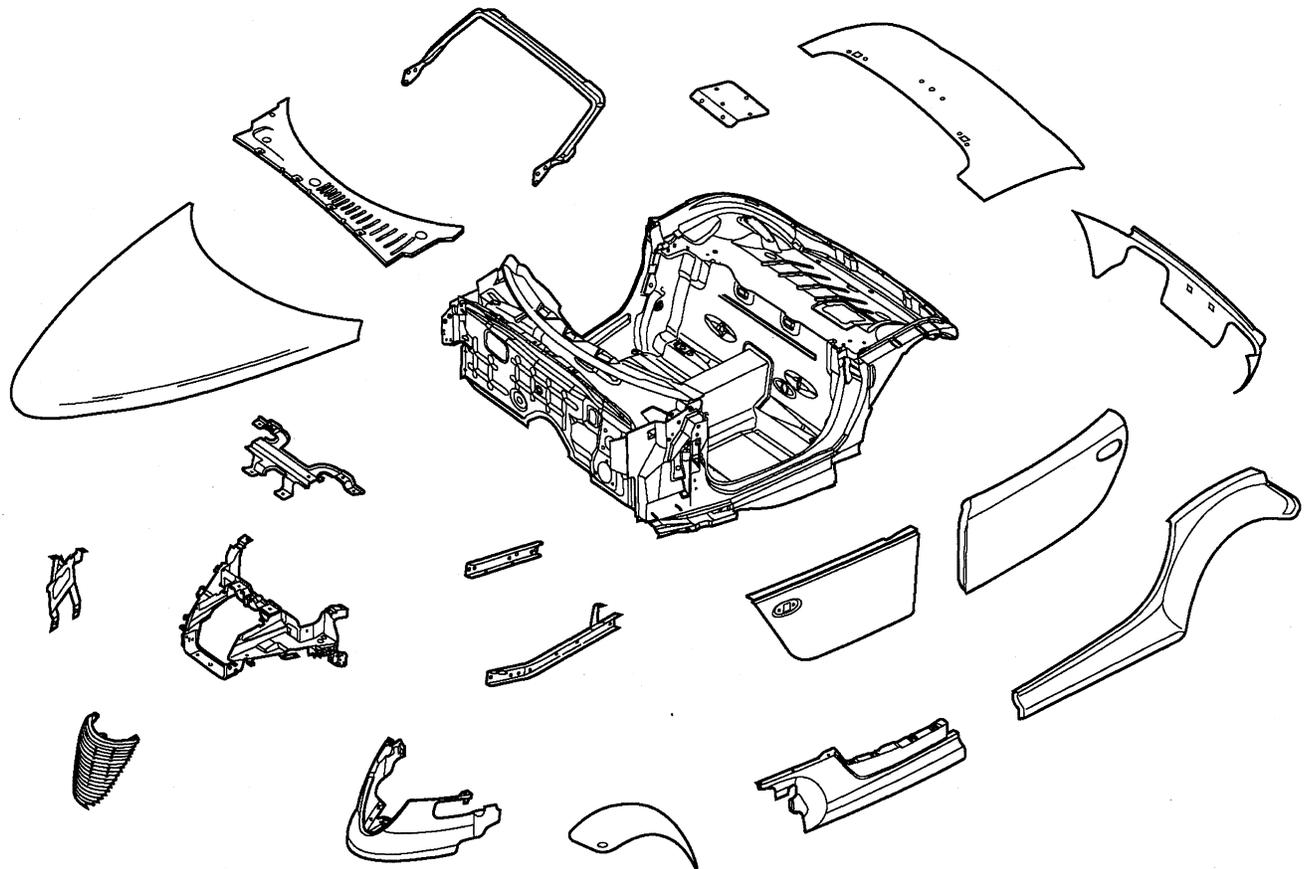


**PLYMOUTH**



# **BODY CONSTRUCTION, DIMENSIONS & JOINTS**



# SAFETY NOTICE

This publication's purpose is to provide Technical Training information to individuals in the automotive trade. All test and repair procedures must be performed in accordance with manufacturers' service and diagnostic manuals. All **Warnings**, **Cautions**, and **Notes** must be observed for safety reasons. The following is a list of general guidelines:

- Proper service and repair is critical to the safe, reliable operation of all motor vehicles.
- The information in this publication has been developed for service personnel and can help when diagnosing and performing vehicle repairs.
- Some Service procedures require the use of special tools. These special tools must be used as recommended throughout this Technical Training Publication, the Diagnostic Manual, and the Service Manual.
- Special attention should be exercised when working with spring- or tension-loaded fastener and devices such as E-Clips, Cir-Clips, Snap Rings, etc., because careless removal may cause personal injury.
- Always wear safety goggles when working on vehicles or vehicle components.
- Improper service methods may damage the vehicle or render it unsafe.
- Observe all **Warnings** to avoid the risk of personal injury.
- Observe all **Cautions** to avoid damage to equipment and vehicles.
- Notes are intended to add clarity and should help make your job easier.

**Cautions** and **Warnings** cover only the situations and procedures Chrysler Corporation has encountered and recommended. Chrysler Corporation cannot know, evaluate, and advise the service trade of all conceivable ways in which service may be performed, or the possible hazards of each. Consequently, Chrysler Corporation has not undertaken any such broad service review. Accordingly, anyone who uses a service procedure or tool that is not recommended in this publication must be certain that neither personal safety, nor vehicle safety, is jeopardized by the methods they select.

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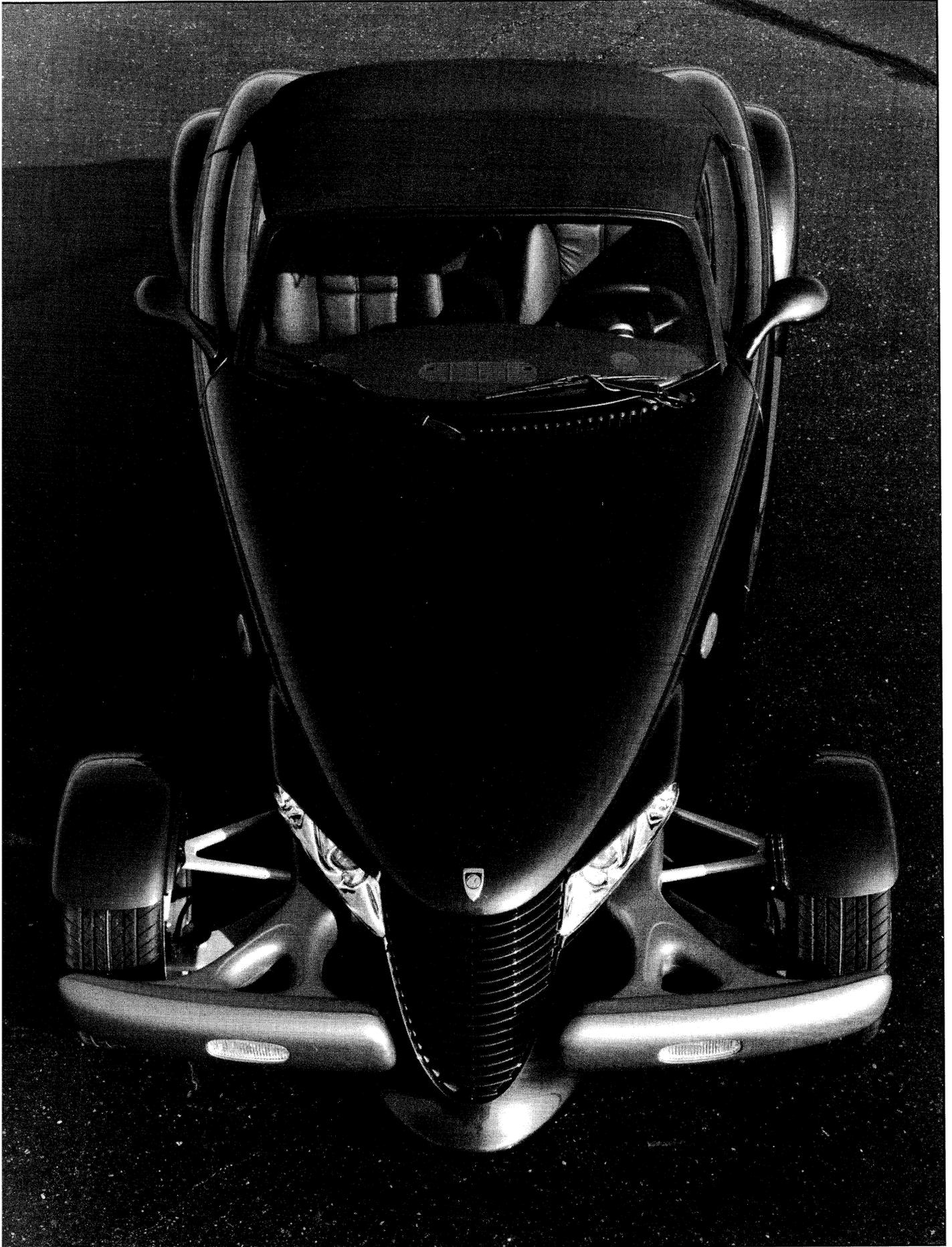
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CustomerOne 





Prowler

# PLYMOUTH PROWLER

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# **PROWLER**



## Introduction

This manual has been prepared for use by all body technicians involved in the repair of the Plymouth Prowler.

### **This manual shows:**

- Typical body panels in these vehicles
- The types of welds and rivets for the panel
- The weld and rivet locations for these panels
- Proper Sealer types and correct locations

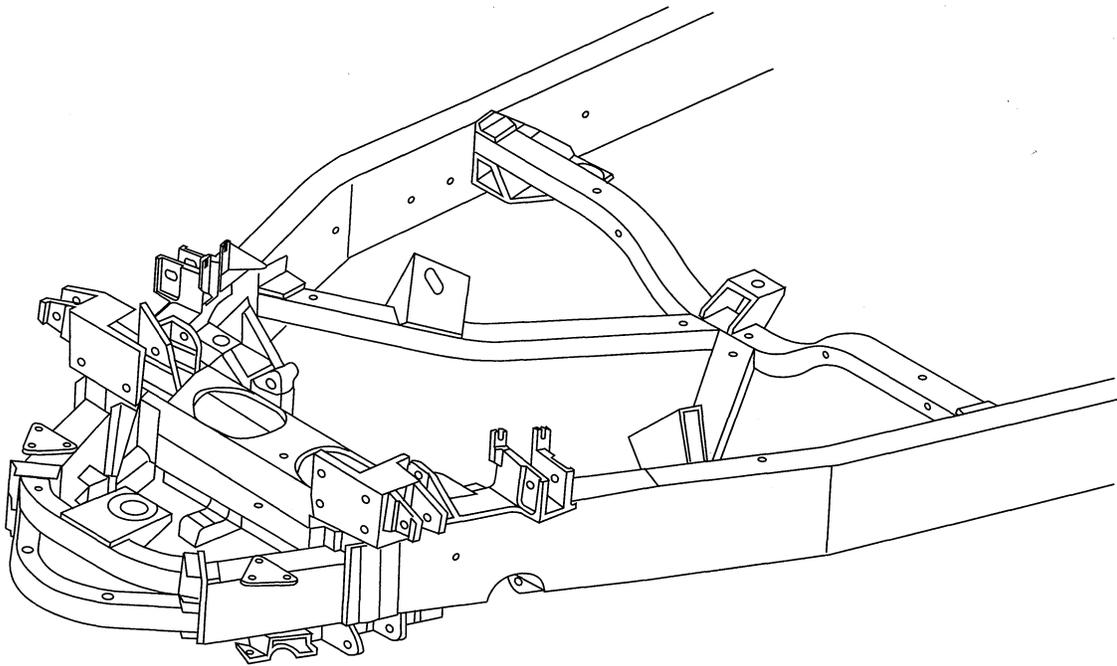
<b>Frame Construction Characteristics .....</b>	<b>3</b>
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Chrysler Corporation reserves the right to make improvements in design or to change specifications to these vehicles without incurring any obligation upon itself.

# PROWLER



## Frame Repair



PROW-100



# Explanation of Contents

## EXPLANATION OF SECTION CONTENTS

The major construction of the frame is welded tubing. Here are some examples for replacement of these parts.

### SYMBOLS

Some of the operations for frame section replacement are designated by the following symbols.

1	3	2	4	Alternate stitch welds until you have a continuous MIG weld.
▬	▬	▬	▬	
Continuous Stitch MIG Weld				

## FASTENER REPLACEMENT OR REPAIR

- To repair damaged self-tapping screws, drill the appropriate size hole a half inch away from the existing damaged hole and use a new fastener.
- To remove blind structural rivets, center punch the rivet for a guide. Drill the rivet out using a drill bit designed to drill stainless steel rivets. Use coated steel rivets for replacement.
- All fasteners must be replaced with released fasteners with PS5973L DACROMET coating.
- All fasteners and mating surfaces must be clean of all oils and lubricants before applying torque.

### Front Frame Assembly

PROW-101

Part Name	Fastener Type
Front Frame Assembly To Frame	.045" 4043 MIG Wire Butt Weld

**CAUTIONS:**

DO NOT put inserts in collapse areas. Strengthening the parts will change the way collision damage is absorbed, possibly endangering the passengers.

When removing this section care should be taken not to damage the side rails where the front frame assembly is attached.

Do not section in the following areas:

- Suspension mounting locations
- Structural part mounting locations
- Dimensional reference holes
- Compound shapes/reinforcements
- Reinforcements (except as noted)
- Compound structures
- Collapse/crush zones
- Engine or drivetrain mounting locations

10

Indicates the name of the parts being fastened together. These parts are illustrated in the box above.

Indicates the type of weld to be performed and the type of welding wire to be used.

Indicates area of repair being referred to.



**NOTE:** Do some test welds to double check your equipment and to insure your welds are the very best quality and conform to the American Welding Society standards.

**NOTE:** For weld specifications contact:

**American Welding Society**

**550 Northwest Le Juene Rd.**

**P. O. Box 351040**

**Miami, Florida 33135**

**Phone: (305) 443-9353**

Points which require particular attention during welded frame section replacement work.

The frame section removal instructions and accompanying illustrations are given in the order in which the work is to be performed.

The frame section installation instructions and accompanying illustrations are given in the order in which the work is to be performed.

In order to keep the instructions brief and simple, obvious work procedures (such as removal of a panel after it has been cut) have been omitted where possible.

### Front Frame Assembly

**NOTES WITH REGARD TO REPAIR WORK**

- Frame sectioning is limited to replacing the front frame assembly.
- 4043 MIG welding wire, .045" in diameter, is recommended for structural aluminum repairs. Use Argon shielding gas.
- When straightening the aluminum frame, be aware that aluminum is softer than steel and will gouge easier. When clamping and anchoring, use a larger surface area than steel and clamp in thicker section.

**REMOVAL**

1. The frame should be straightened and squared before removing front frame assembly.
2. Remove all MIG butt welds. Use a die grinder or other suitable means.

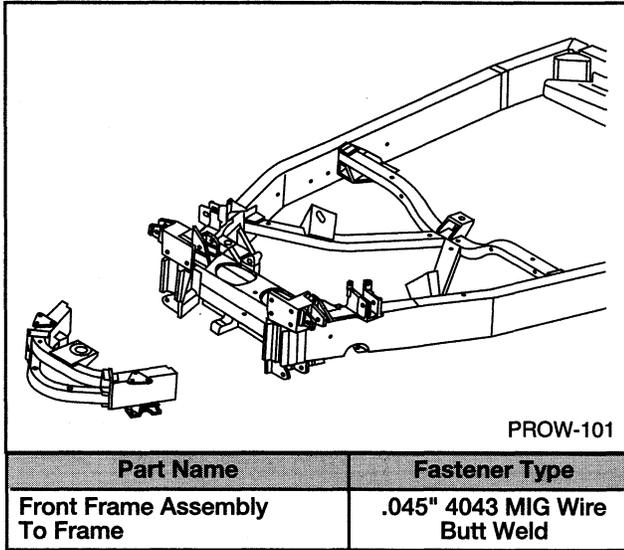
**INSTALLATION**

1. Clean and prep all rails and braces.
2. Tack weld new front frame assembly in place using 4043 MIG wire .045 in.
3. Measure and recheck alignments.
4. Complete MIG welding.

