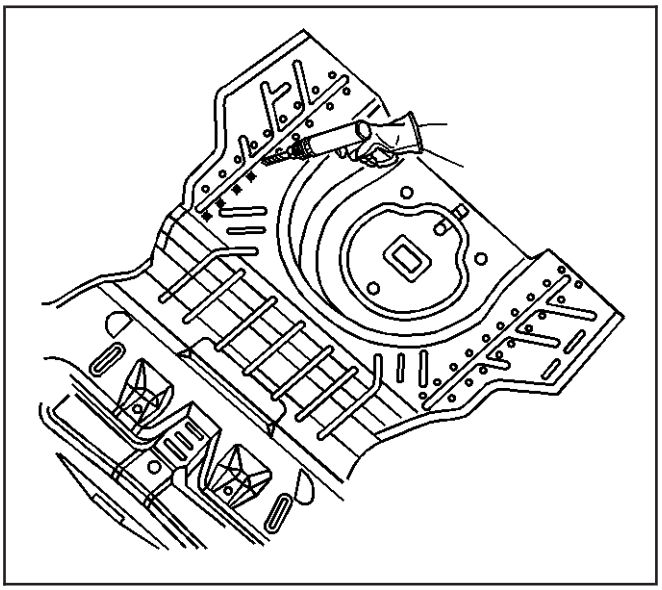
872742

Important: Do not damage any inner panels or reinforcements.

9. Cut slightly rearward of the tape along the holes drilled in the floor pan. Later, the floor panel will be ground flush to the rear edge of the weld flange.

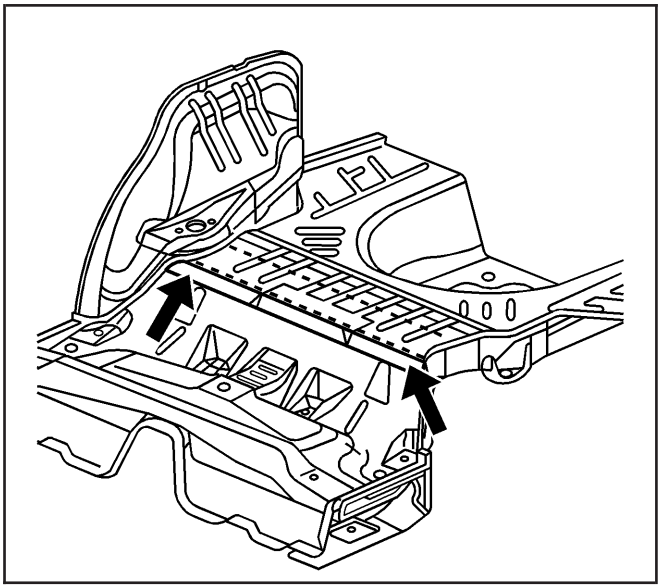


872728



811150

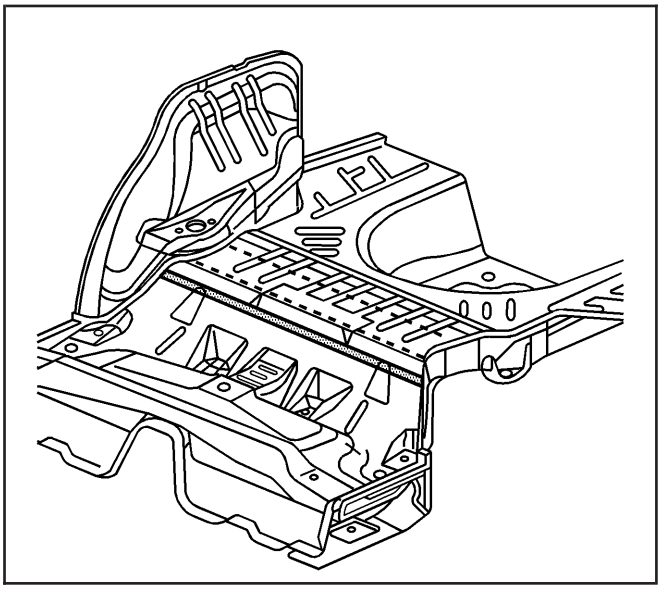
10. Drill out all the spot welds along rails and the wheelhouses rearward of the cutline and remove the rear compartment floor panel. Note the number and location of welds for installation of the service assembly.
11. Cut and grind flush the original panel of the rear compartment panel at the rear edge of the #5 crossbar.



877233

Installation Procedure

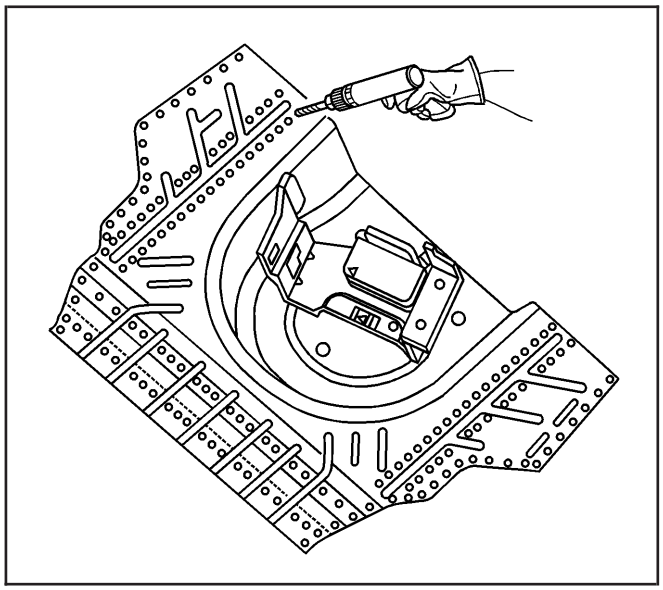
1. On the rear compartment floor panel service part, locate the transition area from the floor pan to the drop-down area which supports the rear seat bottom half.



872726

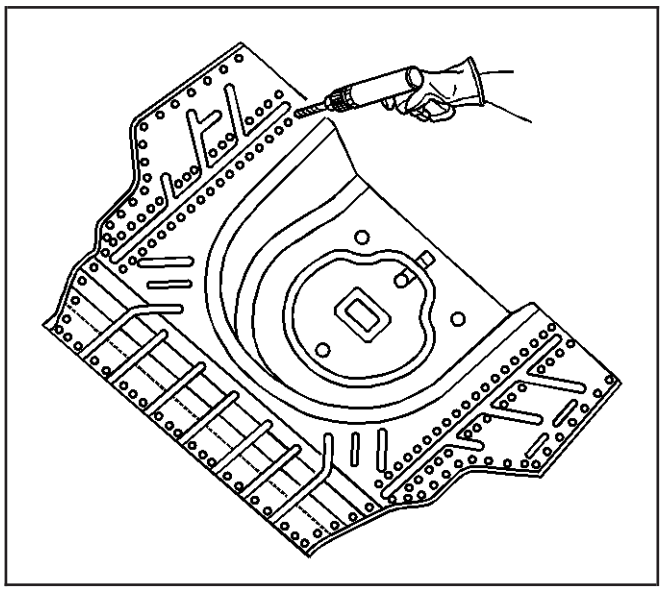
2. Place a piece of masking tape along the top radius within this transition area across the panel

3. Cut along the forward edge of the tape, the edge that would be closest to the rear seat, and remove the rear portion of the panel.
4. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
5. Lay out and drill 2 additional rows of 8 mm (5/16 in) plug weld holes on top of the #5 bar weld flanges.



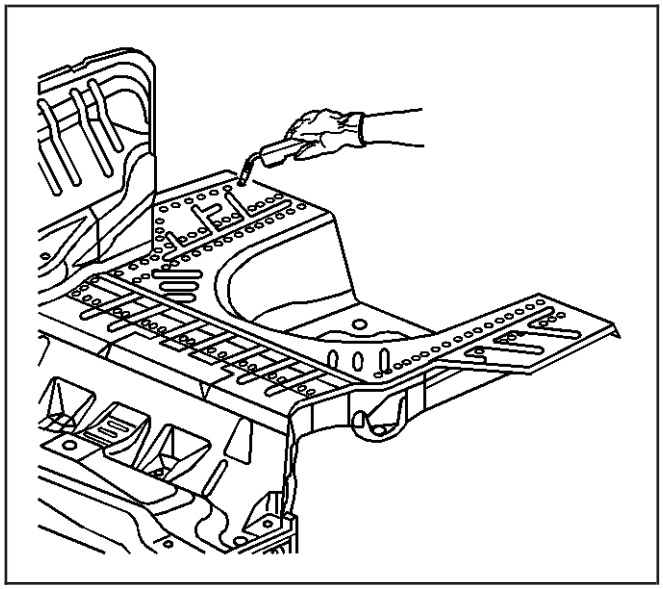
872729

6. Prepare all mating surfaces for welding as necessary.
7. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
8. Position the rear floor pan to the vehicle using 3-dimensional measuring equipment. Clamp the part in place.

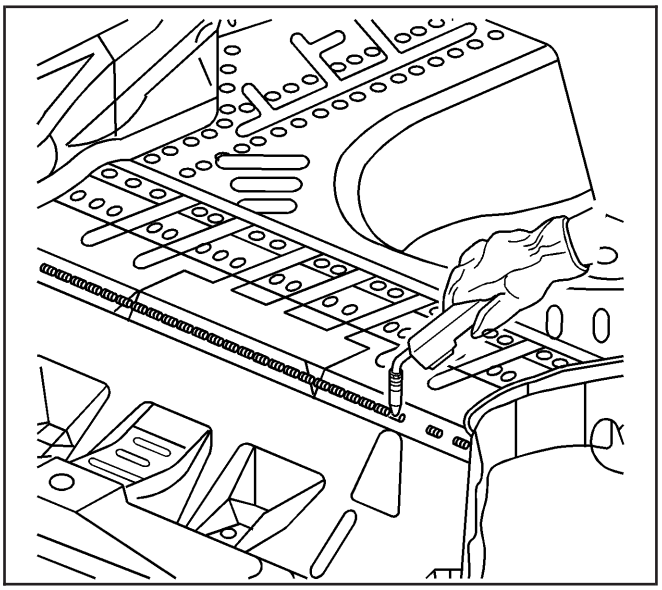


811139

9. Plug weld accordingly.

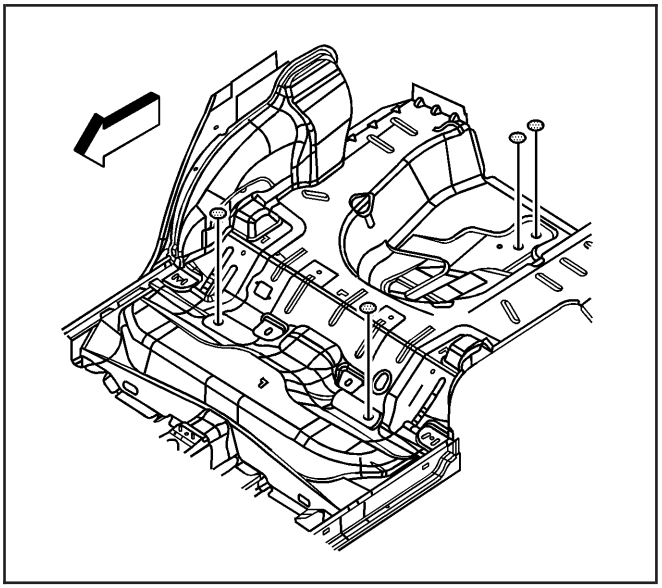


811142



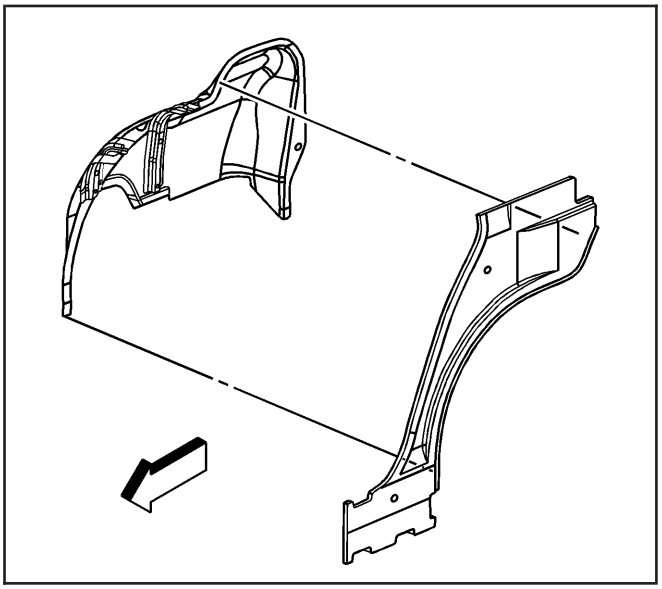
874263

10. Weld the seam along the front cut edge of the floor panel service part. To create a solid weld along the front of the service part with a minimum of heat distortion, make a stitch weld along the seam with 25 mm (1 in) gaps between each weld.
11. Clean and prepare all welded surfaces.
12. Apply sound deadening materials as necessary.
13. Paint the repaired area.



874308

14. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
15. Install all related panels and components.
16. Connect the negative battery cable.
17. Enable the SIR system.



872413

Wheelhouse Replacement - Rear Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

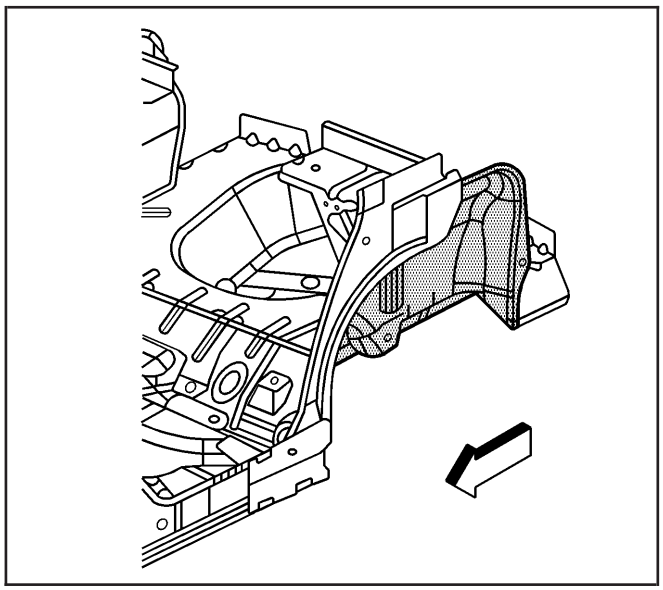
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

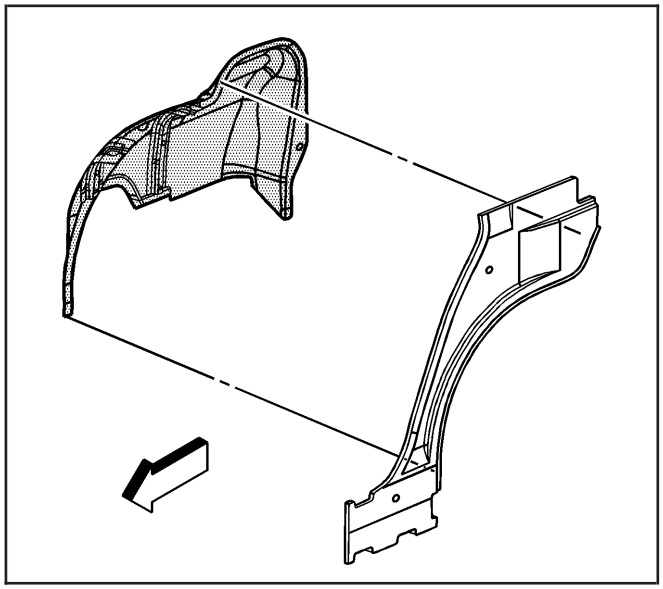
Important: Note the number and location of the factory welds for installation of the wheelhouse-rear inner.

6. Locate and drill out all the necessary factory welds.

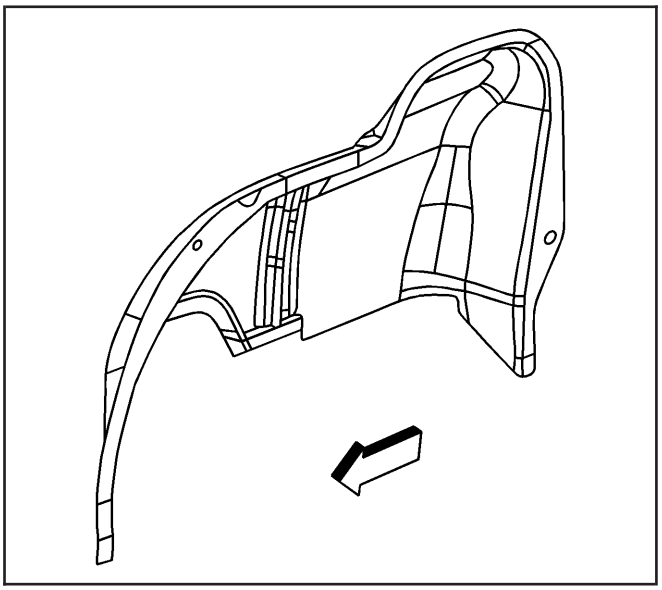


872416

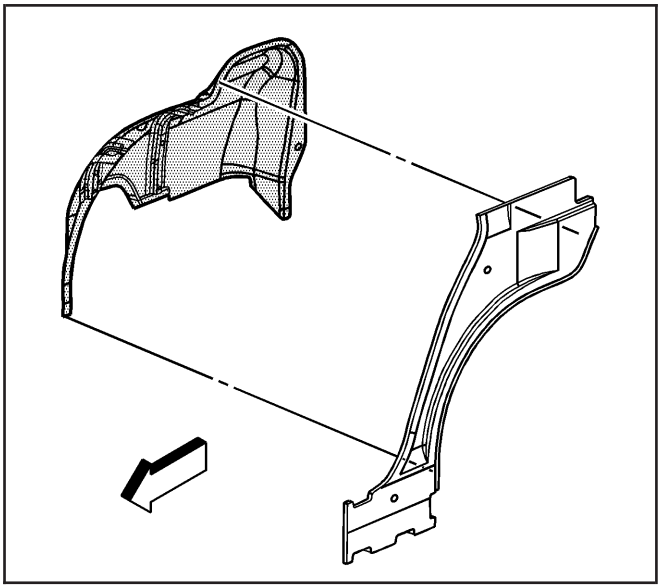
7. Remove the rear inner wheelhouse.



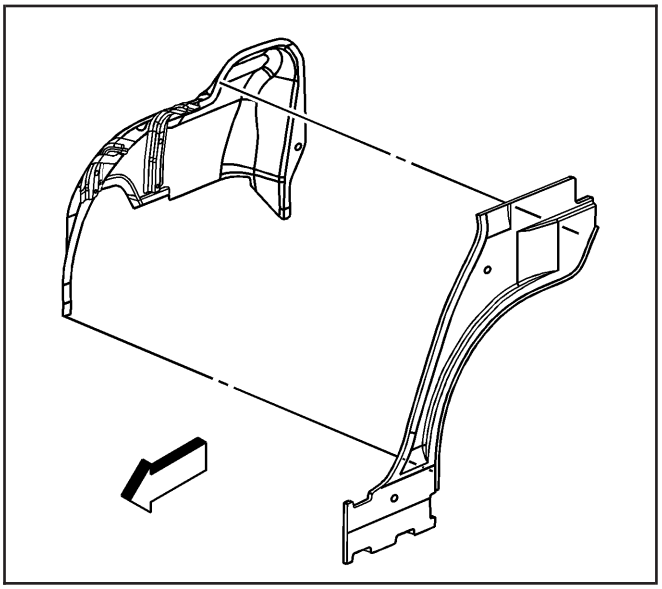
874287



872415



874287



872413

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
4. Position the rear inner wheelhouse to the vehicle. Clamp the part in place.
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

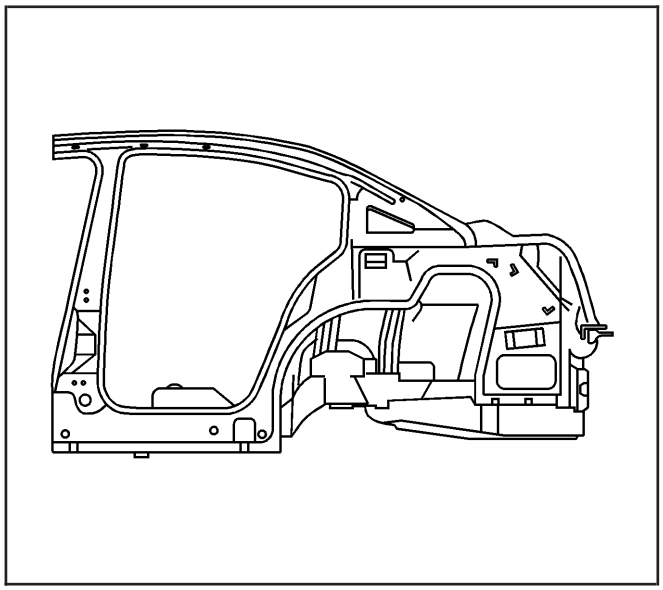
Quarter Panel Sectioning - Outer

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

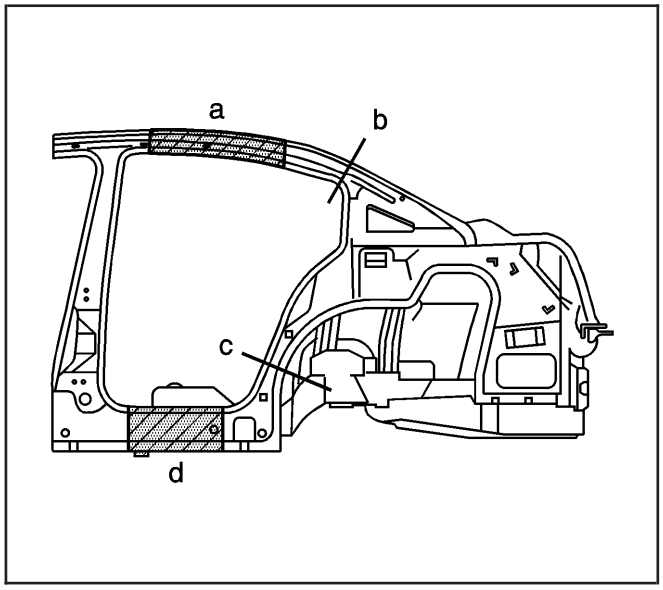
The body side outer panel is available either in one piece or in front or rear portions. The front and the rear halves are cut about half way across the rear door opening. You can perform any one of these replacement procedures separately or in any combination, depending upon the extent of damage to the vehicle. Sectioning must take place in specified areas only. Stay away from the door and window opening radius areas. Section only in straight areas of the openings.



874226

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

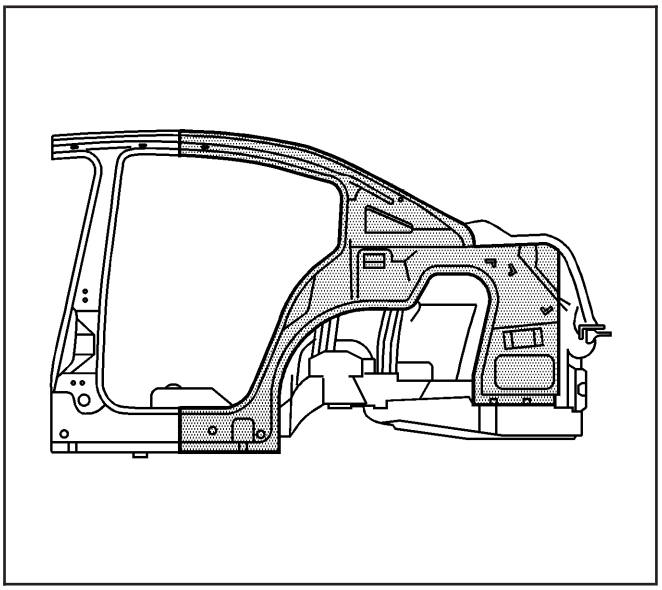
1. Disconnect the negative battery cable.
2. Remove all related panels and components.
3. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
4. Remove the sound deadeners as necessary. Note their location.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



874220

Important: Sectioning can only be done in the recommended areas of the rocker panel, dog leg, sail panel, and upper roof rail area of the body side panel as necessary.

6. Locate the area on the panel where sectioning will be performed.
   - (a) – Any straight area along the rocker panel away from the door opening lower front and rear radius on the body side panel.
   - (b) – 10 mm (3/8 in) rearward of the last upper trim attachment slot.
   - (c) – 75 mm (3 in) down from the quarter panel exterior panel attachment square hole.

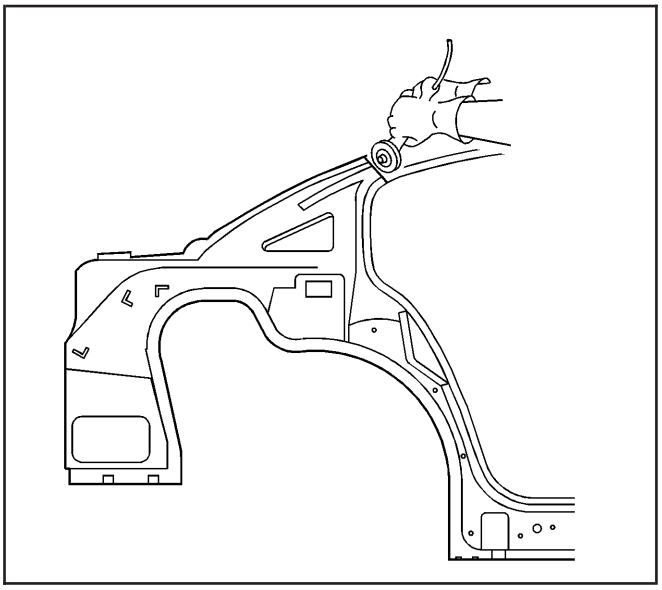


875635

7. Within the recommended sectioning areas, mark the location of the sectioning cut lines on the vehicle.

Important: Note the number and location of the factory welds for installation of the quart panel.

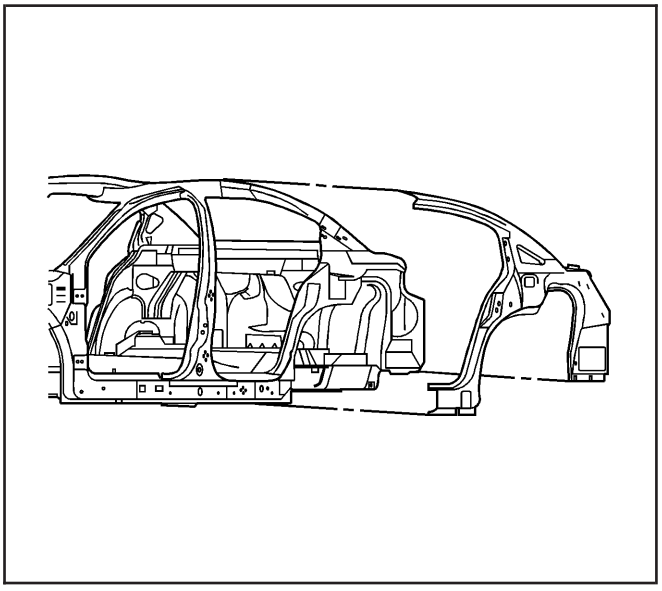
8. Locate and drill out all factory welds.



884763

Important: Do NOT damage any other panels or reinforcements when cutting at the marked locations.

9. Cut the panel at the location laid out in the previous steps.



875636

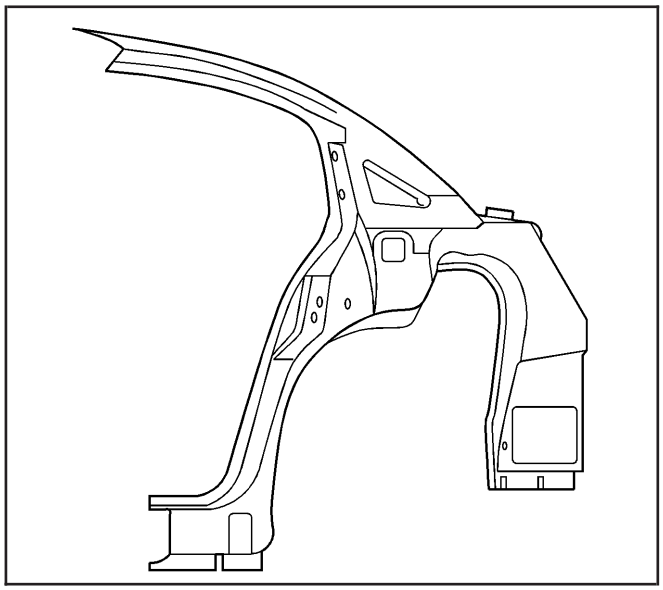
10. Remove the damaged quarter panel.