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# Front Frame Assembly



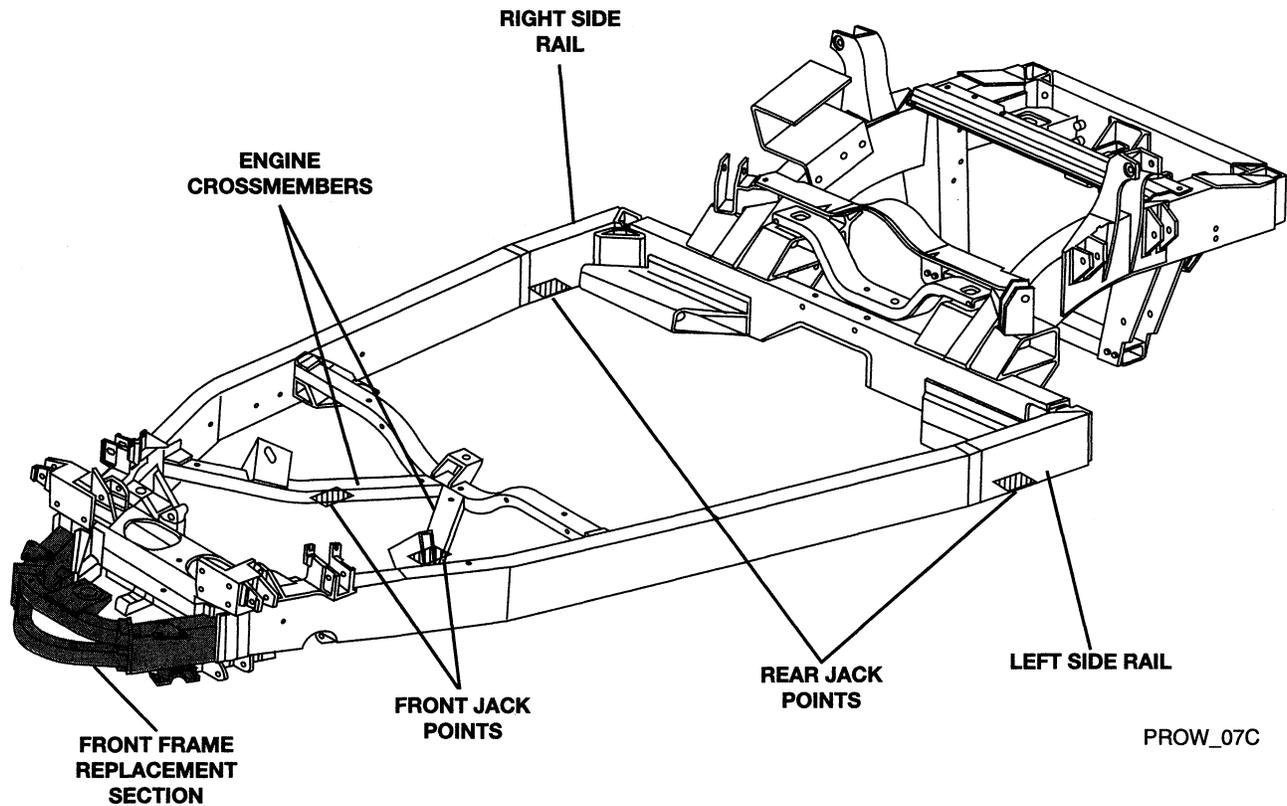
## CAUTIONS:

DO NOT put inserts in collapse areas. Strengthening the parts will change the way collision damage is absorbed, possibly endangering the passengers.

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- Suspension mounting locations
- Structural part mounting locations
- Dimensional reference holes
- Compound shapes/reinforcements
- Reinforcements (except as noted)
- Compound structures
- Collapse/crush zones
- Engine or drivetrain mounting locations





## NOTES WITH REGARD TO REPAIR WORK

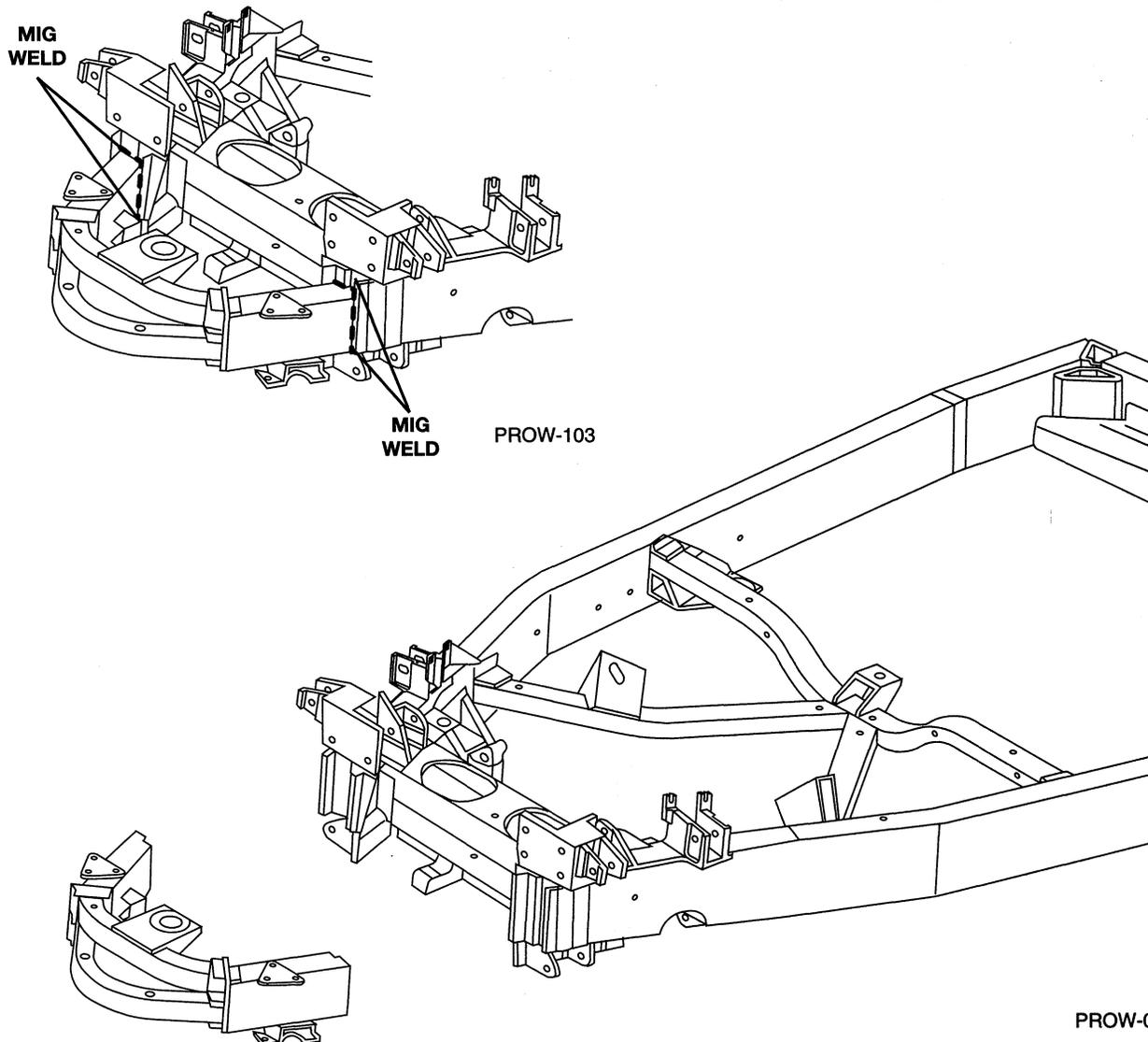
- Frame sectioning is limited to replacing the front frame assembly.
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- When straightening the aluminum frame, be aware that aluminum is softer than steel and will gouge easier. When clamping and anchoring, use a larger surface area than steel and clamp in thicker section.

## REMOVAL

1. The frame should be straightened and squared before removing front frame assembly.
2. Remove all MIG butt welds. Use a die grinder or other suitable means.

## INSTALLATION

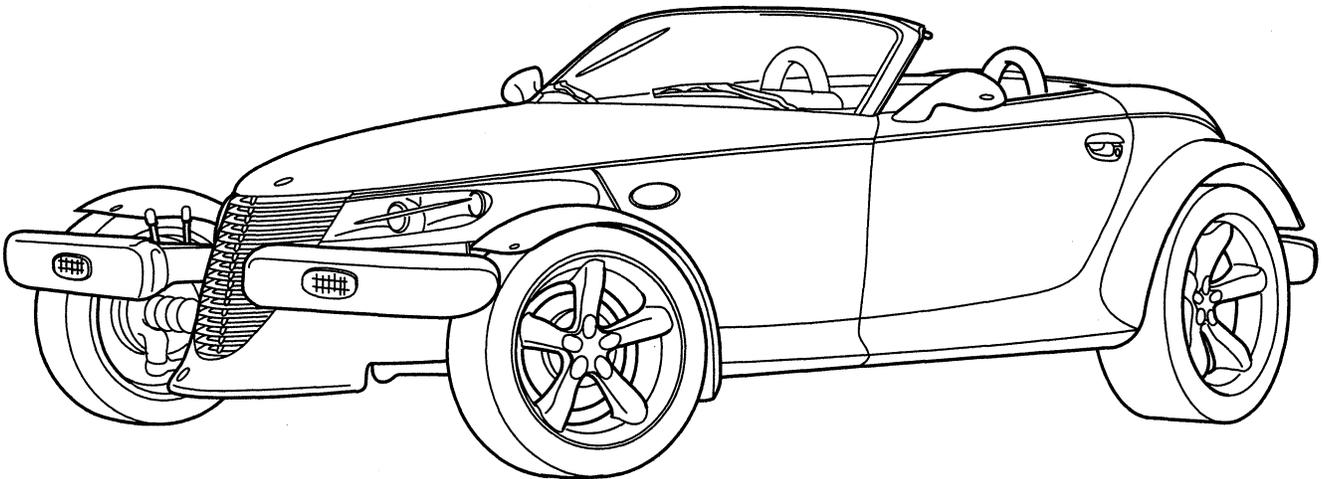
1. Clean and prep all rails and braces.
2. Tack weld new front frame assembly in place using 4043 MIG wire .045 in.
3. Measure and recheck alignments.
4. Complete MIG welding.



# PROWLER



## Body Construction Characteristics



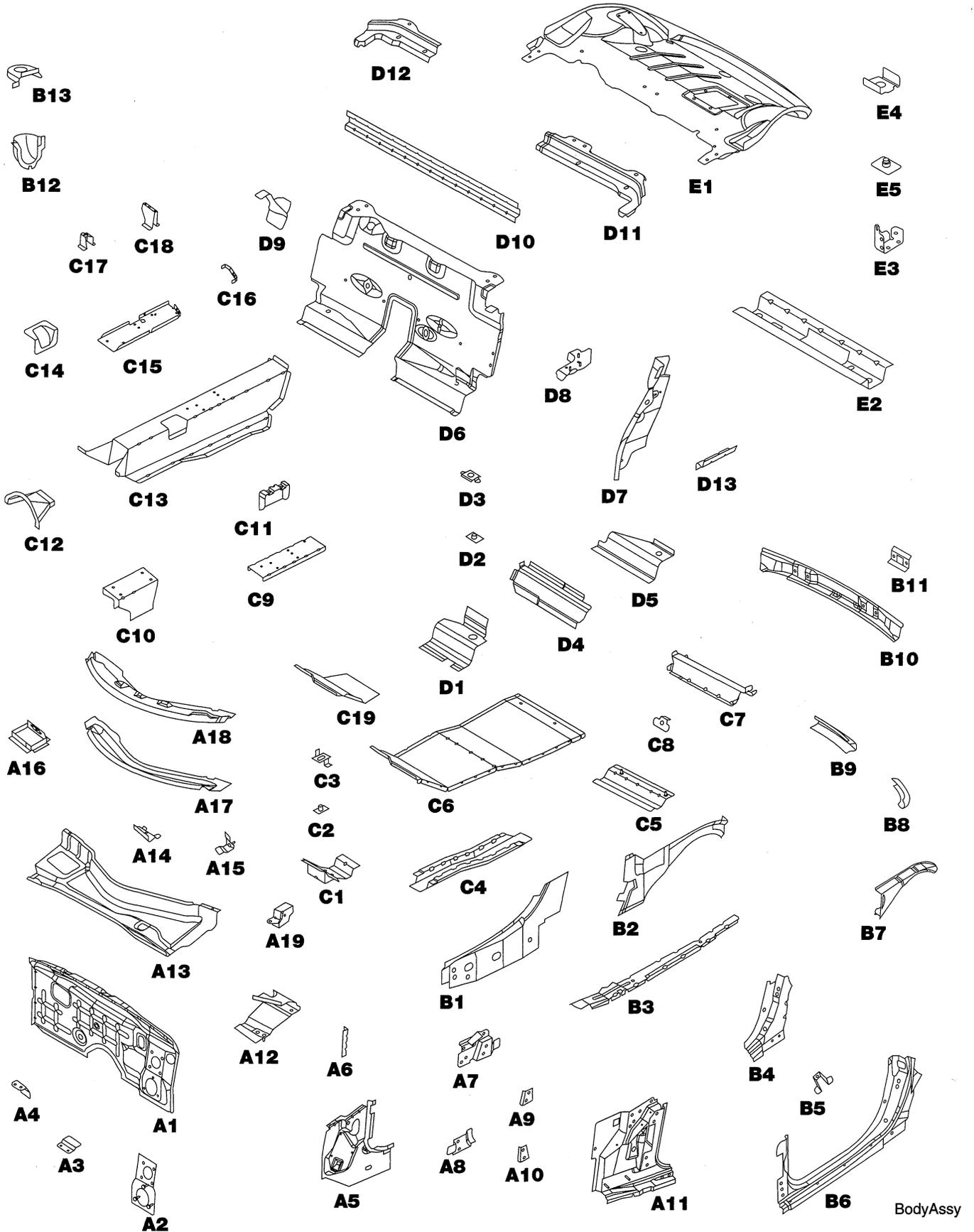
Front-V

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# Body Construction Characteristics

## BODY COMPONENTS — PROWLER



BodyAssy



## Dash, Cowl & Plenum Components

1. Dash Panel
2. Dash Bracket Booster & Steering Column Reinf.
3. Dash Panel Speed Control Rsvr. Attach Bracket
4. Cross Brace to Dash Panel Reinf.
5. Cowl Side Panel
6. Cowl Side I/P Beam Bracket
7. Windshield Frame Hood & Upper Hinge Reinf.
8. B/Side Hinge Pillar Attach Lower Tapping Plate
9. B/Side Door Hinge Upper Reinf.
10. B/Side Hinge Pillar Dr Hinge Att. Lwr. Reinf.
11. B/Side Front Hinge Pillar Reinf.
12. Cowl Plenum Lwr. Strg. Col. Sub Assy. Bracket
13. Cowl Plenum Lwr. Panel
14. Cowl Plenum Lwr. Upper Motor Bracket
15. Cowl Plenum Lwr. HVAC Ctr. Bracket
16. Cowl Plenum Lwr. HVAC Intake Sub Asy. Ext.
17. Cowl Plenum Upper Panel Reinf.
18. Cowl Plenum Upper Panel
19. Cowl Plenum & Pillar Reinf. Assy.

## Body Side & Deck Opening Components

1. Body Side Sill Panel Inner Front
2. Body Side Sill Panel Inner Rear
3. Body Side Outer to Inner Sill Reinf.
4. Body Side Rear Pillar Reinf.
5. Body Side Inner Lower Outer Trim Attd. Bracket
6. Body Side Outer
7. Body Side Outer Rear Panel
8. Deck Opening Lower Outer Front Panel
9. Deck Opening Lower Outer Rear Panel
10. Deck Opening Lower Inner Panel Reinf.
11. Deck Opening Lower Inner Panel
12. Fuel Filler Mounting Panel
13. Fuel Filler Closure Panel

## Front Floor Pan & Tunnel Assy Components

1. Front Floor Mounting Reinf.
2. Front Body Mounting Tapping Plate
3. Front Floor Pan Front Body Mount Retainer
4. Front Floor Longitudinal Reinf.
5. Seat Riser Assy. Crossmember
6. Front Floor Pan
7. Crossmember Seat Riser Front
8. Seat Riser Front Crossmember Tapping Plate
9. Front Floor Tunnel Shtr. & P/Brk Reinf.
10. I/P Ctr. Stack & Air Bag Mod. Reinf.
11. I/P Ctr. Stack & F/Pan Tunnel Bracket
12. Front Floor Pan Tunnel Side Rear Reinf.
13. Front Floor Pan Tunnel Panel
14. Front Floor Pan Tunnel Shifter Cable Panel
15. Front Floor Pan Tunnel Console
16. Front Floor Pan Tunnel Park Brake Cable Brk.
17. Front Floor Pan Tunnel Console Front Att. Brk.
18. Frt. Floor Pan Tunnel Console Arm Rest Brk.
19. Front Floor Pan Doubler Reinf.