Installation Procedure

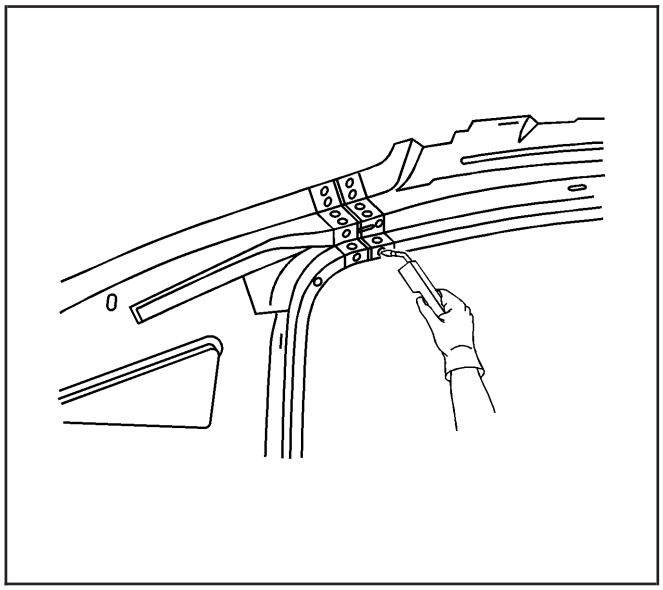
1. Locate the area on the service panel where you will perform sectioning.
2. Measure and mark the cut line location on the service part at the same location as on the vehicle layout.
3. Cut the service panel in corresponding locations to fit the remaining original panel. The sectioning joint should be trimmed to allow a gap of 1½ times the metal thickness at the sectioning joint.
4. Create 100 mm (4 in) backing plates from the unused portion of the service part for the sectioned areas.
5. Trim the backing plates as necessary to fit behind the panel at the sectioning joints.

Important: 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.

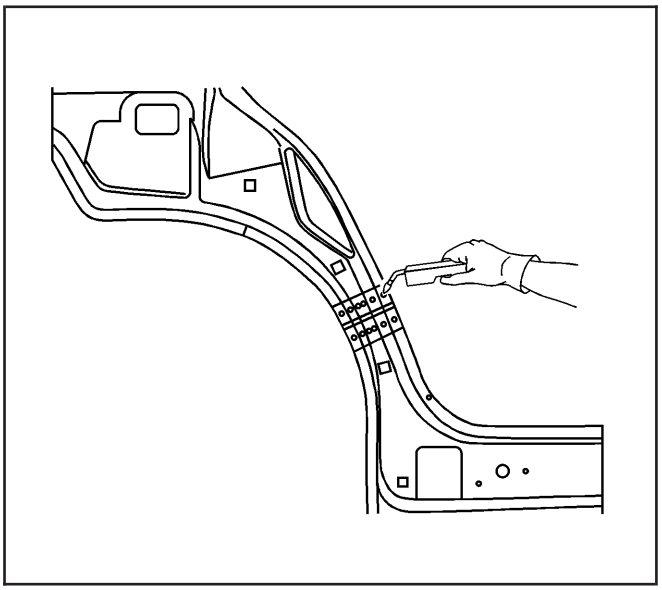
6. Drill 8 mm (5/16 in) plug weld holes along the sectioning areas in the service part, and along the sectioning areas on the vehicle. Drill the plug weld holes 15 mm (5/8 in) from the edges.
7. Drill 8 mm (5/16 in) plug weld holes at the locations noted from the original panel.
8. Prepare all mating surfaces as necessary.
9. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.
10. Fit the backing plates 50 mm (2 in) into the sectioning joints on the vehicle. Clamp the plates in place, and plug weld to the section joint
11. Weld the plug weld holes on the vehicle half of the backing plates.
12. Position the outer front pillar to the vehicle using 3-dimensional measuring equipment. Clamp the quarter panel in place.



875634



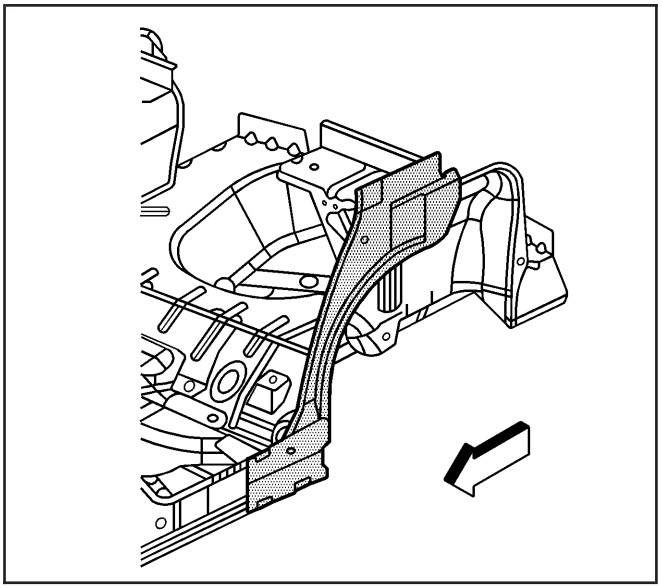
875639



875638

Important: The dogleg illustration is shown. The rocker panel section joint is similar.

13. Plug weld accordingly.
14. To create a solid weld with minimum heat distortion, make a 25 mm (1 in) stitch weld along the seam with gaps of 25 mm (1 in). Go back and complete the stitch weld.
15. Clean and prepare all of the welded surfaces.
16. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
17. Paint the repaired area.
18. Install all of the related panels and components.
19. Connect the negative battery cable.
20. Enable the SIR system.



872409

Quarter Panel Replacement - Inner

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

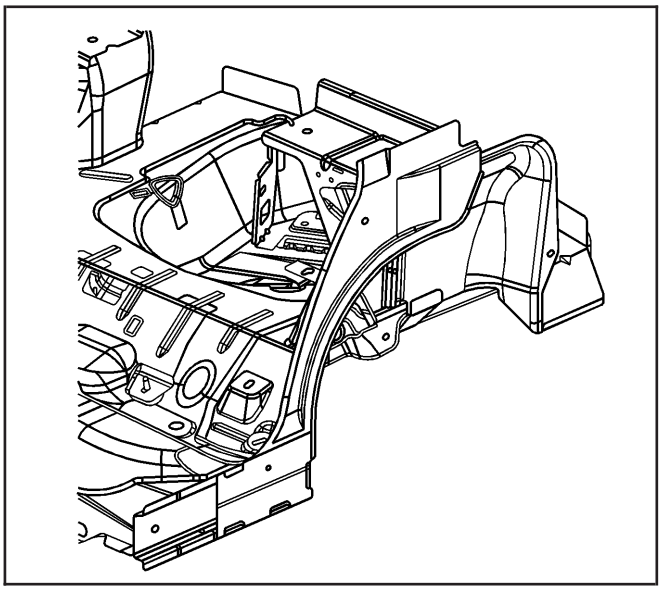
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Note the location and remove the sealers and anti-corrosion materials from the repair area, as necessary.

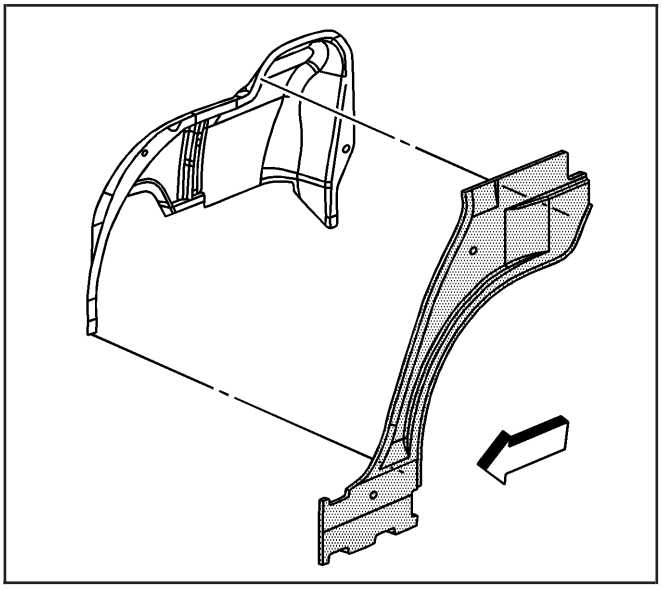
Important: Do not damage any inner panels or reinforcements.

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



872407

7. Remove the damaged quarter assembly.

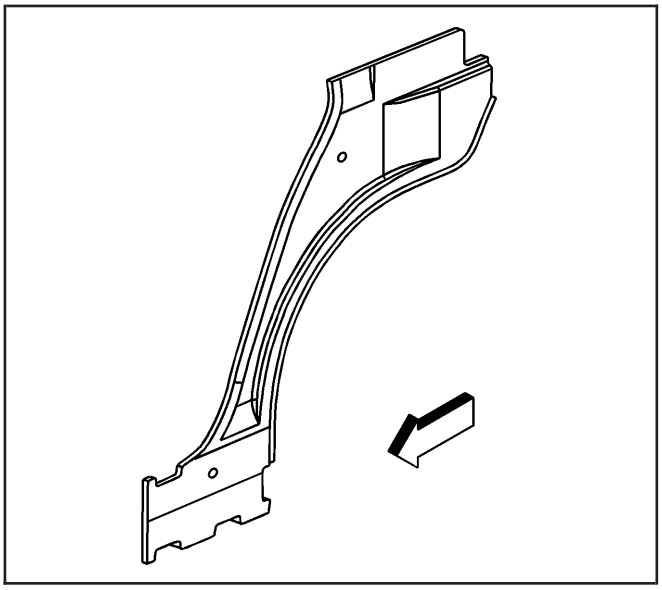


872411

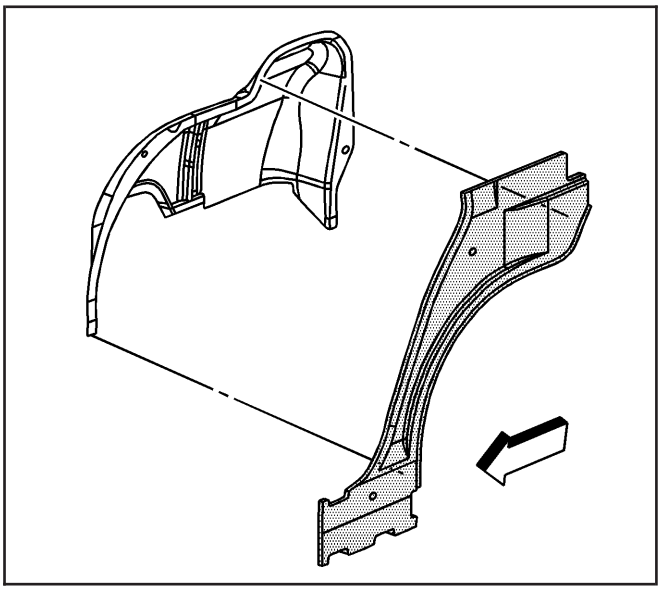
Installation Procedure

Important: If the location of the original plug weld holes can not be determined, or if structural weld-thru adhesive is present, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



872408

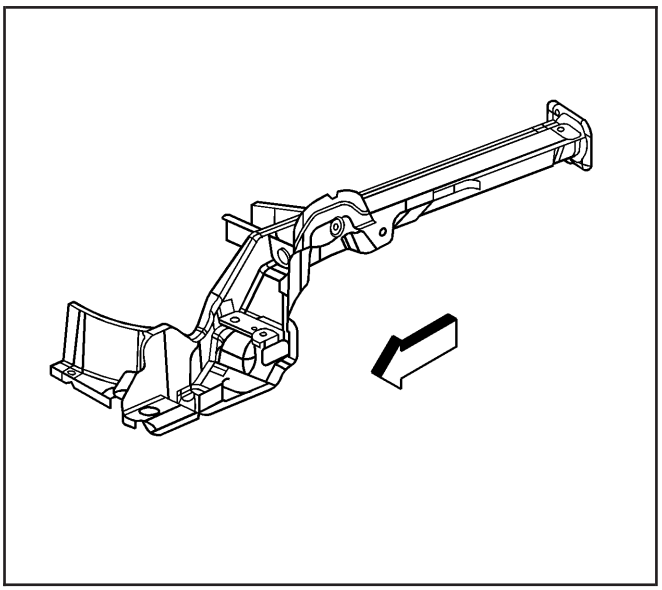


872411

4. Position the inner quarter assembly to the vehicle. Clamp the assembly in place.

Important: Filler, rear wheelhouse panel must be welded to the reinforcement assembly spare wheel carrier and the plate driver seat shoulder belt.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Install all related panels and components.
11. Connect the negative battery cable.
12. Enable the SIR system.



874177

Cross Bar No.4 Extension Replacement - Floor Panel

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

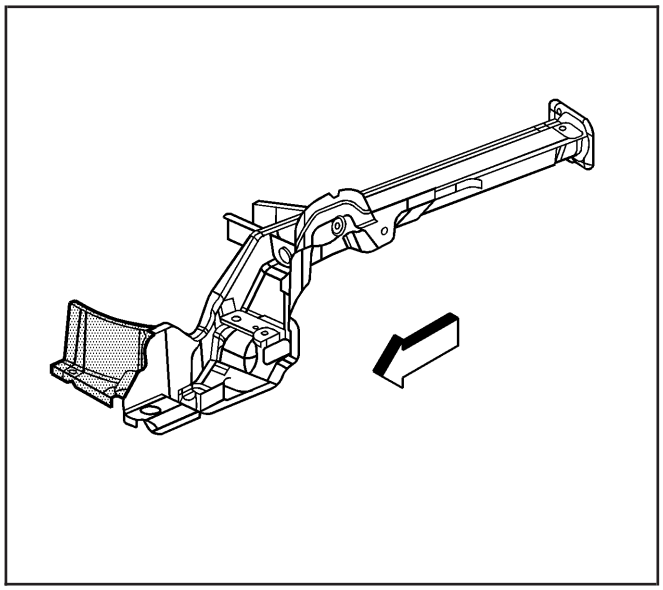
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

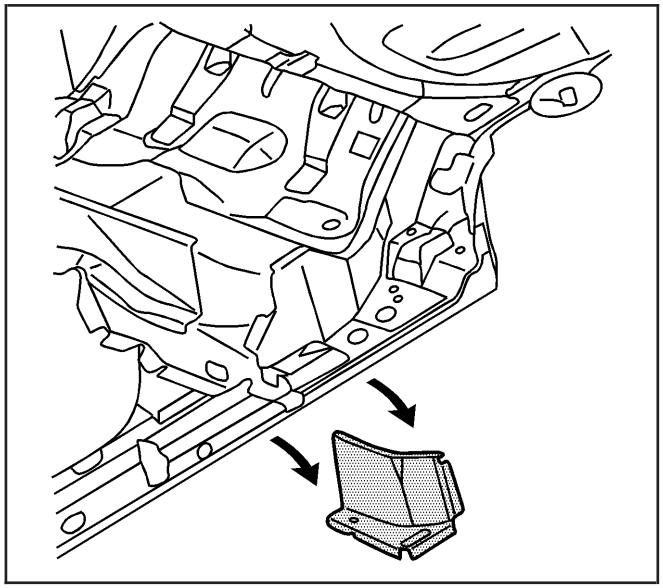
Important: Note the number and location of the factory welds for installation of the #4 cross bar.

6. Locate and drill out all the necessary factory welds.



874182

7. Remove the #4 cross bar.

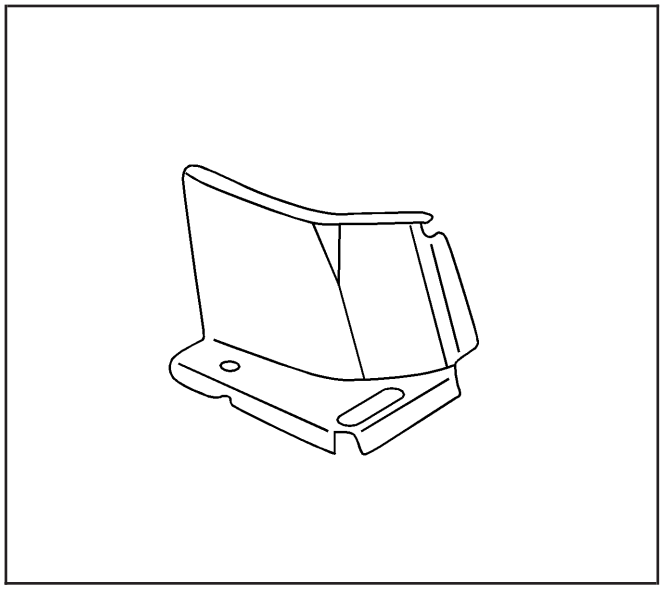


874184

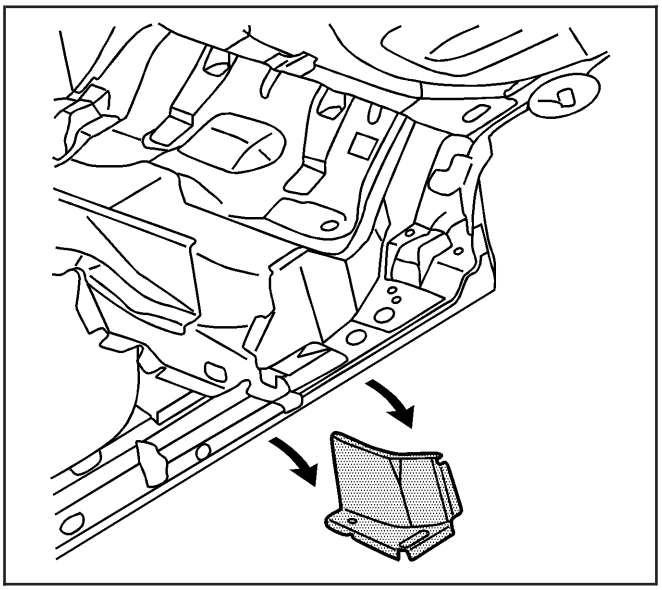
Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

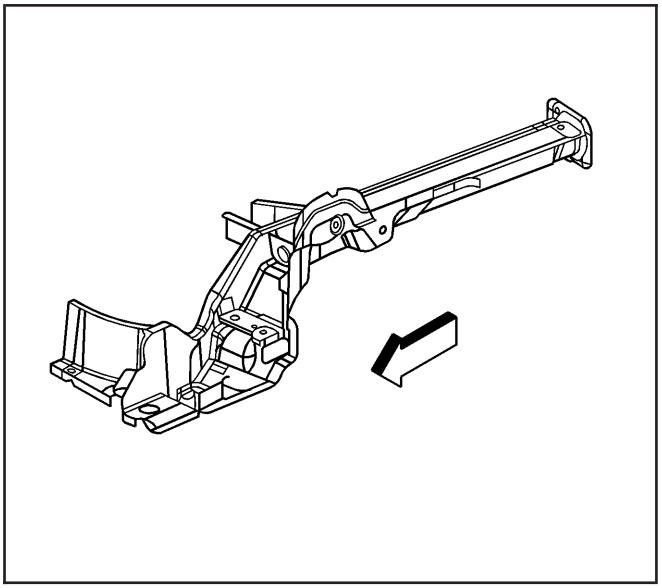


874179



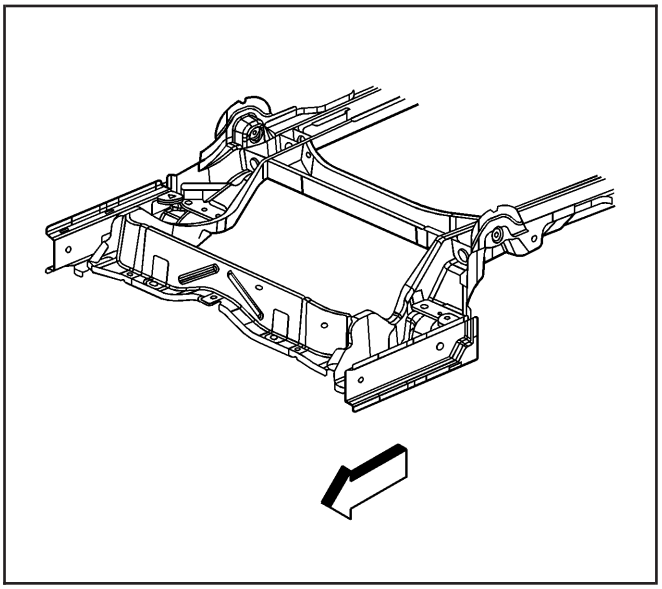
874184

4. Position the #4 cross bar.



874177

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



874167

Cross Bar No.4 Replacement - Floor Panel

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

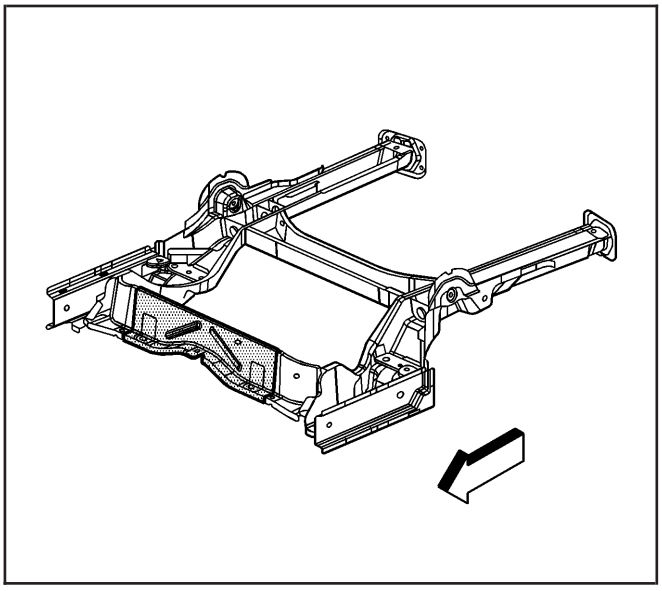
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

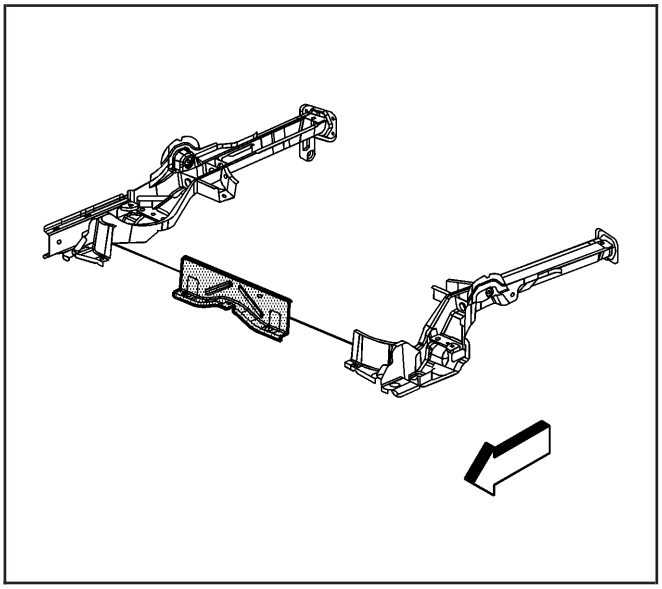
Important: Note the number and location of the factory welds for installation of the #4 cross bar.

6. Locate and drill out all the necessary factory welds.

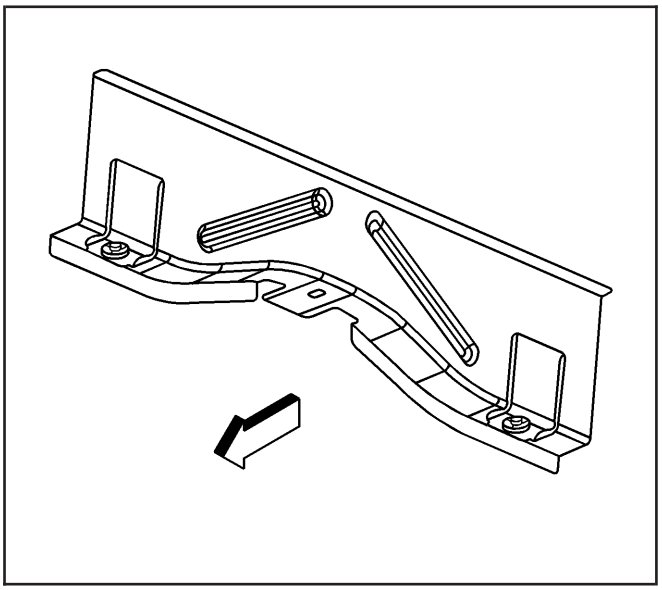


874173

7. Remove the #4 cross bar.



874174

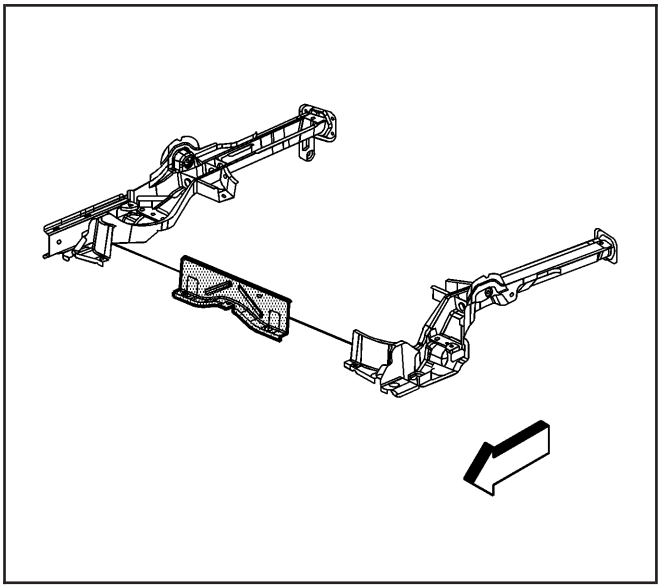


874170

Installation Procedure

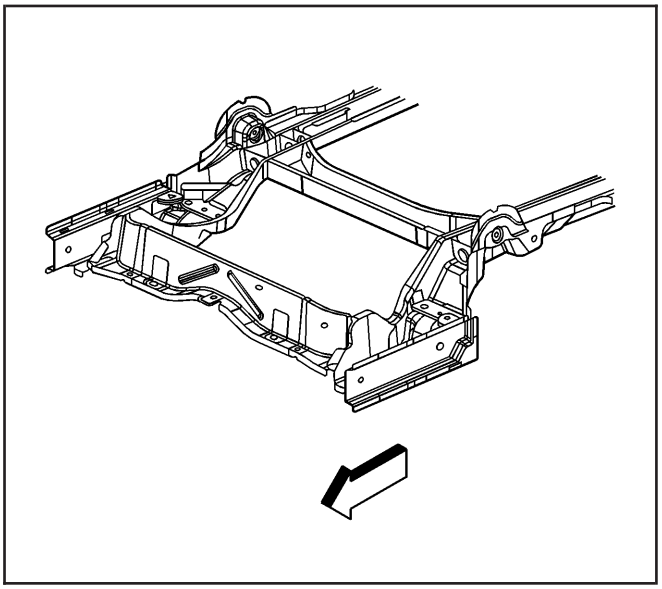
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.



874174

4. Position the #4 cross bar.



874167

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.

Cross Bar No.5 Extension Replacement - Floor Panel

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

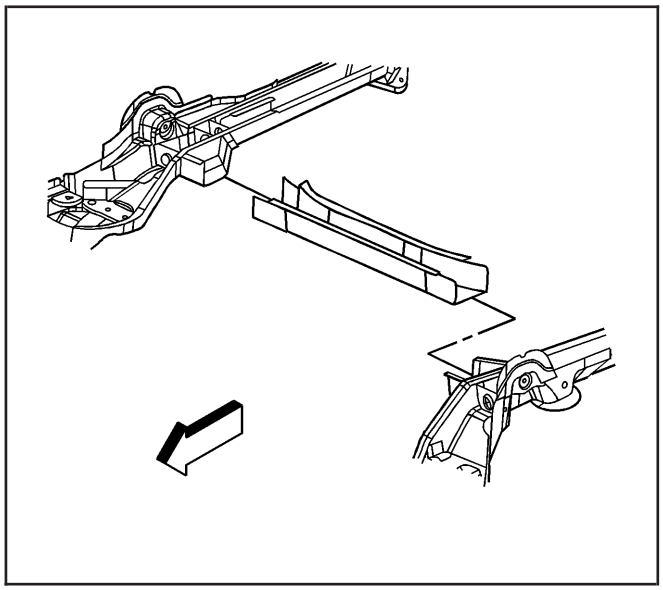
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

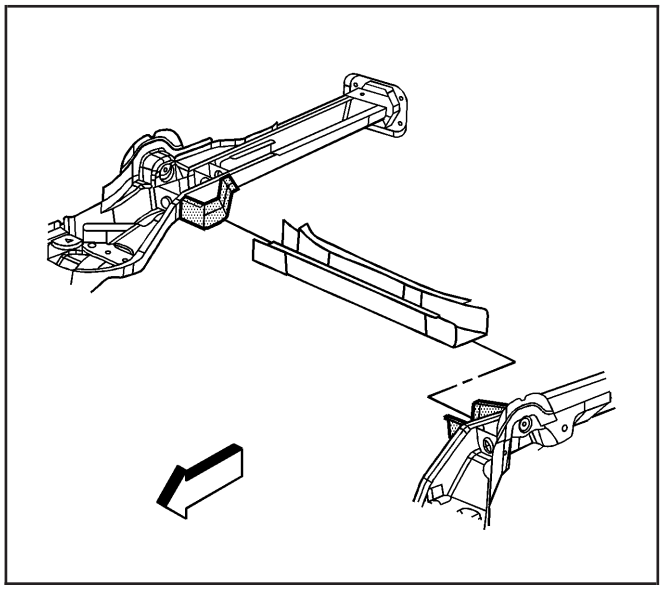
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the #5 bar extension.

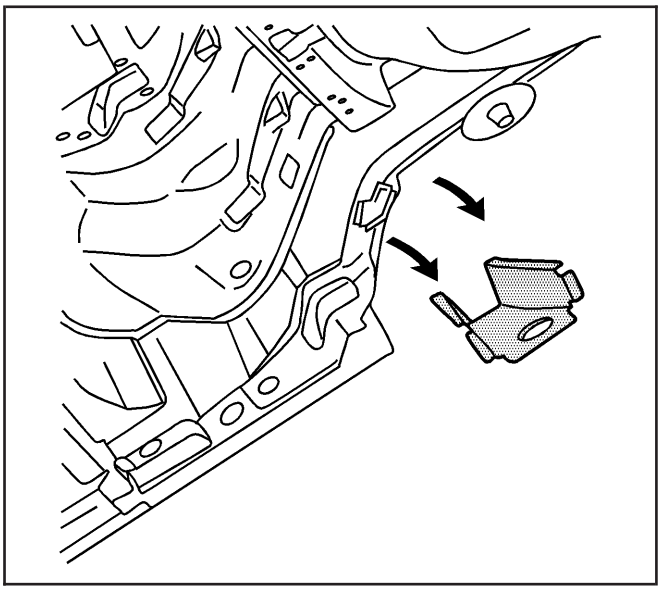
6. Locate and drill out all the necessary factory welds.



874197

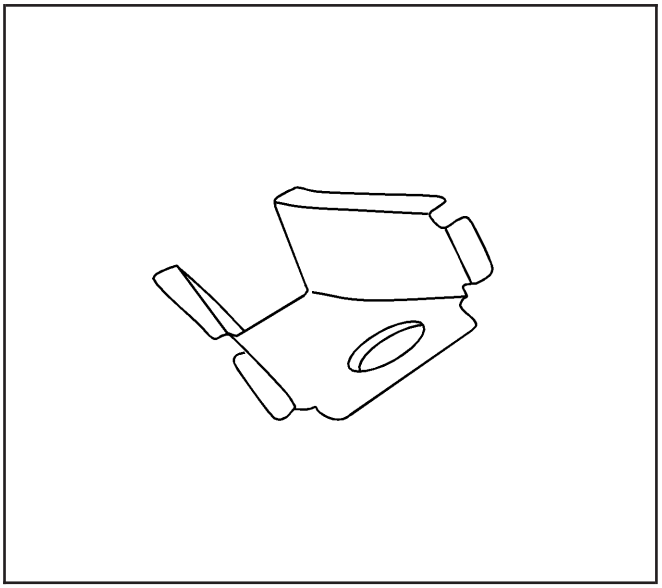


874202



874205

7. Remove the #5 bar extension.

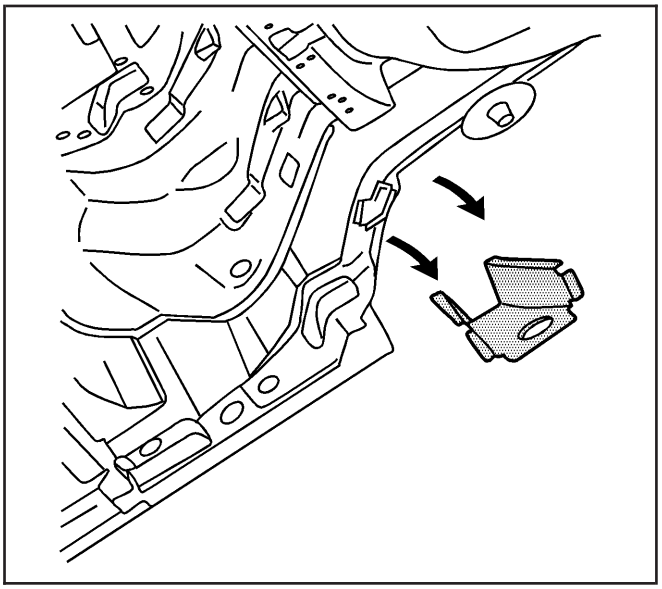


874199

Installation Procedure

Important: 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.

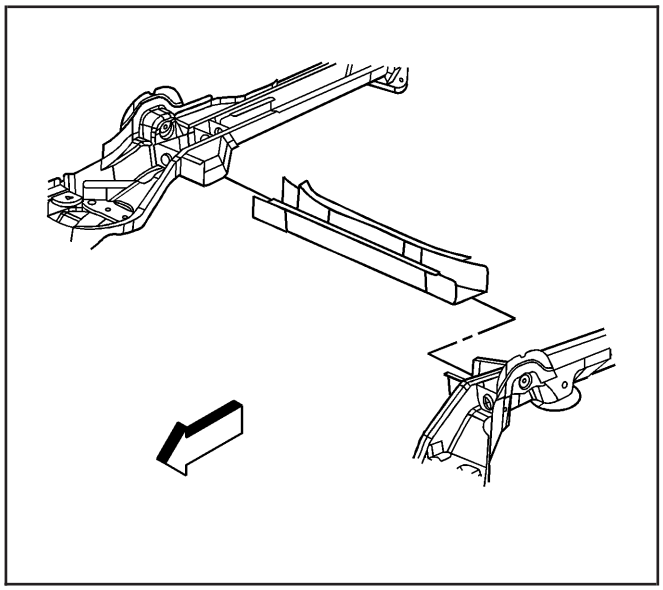
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



874205

4. Position the #5 bar extension.

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



874197

Cross Bar No.5 Replacement - Floor Panel

Removal Procedure

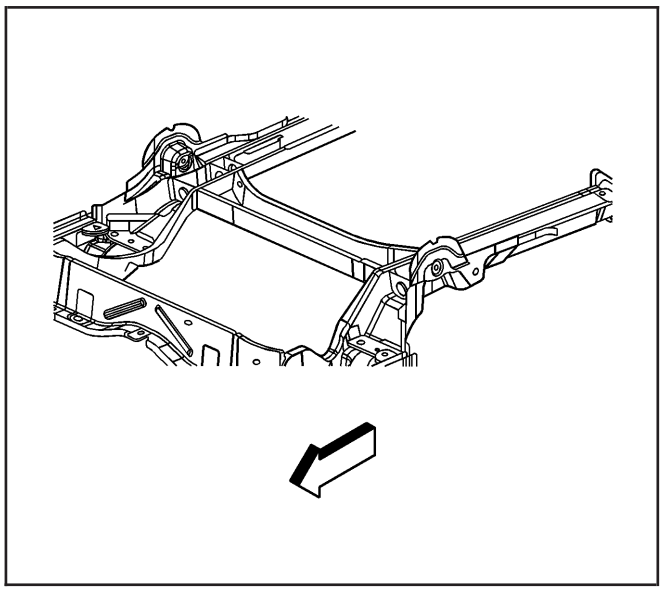
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

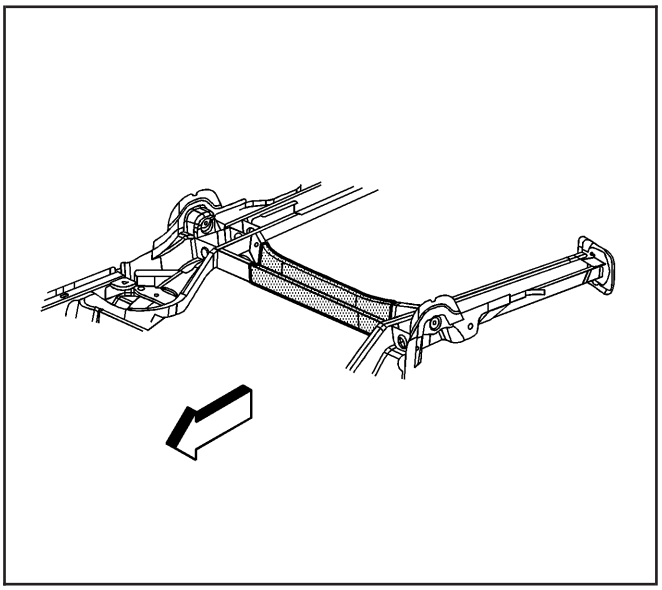
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

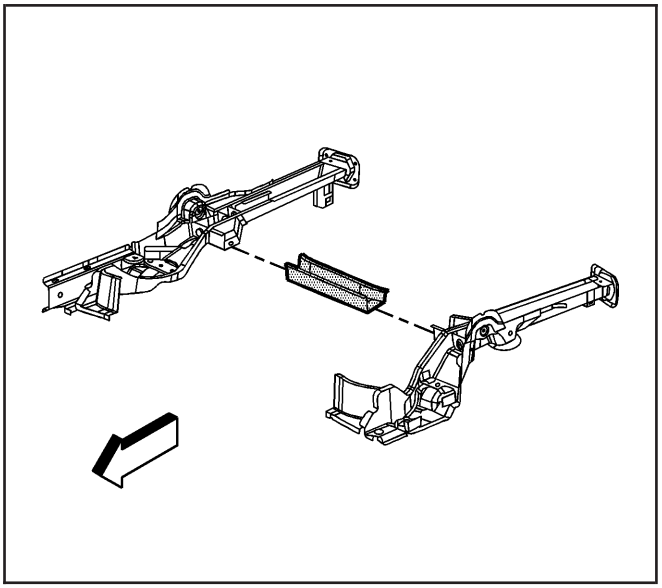
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



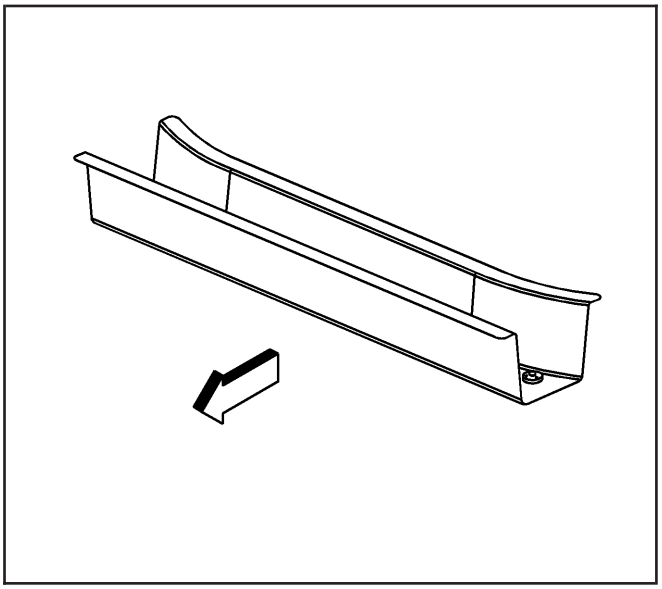
874186



874192



874193



874189

Important: Note the number and location of the factory welds for installation of the #5 cross bar.

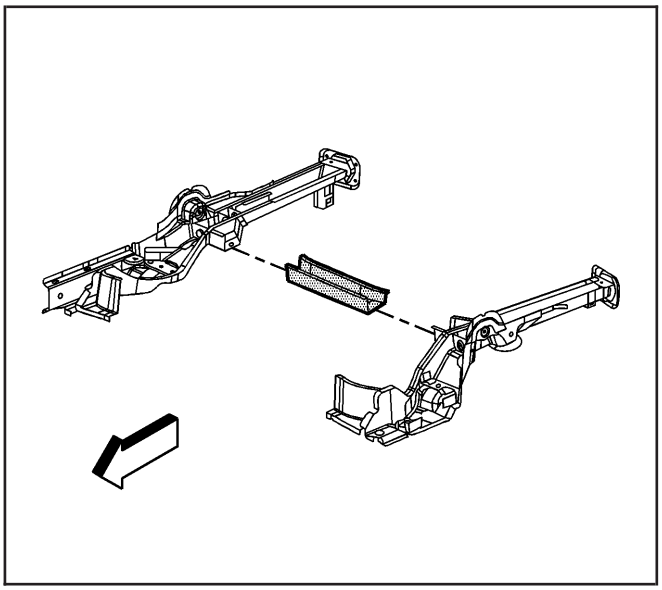
6. Locate and drill out all the necessary factory welds.
7. Remove the #5 cross bar.

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

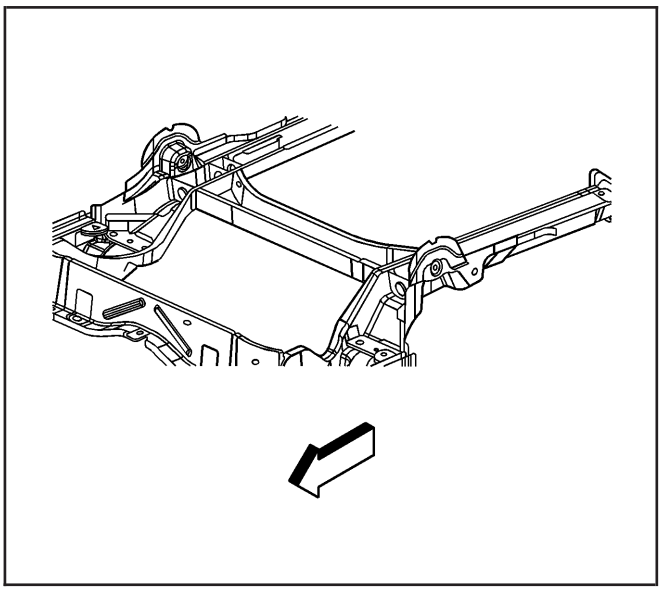
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the locations noted from the original panel.
2. Prepare all mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

4. Position the #5 cross bar.



874193

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



874186

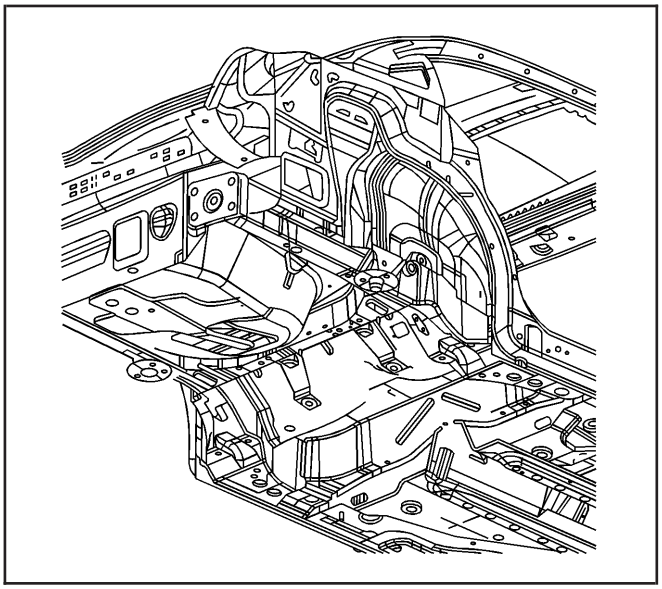
Rail Replacement Rear Side Underbody

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

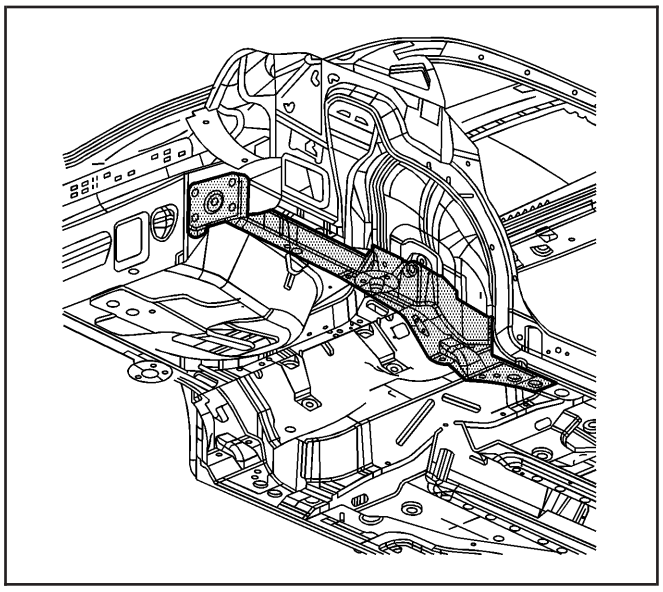
1. Disable the SIR system.



872724

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

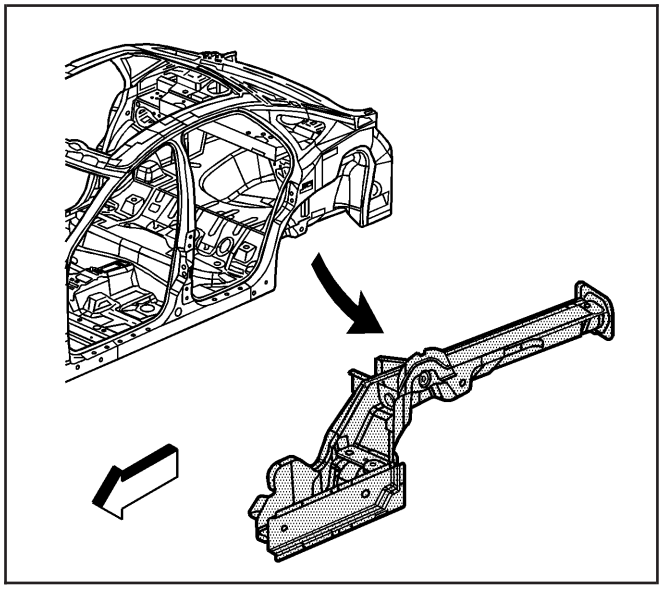
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damaged area as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



872746

Important: Note the number and location of the factory welds for installation of the wheelhouse-rear inner.

6. Locate and drill out all the necessary factory welds.



872751

7. Remove the rear rail.

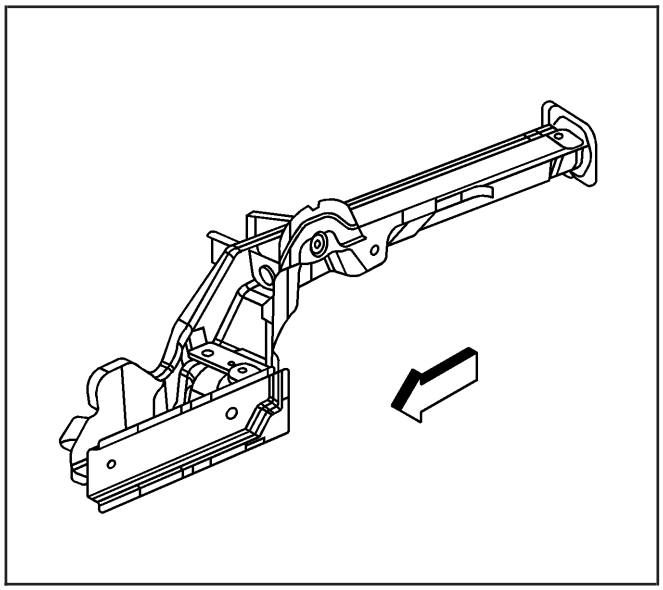
Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces for welding as necessary.
3. Apply 3M Weld-Thru Coating P/N 05916 or equivalent to all mating surfaces.

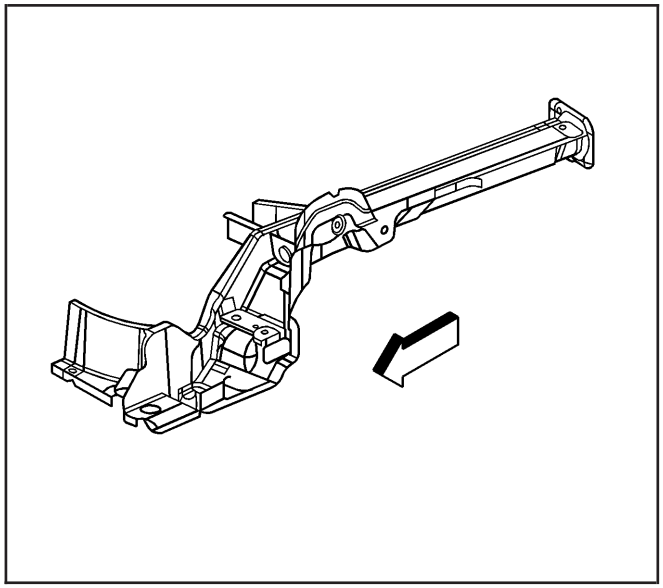
Important: The service part includes an inner rocker rear extension. The rear rail can be installed with or without the extension.

4. If an extension panel is required, drill out the spot welds.



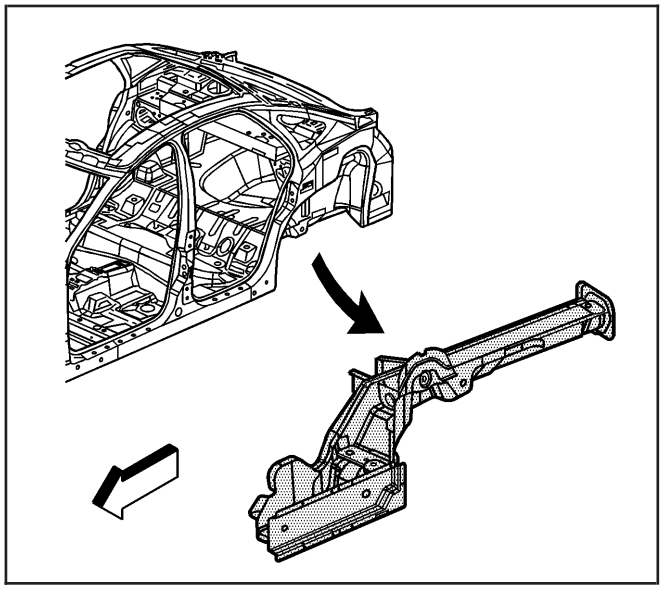
872744

5. Remove the extension panel if necessary.

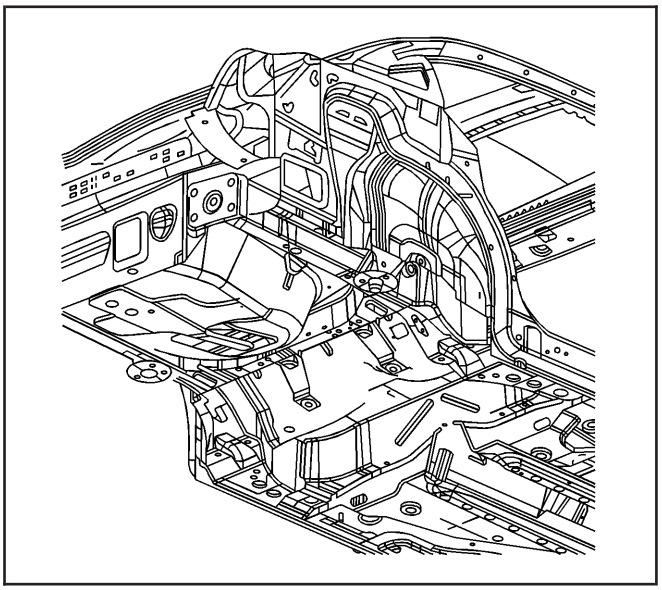


874177

6. Position the rear rail to the vehicle using 3-dimensional measuring equipment. Clamp the rail in place.

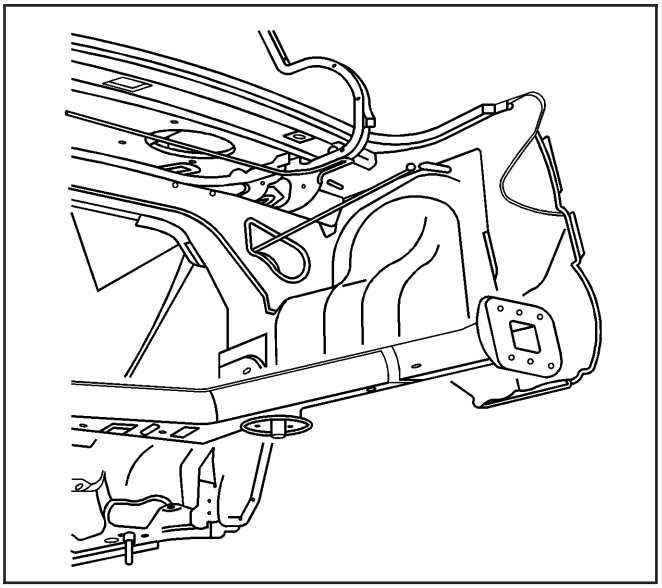


872751



872724

7. Plug weld accordingly.
8. Clean and prepare all of the welded surfaces.
9. Install all of the related panels and components.
10. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
11. Paint the repaired area.
12. Connect the negative battery cable.
13. Enable the SIR system.



874301

Rail Sectioning Rear Side Underbody

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Sectioning should be performed only in the recommended areas. Failure to do so may compromise the structural integrity of the vehicle and cause personal injury if the vehicle is in a collision.

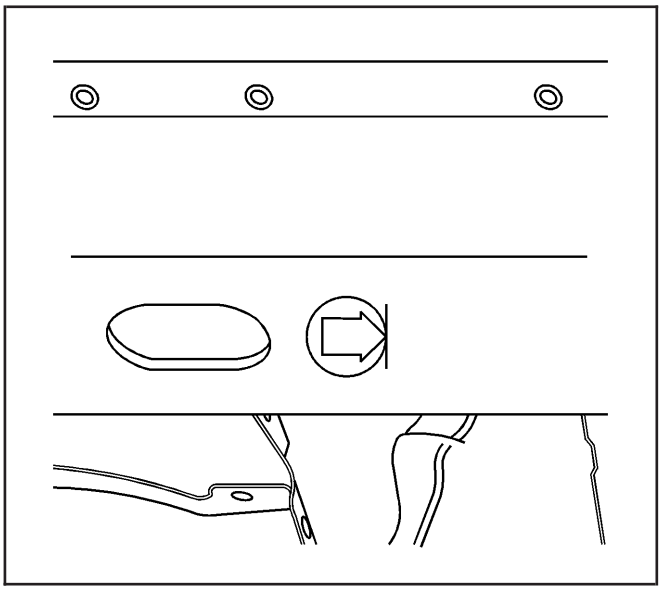
Caution: Refer to SIR Caution on page 1-1 in General Information.

1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all of the related panels and the components.
4. Remove the sealers and anti-corrosion materials from the repair area, as necessary.
5. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.

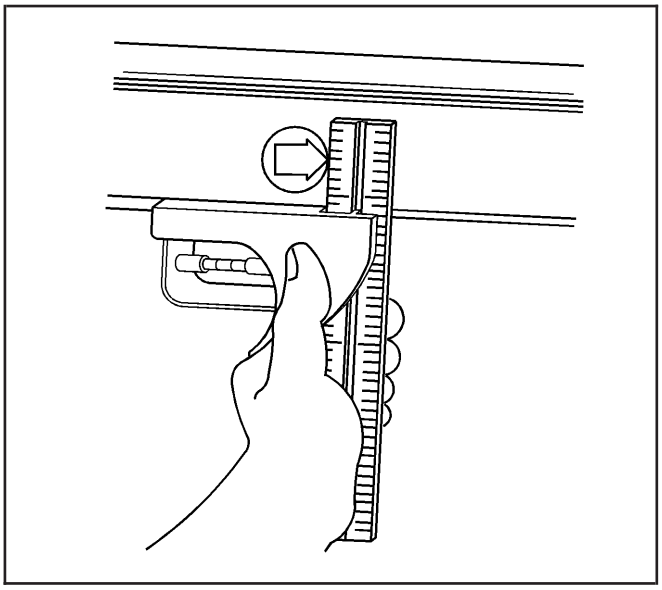
6. Locate the die mark on the outer lower surface of the rear rail, rearward of the #5 bar.



876931

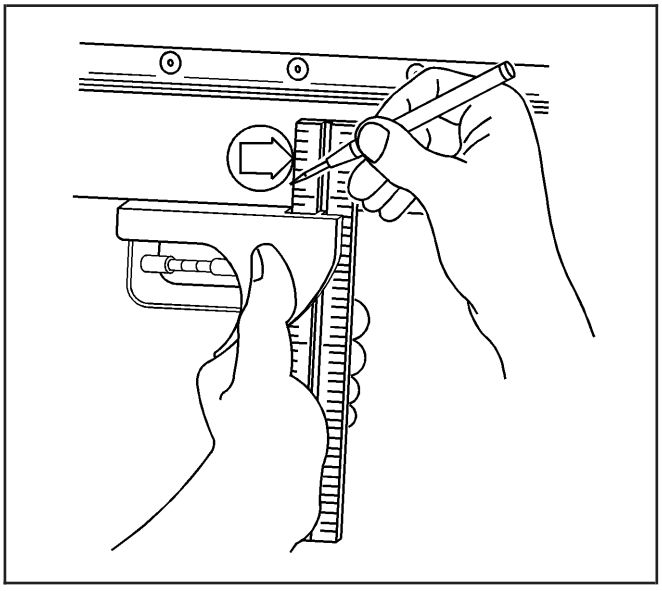
Important: Do not section the rail in any area other than the die mark location given.