## Bulkhead Shelf Panel Components

1. Bulkhead Body Mnt. Doubler Reinf.
2. Shelf Bulkhead Panel Body Mount T-Plate
3. Shelf Bulkhead Panel Body Mount Retainer
4. Bulkhead Body Mount Doubler Reinf.
5. Bulkhead Panel Body Mount Reinf.
6. Shelf Bulkhead Panel
7. Shelf Bulkhead Extension
8. Stud Plate Assy. - Rear F/Pan & W/Hse
9. Shelf Bulkhead DSI C/Out Upper Panel
10. Shelf Bulkhead DSI Lower Reinf.
11. Shelf Bulkhead DSI Upper - Left
12. Shelf Bulkhead DSI Upper - Right
13. Bulkhead DSI Closeout Lower Shelf

## Rear Floor Pan Components

1. Rear Floor Pan
2. Rear Floor Pan Reinforcement
3. Rear Floor Pan Bracket
4. Rear Floor Pan Mounting Tapping Plate
5. Rear Floor Pan Mount Retainer

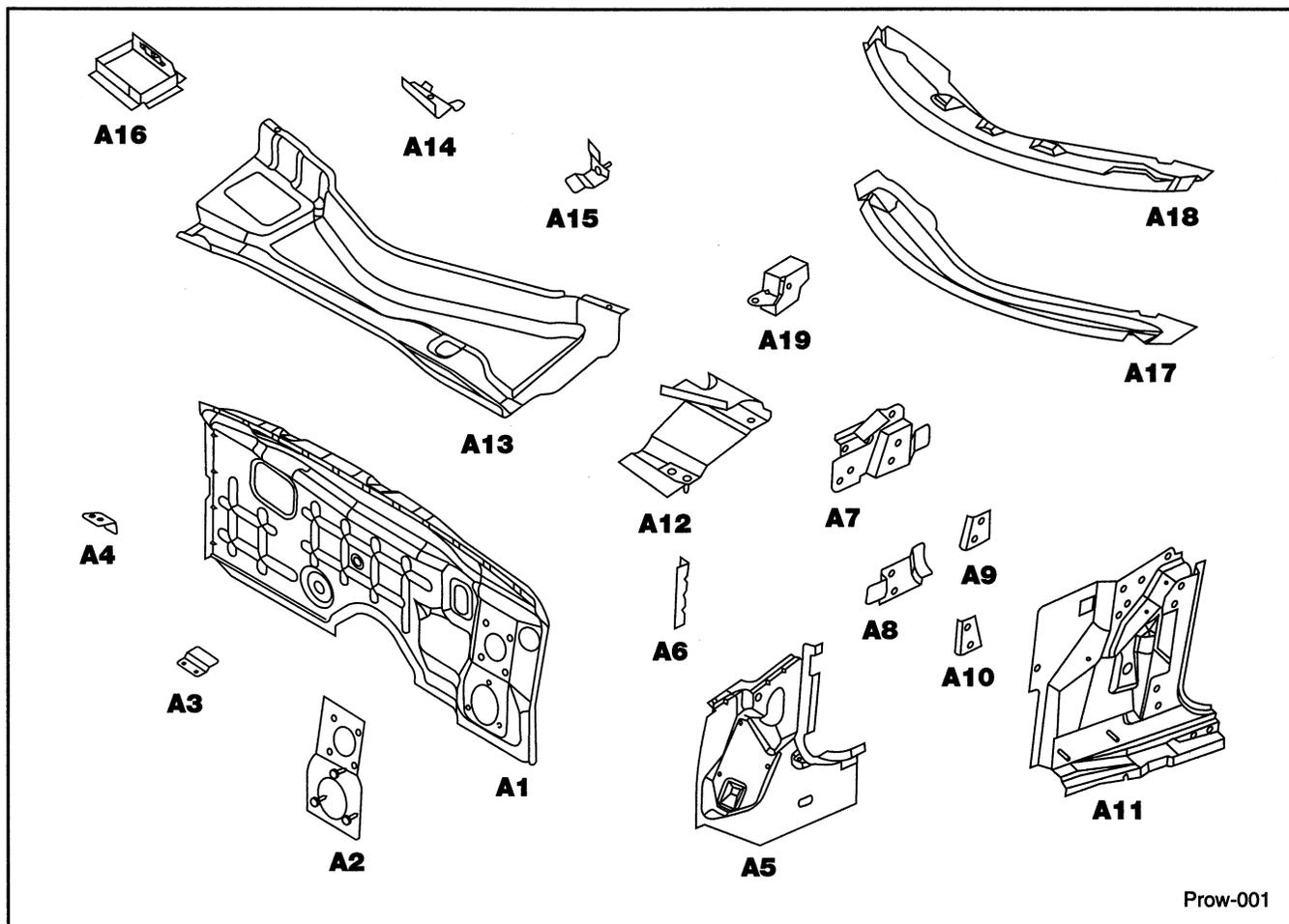


## Body Construction Characteristics

### DASH, COWL & PLENUM COMPONENTS

The parts listed below may be serviced individually or as an assembly.

1. Dash Panel
2. Dash Bracket Booster & Steering Column Reinf.
3. Dash Panel Speed Control Rsvr. Attach Bracket
4. Cross Brace to Dash Panel Reinf.
5. Cowl Side Panel
6. Cowl Side I/P Beam Bracket
7. Windshield Frame Hood & Upper Hinge Reinf.
8. B/Side Hinge Pillar Attach Lower Tapping Plate
9. B/Side Door Hinge Upper Reinf.
10. B/Side Hinge Pillar Dr Hinge Att. Lwr. Reinf.
11. B/Side Front Hinge Pillar Reinf.
12. Cowl Plenum Lwr. Strg. Col. Sub Assy. Bracket
13. Cowl Plenum Lwr. Panel
14. Cowl Plenum Lwr. Upper Motor Bracket
15. Cowl Plenum Lwr. HVAC Ctr. Bracket
16. Cowl Plenum Lwr. HVAC Intake Sub Assy. Ext.
17. Cowl Plenum Upper Panel Reinf.
18. Cowl Plenum Upper Panel
19. Cowl Plenum & Pillar Reinf. Assy.



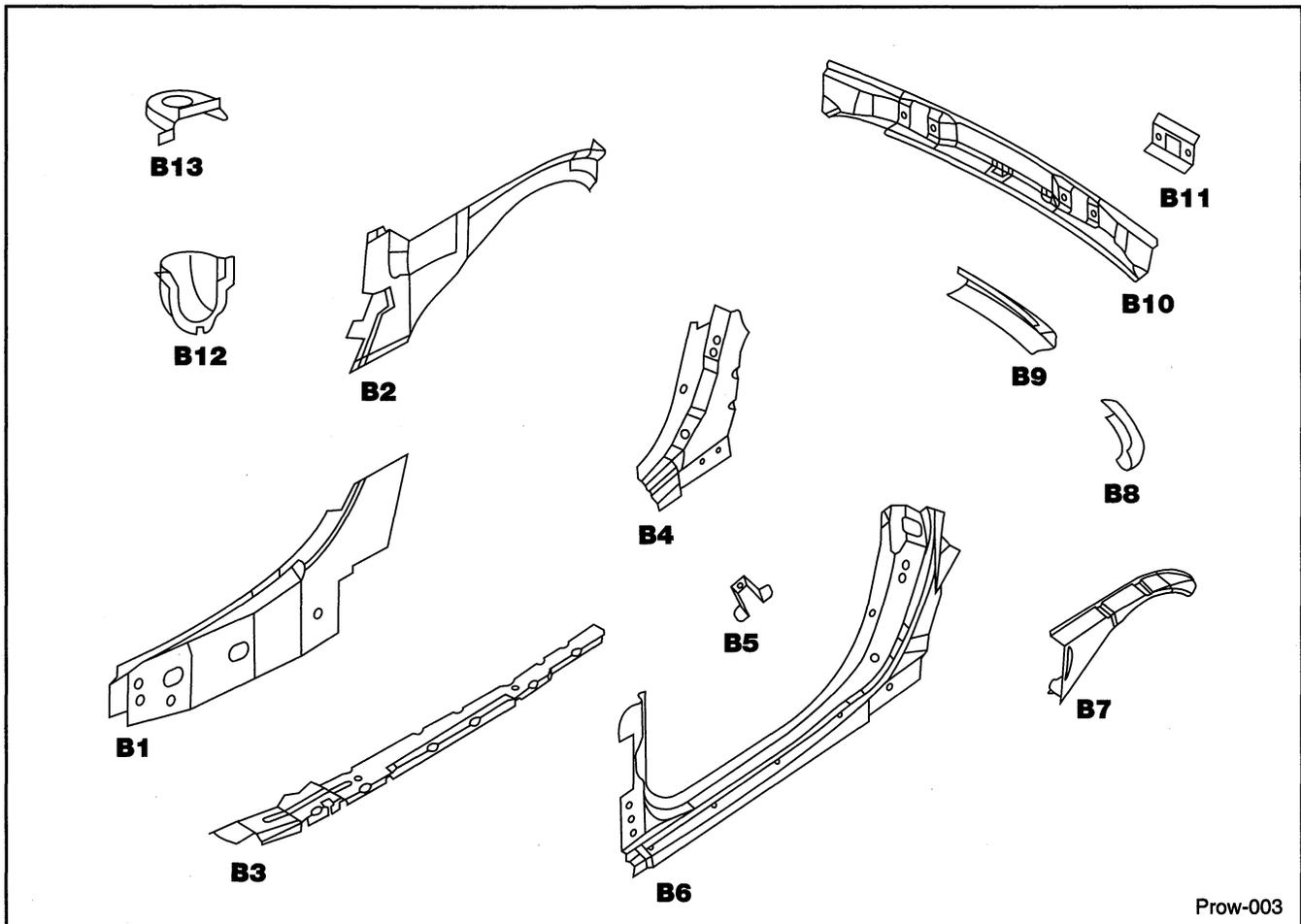
Prow-001



## BODY SIDE & DECK OPENING COMPONENTS

The parts listed below may be serviced individually or as an assembly.

1. Body Side Sill Panel Inner Front
2. Body Side Sill Panel Inner Rear
3. Body Side Outer to Inner Sill Reinf.
4. Body Side Rear Pillar Reinf.
5. Body Side Inner Lower Outer Trim Attd. Bracket
6. Body Side Outer
7. Body Side Outer Rear Panel
8. Deck Opening Lower Outer Front Panel
9. Deck Opening Lower Outer Rear Panel
10. Deck Opening Lower Inner Panel Reinf.
11. Deck Opening Lower Inner Panel
12. Fuel Filler Mounting Panel
13. Fuel Filler Closure Panel



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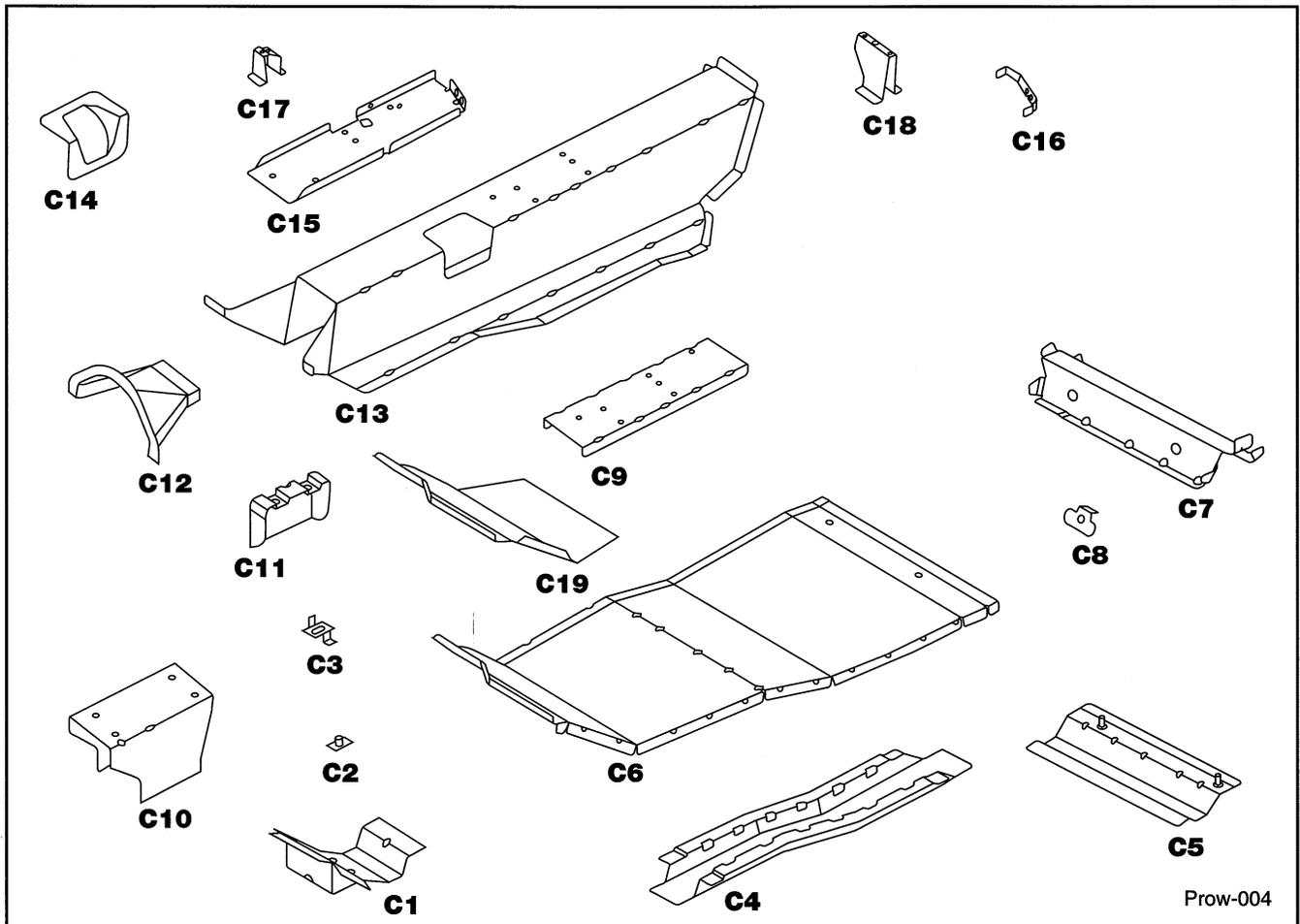


## Body Construction Characteristics

### FRONT FLOOR PAN & TUNNEL ASSY COMPONENTS

The parts listed below may be serviced individually or as an assembly.

1. Front Floor Mounting Reinf.
2. Front Body Mounting Tapping Plate
3. Front Floor Pan Front Body Mount Retainer
4. Front Floor Longitudinal Reinf.
5. Seat Riser Assy. Crossmember
6. Front Floor Pan
7. Crossmember Seat Riser Front
8. Seat Riser Front Crossmember Tapping Plate
9. Front Floor Tunnel Shtr. & P/Brk Reinf.
10. I/P Ctr. Stack & Air Bag Mod. Reinf.
11. I/P Ctr. Stack & F/Pan Tunnel Bracket
12. Front Floor Pan Tunnel Extension
13. Front Floor Pan Tunnel Panel
14. Front Floor Pan Tunnel Shifter Cable Panel
15. Front Floor Pan Tunnel Console
16. Front Floor Pan Tunnel Park Brake Cable Brk.
17. Front Floor Pan Tunnel Console Front Att. Brk.
18. Frt. Floor Pan Tunnel Console Arm Rest Brk.
19. Front Floor Pan Doubler Reinf.

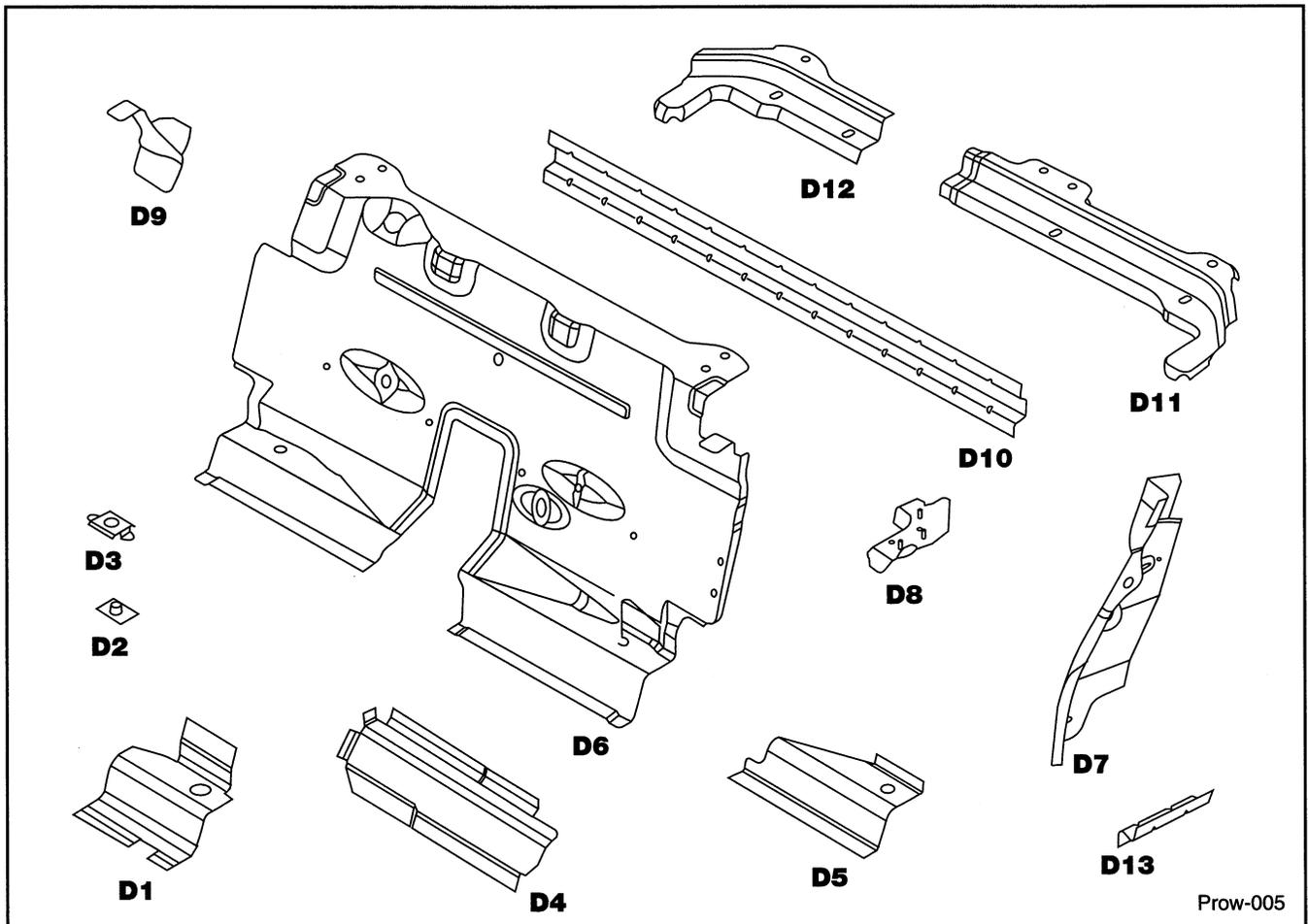




## BULKHEAD SHELF PANEL COMPONENTS

The parts listed below may be serviced individually or as an assembly.