7. Align a sliding square or similar tool to the line at the tip of the arrow in the die mark. Scribe a line across the rail.

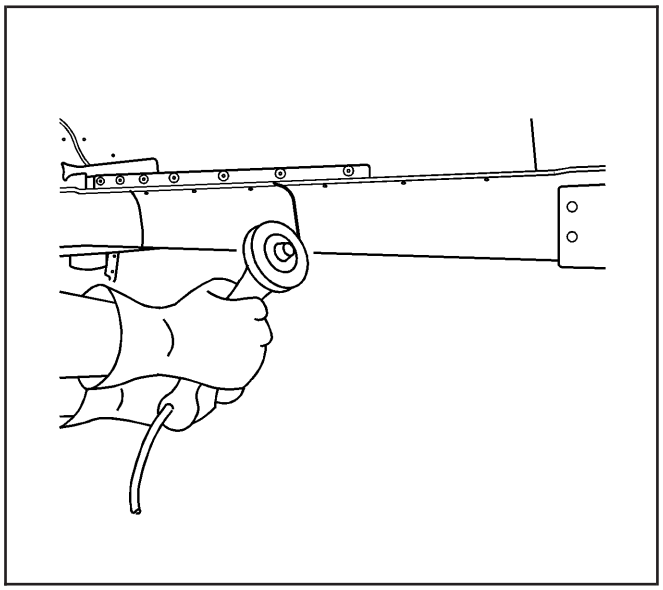


872755

8. Use the same tool to transfer this scribed line onto the sides and the weld flanges of the rail.

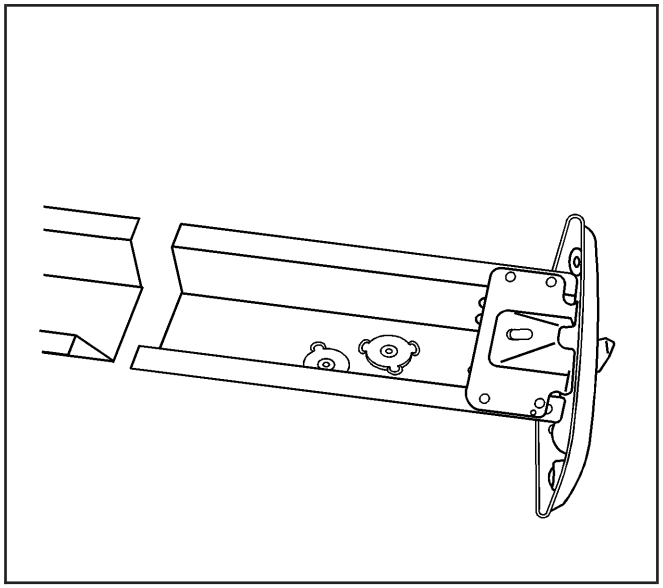


872758



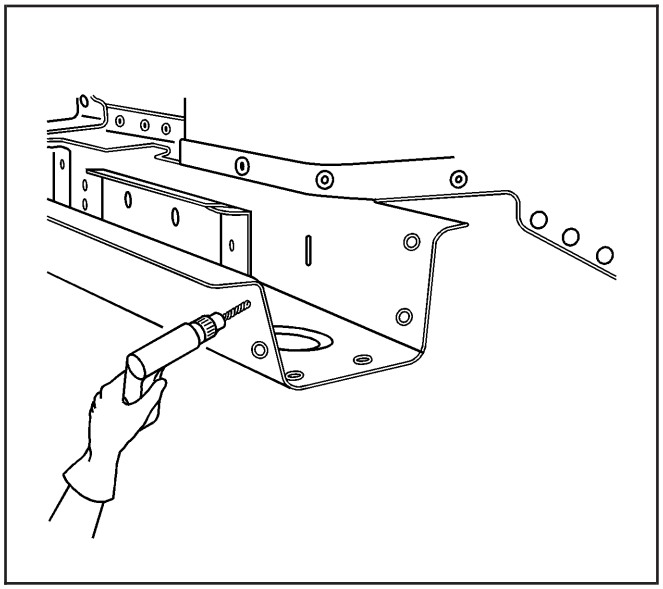
872761

9. Cut at the marked location.



872770

10. Remove the damaged component from the vehicle.

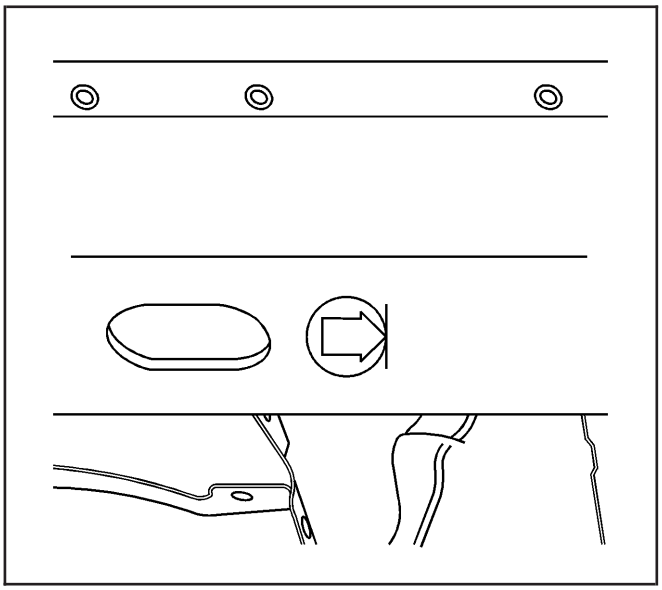


882100

11. Drill 2 8 mm (5/16 in) plug weld holes on each of the 3 sides of the rear rail. Position the center of the holes 10 mm (3/8 in) from the cut edge.

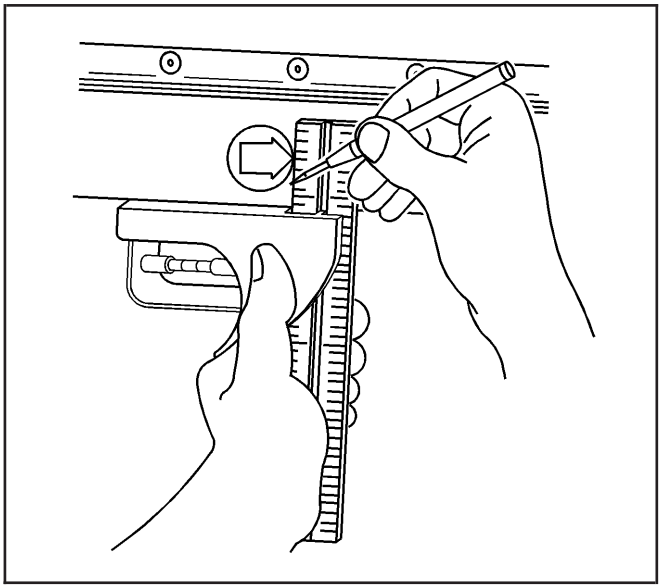
Installation Procedure

1. Locate the die marks on the service part rear rail.



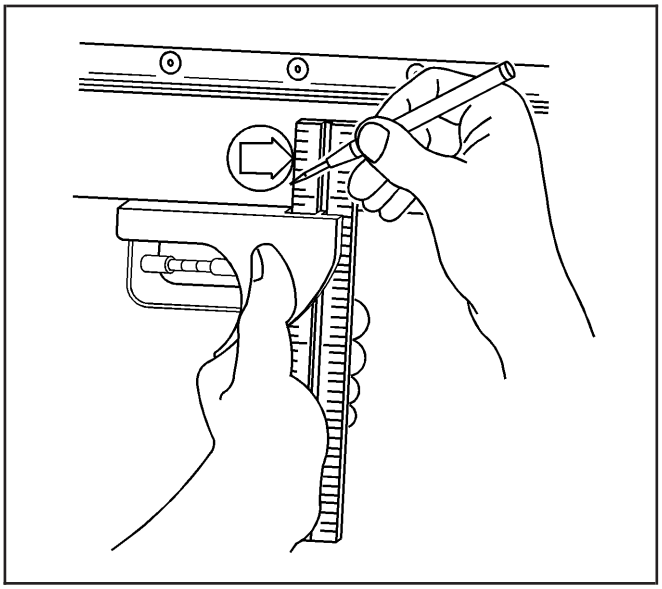
876931

2. Align a sliding square or similar tool to the line at the tip of the arrow in the die mark and scribe a line across the rail.

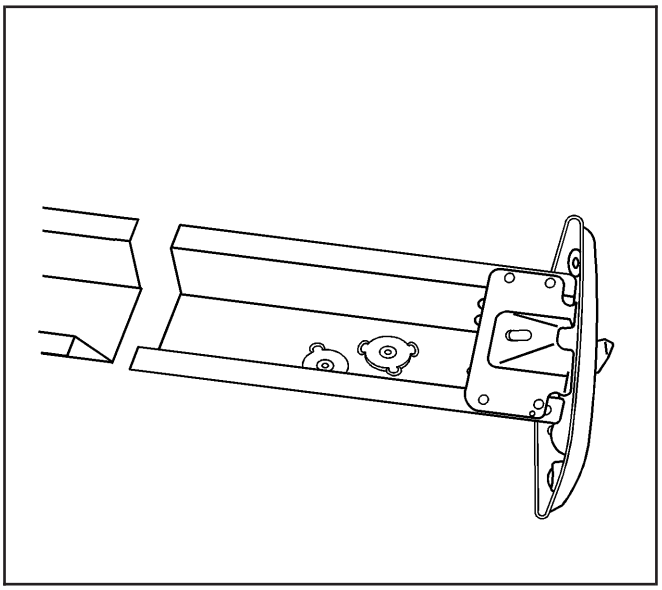


872758

3. Use the same tool to transfer this scribed line onto the sides and the weld flanges of the rail.
4. Place a mark forward, towards the rear of the arrow, 25 mm (1 in) from the scribed line on all 3 sides of the service rail.
5. Use the tool to scribe a line on all 3 sides and weld flanges of the rail.
6. Cut at the scribe line at the rear of the arrow.

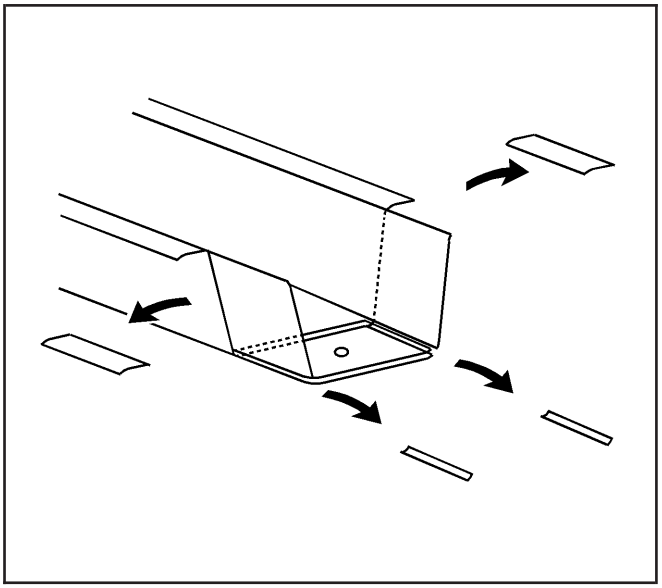


872758



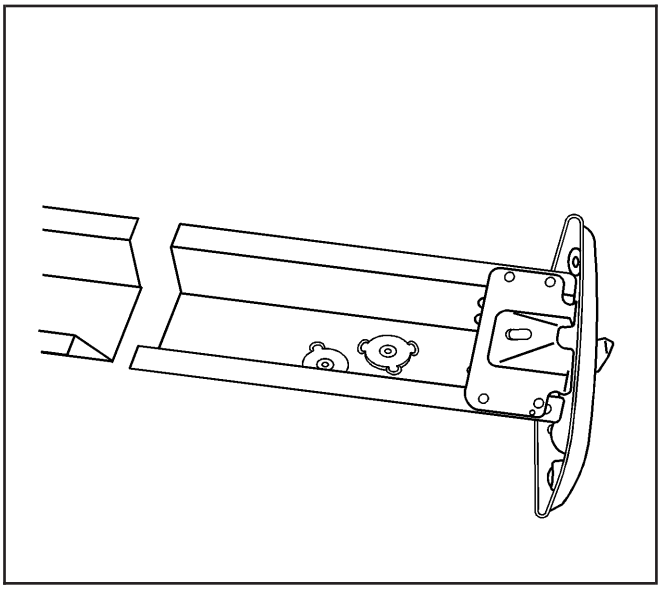
872770

7. Remove the rear portion of the rail.



872763

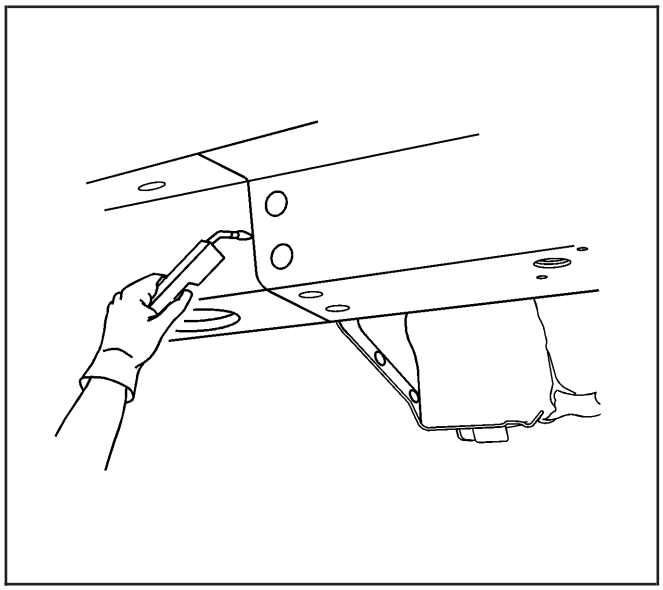
8. Cut the upper outer flanges of the rear portion of the rear rail service part. Cut the flanges back to the first scribe line and remove the tabs.
9. Cut the lower radius corners of the service part back to the first scribe line and remove the small corners.
10. Bend the bottom side of the service part at the sectioning location inward slightly by aligning a vice grip flanging tool or similar tool at the first scribed line.
11. Prepare the sectioning area of the rear rail for welding.
12. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



872770

13. Position the rear rail section using 3-dimensional measuring equipment. Clamp the rail section in place.

14. Tack weld the part into position.
15. Inspect the service rear rail for proper dimensions, using 3-dimensional measuring equipment.
16. Plug weld at each 8 mm plug weld hole location.
17. Stitch weld along the entire sectioning joint. Make welds along the seam with 25 mm (1 in) gaps between. Weld the gaps.
18. Clean and prepare the welded surfaces.
19. Install all of the related panels and components.
20. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
21. Paint the repaired area.
22. Enable the SIR system.
23. Connect the negative battery cable.



876961

Rail Underbody Gusset Replacement - Rear

Removal Procedure

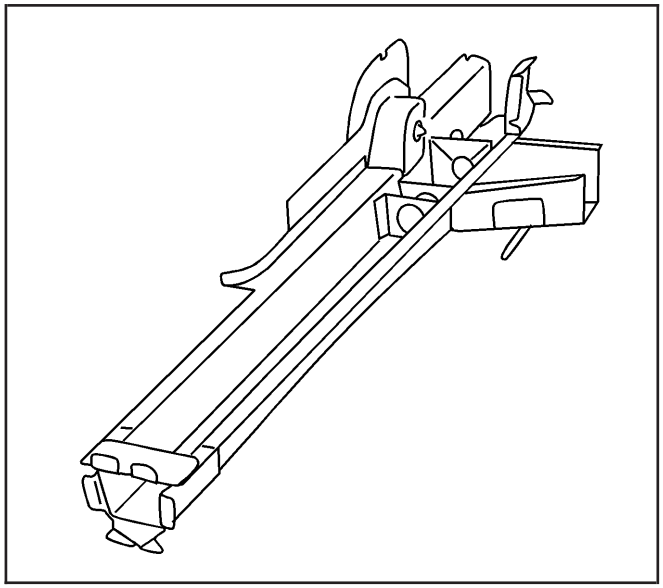
Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

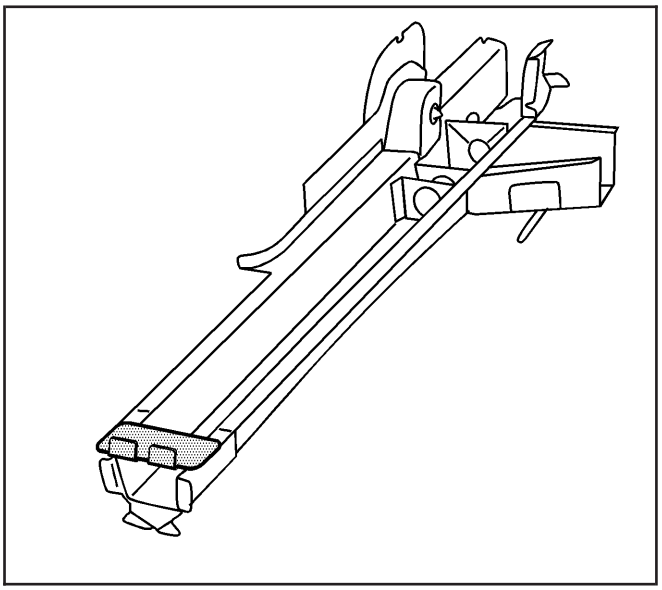
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.



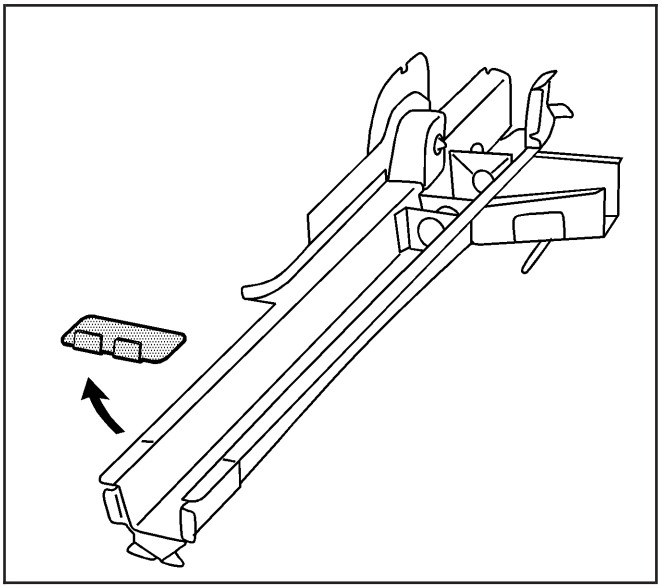
874146



874152

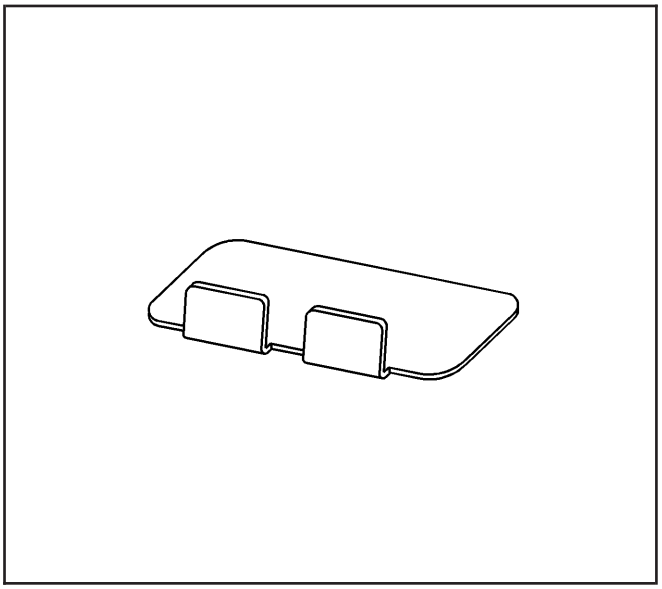
Important: Note the number and location of the factory welds for installation of the underbody gusset to the rear rail.

6. Locate and drill out all the necessary factory welds.



874156

7. Remove the underbody gusset from the rear rail.



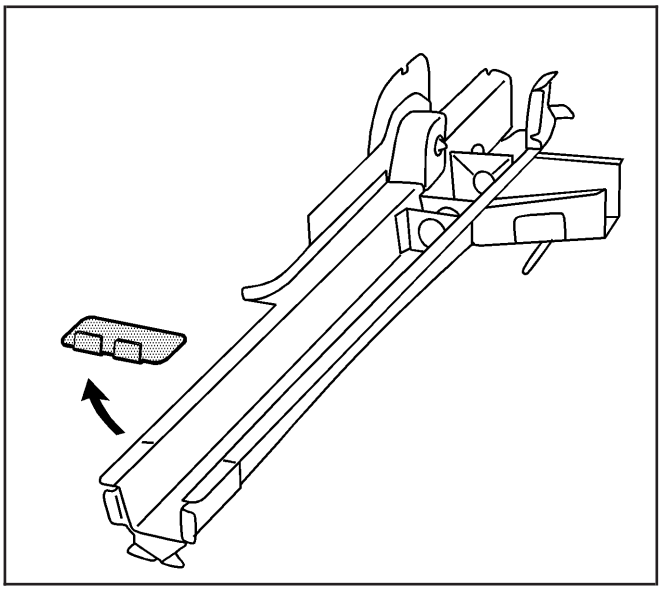
874149

Installation Procedure

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

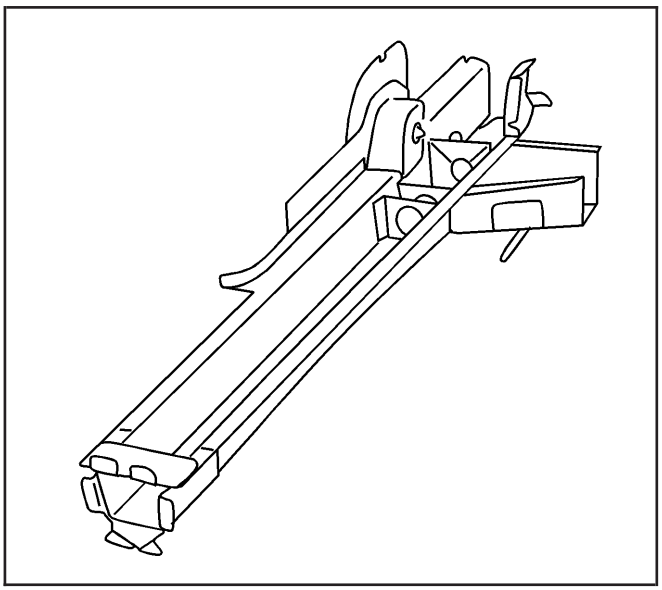
1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.

4. Position the underbody gusset to the rear rail.



874156

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



874146

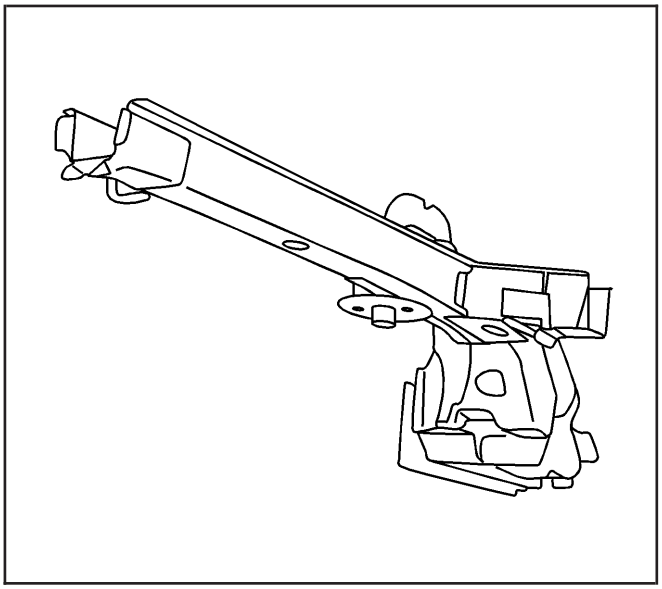
Rail Underbody Reinforcement Replacement - Rear

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: Refer to SIR Caution on page 1-1 in General Information.

1. Disable the SIR system.



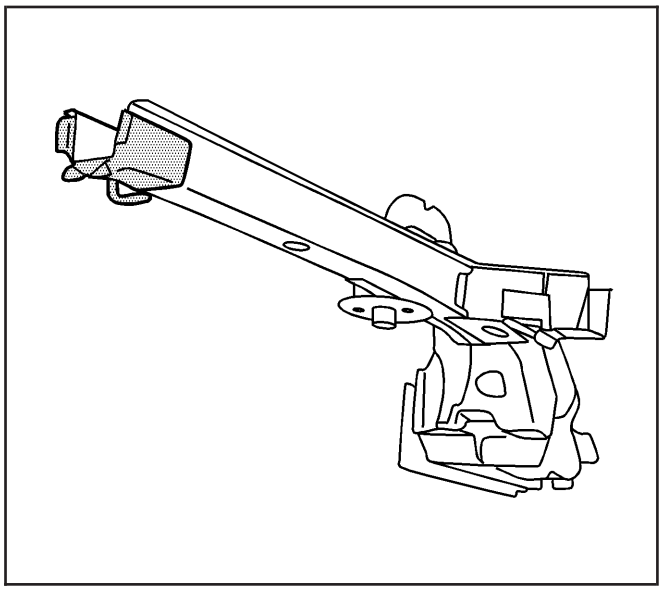
874158

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

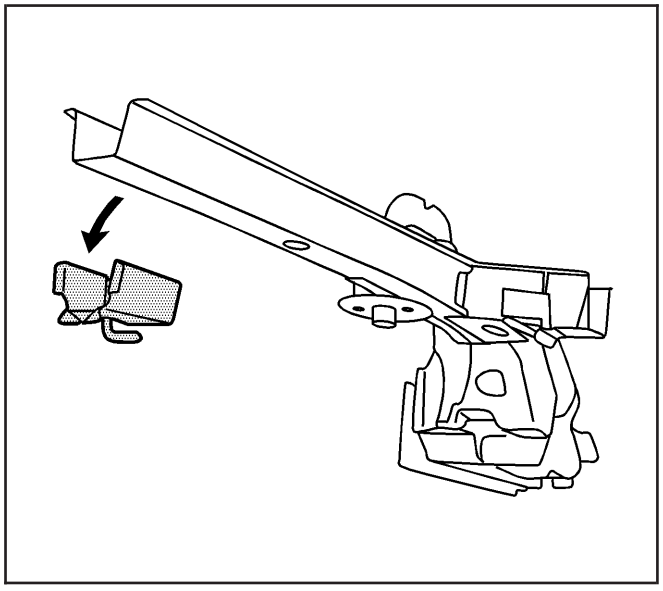
Important: Note the number and location of the factory welds for installation of the underbody reinforcement of the rear rail.

6. Locate and drill out all the necessary factory welds.



874161

7. Remove the underbody reinforcement of the rear rail.

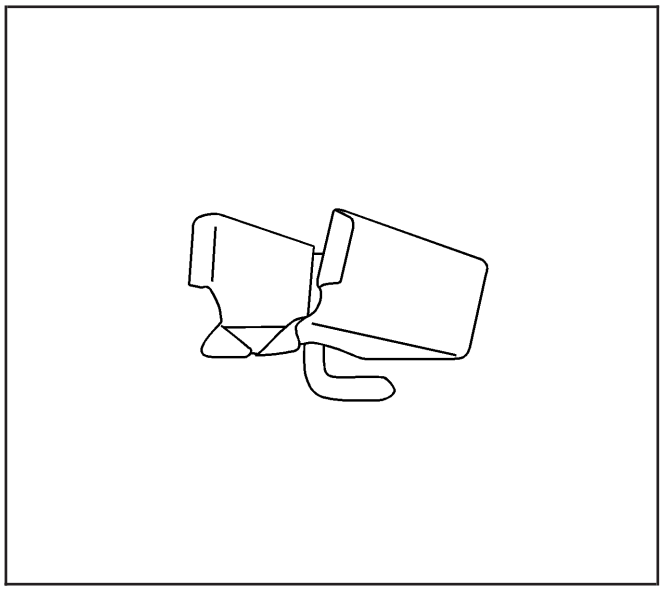


874164

Installation Procedure

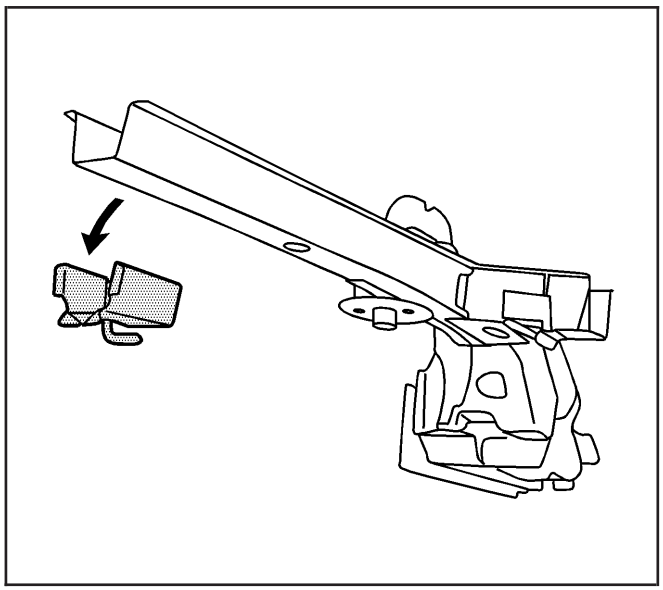
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.