1. Bulkhead Body Mnt. Doubler Reinf.
2. Shelf Bulkhead Panel Body Mount T-Plate
3. Shelf Bulkhead Panel Body Mount Retainer
4. Bulkhead Body Mount Doubler Reinf.
5. Bulkhead Panel Body Mount Reinf.
6. Shelf Bulkhead Panel
7. Shelf Bulkhead Extension
8. Stud Plate Assy. - Rear F/Pan & W/Hse
9. Shelf Bulkhead DSI C/Out Upper Panel
10. Shelf Bulkhead DSI Lower Reinf.
11. Shelf Bulkhead DSI Upper - Left
12. Shelf Bulkhead DSI Upper - Right
13. Bulkhead DSI Closeout Lower Shelf



Prow-005

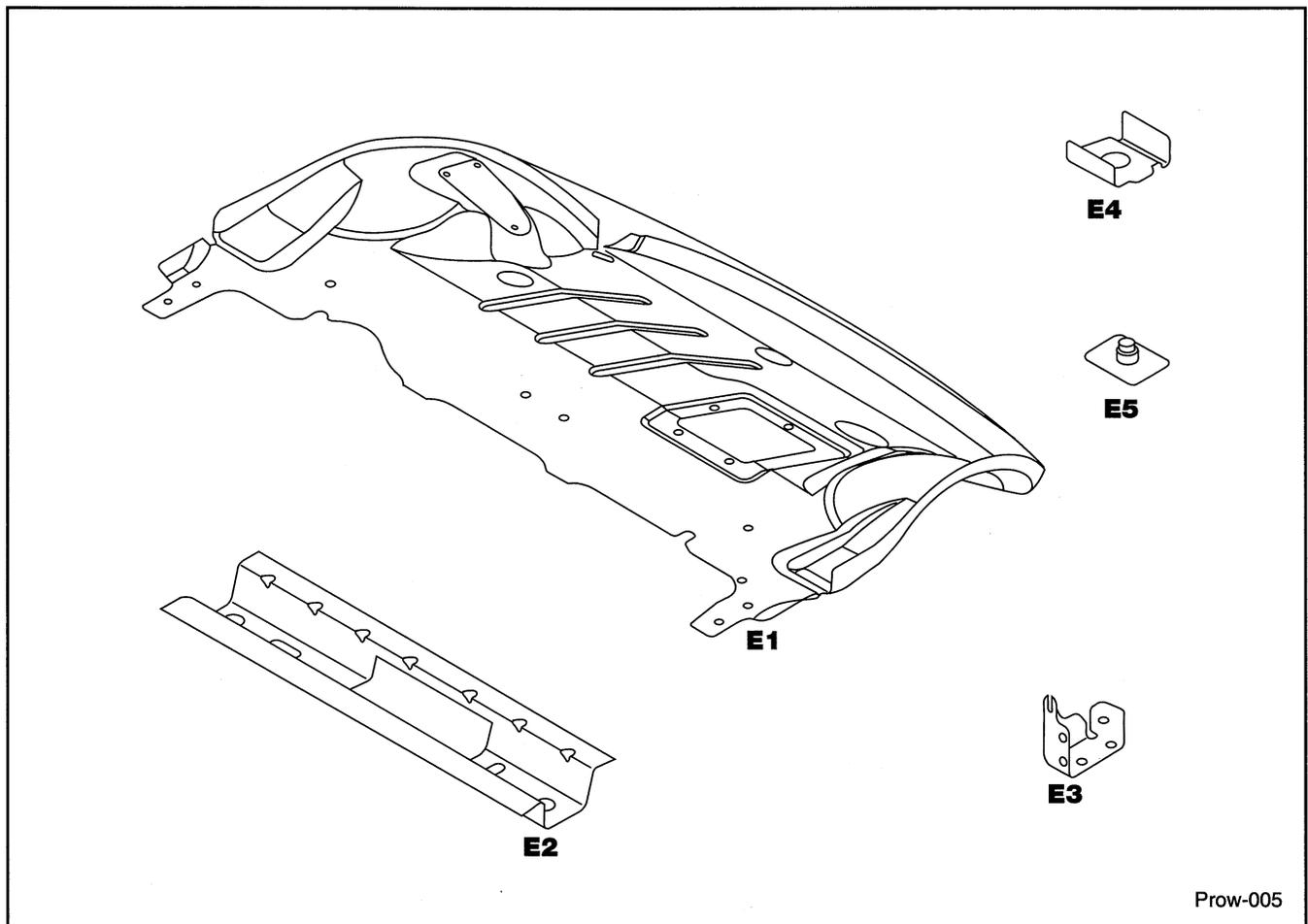


## Body Construction Characteristics

### REAR FLOOR PAN COMPONENTS

The parts listed below may be serviced individually or as an assembly.

1. Rear Floor Pan
2. Rear Floor Pan Reinforcement
3. Rear Floor Pan Bracket
4. Rear Floor Pan Mounting Tapping Plate
5. Rear Floor Pan Mount Retainer

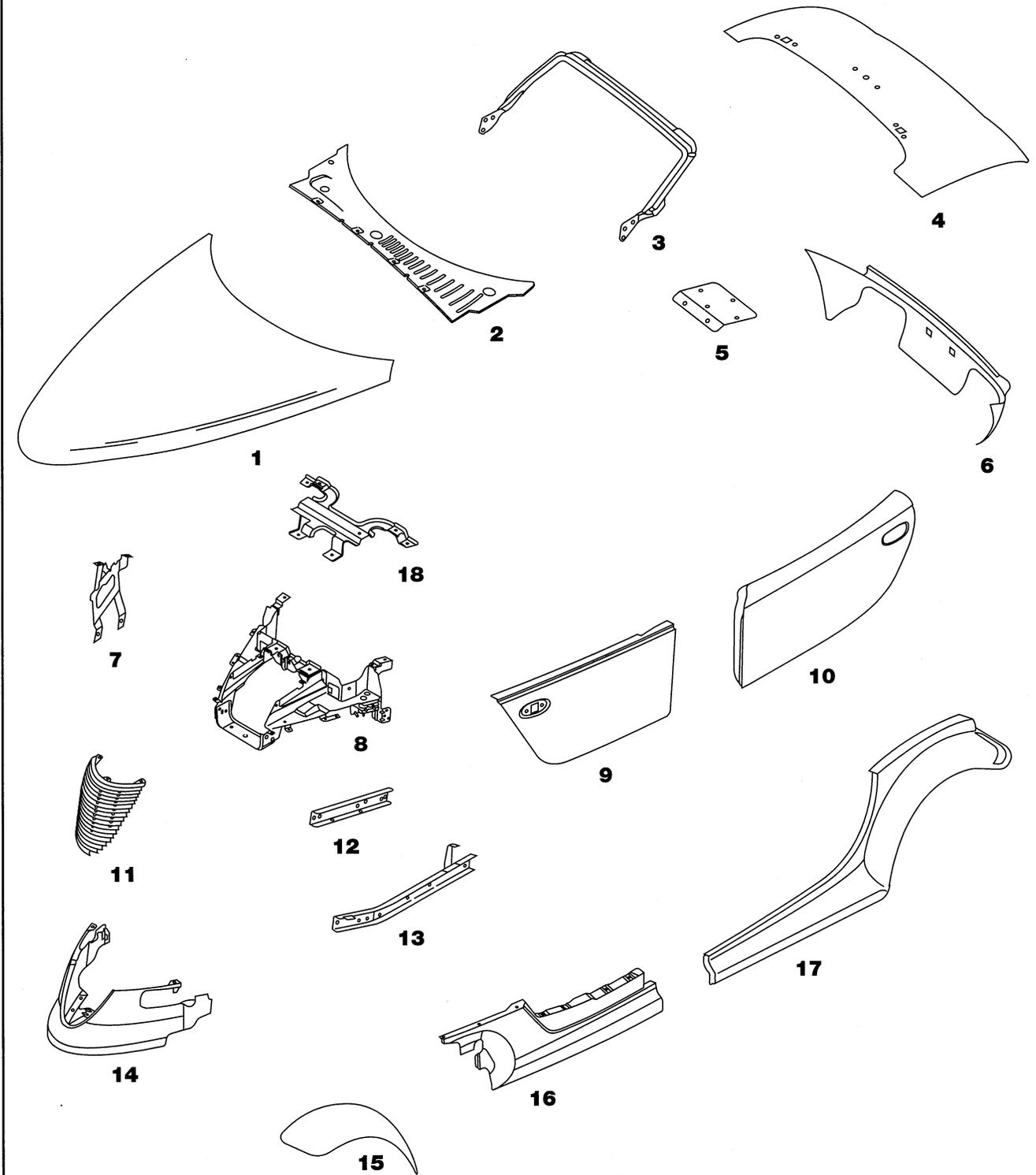


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## BOLT-ON BODY COMPONENTS — PROWLER



Prow-a08



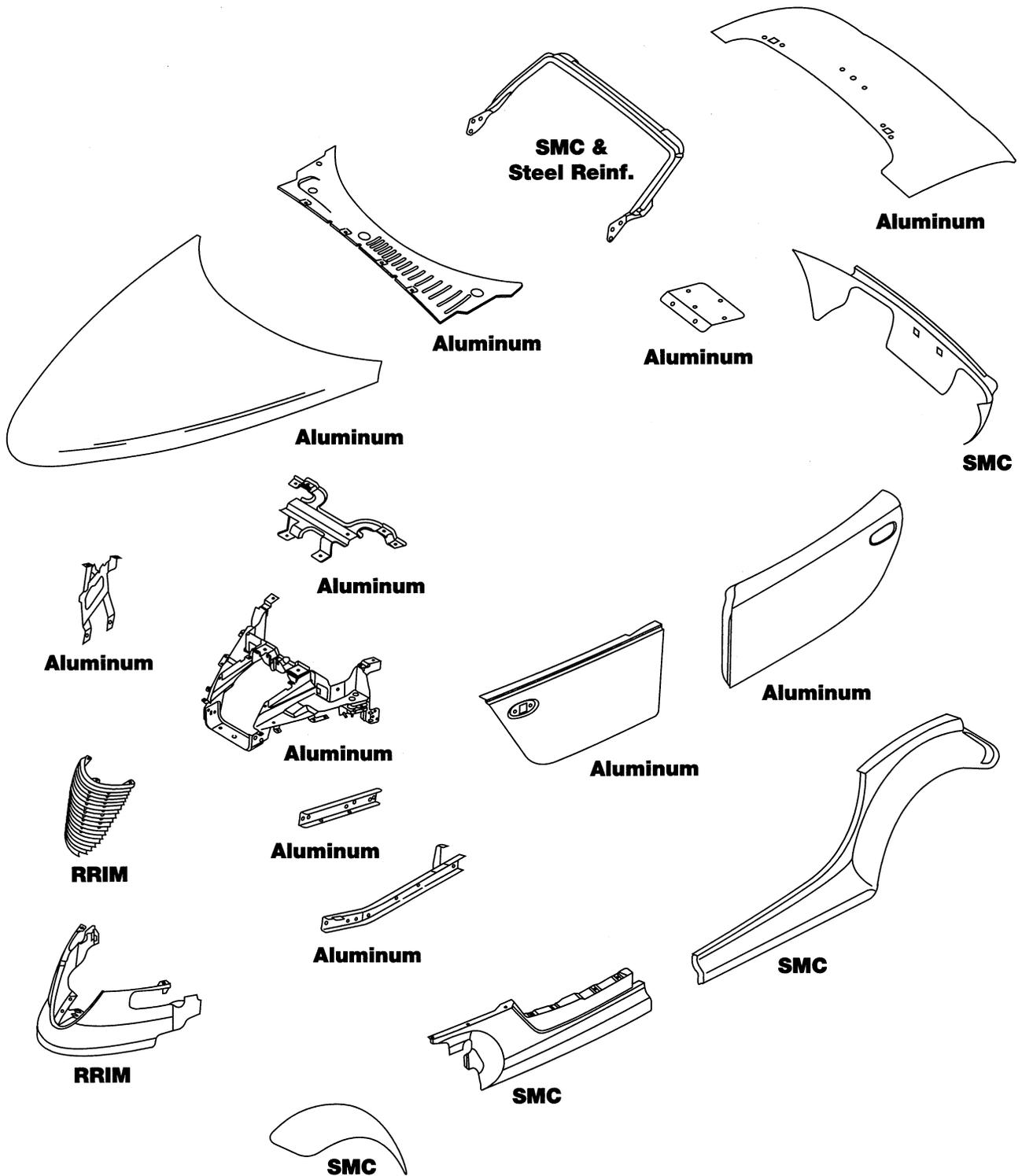
### **BOLT-ON BODY COMPONENTS**

1. Hood Assy.
2. Cowl Trim Top
3. Windshield Frame Assy.
4. Deck Assy.
5. Fuel Filter Cover
6. Rear Fascia
7. Hood Side Beam Inner Right Panel
8. Headlamp Support Assy.
9. Hood Side Panel
10. Door Assy.
11. Front Fascia Panel Assy.
12. Hood Side Upper Beam
13. Hood Side Lower Beam
14. Front Fascia Panel Assy.
15. Front Fender Assy.
16. Panel Assy. Front Qrt. and Side Sill
17. Rear Quarter Panel and Fender Assy.
18. Upper Cooling System Support



# Body Construction Characteristics

## BODY COMPONENTS MATERIALS — PROWLER



Prow-a08



## INTRODUCTION

All body panels are made of plastic composition or aluminum materials. Different processes are used to create and shape the panels. Most body and internal structure panels are aluminum. Front, rear fenders, and rear fascia/valance are constructed of SMC (Sheet Molding Compound). Flexible panels are produced from the RRIM process.

All panels are fastened with adhesive, henrob rivets, pop rivets, or a combination of these fasteners.

Service repair is enhanced as all exterior panels can be easily removed.

- RRIM (Reinforced Reaction Injection Molding) — This process has produced highly flexible plastic panels throughout the industry, an example is the PROWLER front fascia panel.
- SMC (Sheet Molding Compound) — This material is repaired easily using rigid plastic repair procedures. It is constructed using short fiberglass strands usually less than 2" long. Sheet stock of glass impregnated resin matting is placed into the mold and pressed under heat to flow material throughout the mold. Tooling is shear edge designed to mold to net (i.e. no trimming at periphery required).

## HENROB RIVETS



Triple Thickness Henrob Rivet



Double Thickness Henrob Rivet

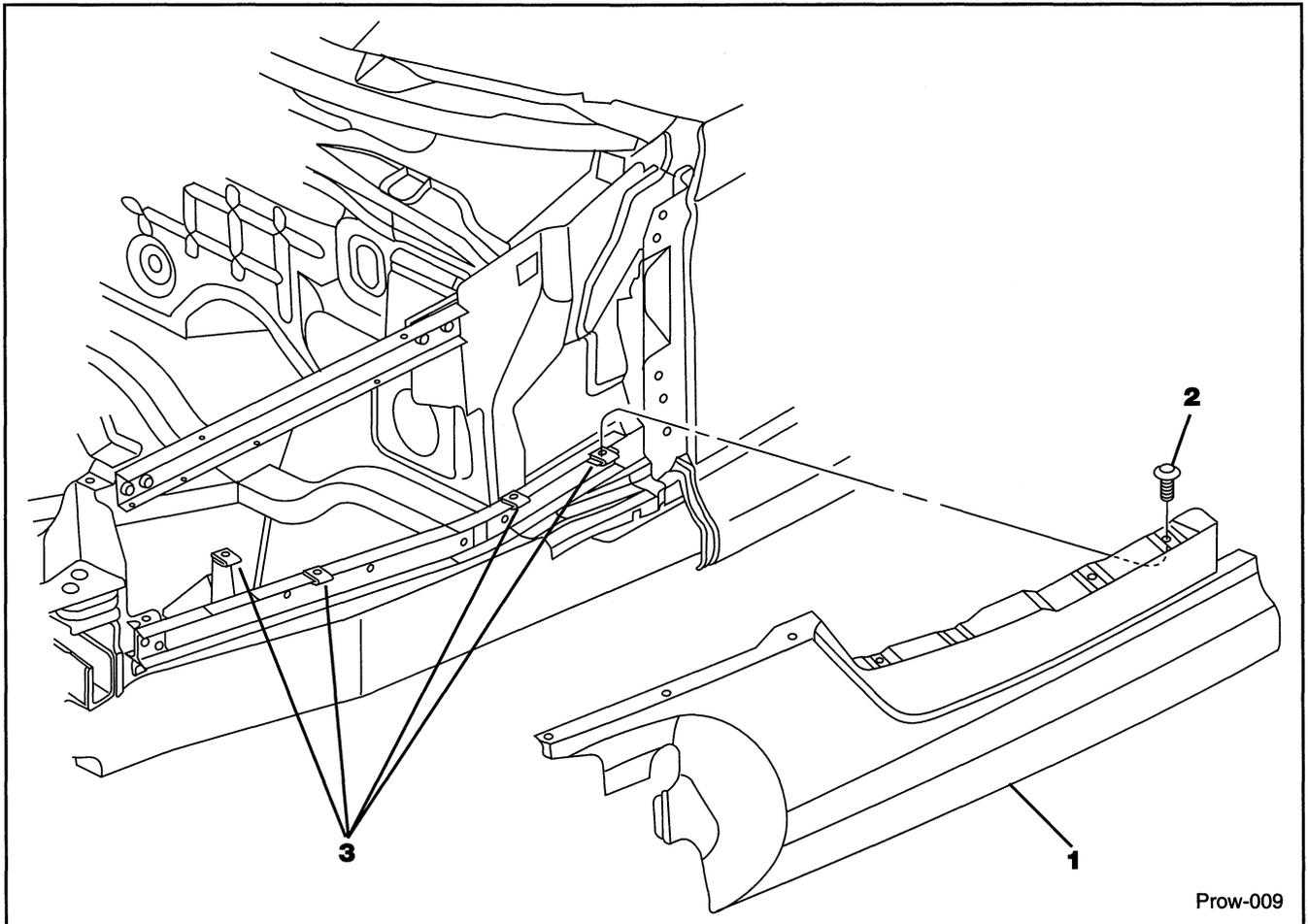


## Body Construction Characteristics

### PANEL ASSY. FRONT QRT. AND SIDE SILL

The front quarter side sill is bolted at the top and riveted at the bottom.