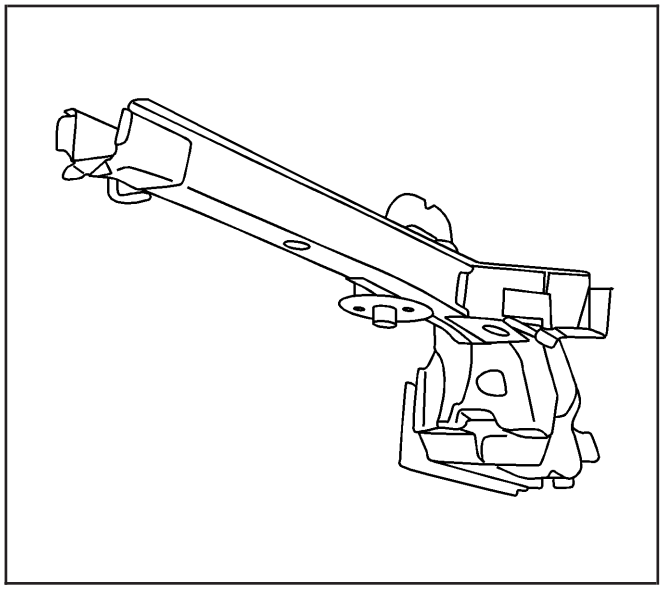
874160

4. Position the underbody reinforcement to the rear rail and clamp in place.

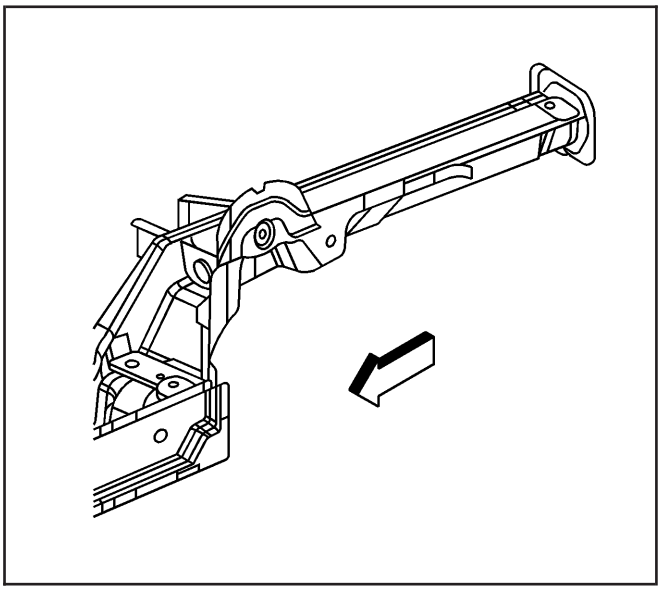


874164

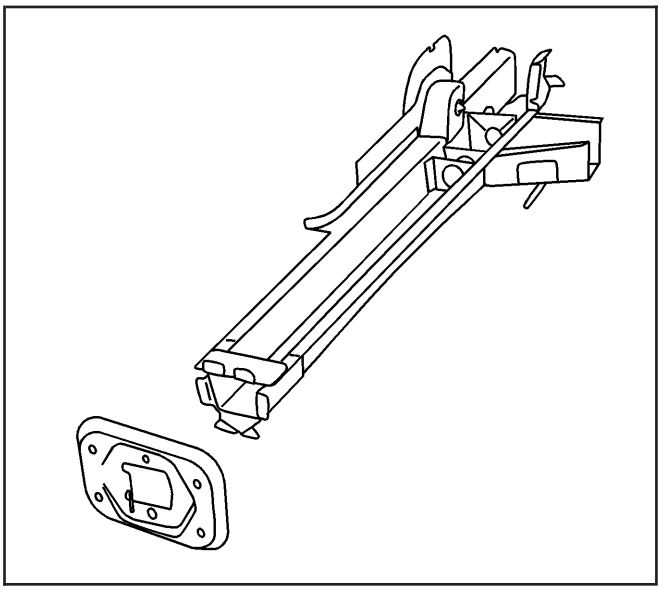
5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



874158



874137



874140

Impact Bar Anchor Plate Replacement - Rear Bumper

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

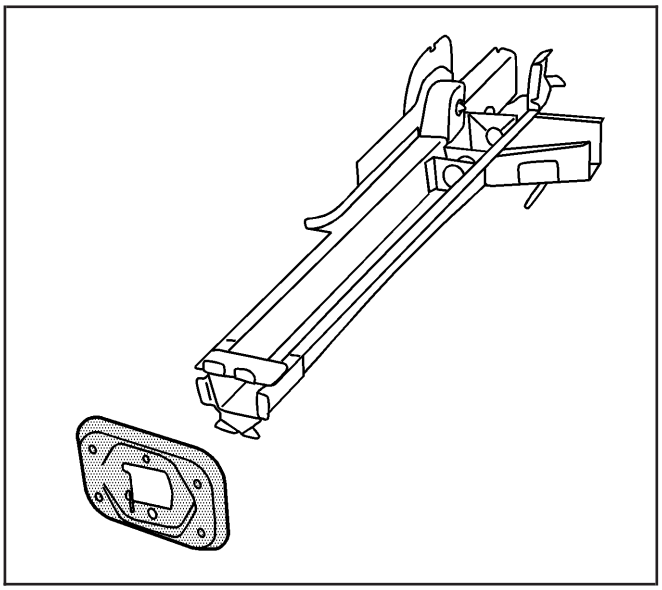
Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

1. Disable the SIR system.
2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

Important: Note the number and location of the factory welds for installation of the anchor plate.

6. Locate and drill out all the necessary factory welds.

7. Remove the anchor plate.

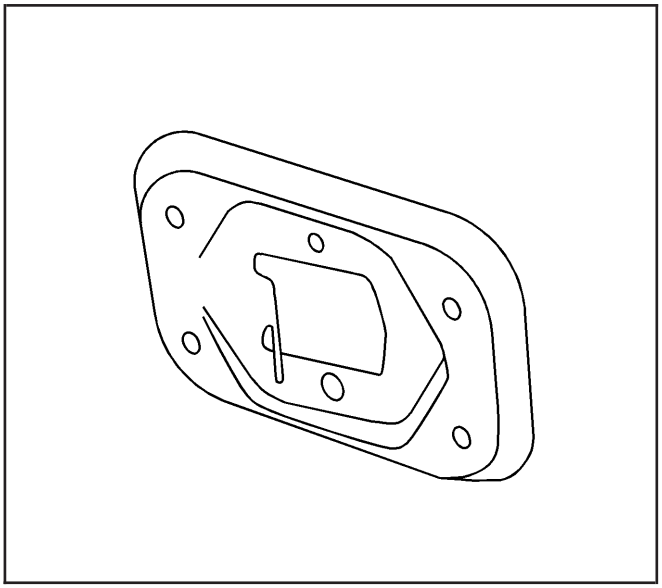


874142

Installation Procedure

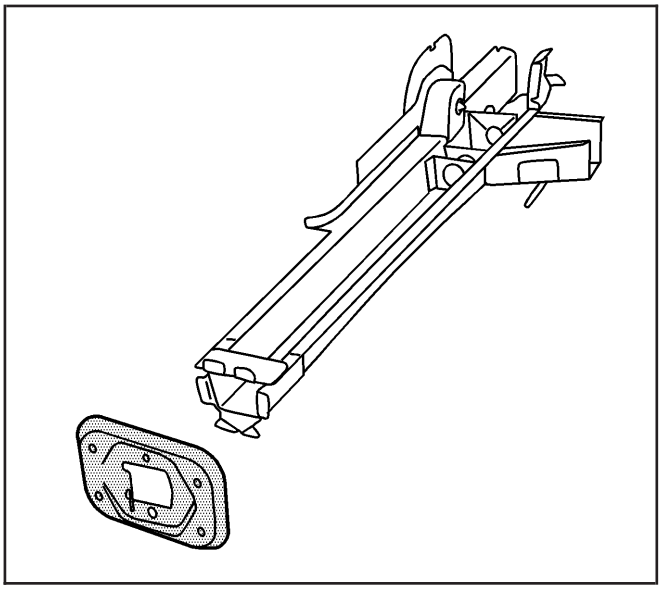
Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ in) apart.

1. Drill 8 mm (5/16 in) plug weld holes in the service part as necessary in the corresponding locations noted on the original panel.
2. Prepare all mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.

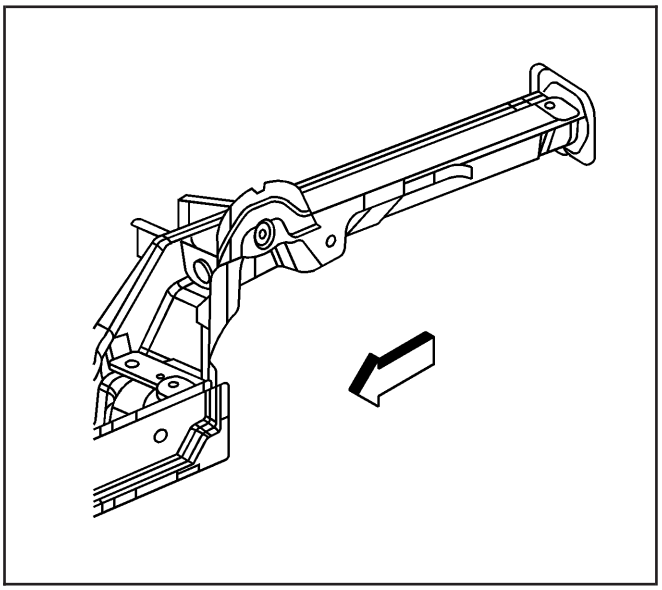


874127

4. Position the anchor plate to the rear rail.

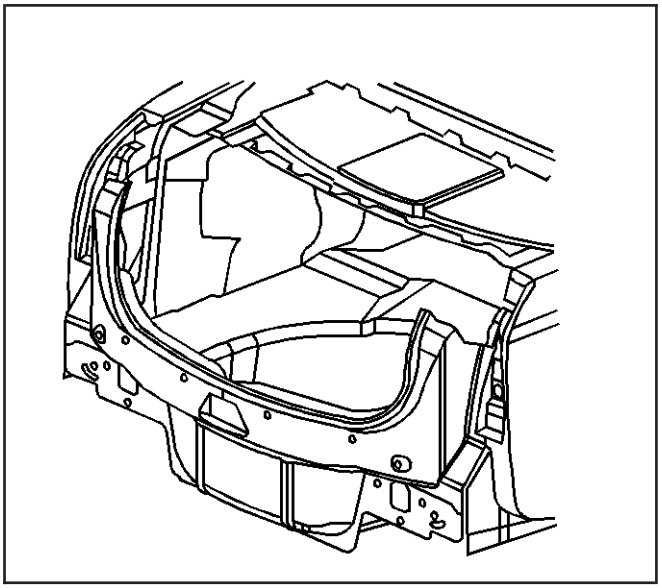


874142



874137

5. Plug weld accordingly.
6. Clean and prepare all of the welded surfaces.
7. Install all of the related panels and components.
8. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
9. Paint the repaired area.
10. Connect the negative battery cable.
11. Enable the SIR system.



789109

Body Rear End Panel Replacement

This repair procedure gives you the option of using an installation procedure for either metal-inert gas (MIG) welding or adhesive bonding.

Removal Procedure

Caution: To avoid personal injury when exposed to welding flashes or to galvanized (Zinc Oxide) metal toxic fumes while grinding/cutting on any type of metal or sheet molded compound, you must work in a properly ventilated area, wearing an approved respirator, eye protection, earplugs, welding gloves, and protective clothing.

Caution: When performing service on or near the SIR components or the SIR wiring, the SIR system must be disabled. Refer to SIR Disabling and Enabling Zones. Failure to observe the correct procedure could cause deployment of the SIR components, personal injury, or unnecessary SIR system repairs.

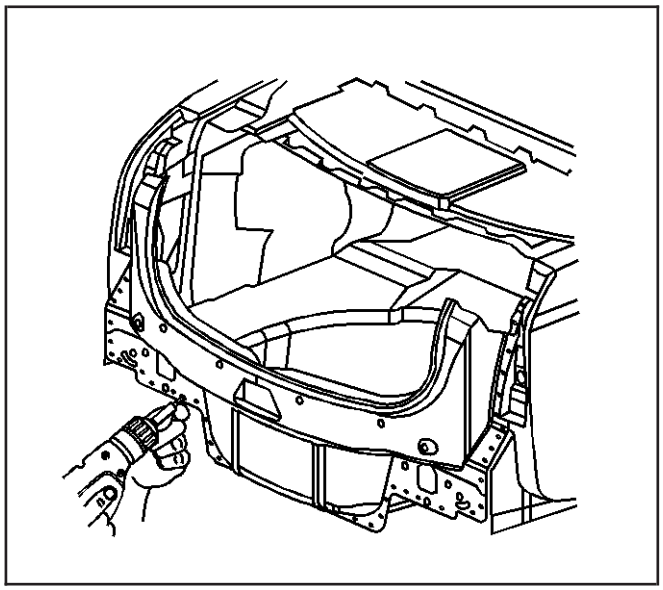
1. Disable the SIR system.

Caution: Before servicing any electrical component, the ignition key must be in the OFF or LOCK position and all electrical loads must be OFF, unless instructed otherwise in these procedures. If a tool or equipment could easily come in contact with a live exposed electrical terminal, also disconnect the negative battery cable. Failure to follow these precautions may cause personal injury and/or damage to the vehicle or its components.

2. Disconnect the negative battery cable.
3. Remove all related panels and components.
4. Repair as much of the damage as possible. Refer to *Dimensions - Body on page 3-7*.
5. Remove the sealers and anti-corrosion materials from the repair area, as necessary.

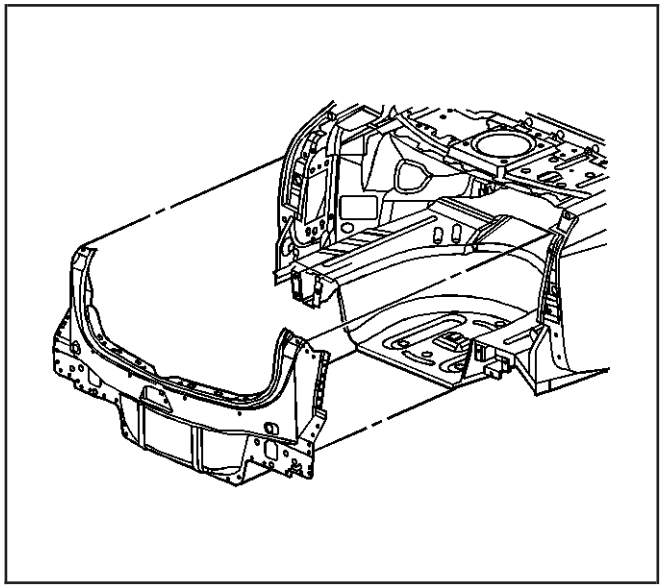
Important: Note the number and location of the factory welds for installation of the rear end panel.

6. Locate and drill out all the necessary factory welds.



789111

7. Remove the rear end panel.

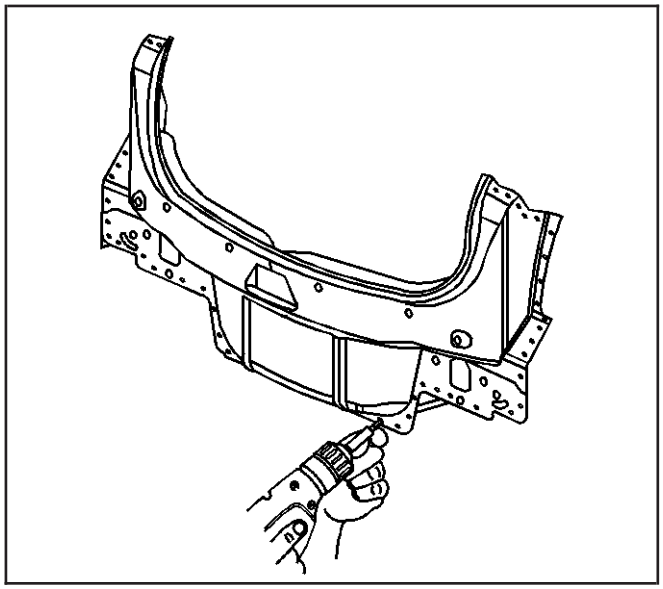


789112

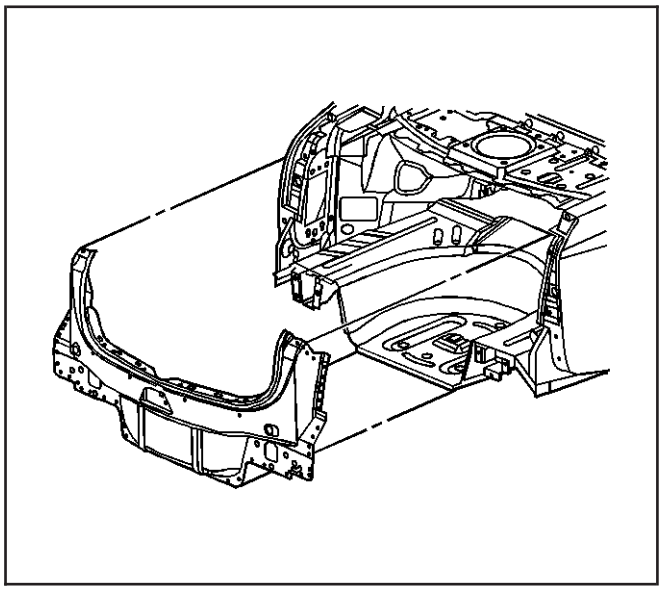
Installation Procedure (Metal-Inert Gas (MIG) Welding)

Important: If the location of the original plug weld holes can not be determined, space the plug weld holes every 40 mm (1½ 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 mating surfaces as necessary.
3. Apply 3M® Weld-Thru coating P/N 05916 or equivalent to all mating surfaces.

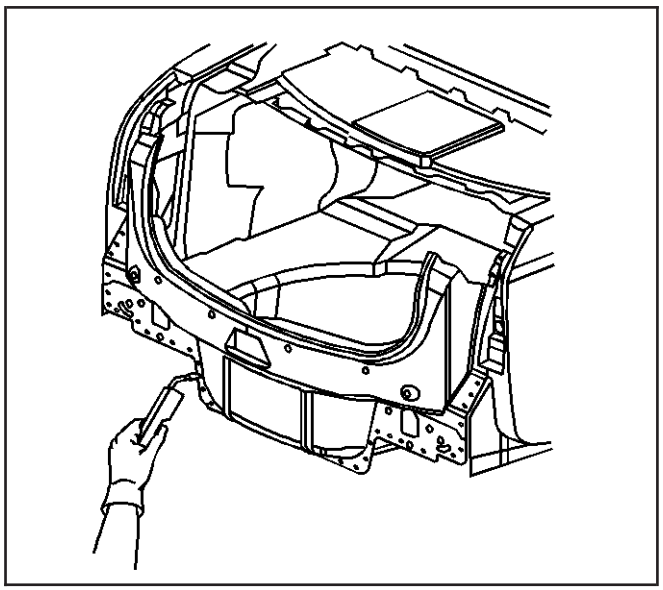


789114



789112

4. Position the rear end panel on the vehicle. Use 3-dimensional measuring equipment to inspect the panel.
5. Clamp the panel in place.

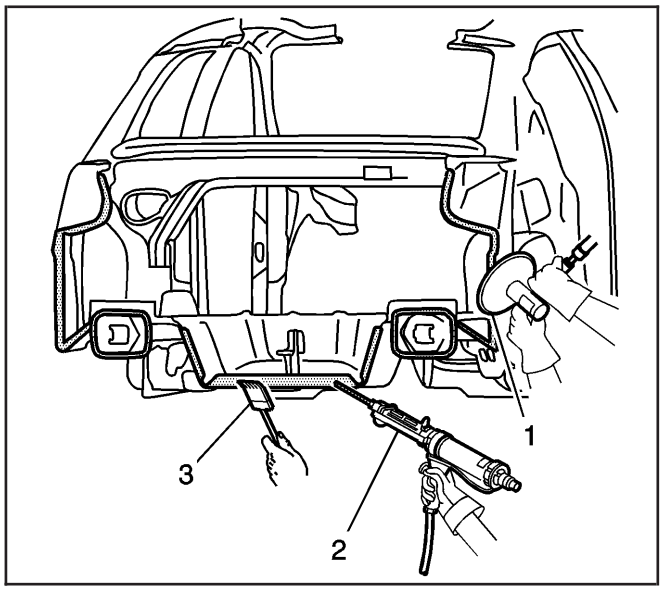


789116

6. Plug weld accordingly.
7. Clean and prepare all of the welded surfaces.
8. Install all of the related panels and components.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
10. Paint the repaired area.
11. Connect the negative battery cable.
12. Enable the SIR system.

Installation Procedure (Adhesive Bonding)

1. Grind the surface of the body mating flanges (1) to bare steel.

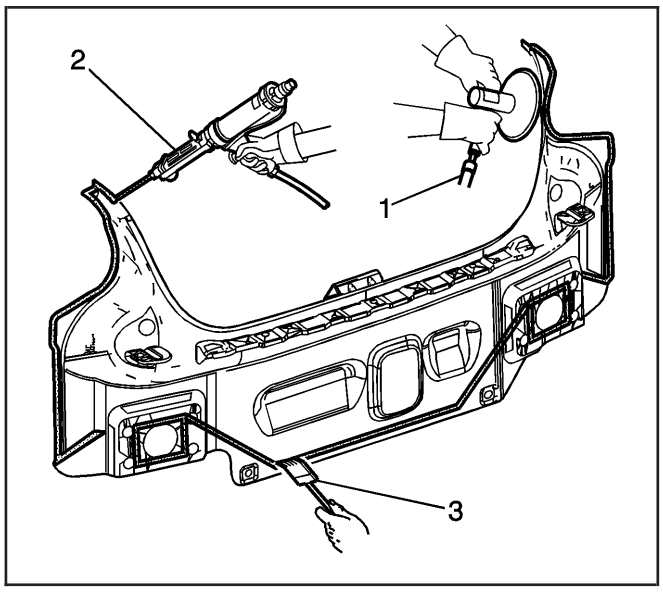


884474

2. Grind the body rear end panel mating flanges (1) to remove the E-coating. Take care not to damage the corners or thin the metal during the grinding operation.
3. Clean the mating surfaces.

Important: The adhesive has a working time of 40–50 minutes. Do not allow the adhesive to totally cure off the vehicle, as proper alignment of the panel to the body will be difficult.

4. Apply a bead of metal panel bonding adhesive (2) GM P/N 12378566/7 (Canadian P/N 88901674/5) or equivalent to a thickness of 3–6 mm (1/8 to 1/4 in), to both of the mating surfaces.
5. Using a small acid brush (3), spread a coat of adhesive to cover all the bare metal surfaces to ensure corrosion protection.



874302

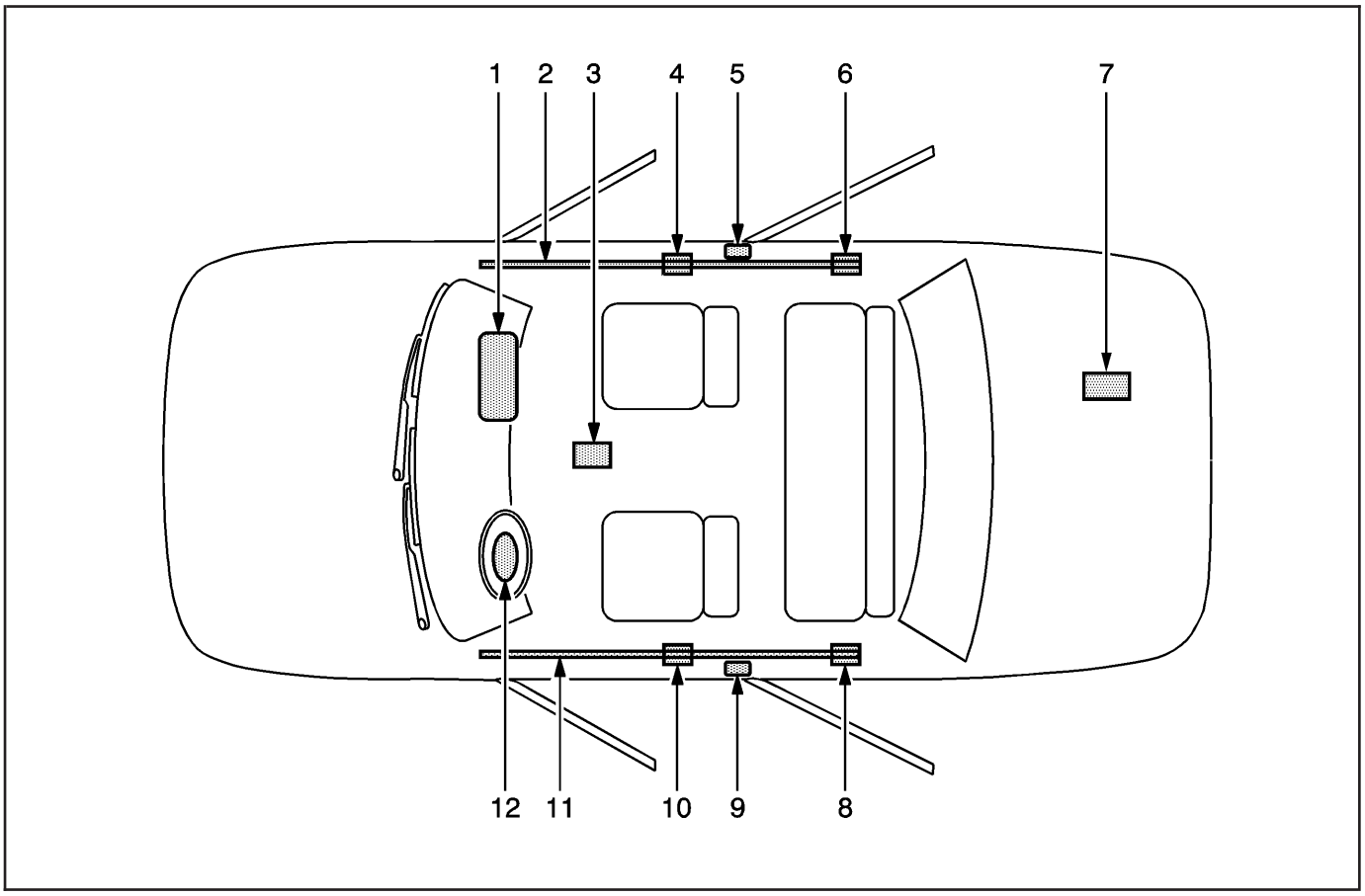
Important: Do NOT pull the panels apart after joined together. Slide the panels against each other to realign the panels.

6. Install the body rear end panel to the vehicle.
7. Clamp the body rear end panel into position as required.
8. Using lacquer thinner remove the excess adhesive from the panel area.
9. Apply the sealers and anti-corrosion materials to the repair area, as necessary.
10. Paint the repair area.
11. Install all related panels and components.
12. Connect the negative battery cable.
13. Enable the SIR system.

Component Locator

SIR Zone Identification Views

The SIR Zone Identification Views shown below illustrate the approximate location of all SIR components available for the vehicle. This will assist in determining the appropriate SIR Disabling and Enabling Zones for a given service procedure.



894507

Legend

(1) I/P Air Bag–Located at the top right under the instrument panel
(2) Right Roof Rail Air Bag–Located under the headliner, extending from the passenger front windshield pillar to the passenger rear windshield pillar
(3) Sensing and Diagnostic Module (SDM)–Located underneath the vehicle carpet under the center console
(4) Seat Belt Pretensioner–Located behind the center pillar under the headliner
(5) Side Impact Sensor (SIS)–Located under the center pillar trim near the bottom
(6) Inflator Module for Right Roof Rail Air Bag–Located behind the garnish molding under the upper lock pillar
(7) Vehicle Battery–Located under the hood on the right side
(8) Inflator Module for Left Roof Rail Air Bag–Located behind garnish molding under the upper lock pillar
(9) Side Impact Sensor (SIS)–Located under the center pillar trim near the bottom on the Sedan and located in the door on the Coupe
(10) Seat Belt Pretensioner–Located behind the center pillar under the headliner
(11) Left Roof Rail Air Bag–Located under the headliner, extending from the driver front windshield pillar to the driver rear windshield pillar
(12) Steering Wheel Air Bag–Located on the steering wheel

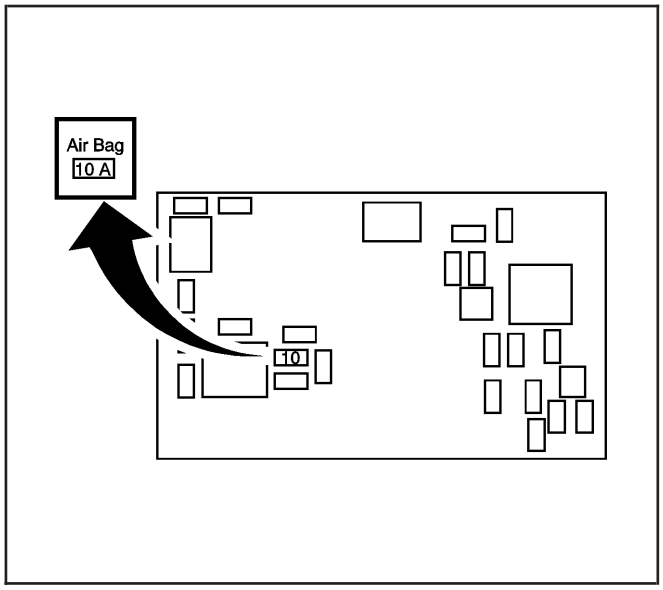
SIR Disabling and Enabling
Zone 2 (Coupe)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center then remove fuse center cover.