1. Panel Assy. Front Qtr. and Side Sill
2. Screw
3. U-nut



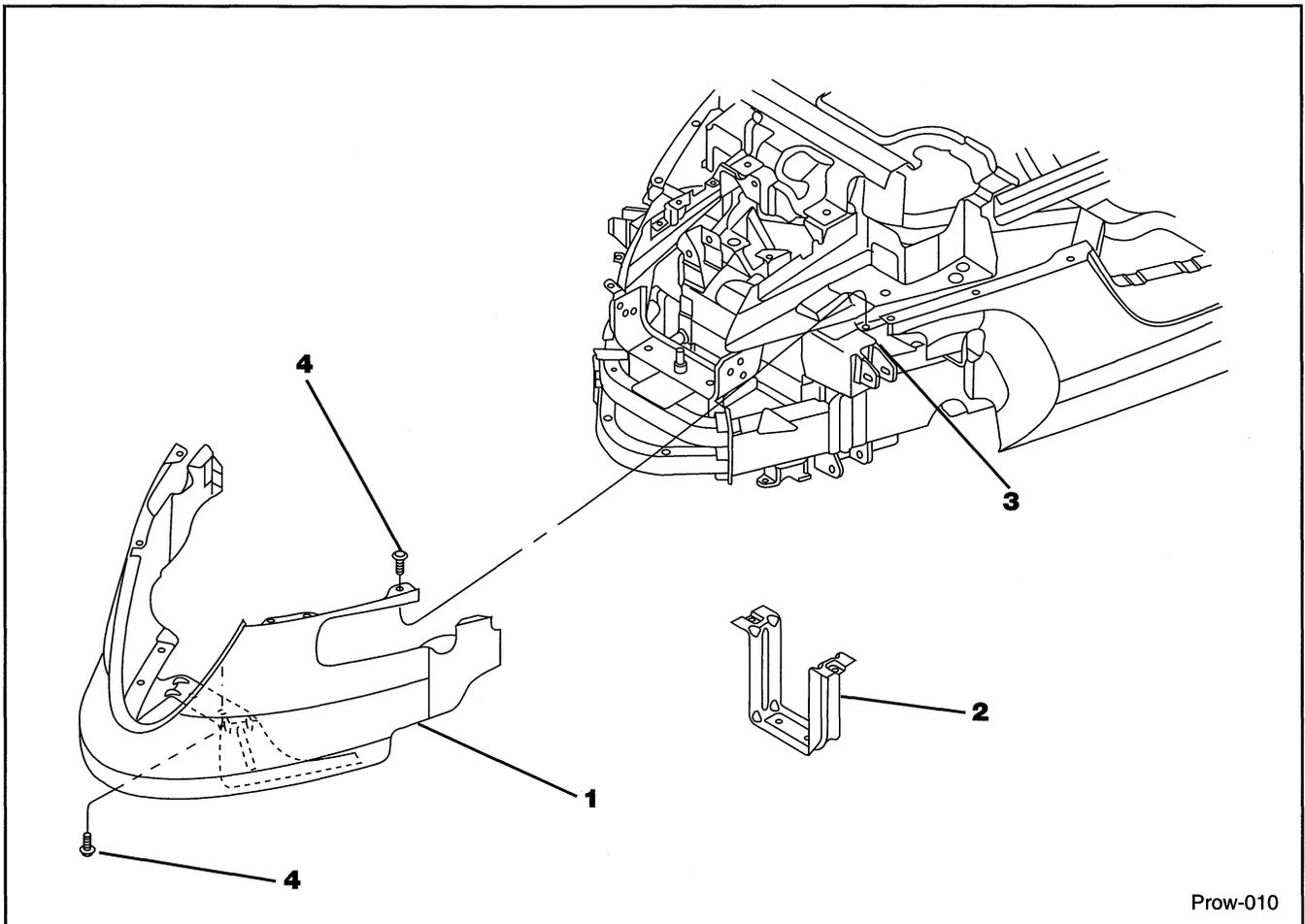
Prow-009



## FRONT FASCIA AND BRACKET

The front fascia panel assembly is secured with screws.

1. Front Fascia Panel Assy.
2. Fascia Support to C/mbr. Bracket
3. Front Lower Body Mnt. C/mbr. Extension Assy.
4. Screw



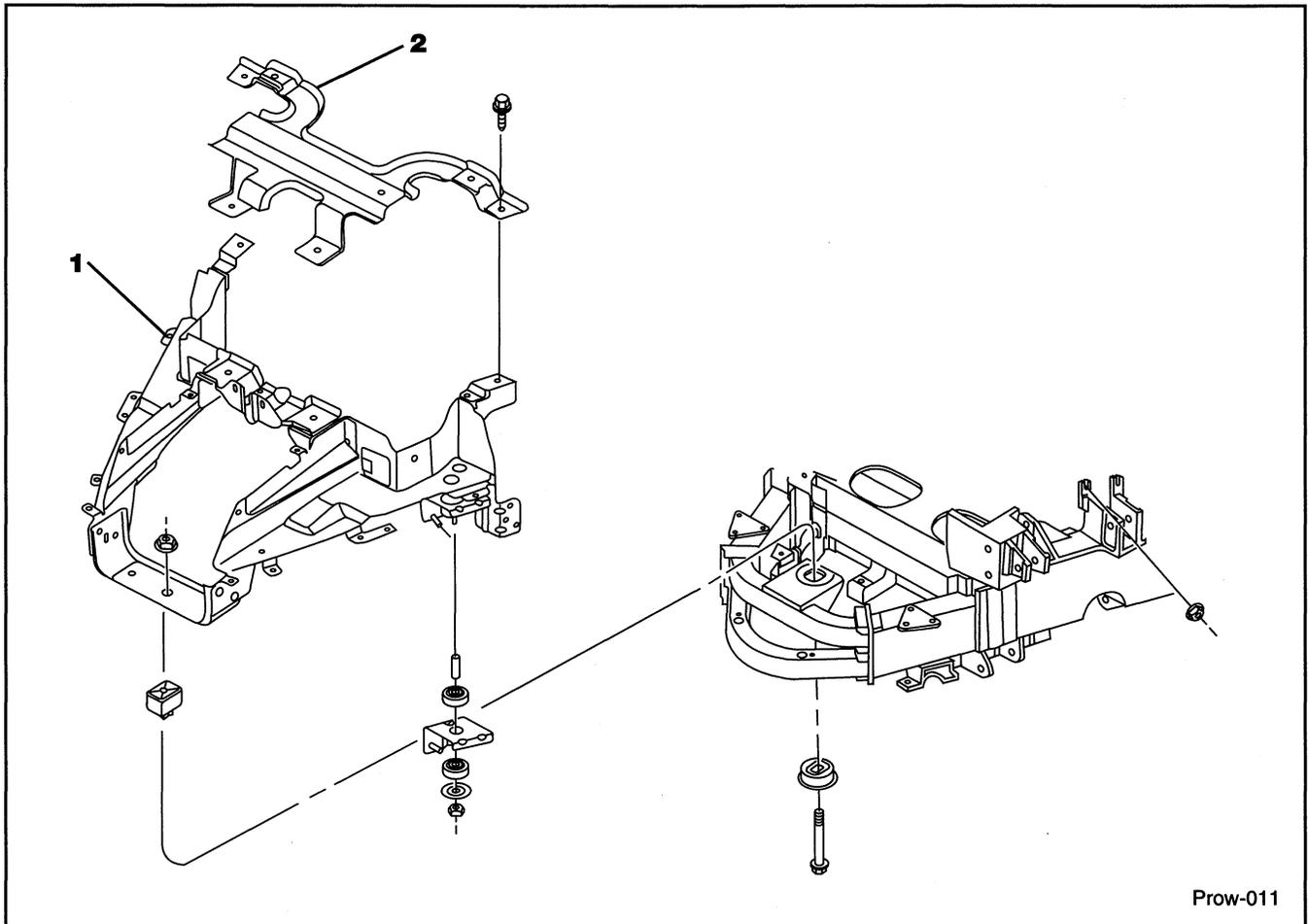
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### HEADLAMP SUPPORT ASSEMBLY

The position of the headlamp support is critical for headlamp alignment.

1. Headlamp Support Assy.
2. Upper Cooling System Support

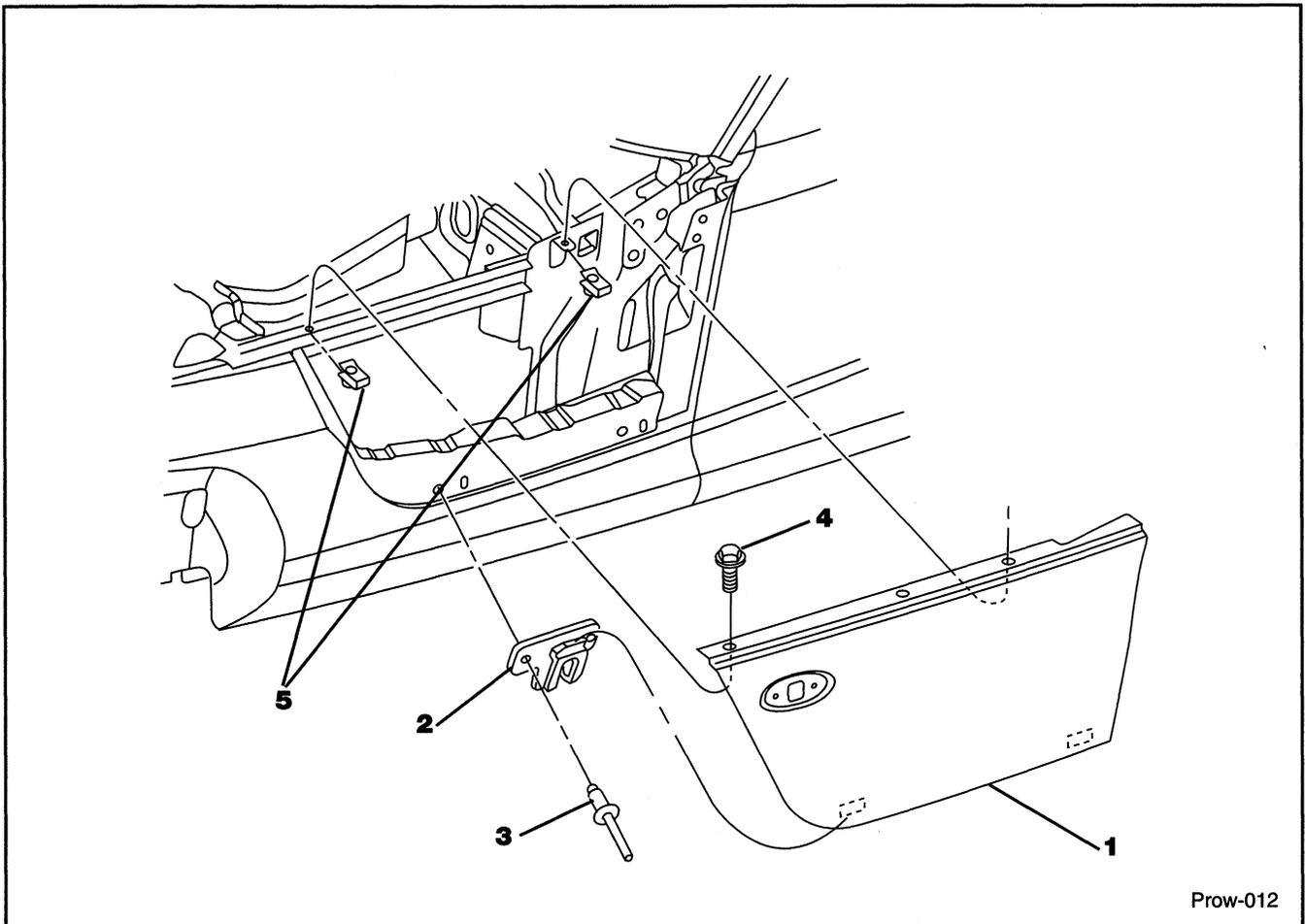




## HOOD SIDE PANEL

The parts listed below may be serviced individually or as an assembly.

1. Hood Side Panel
2. Hood Side Panel Assy. Att. Clip
3. Rivet
4. Screw and Washer
5. U-nut



Prow-012

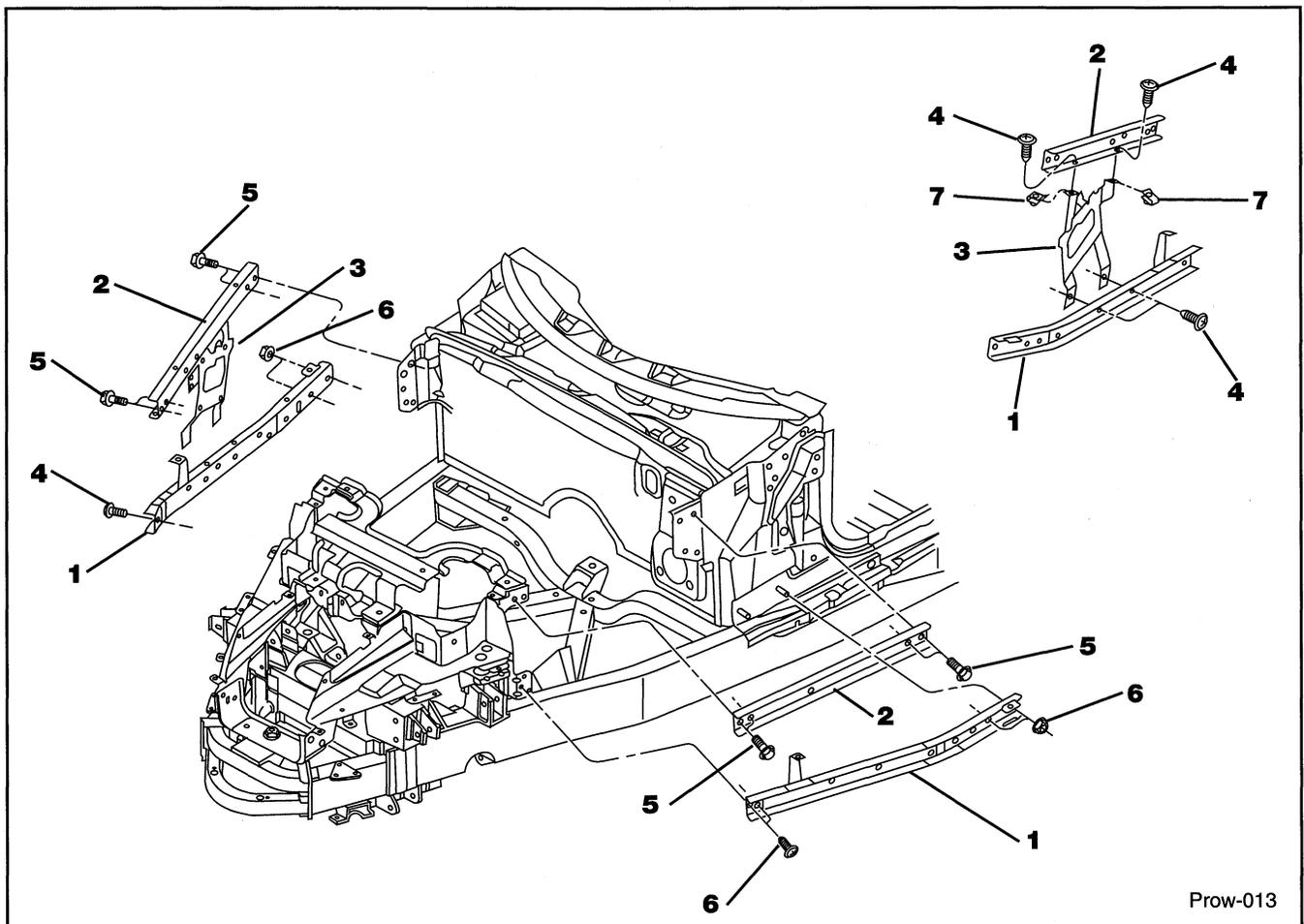


## Body Construction Characteristics

### HOOD SIDE BEAMS

The parts listed below are serviced individually.

1. Hood Side Lower Beam
2. Hood Side Upper Beam
3. Hood Side Beam Inner Right Panel
4. Screw
5. Screw and Washer Hex
6. Nut and Washer
7. U-nut

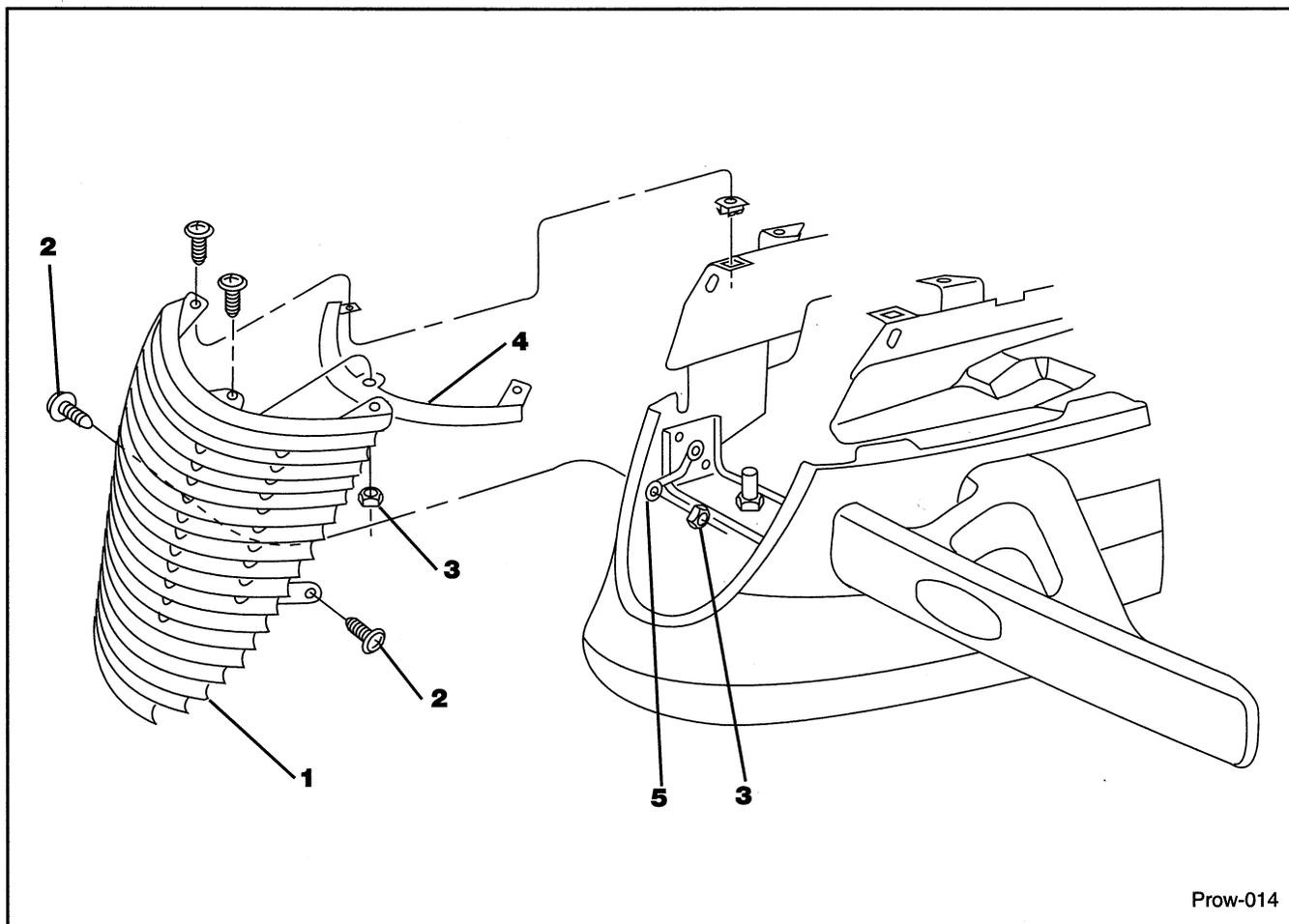




## FRONT FASCIA PANEL ASSEMBLY

The front fascia is bolted on with screws and nuts.

1. Front Fascia Panel Assy.
2. Screw
3. Nut
4. Front Grill Upper Att. Bracket
5. Grill Center Attachment Rod Front
6. Plastic Nut



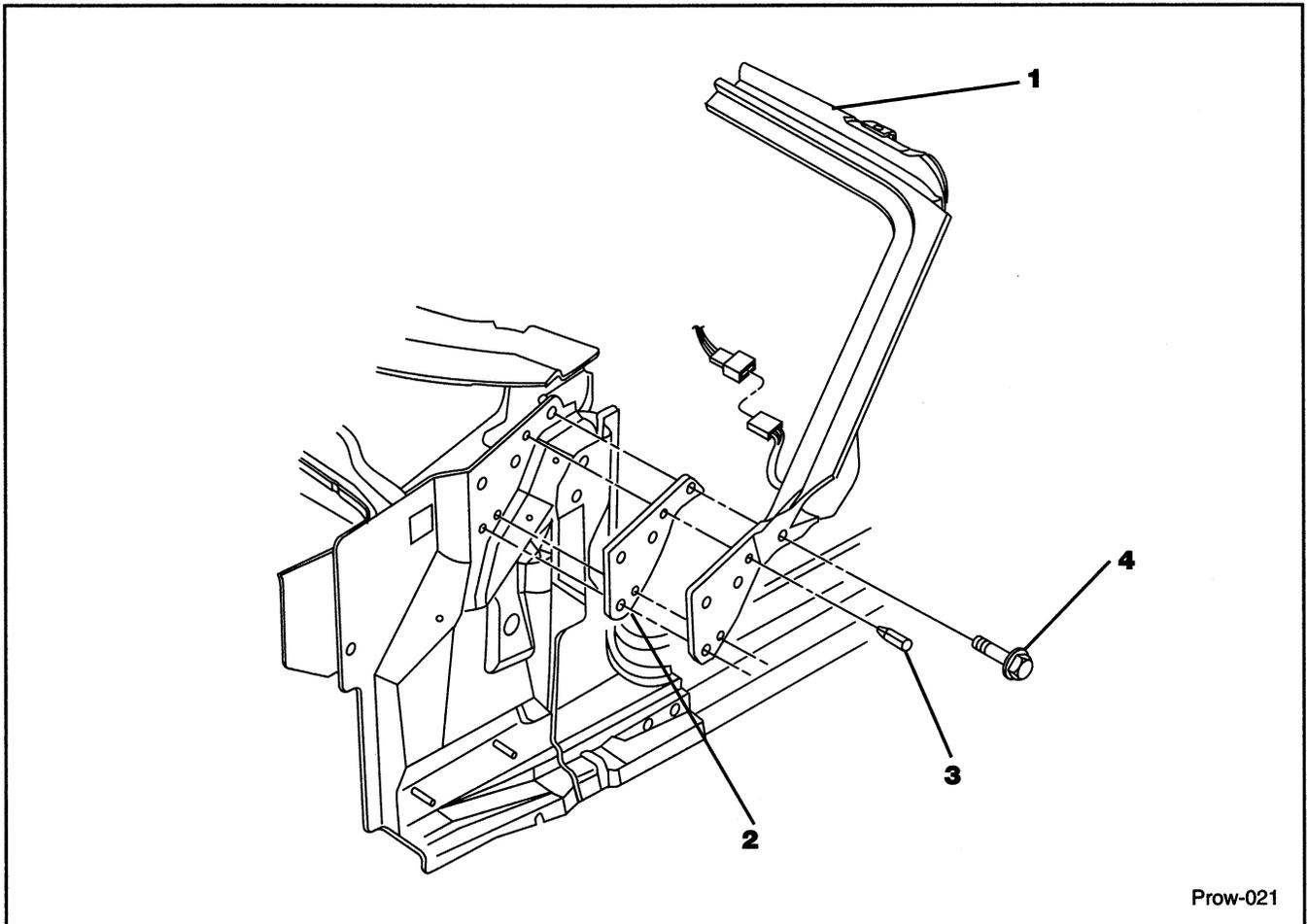
Prow-014



### WINDSHIELD FRAME ASSEMBLY

The alignment pin is critical for windshield alignment.

1. Windshield Frame Assy.
2. Shim
3. Alignment Pin
4. Hex Head Screw and Washer

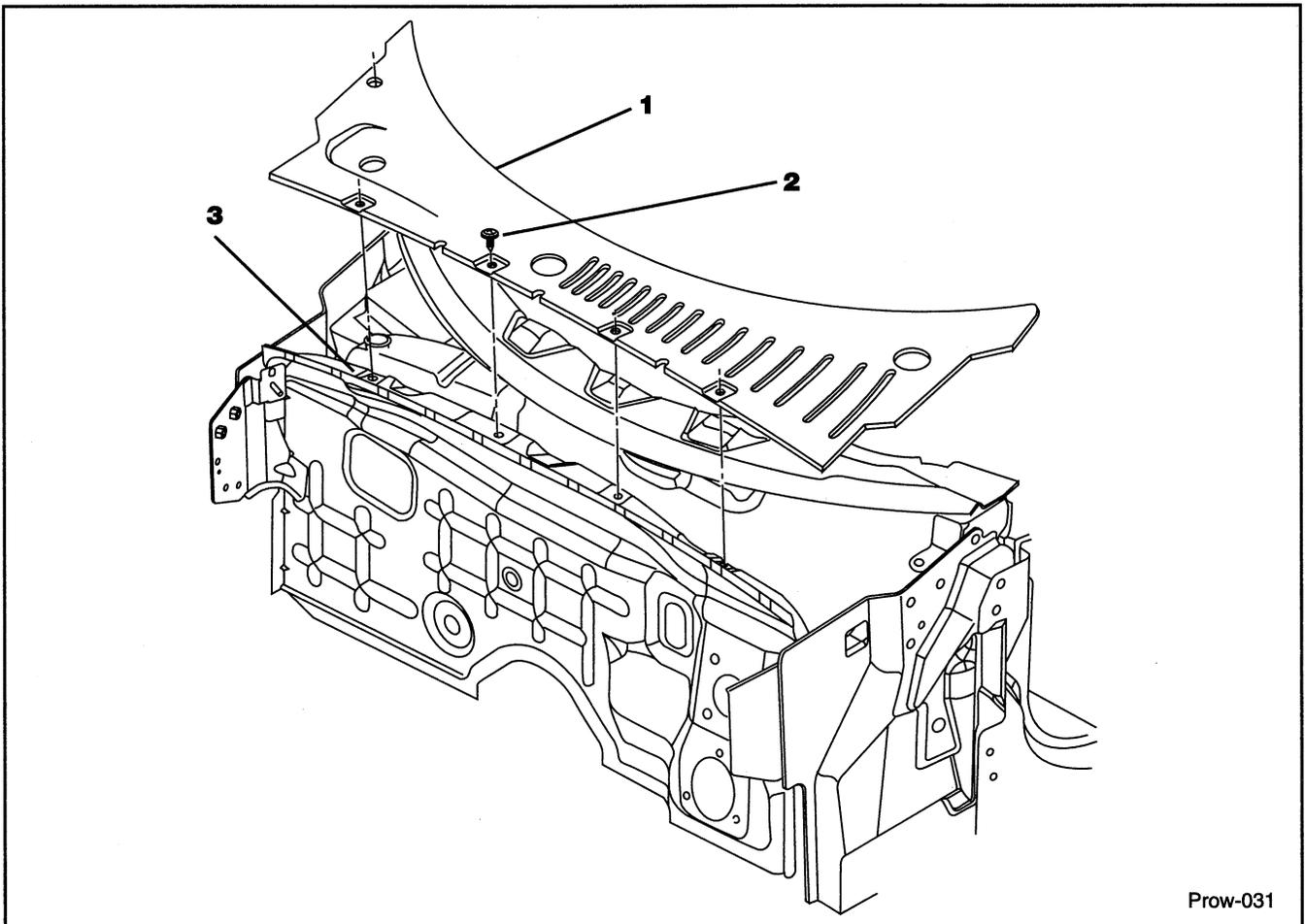




## COWL TRIM TOP

The cowl trim top is secured to the dash with four screws.

1. Cowl Trim Top
2. Screw
3. Dash



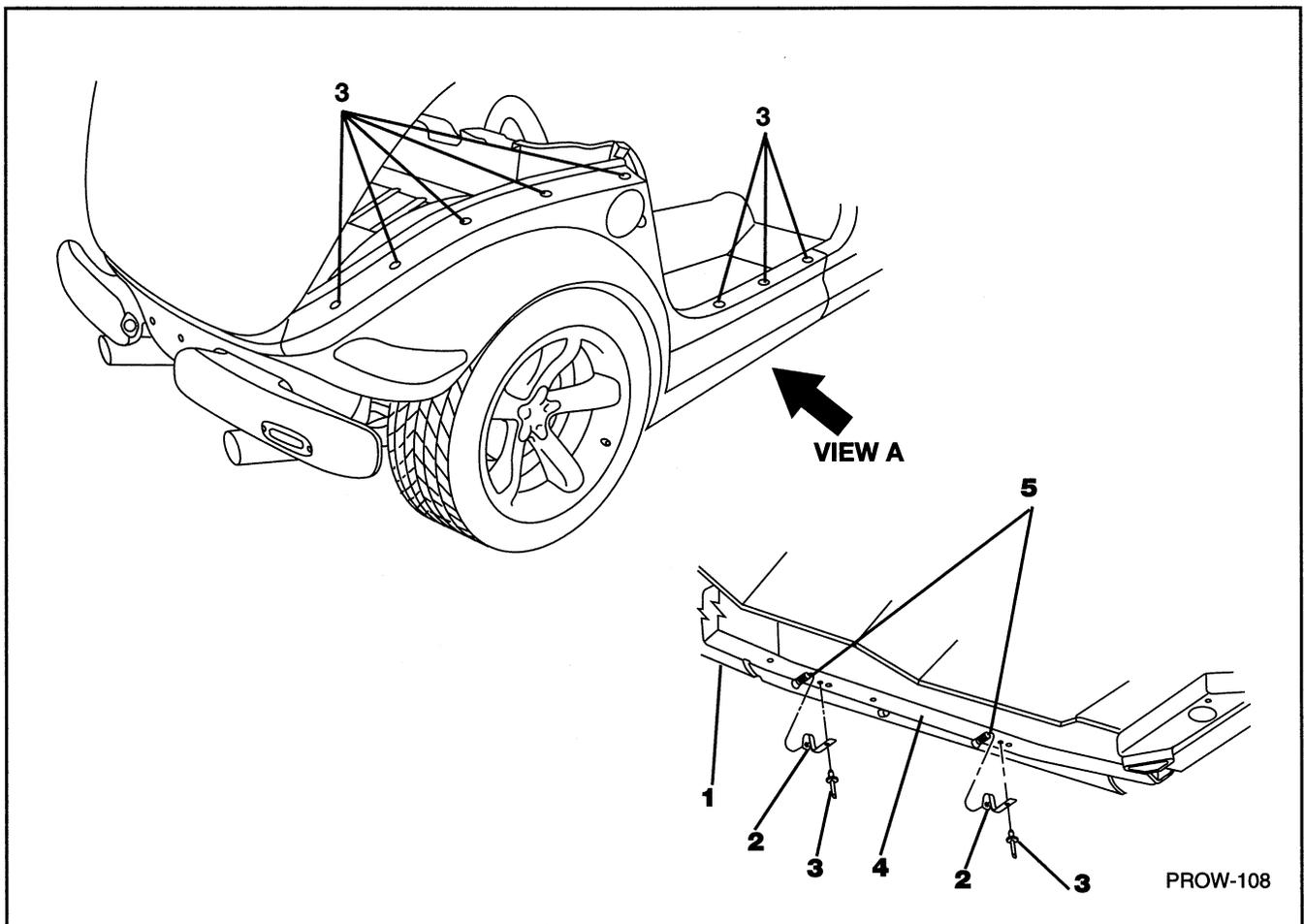


## Body Construction Characteristics

### REAR QUARTER PANEL AND FENDER ASSEMBLY

The rear quarter panel and fender assembly are secured to the vehicle with rivets along the top and spring attach and rivets at the bottom.