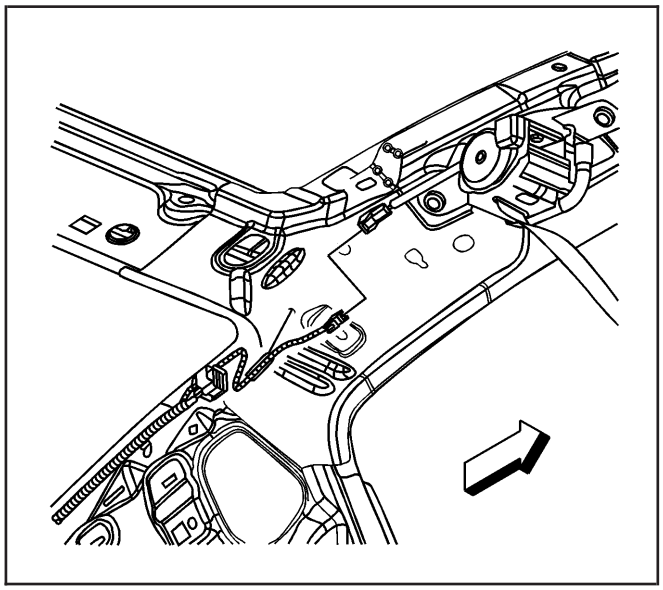
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.

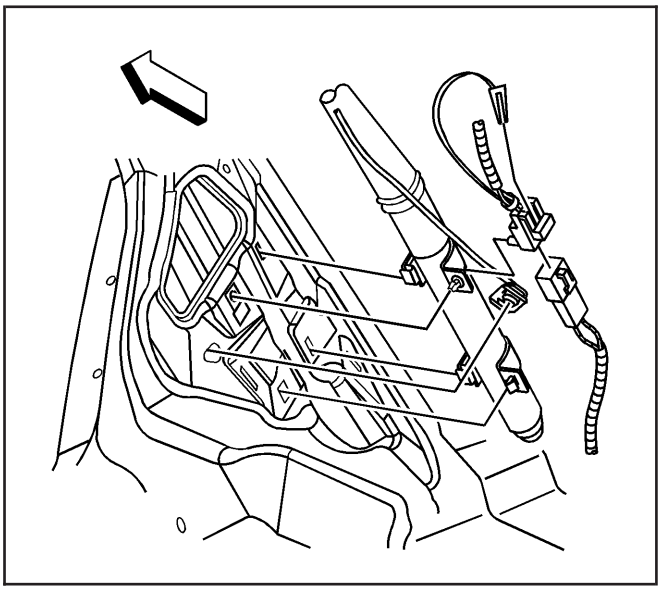


893538

6. Remove the coat hooks.
7. Remove the trim panel from the high mount stop lamp by pulling at the clip locations.
8. Gently pull back on the headliner to access the left pretensioner connector.
9. Remove the connector position assurance (CPA) from the left/driver pretensioner.
10. Disconnect the left pretensioner connector.

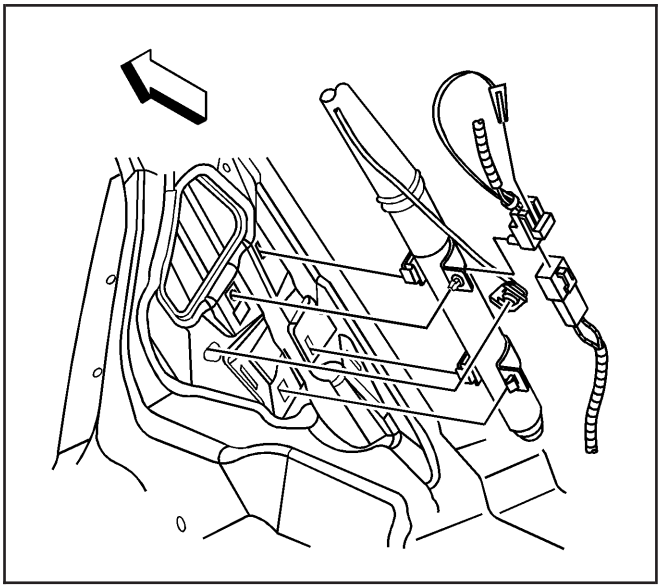


899819



899820

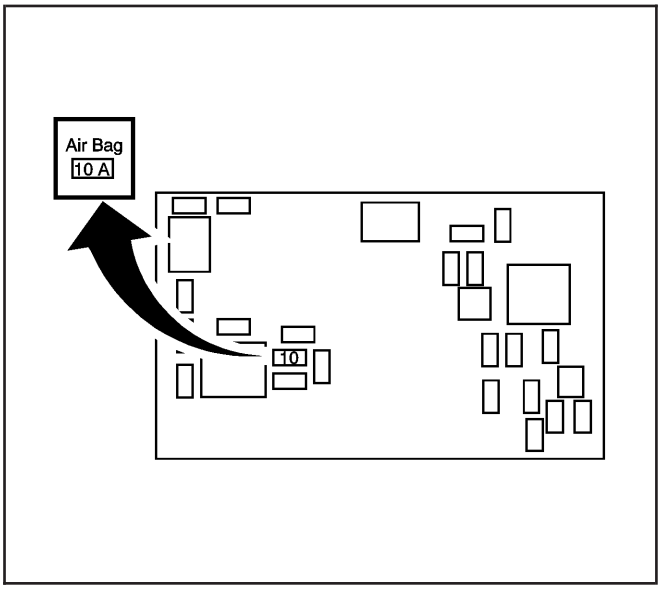
11. Remove the garnish molding from the upper lock pillar.
12. Remove the connector position assurance (CPA) from the left/driver roof rail module connector.
13. Disconnect the left roof rail module yellow connector from the vehicle harness yellow connector.



899820

Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the left roof rail module yellow connector to the vehicle harness yellow connector.
3. Install the connector position assurance (CPA) to the left/driver roof rail module connector.
4. Install garnish molding to the upper lock pillar.
5. Gently pull back on the headliner to access the left pretensioner.
6. Connect the left pretensioner connector and install the connector position assurance (CPA).
7. Install the trim panel to the high mount stop lamp.
8. Install the coat hooks.



893538

9. Install the AIR BAG fuse into the body control module fuse center.
10. Install the body control module fuse center cover.
11. Use caution while reaching in and turn the ignition switch to the ON position.

    The AIR BAG indicator will flash then turn OFF.
12. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.

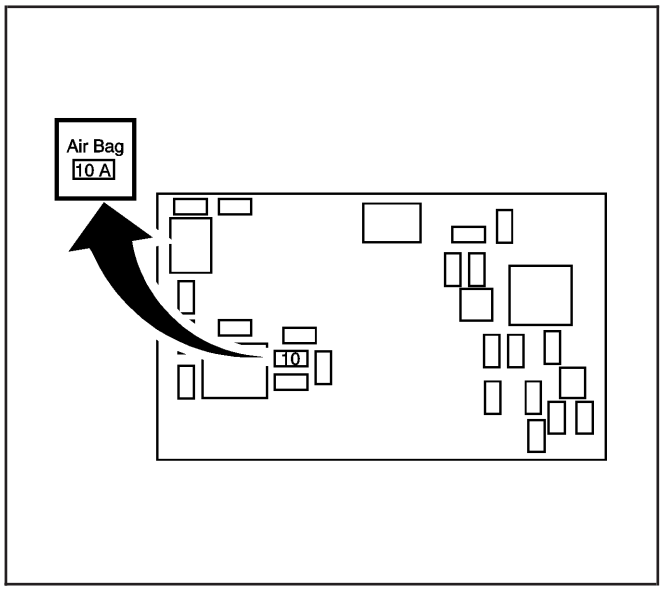
SIR Disabling and Enabling
Zone 2 (Sedan)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center then remove fuse center cover.

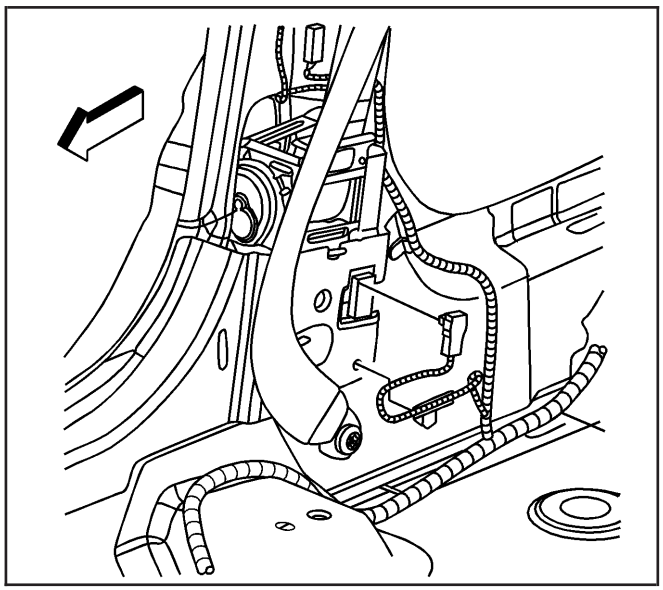
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.



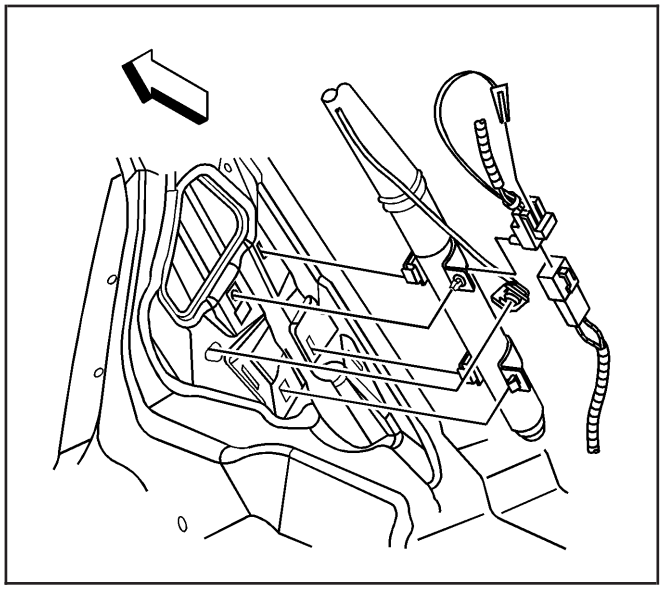
893538

6. Remove the lower center pillar.
7. Remove the connector position assurance (CPA) from the pretensioner.
8. Disconnect the left pretensioner yellow connector from the vehicle harness yellow connector.
9. Remove the garnish molding from the upper lock pillar.

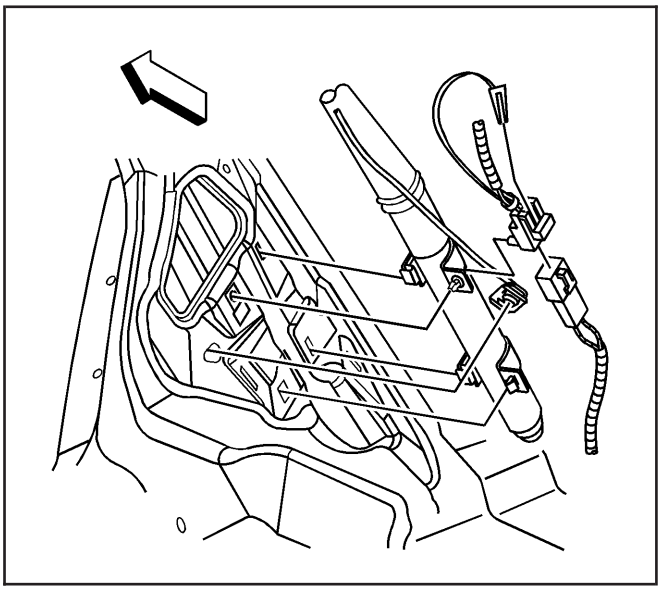


899818

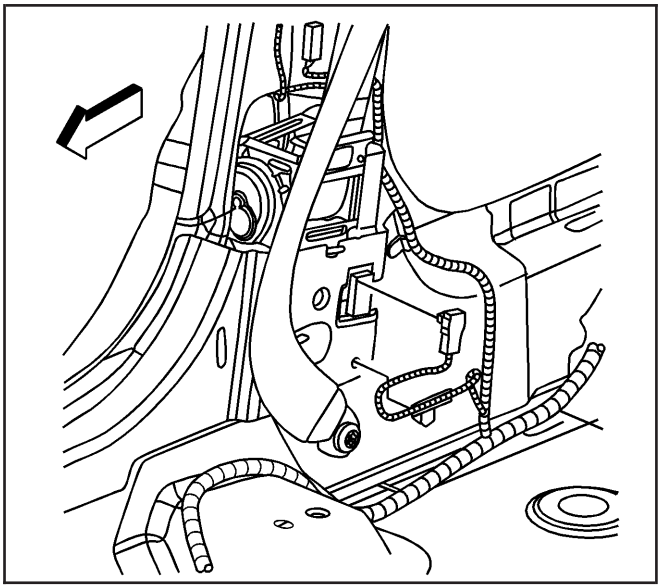
10. Remove the connector position assurance (CPA) from the left/driver roof rail module connector.
11. Disconnect the left roof rail module yellow connector from the vehicle harness yellow connector.



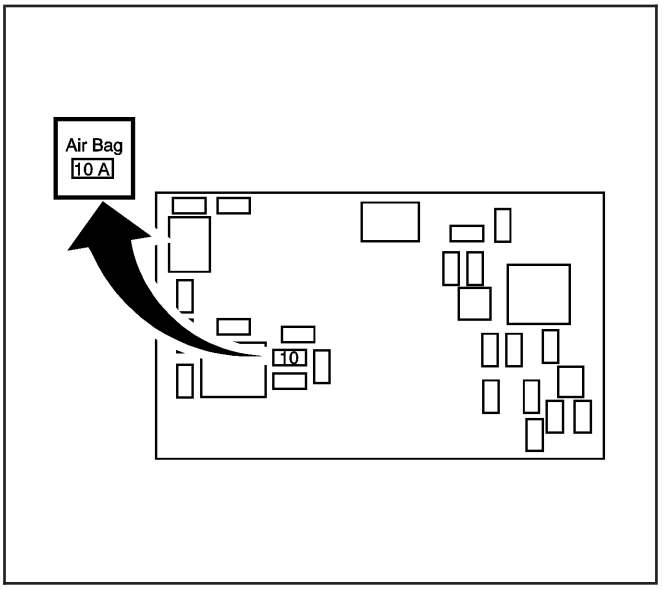
899820



899820



899818



893538

Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the left roof rail module yellow connector to the vehicle harness yellow connector.
3. Install the connector position assurance (CPA) to the left/driver roof rail module connector.
4. Install garnish molding to the upper lock pillar.
5. Connect the left pretensioner and install the connector position assurance (CPA).
6. Install the lower center pillar.
7. Install the AIR BAG fuse into the body control module fuse center.
8. Install the body control module fuse center cover.
9. Use caution while reaching in and turn the ignition switch to the ON position.

   The AIR BAG indicator will flash then turn OFF.
10. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.

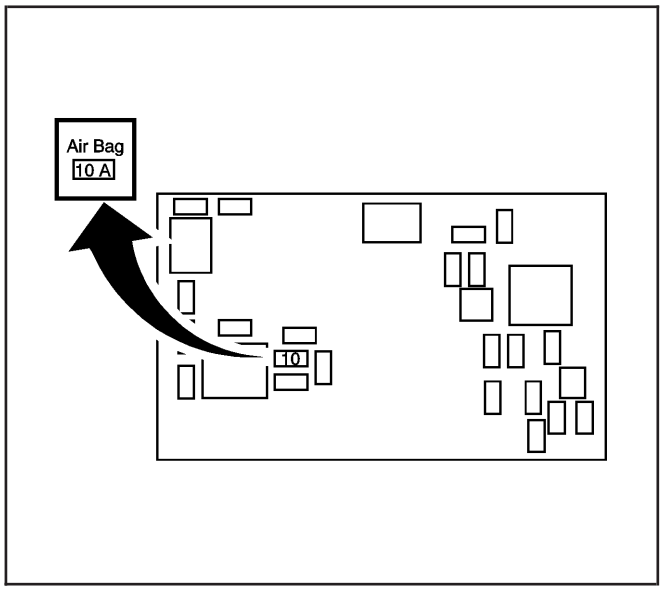
SIR Disabling and Enabling Zone 3

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center then remove the fuse center cover.

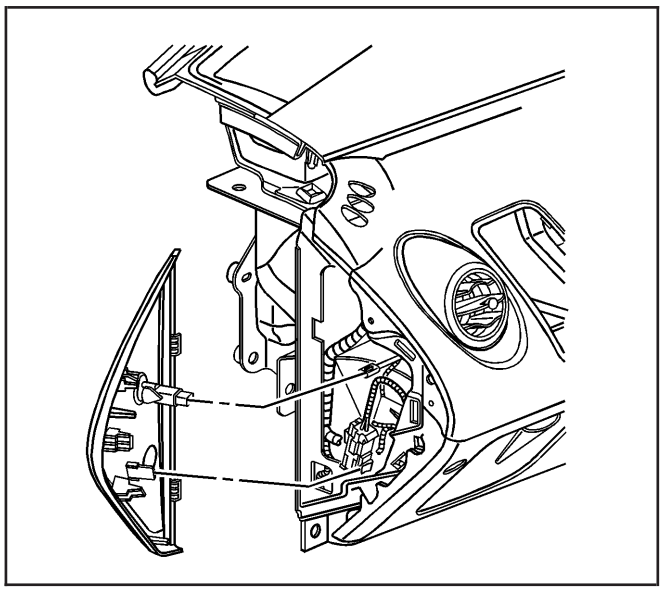
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.



893538

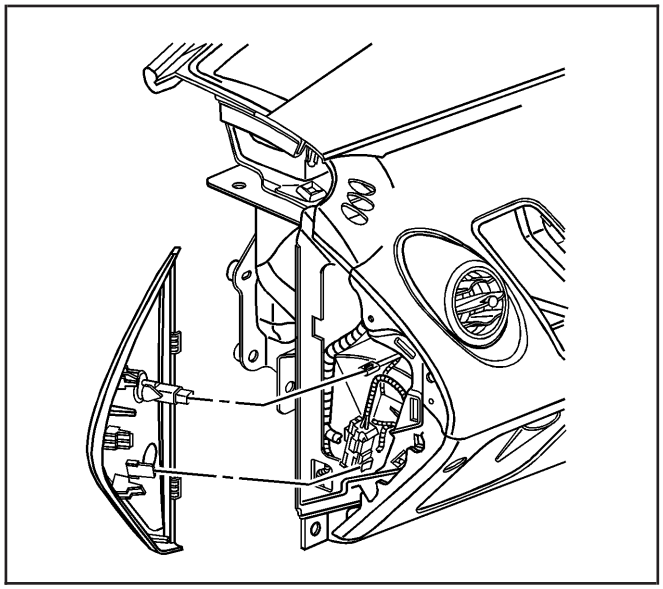
6. Remove the left/driver outer trim cover from the I/P.
7. Remove the connector position assurance (CPA) from the steering wheel module coil yellow connector (4–way).
8. Disconnect the steering wheel module coil yellow connector from the vehicle harness yellow connector.



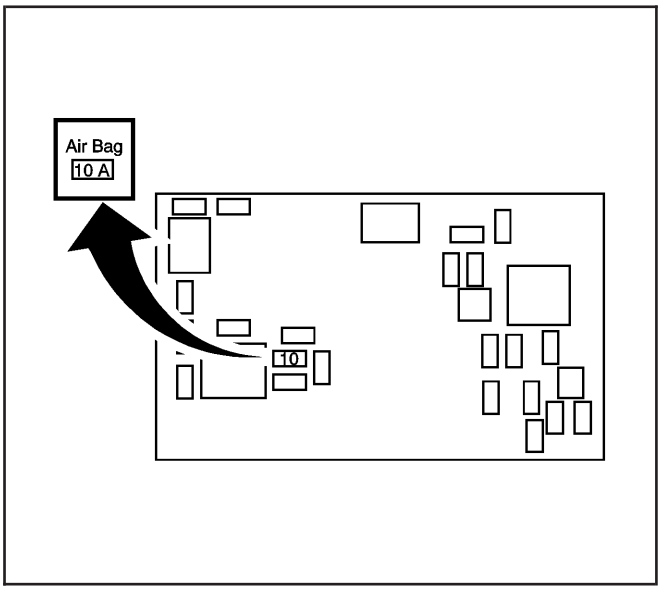
877766

Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the steering wheel module coil yellow connector (4–way) to the vehicle harness yellow connector.
3. Install the CPA to the steering wheel module coil yellow connector.
4. Install the left outer trim cover to the I/P.



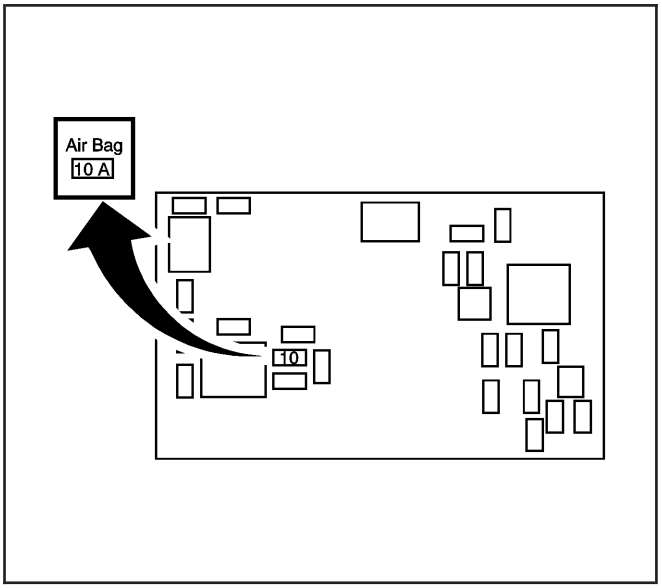
877766



893538

5. Install the AIR BAG fuse into the body control module fuse center.
6. Install the body control module fuse center cover.
7. Use caution while reaching in and turn the ignition switch to the ON position.

   The AIR BAG indicator will flash then turn OFF.
8. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.



893538

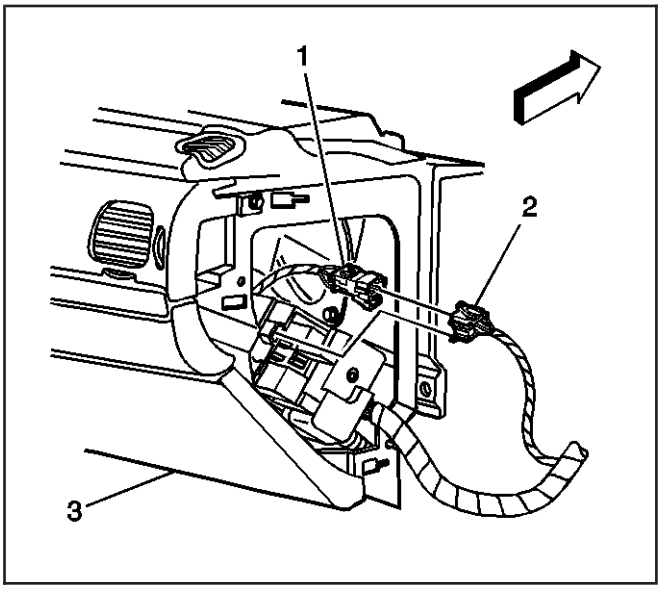
SIR Disabling and Enabling Zone 5

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center, then remove the fuse center cover.

Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.

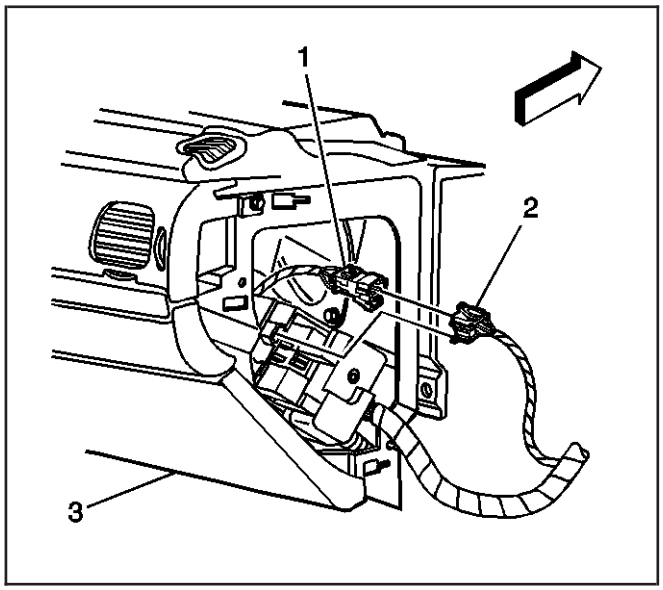


816857

6. Remove the right/passenger outer trim cover from the I/P (3).
7. Remove the connector position assurance (CPA) from the I/P module yellow connector (2).
8. Disconnect the I/P module yellow connector (1) (4-way) from the vehicle harness yellow connector (2).

Enabling Procedure

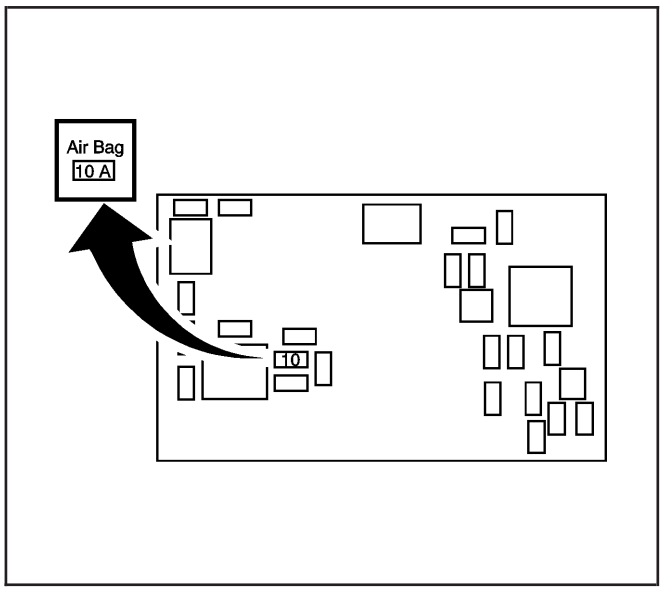
1. Remove the key from the ignition switch.
2. Connect the I/P module yellow connector (1) (4–way) to the vehicle harness yellow connector (2).
3. Install the CPA to the I/P module yellow connector (2).
4. Install the right outer trim cover to the I/P (3).



816857

5. Install the AIR BAG fuse into the body control module fuse center.
6. Install the body control module fuse center cover.
7. Use caution while reaching in and turn the ignition switch to the ON position.

   The AIR BAG indicator will flash then turn OFF.
8. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.

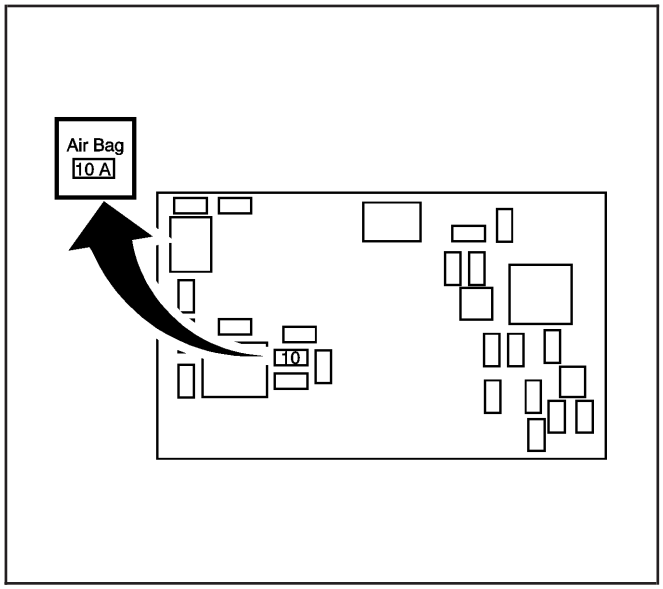


893538

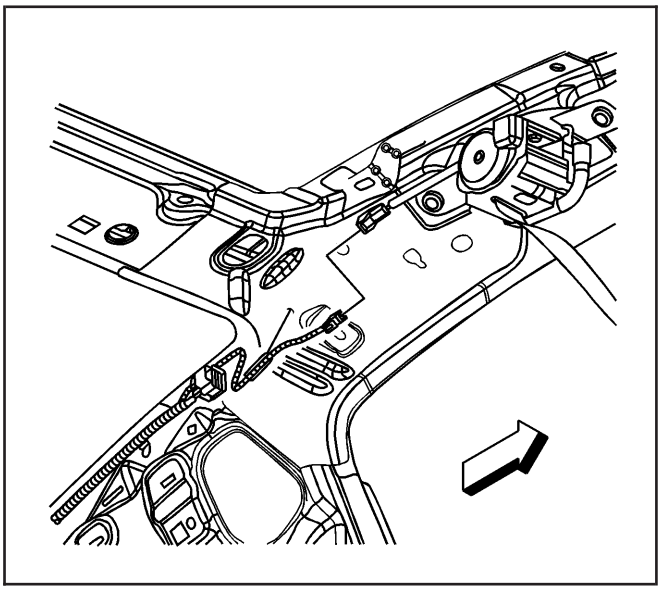
SIR Disabling and Enabling Zone 6 (Coupe)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center, then remove the fuse center cover.



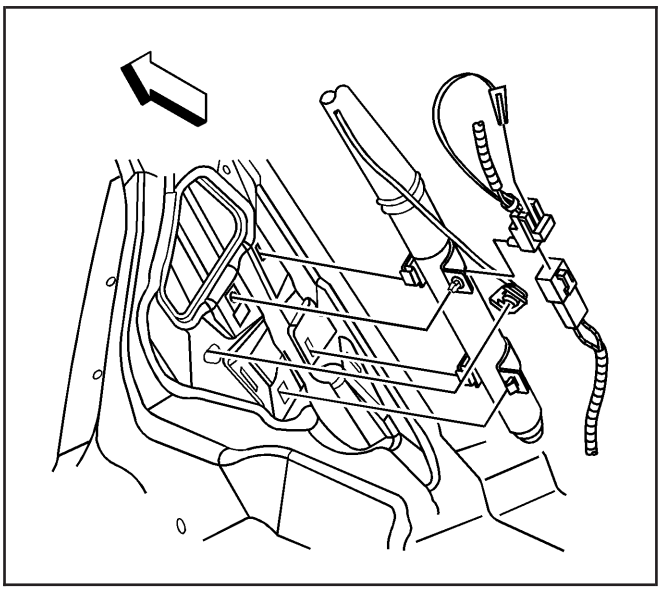
893538



899819

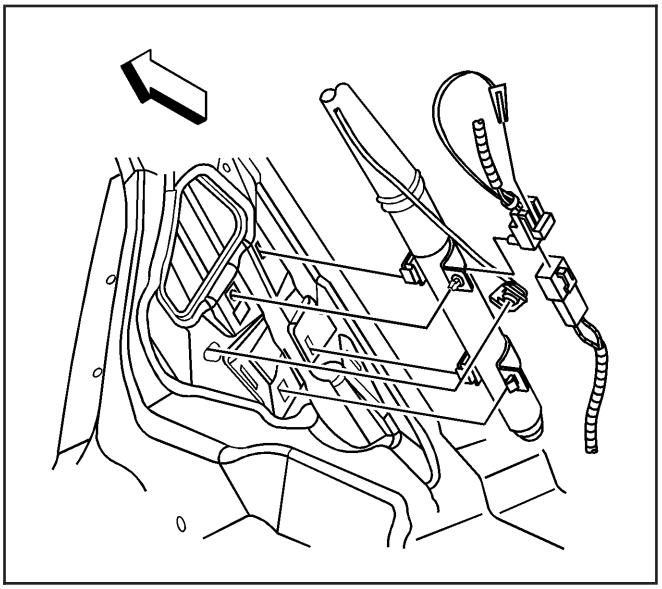
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.
6. Remove the coat hooks.
7. Remove the trim panel from the high mount stop lamp by pulling at the clip locations.
8. Gently pull back on the headliner to access the right pretensioner connector.
9. Remove the connector position assurance (CPA) from the right/passenger pretensioner connector.
10. Disconnect the right/passenger connector.
11. Remove the garnish molding from the upper lock pillar.



899820

12. Remove the connector position assurance (CPA) from the right/passenger roof rail module connector.
13. Disconnect the right roof rail module yellow connector from the vehicle harness yellow connector.

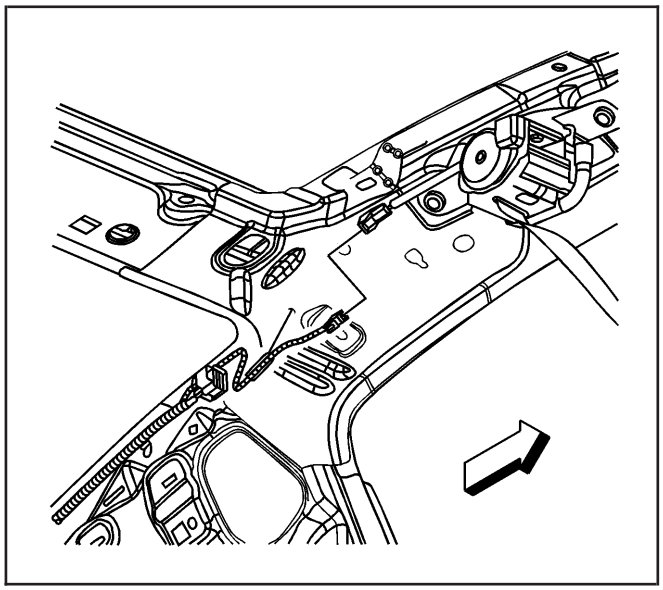


899820

Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the right roof rail module yellow connector to the vehicle harness yellow connector.
3. Install the CPA to the right roof rail module connector.
4. Install the garnish molding to the upper lock pillar.
5. Gently pull back on the headliner to access the right pretensioner.
6. Connect the right pretensioner connector and install the connector position assurance (CPA).

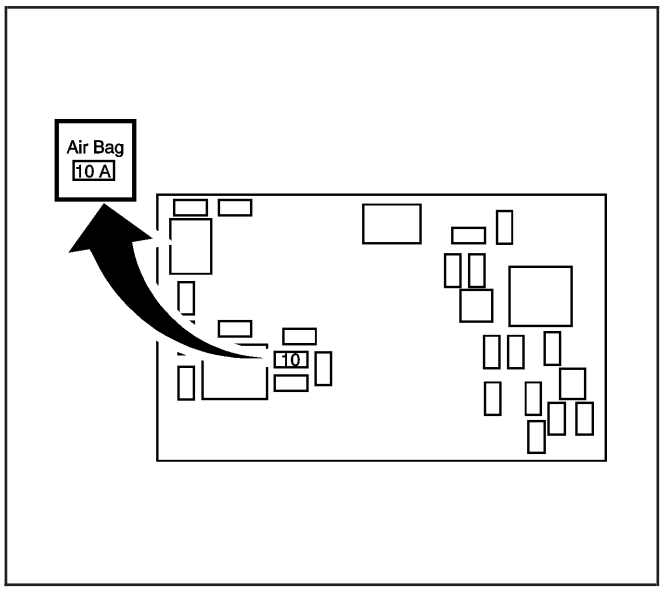
7. Install the trim panel to the high mount stop lamp.
8. Install the coat hooks.



899819

9. Install the AIR BAG fuse into the body control module fuse center.
10. Install the body control module fuse center cover.
11. Use caution while reaching in and turn the ignition switch to the ON position.

    The AIR BAG indicator will flash then turn OFF.
12. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.

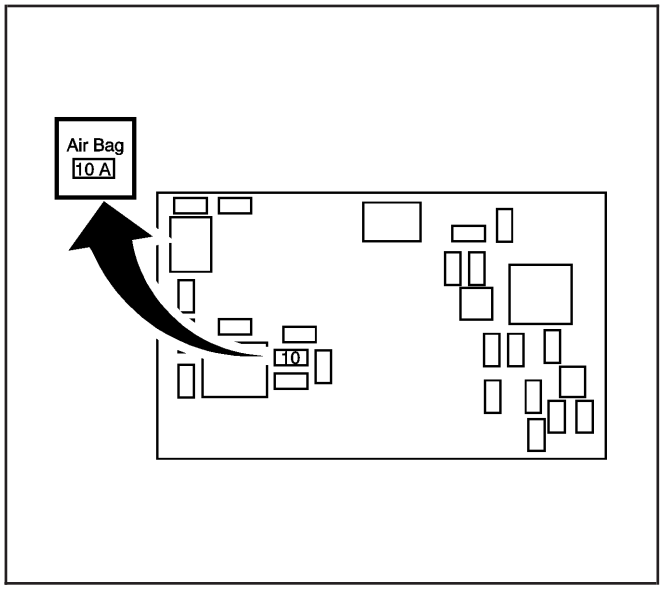


893538

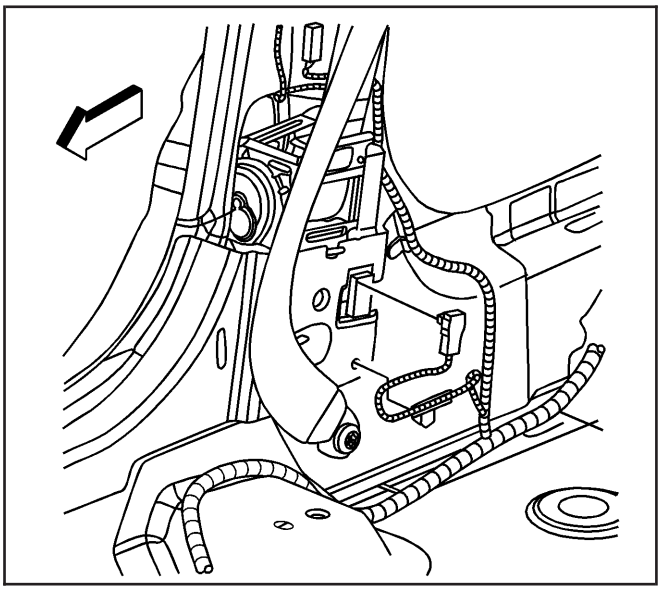
SIR Disabling and Enabling Zone 6 (Sedan)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center, then remove the fuse center cover.



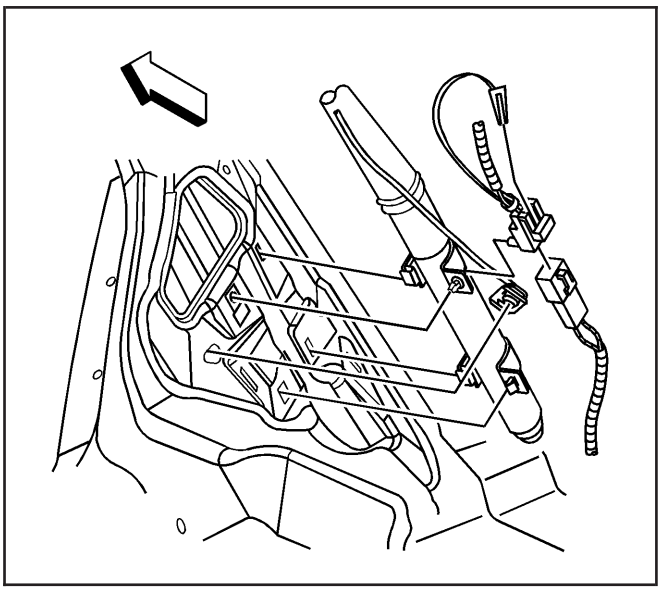
893538



899818

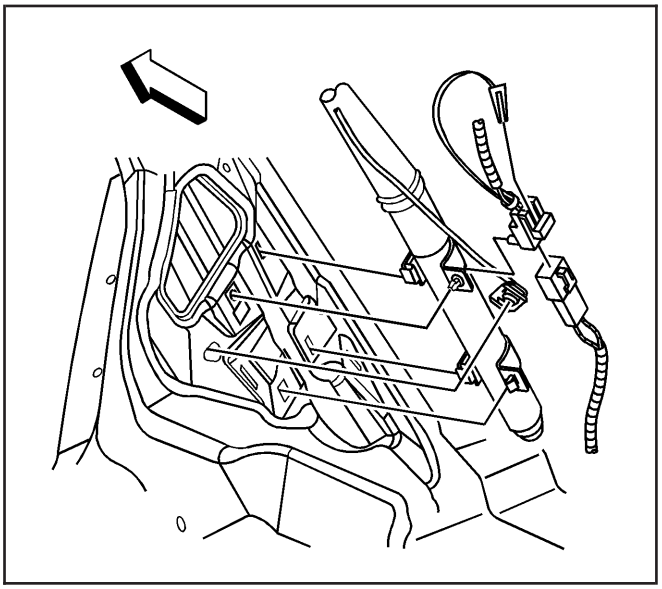
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.
6. Remove the lower center pillar.
7. Remove the connector position assurance (CPA) from the pretensioner.
8. Disconnect the right pretensioner yellow connector from the vehicle harness connector.
9. Remove the garnish molding from the upper lock pillar.



899820

10. Remove the connector position assurance (CPA) from the right/passenger roof rail module connector.
11. Disconnect the right roof rail module yellow connector from the vehicle harness yellow connector.

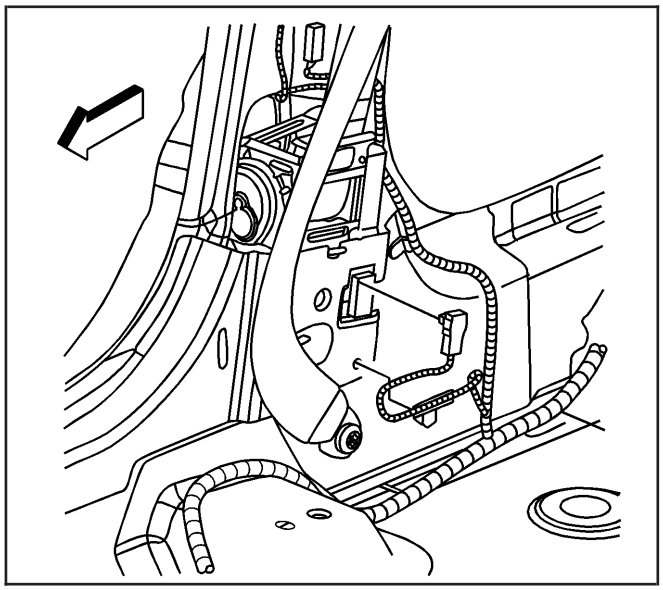


899820

Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the right roof rail module yellow connector to the vehicle harness yellow connector.
3. Install the CPA to the right roof rail module connector.
4. Install the garnish molding to the upper lock pillar.

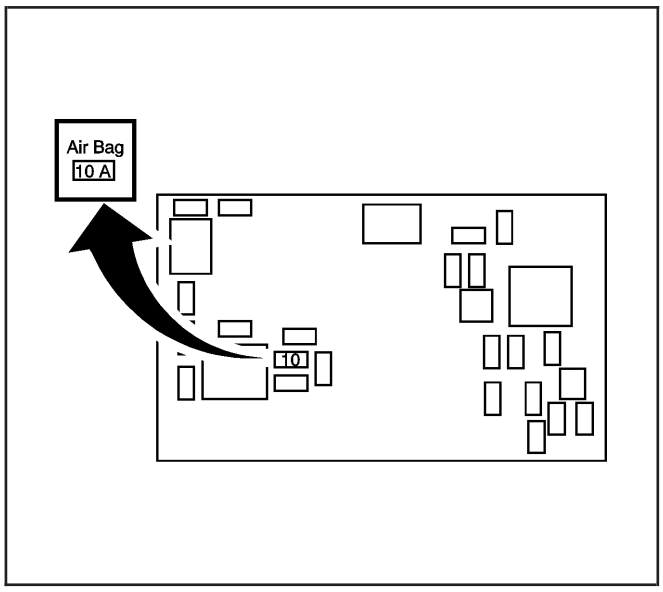
5. Connect the right pretensioner and install the connector position assurance (CPA).
6. Install the lower center pillar.



899818

7. Install the AIR BAG fuse into the body control module fuse center.
8. Install the body control module fuse center cover.
9. Use caution while reaching in and turn the ignition switch to the ON position.

   The AIR BAG indicator will flash then turn OFF.
10. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.

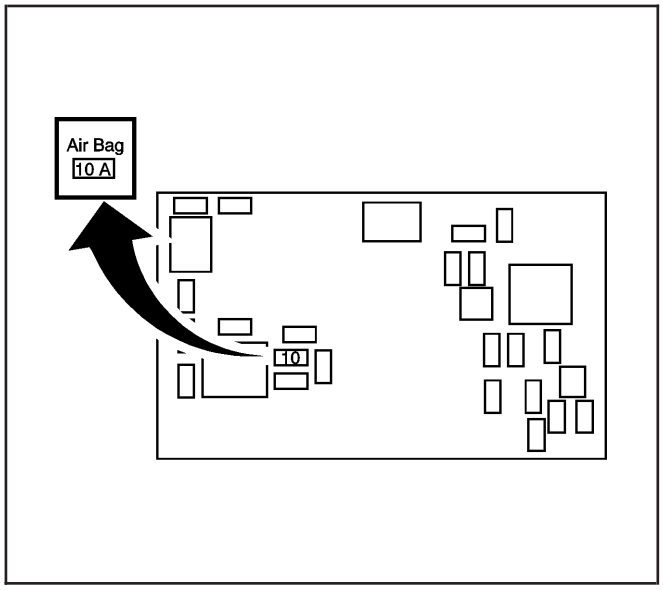


893538

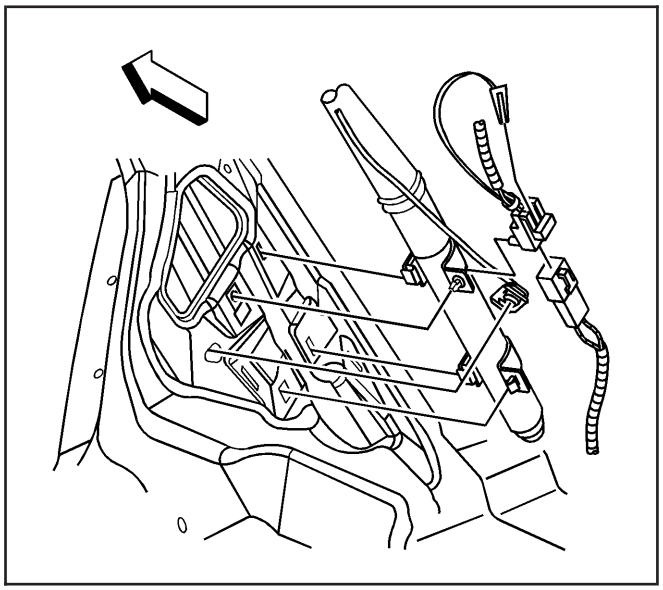
SIR Disabling and Enabling Zone 8 (Coupe)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center then remove the fuse center cover.



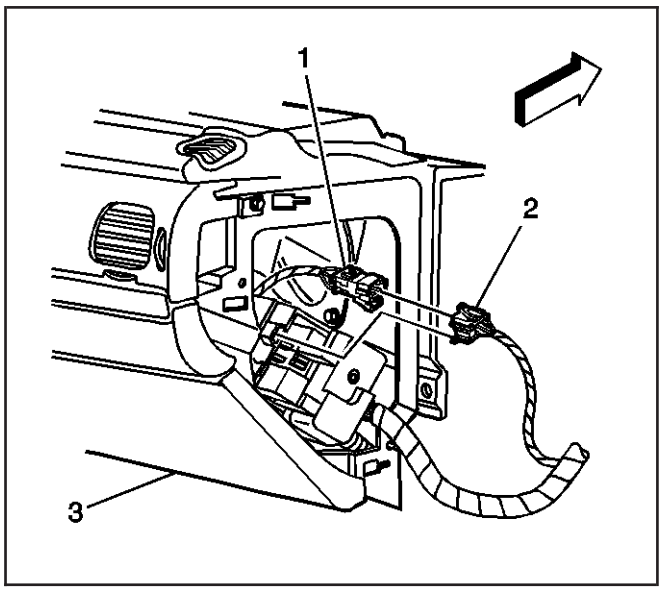
893538



899820

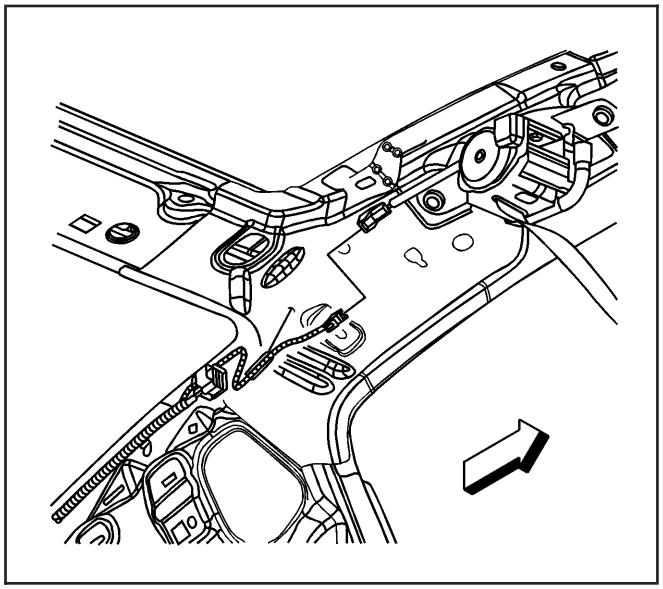
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.
6. Remove the garnish molding from the upper lock pillar.
7. Remove the connector position assurance (CPA) from the right/passenger roof rail module yellow connector.
8. Disconnect the right roof rail module yellow connector from the vehicle harness yellow connector.



816857

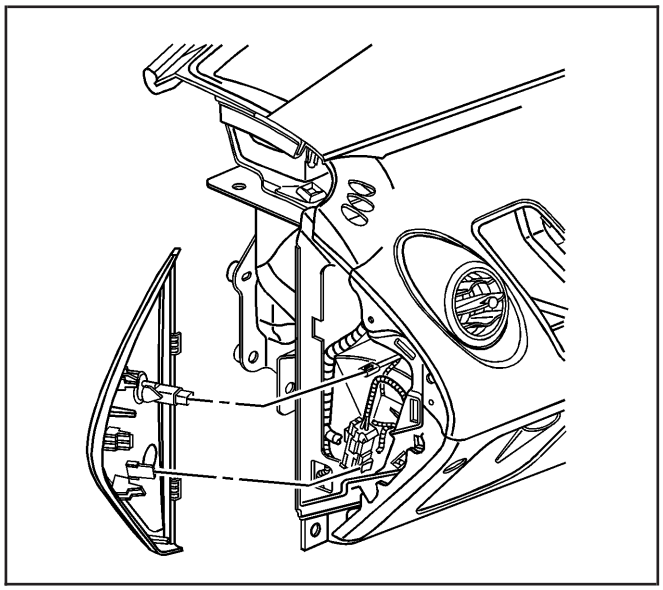
9. Remove the passenger/right outer trim cover from the I/P (3).
10. Remove the CPA from the I/P module yellow connector (1).
11. Disconnect the I/P module yellow connector (1) from the vehicle harness yellow connector (2).
12. Remove the coat hooks.
13. Remove the trim panel from the high mount stop lamp by pulling at the clip locations.
14. Gently pull back on the headliner to access the right/passenger pretensioner connector.



899819

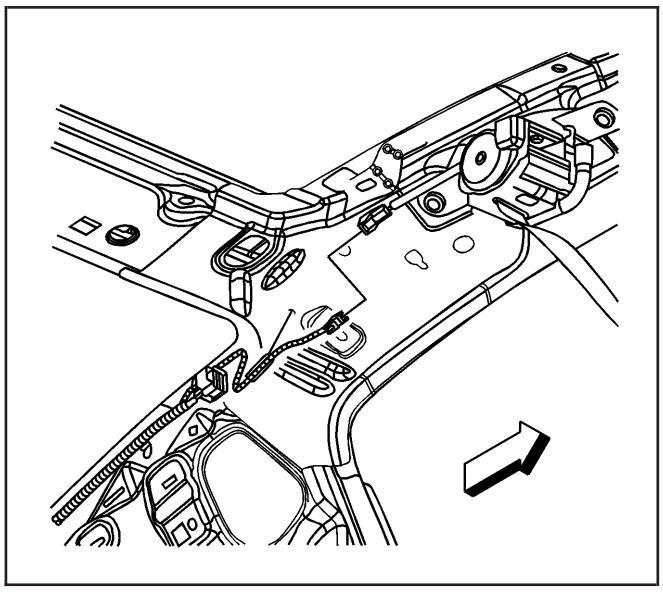
15. Remove the connector position assurance (CPA) from the right/passenger connector.
16. Disconnect the right/passenger pretensioner connector

17. Remove the driver/left outer trim cover from the instrument panel (I/P).
18. Remove the CPA from the steering wheel module coil yellow connector.
19. Disconnect the steering wheel module coil yellow connector from the vehicle harness yellow connector.



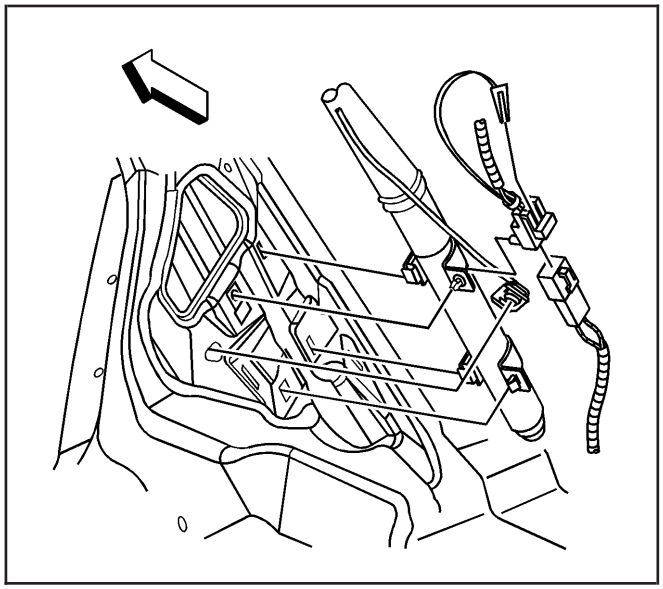
877766

20. Gently pull back on the headliner to access the left/driver pretensioner connector.
21. Remove the connector position assurance (CPA) from the left/driver pretensioner connector.
22. Disconnect the left/driver pretensioner connector.

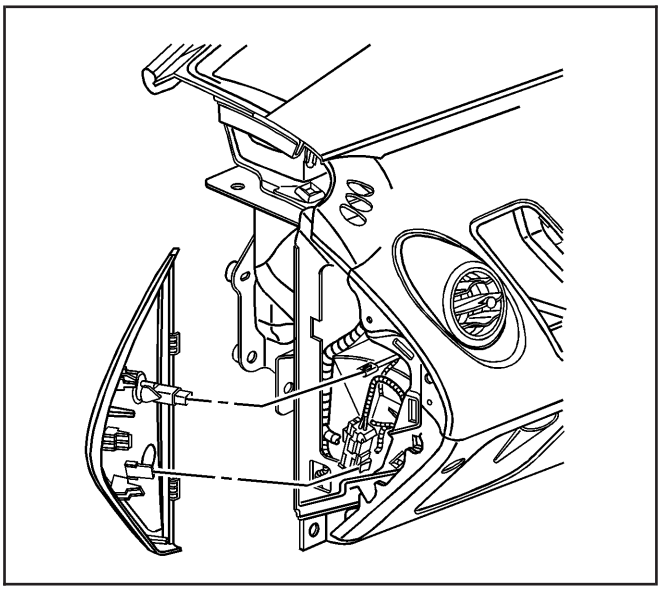


899819

23. Remove the garnish molding from the upper lock pillar.
24. Remove the CPA from the left/driver roof rail module yellow connector.
25. Disconnect the left roof rail module yellow connector from the vehicle harness yellow connector.