1. Rear Quarter Panel
2. Spring Attach
3. Rivet
4. Frame Side Sill
5. Stud

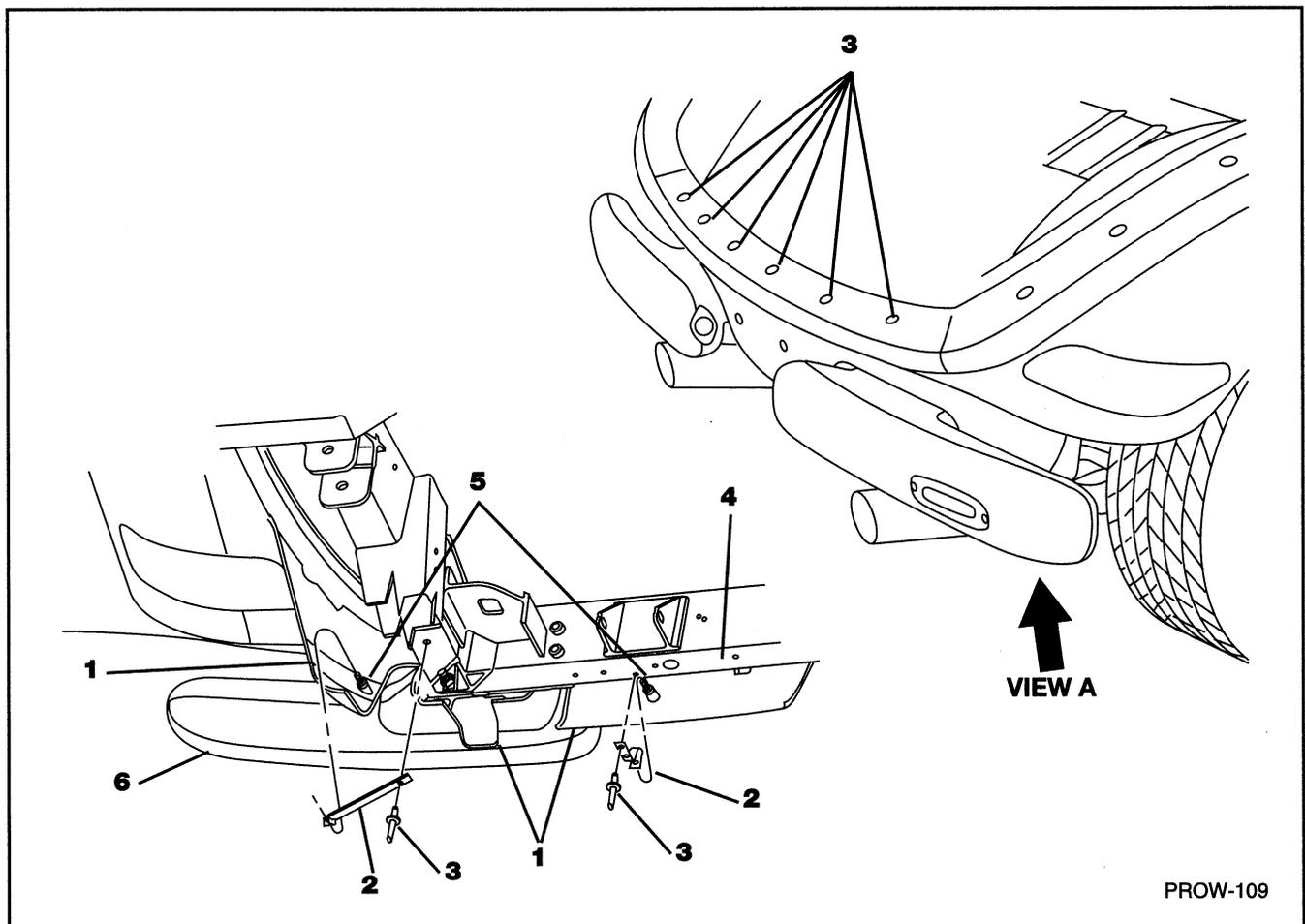




## REAR FENDER/VALANCE

The rear fender is secured along the top with rivets and along the bottom with spring attach and rivets.

1. Rear Valance
2. Spring Attach
3. Rivet
4. Frame Rear
5. Stud
6. Rear Bumper



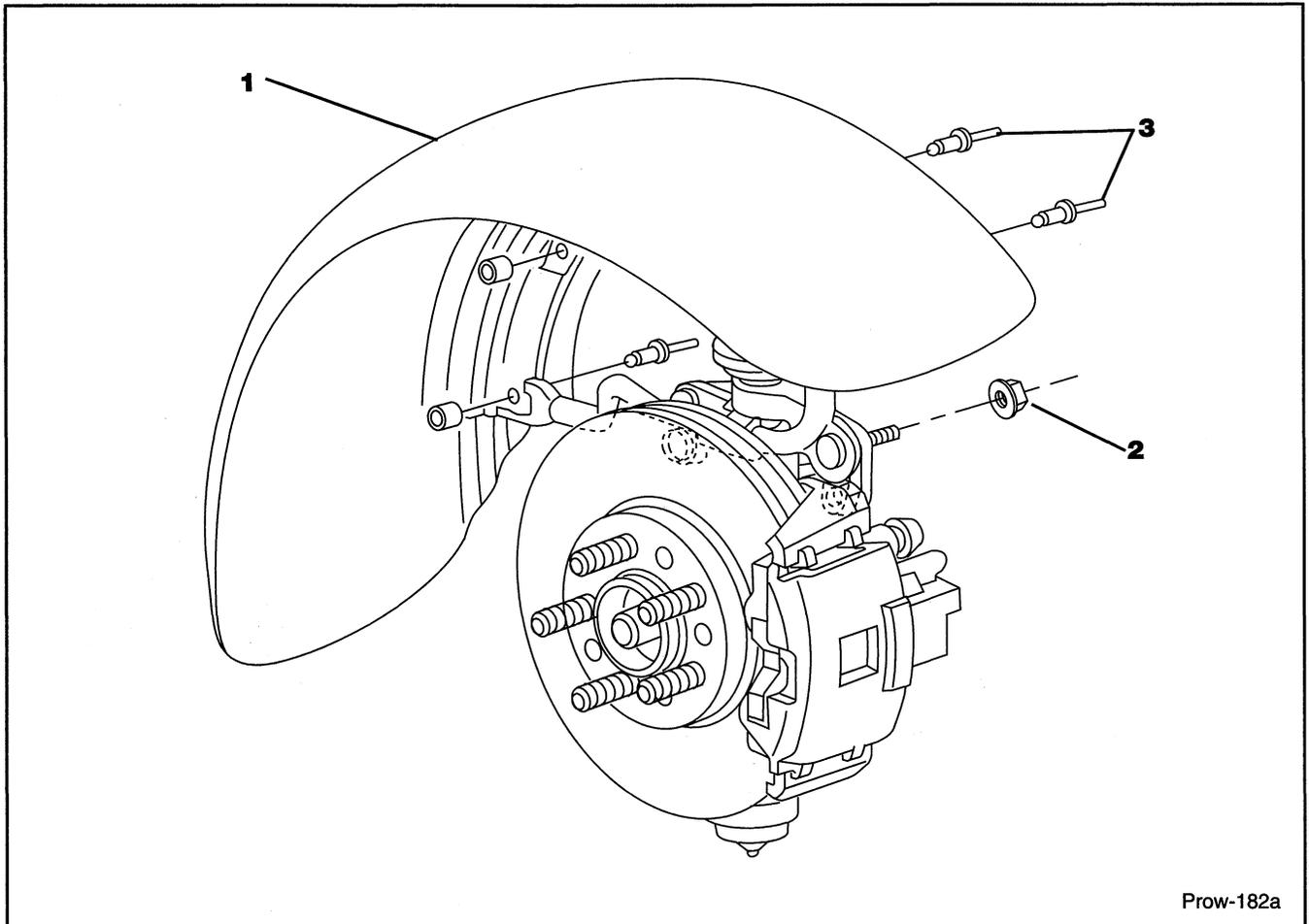
PROW-109



### FRONT FENDER

The front fender is secured with nuts and screws.

1. Front Fender
2. Nut
3. Rivet

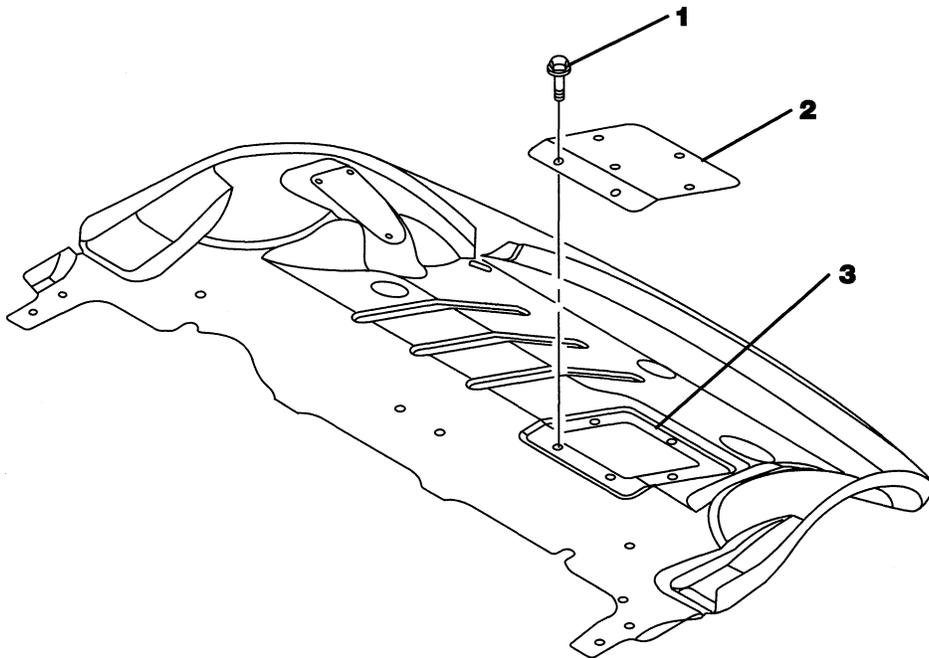




## FUEL FILTER COVER

The fuel pump access panel must be removed to change the fuel pump.

1. Bolt
2. Fuel Pump Access Panel
3. Rear Floor Pan

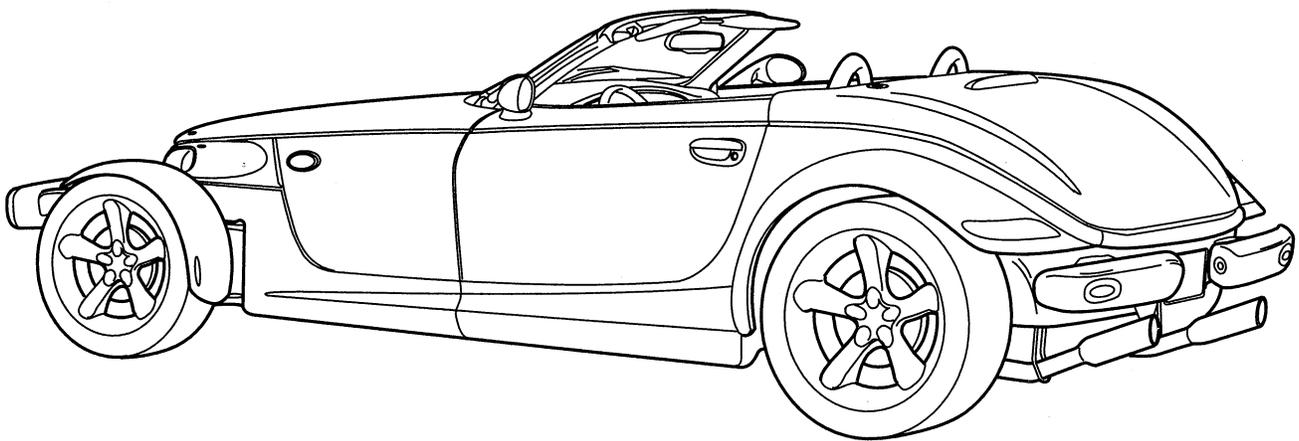


Prow-032

# PROWLER



## Body Panel Replacement



REAR-VIEW

<b>Explanation of Contents .....</b>	<b>40</b>
<b>Dash Cowl Plenum Assy.....</b>	<b>42</b>
<b>Body Side .....</b>	<b>48</b>
<b>Front Floor Pan and Tunnel .....</b>	<b>56</b>
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# Explanation of Contents

## EXPLANATION OF SECTION CONTENTS

When servicing the PROWLER, it is important to know how the body panels are secured to the vehicle. The aluminum body tub panels are assembled with rivets and adhesive. This section indicates the location and type of fastener to use.

Body panels attached with structural adhesive can be separated using a heat gun at 400°F. The panel can then be separated and the adhesive removed with a flat blade scraper.

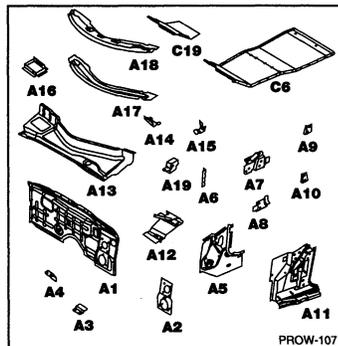
Once panels have been separated and bare metal is exposed, corrosion protection must be reapplied to the metal. Failure to reapply corrosion protection may result in vehicle damage.

### Symbol Key

R = Rivet

A = Adhesive

### Dash, Cowl, and Plenum Assembly



PROW-107

No.	Asy of Parts	F	R
1	A1 + A2	R/A8	R/A8
2	A1 + A3	R/A2	R/A2
3	A1 + A4	R/A2	R/A2
4	A17 + A18	R/A24	R/A24
5	A13 + A16	R/A10	R/A10

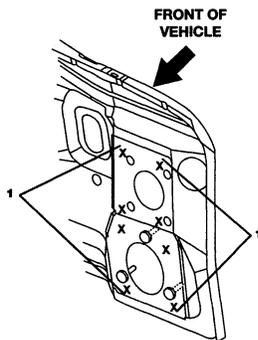
R = Right Hand Side of Vehicle L = Left Hand Side of Vehicle

No.	Asy of Parts	F	R
6	A13 + A15	R/A4	R/A4
7	A12 + A13	R/A9	R/A9
8	A12 + A13	R4	R4
9	A14 + A13	R1	R1
10	A14 + A3 + A12	R1	R1
11	A1 + A13 + A14	R2	R2
12	A1 + A14	R3	R3
13	A1 + A13	R21	R21
14	A9 + A11	R/A1	R/A1
15	A10 + A11	R/A1	R/A1
16	A7 + A11	R/A6	R/A6
17	A8 + A11	R/A5	R/A5
18	A5 + A8	R/A3	R/A3
19	A16 + A13 + A5	R/A3	R/A3
20	A13 + A5	R/A5	R/A5
21	A1 + A5	R/A3	R/A3
22R	A5 + C6	R/A10	R/A10
22L	A5 + C6	R/A11	R/A11
23	A5 + C19	R/A4	R/A4
24R	A5 + A11	R/A13	R/A13
24L	A5 + A11	R/A14	R/A14
25	A19 + A3	R1	R1
26	A19 + A13 + A5	R1	R1

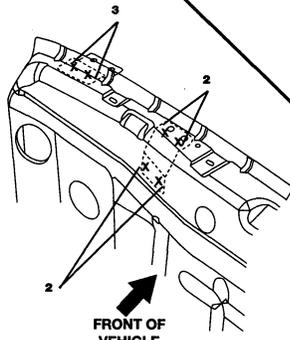
“F” indicates the number of factory henrob rivets and adhesive to be separated.

“R” indicates the number of pop rivets and adhesive to be replaced.

R/A3 indicates that the method used at the factory was a rivet and adhesive. For example, “FR/A3, RR/A3” indicates that the 3 rivet and adhesive made at the factory should be replaced by 3 rivet and adhesive if repairs are made.



Prow-036



Prow-037

The illustration below identifies components that are assembled with rivets and adhesive. For example, “A5 + A11” indicates that component “A5” and component “A11,” which are shown in the top left corner illustration on the page, are riveted and bonded with adhesive.



## NOTES

- Always mark shim location and number when removing panels.
- Shims are used with bolts and screws and adhesives. Shims are used to assist body panel alignment.
- All riveted seams require a structural adhesive during assembly. You should dry fit all body components prior to applying the adhesives.
- Before beginning repair procedures, perform tests to verify your equipment and materials to ensure your repairs are the best quality.

- Right and left hand sides will be called out in the charts when rivet placement is not symmetrical or the number of rivets are different.

Points which require particular attention during body panel replacement work.

Removal and installation instructions are given to help different body component removal and installation procedures.

## Dash, Cowl, and Plenum Assembly



### NOTES WITH REGARD TO REPAIR WORK

- The rivets must be coated to control galvanic corrosion.
- Use 3M structural adhesive #08115, or equivalent.

### REMOVAL

Use one of the following procedures to remove the rivet:

#### Drill Procedure

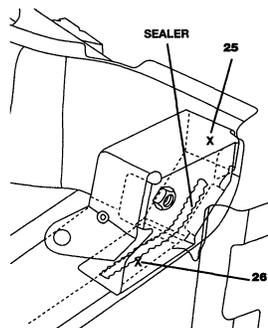
1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

### Grind Procedure

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

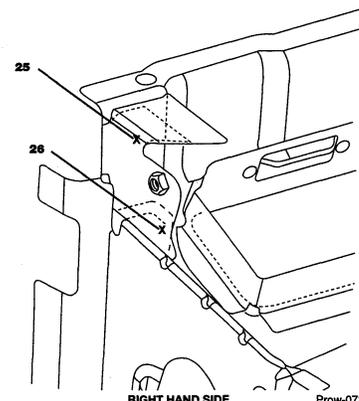
### INSTALLATION

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.