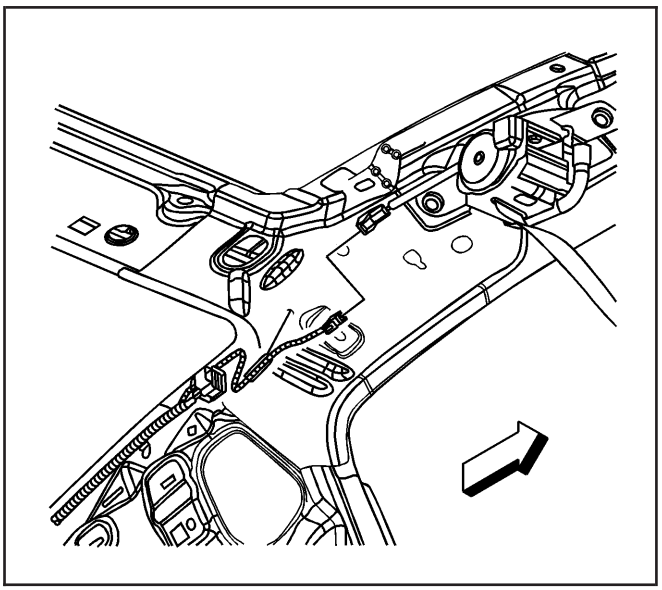
899820



877766

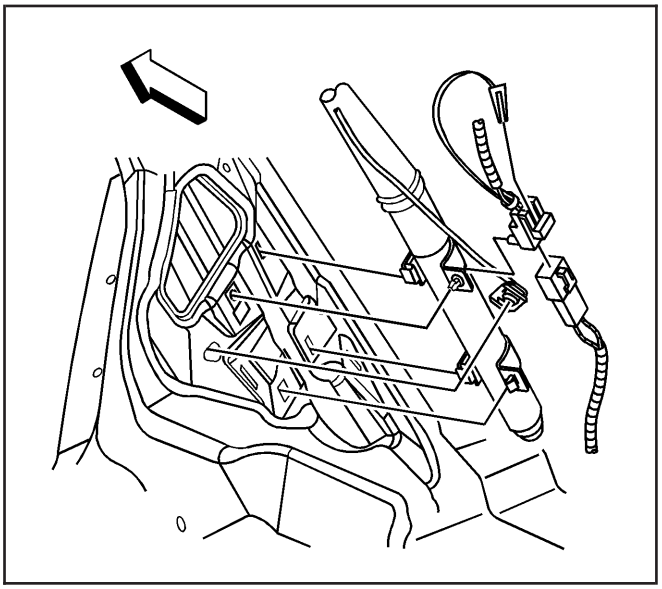
Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the steering wheel module coil yellow connector to the vehicle harness yellow connector.
3. Install the CPA to the steering wheel module coil yellow connector.
4. Install the driver/left outer trim cover to the instrument panel (I/P).



899819

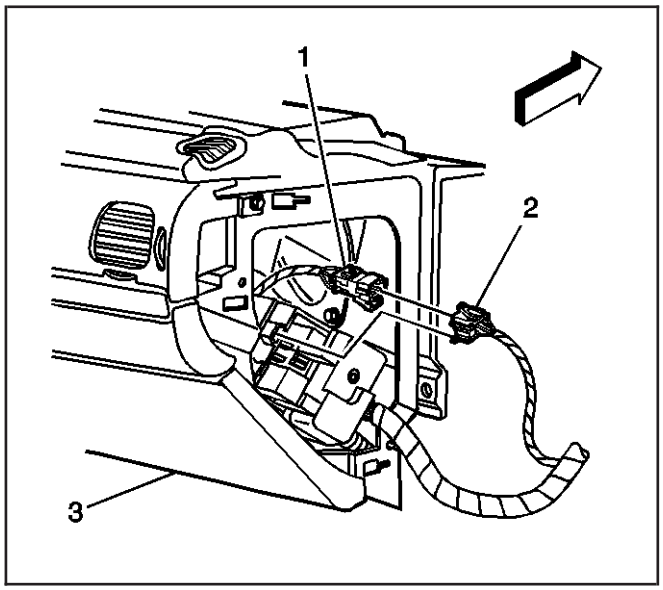
5. Gently pull back on the headliner and connect the left/driver pretensioner connector.
6. Install the connector position assurance (CPA) to the left/driver connector.



899820

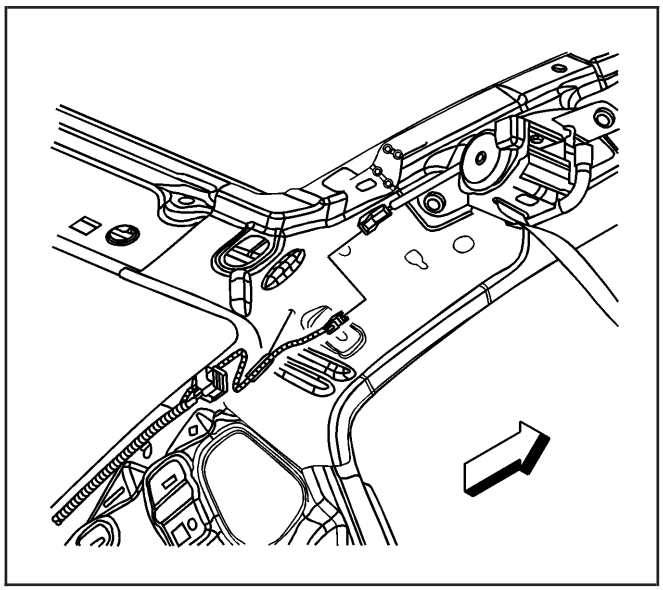
7. Connect the left/driver roof rail module yellow connector to the vehicle harness yellow connector.
8. Install the CPA to the left roof rail module yellow connector.
9. Install the left outer trim cover.

10. Connect the passenger/I/P module yellow connector (1) to the vehicle harness yellow connector (2).
11. Install the CPA to the I/P module yellow connector (1).
12. Install the passenger/right outer trim cover to the instrument panel (I/P) (3).



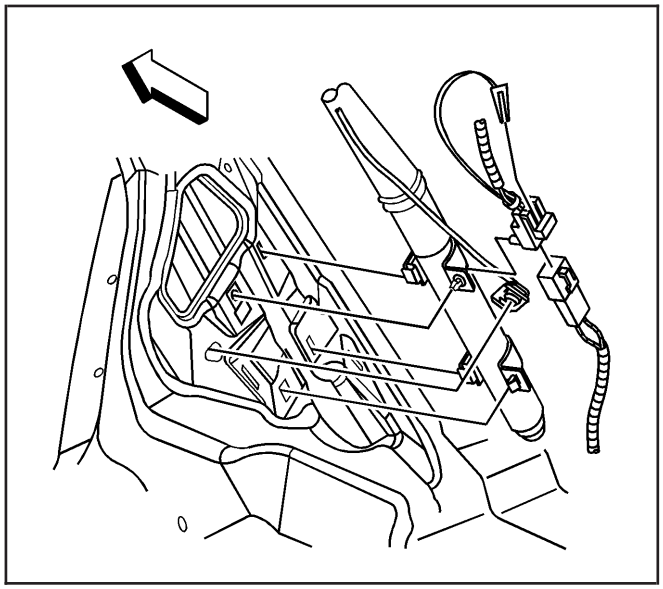
816857

13. Connect the right/pretensioner connector.
14. Install the connector position assurance (CPA) to the right/pretensioner connector.
15. Install the trim panel to the high mount stop lamp.
16. Install the coat hooks.



899819

17. Connect the passenger/right roof rail module yellow connector to the vehicle harness yellow connector.
18. Install the CPA to the right roof rail module yellow connector.
19. Install the garnish molding to the upper lock pillar.



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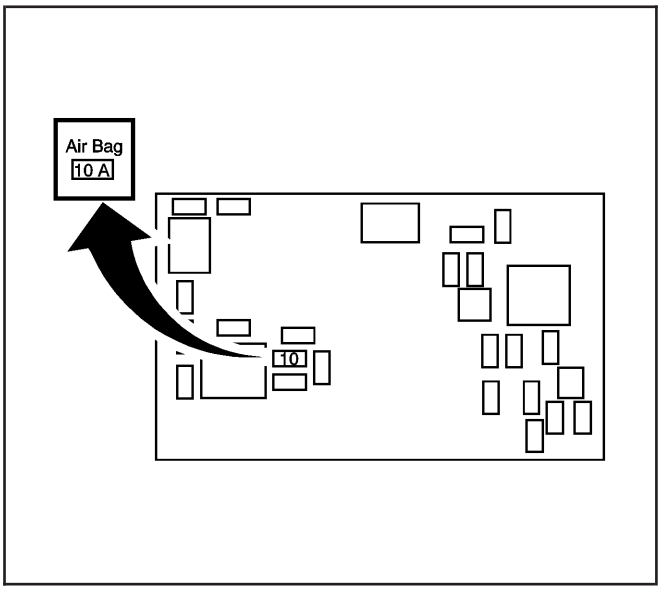

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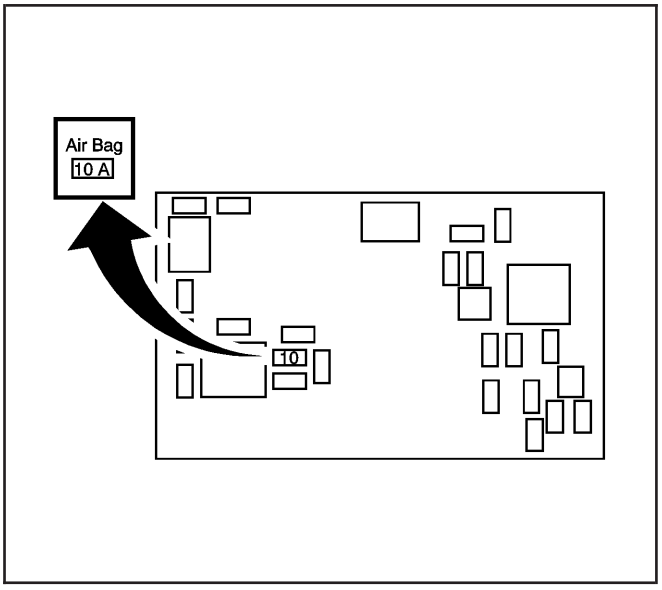
20. Install the AIR BAG fuse into the body control module fuse center.
21. Install the body control module fuse center cover.
22. Use caution while reaching in and turn the ignition switch to the ON position.

    The AIR BAG indicator will flash then turn OFF.
23. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.



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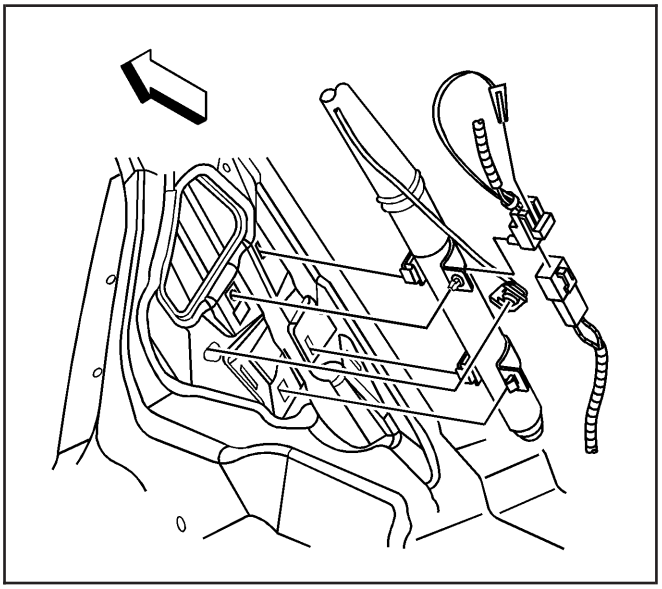
SIR Disabling and Enabling Zone 8 (Sedan)

Disabling Procedure

1. Turn the steering wheel so that the vehicle's wheels are pointing straight ahead.
2. Turn the ignition switch to the OFF position.
3. Remove the key from the ignition switch.
4. Locate the body control module fuse center then remove the fuse center cover.



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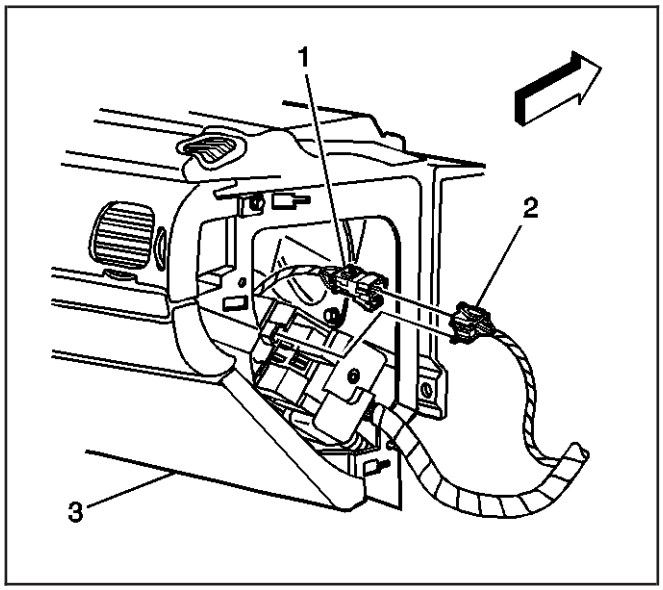
Important: With the AIR BAG fuse removed and the ignition switch in the ON position, the AIR BAG warning indicator illuminates. This is normal operation, and does not indicate an SIR system malfunction.

5. Locate and remove the AIR BAG fuse from the body control module fuse center.
6. Remove the garnish molding from the upper lock pillar.
7. Remove the connector position assurance (CPA) from the right/passenger roof rail module yellow connector.
8. Disconnect the right roof rail module yellow connector from the vehicle harness yellow connector.

9. Remove the passenger/right outer trim cover from the I/P (3).
10. Remove the CPA from the I/P module yellow connector (1).
11. Disconnect the I/P module yellow connector (1) from the vehicle harness yellow connector (2).
12. Remove the lower right center pillar.



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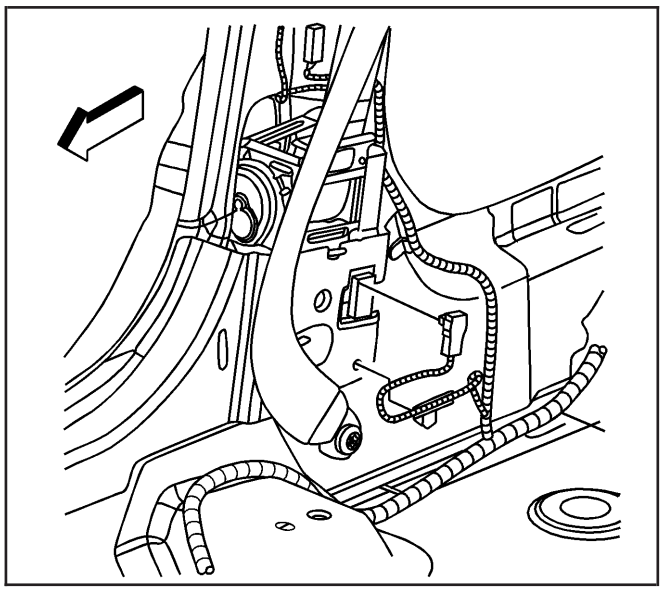
13. Remove the connector position assurance (CPA) from pretensioner connector.
14. Disconnect the right/passenger pretensioner connector from the vehicle harness yellow connector.



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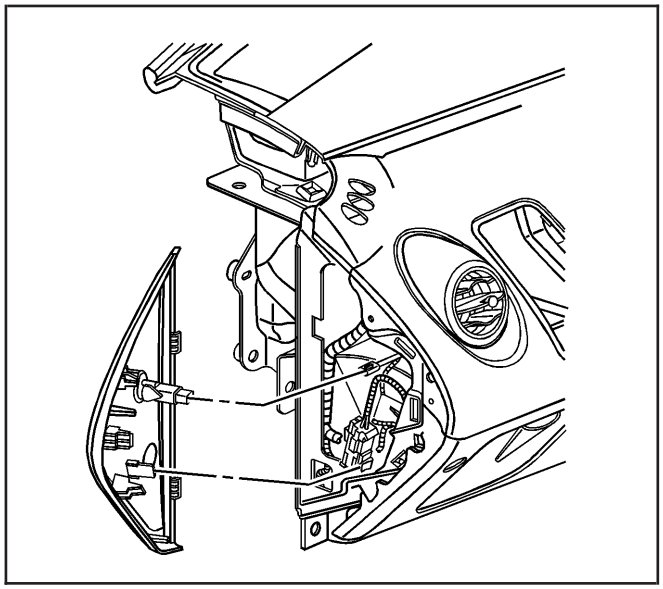
15. Remove the driver/left outer trim cover from the instrument panel (I/P).
16. Remove the CPA from the steering wheel module coil yellow connector.
17. Disconnect the steering wheel module coil yellow connector from the vehicle harness yellow connector.
18. Remove the lower left center pillar.



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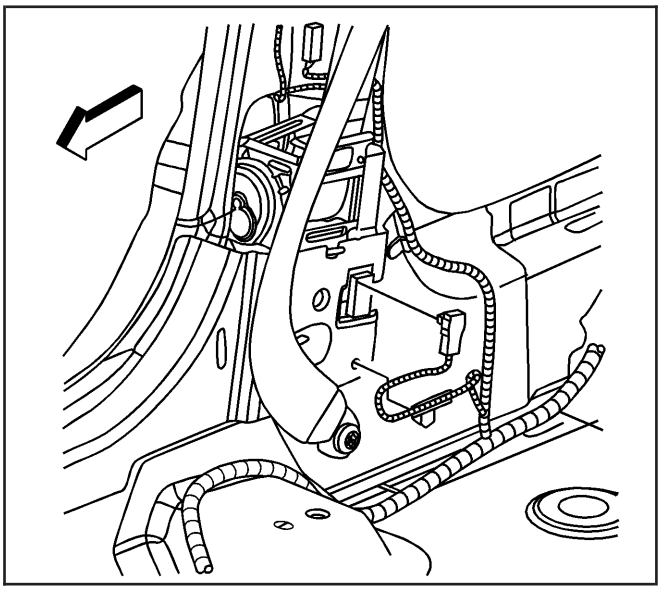

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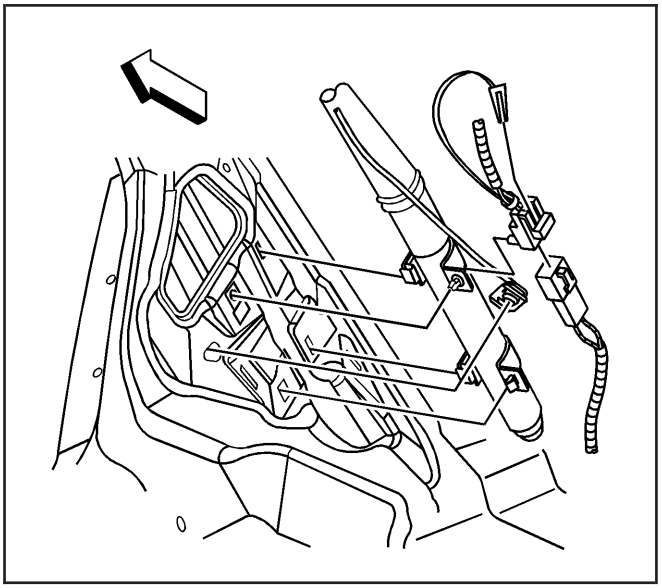
19. Remove the connector position assurance (CPA) from pretensioner connector.
20. Disconnect the left/driver pretensioner connector from the vehicle harness yellow connector.



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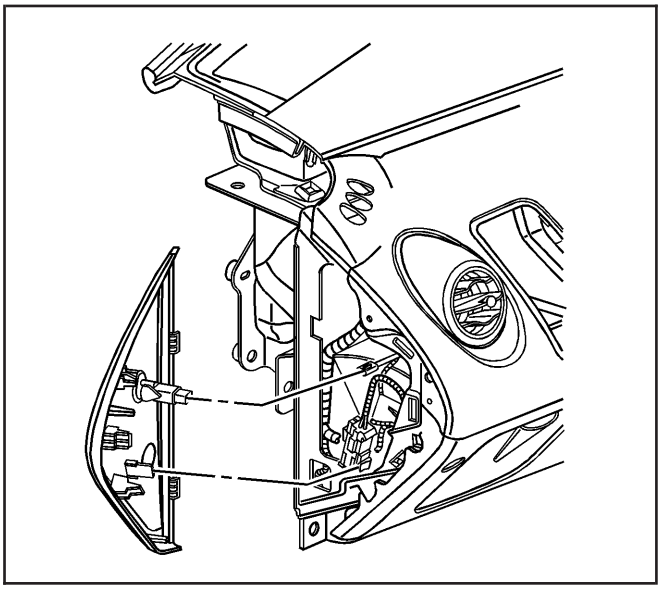
21. Remove the garnish molding from the upper lock pillar.
22. Remove the CPA from the left/driver roof rail module yellow connector.
23. Disconnect the left roof rail module yellow connector from the vehicle harness yellow connector.



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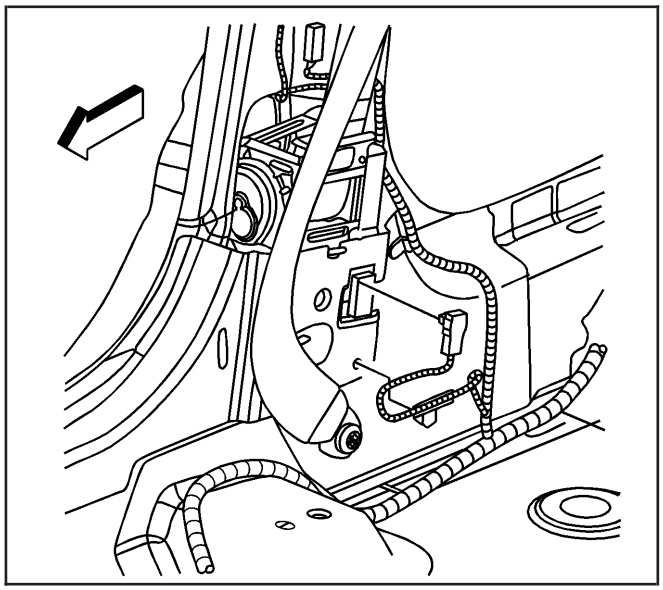
Enabling Procedure

1. Remove the key from the ignition switch.
2. Connect the steering wheel module coil yellow connector to the vehicle harness yellow connector.
3. Install the CPA to the steering wheel module coil yellow connector.
4. Install the driver/left outer trim cover to the instrument panel (I/P).

5. Connect the left/driver pretensioner connector.
6. Install the connector position assurance (CPA) to the left/driver pretensioner connector.
7. Install the left/driver lower center pillar.



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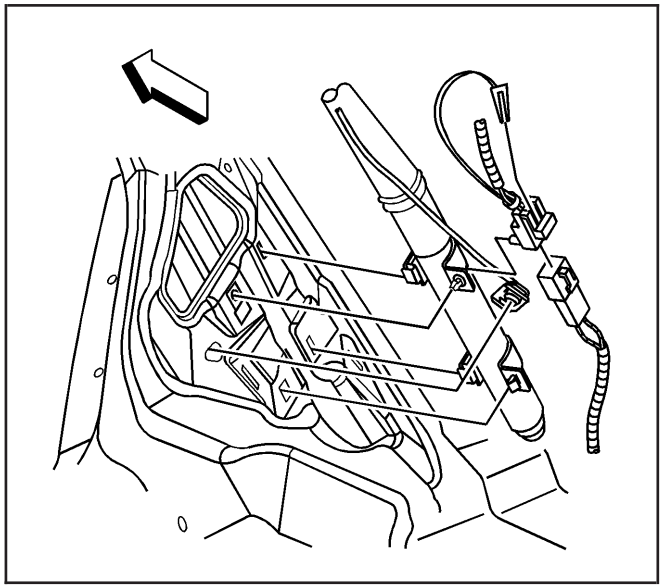
8. Connect the left/driver roof rail module yellow connector to the vehicle harness yellow connector.
9. Install the CPA to the left roof rail module yellow connector.
10. Install the left outer trim cover.



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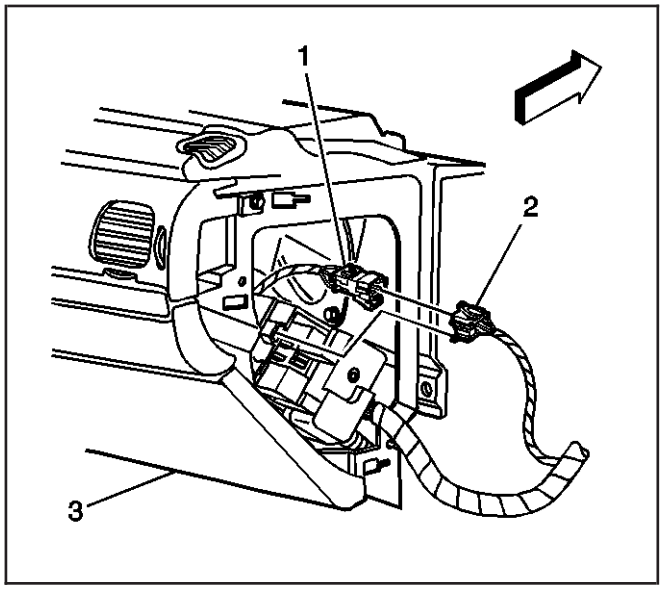
11. Connect the passenger/I/P module yellow connector (1) to the vehicle harness yellow connector (2).
12. Install the CPA to the I/P module yellow connector (1).
13. Install the passenger/right outer trim cover to the instrument panel (I/P) (3).



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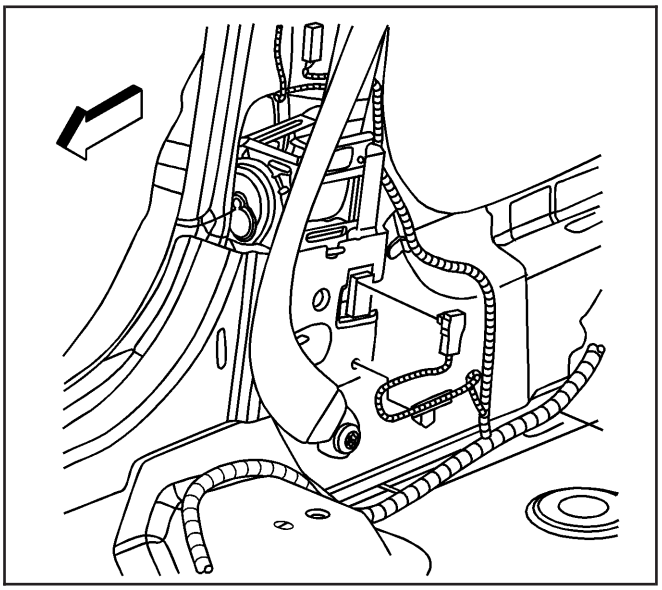

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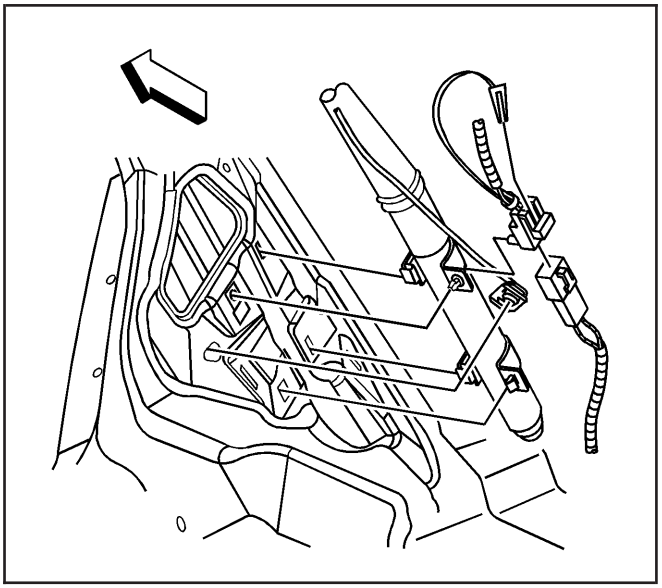
14. Connect the right/pretensioner connector.
15. Install the connector position assurance (CPA) to the right/pretensioner connector.
16. Install the right lower center pillar.



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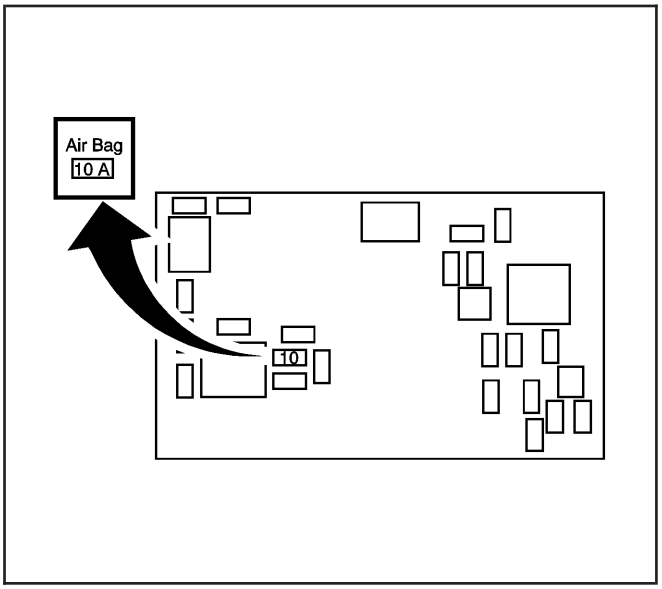
17. Connect the passenger/right roof rail module yellow connector to the vehicle harness yellow connector.
18. Install the CPA to the right roof rail module yellow connector.
19. Install the garnish molding to the upper lock pillar.



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20. Install the AIR BAG fuse into the body control module fuse center.
21. Install the body control module fuse center cover.
22. Use caution while reaching in and turn the ignition switch to the ON position.

    The AIR BAG indicator will flash then turn OFF.
23. Perform the SIR Diagnostic System Check if the AIR BAG warning indicator does not operate as described.