LEFT HAND SIDE

Prow-072

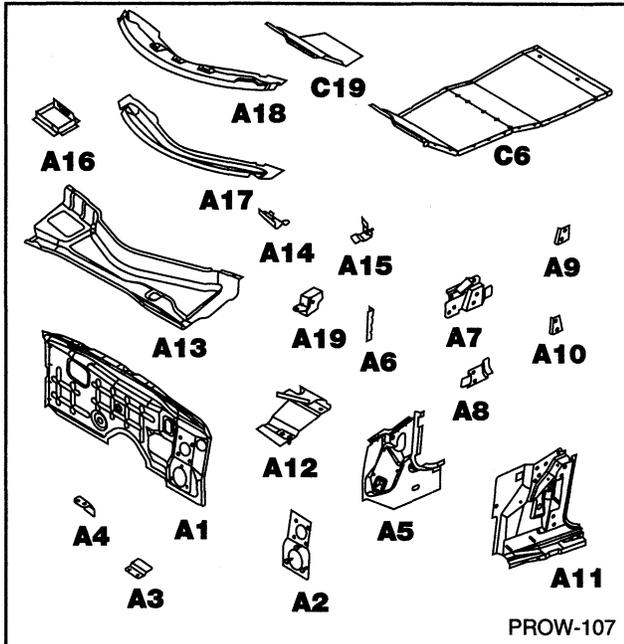


RIGHT HAND SIDE

Prow-073



# Dash, Cowl, and Plenum Assembly

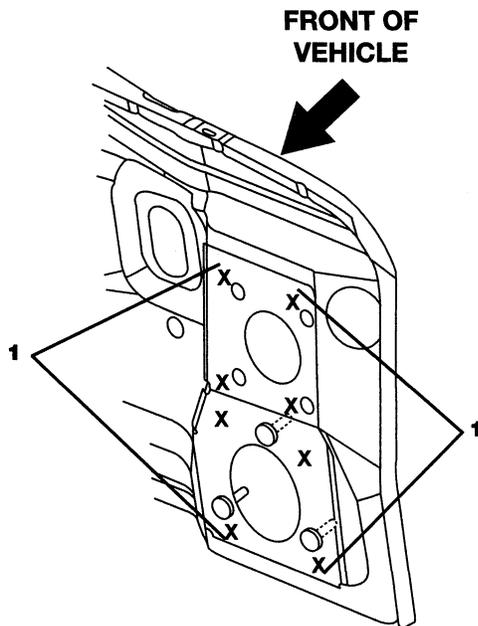


PROW-107

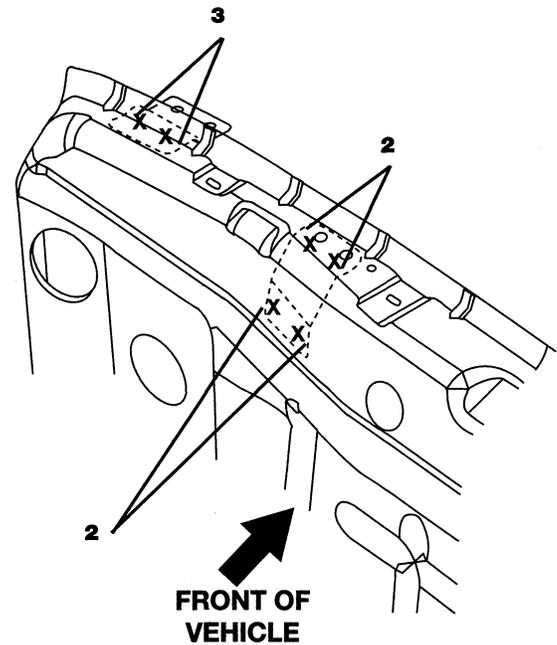
No.	Assy of Parts	F	R
1	A1 + A2	R/A8	R/A8
2	A1 + A3	R/A2	R/A2
3	A1 + A4	R/A2	R/A2
4	A17 + A18	R/A24	R/A24
5	A13 + A16	R/A10	R/A10

R = Right Hand Side of Vehicle    L = Left Hand Side of Vehicle

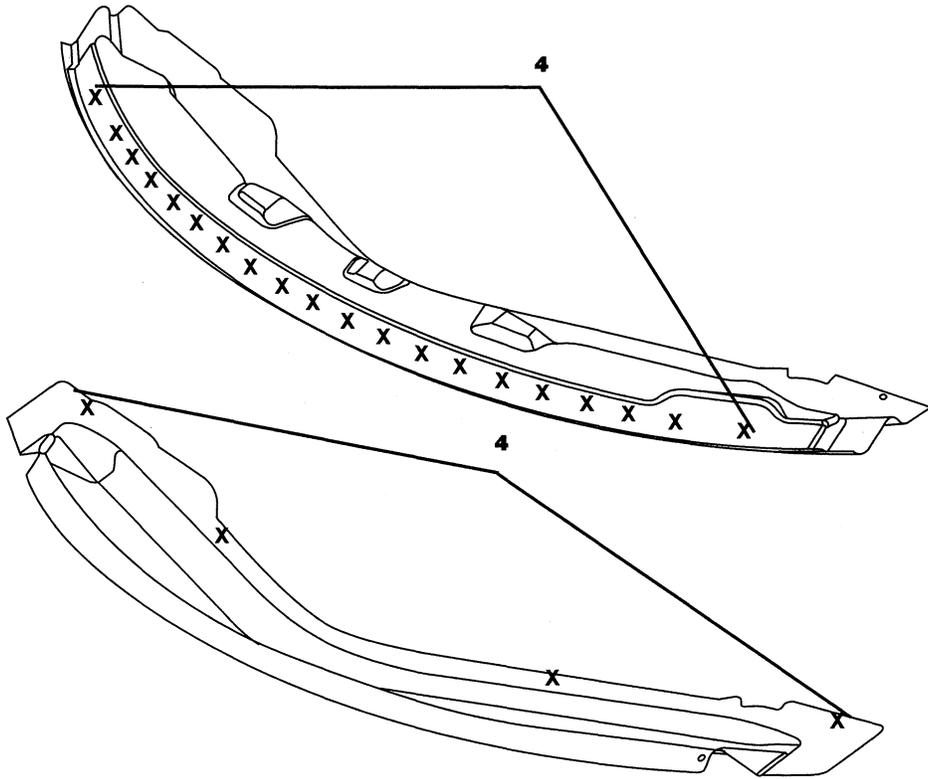
No.	Assy of Parts	F	R
6	A13 + A15	R/A4	R/A4
7	A12 + A13	R/A9	R/A9
8	A12 + A13	R4	R4
9	A14 + A13	R1	R1
10	A14 + A3 + A12	R1	R1
11	A1 + A13 + A14	R2	R2
12	A1 + A14	R3	R3
13	A1 + A13	R21	R21
14	A9 + A11	R/A1	R/A1
15	A10 + A11	R/A1	R/A1
16	A7 + A11	R/A6	R/A6
17	A8 + A11	R/A5	R/A5
18	A5 + A8	R/A3	R/A3
19	A16 + A13 + A5	R/A3	R/A3
20	A13 + A5	R/A5	R/A5
21	A1 + A5	R/A3	R/A3
22R	A5 + C6	R/A10	R/A10
22L	A5 + C6	R/A11	R/A11
23	A5 + C19	R/A4	R/A4
24R	A5 + A11	R/A13	R/A13
24L	A5 + A11	R/A14	R/A14
25	A19 + A3	R1	R1
26	A19 + A13 + A5	R1	R1



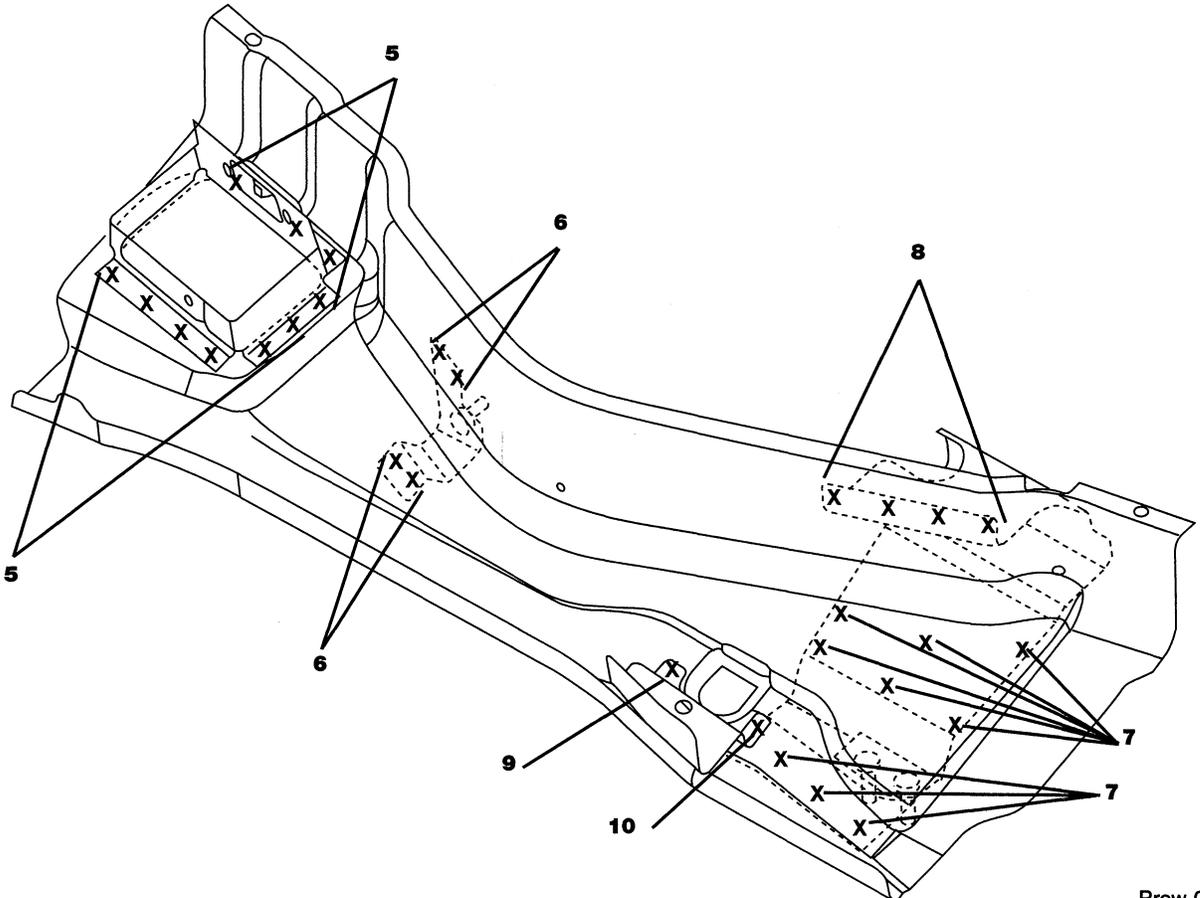
Prow-036



Prow-037



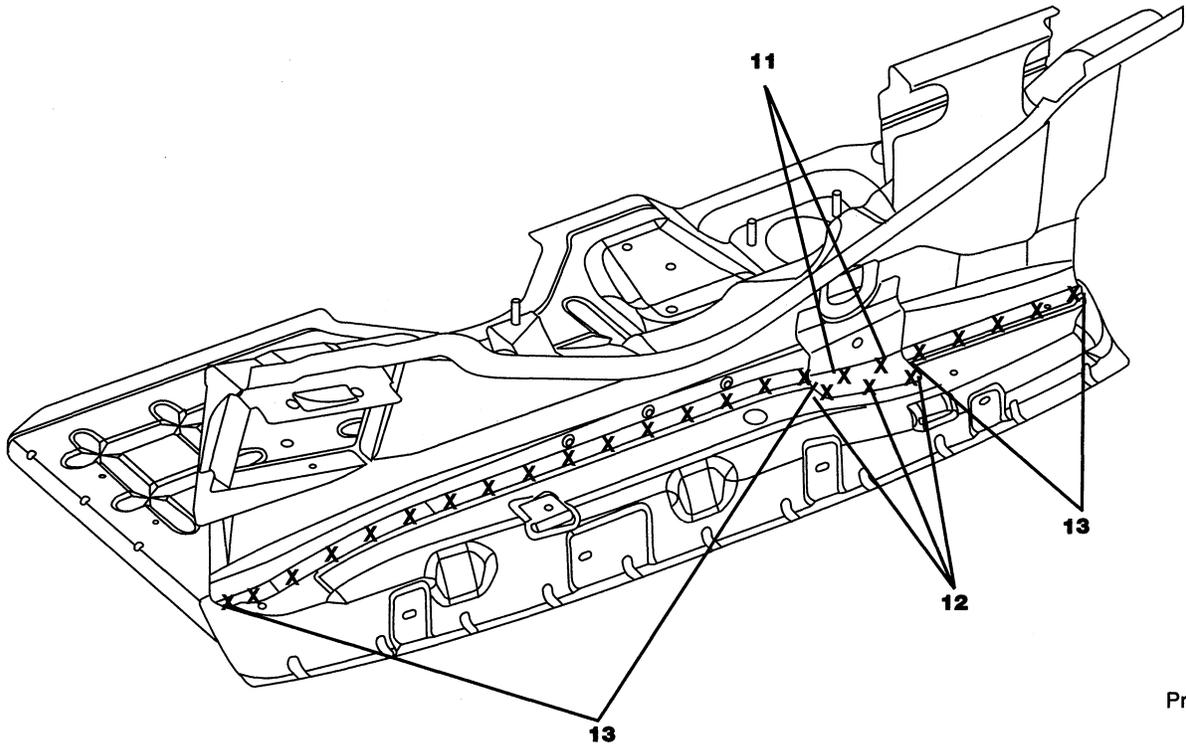
Prow-038



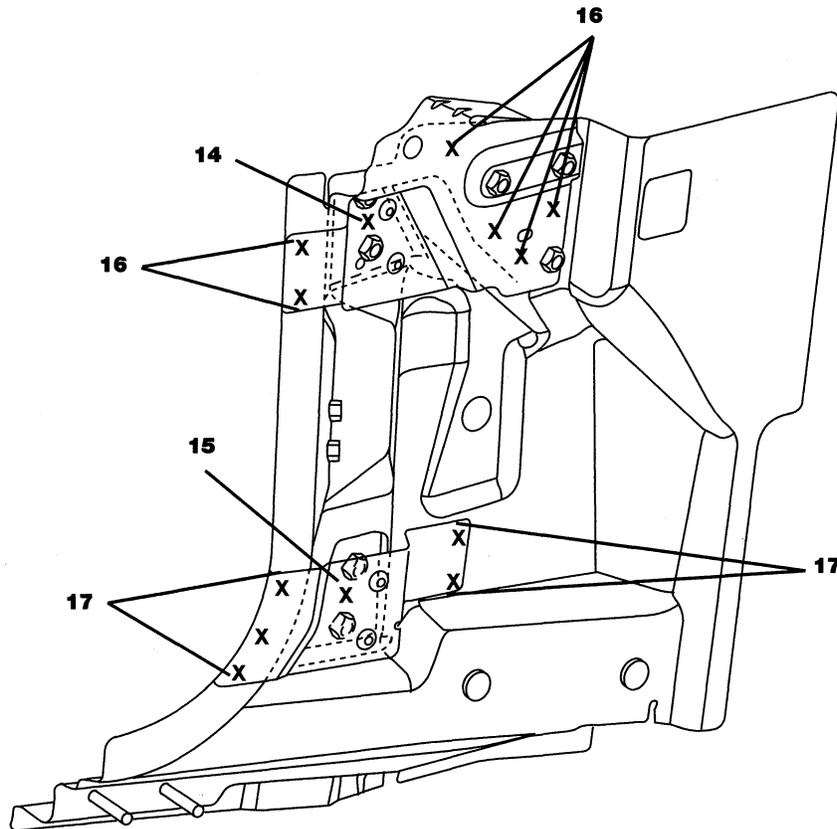
Prow-039



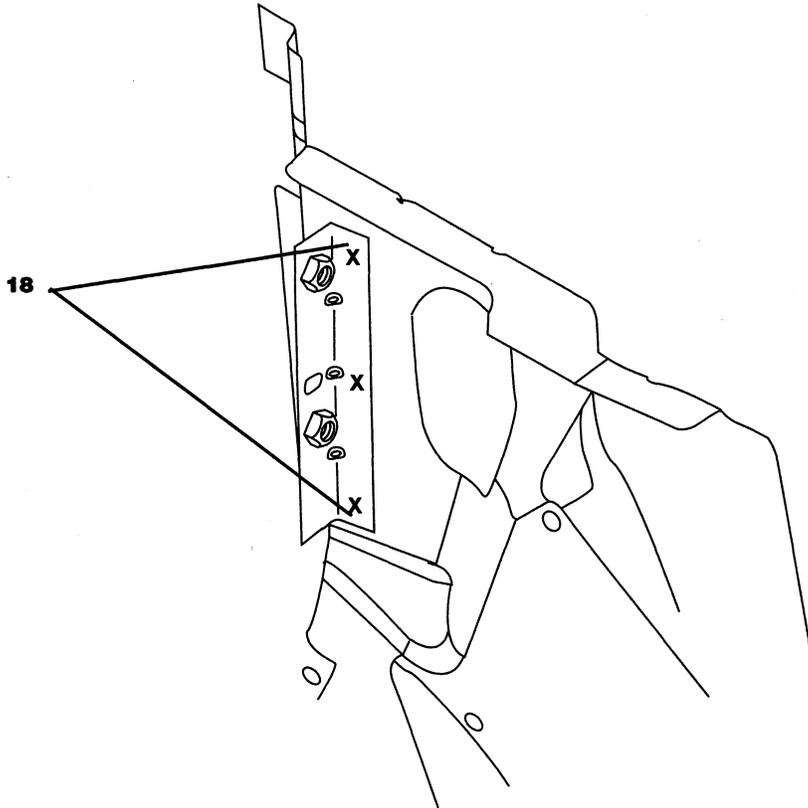
# Dash, Cowl, and Plenum Assembly



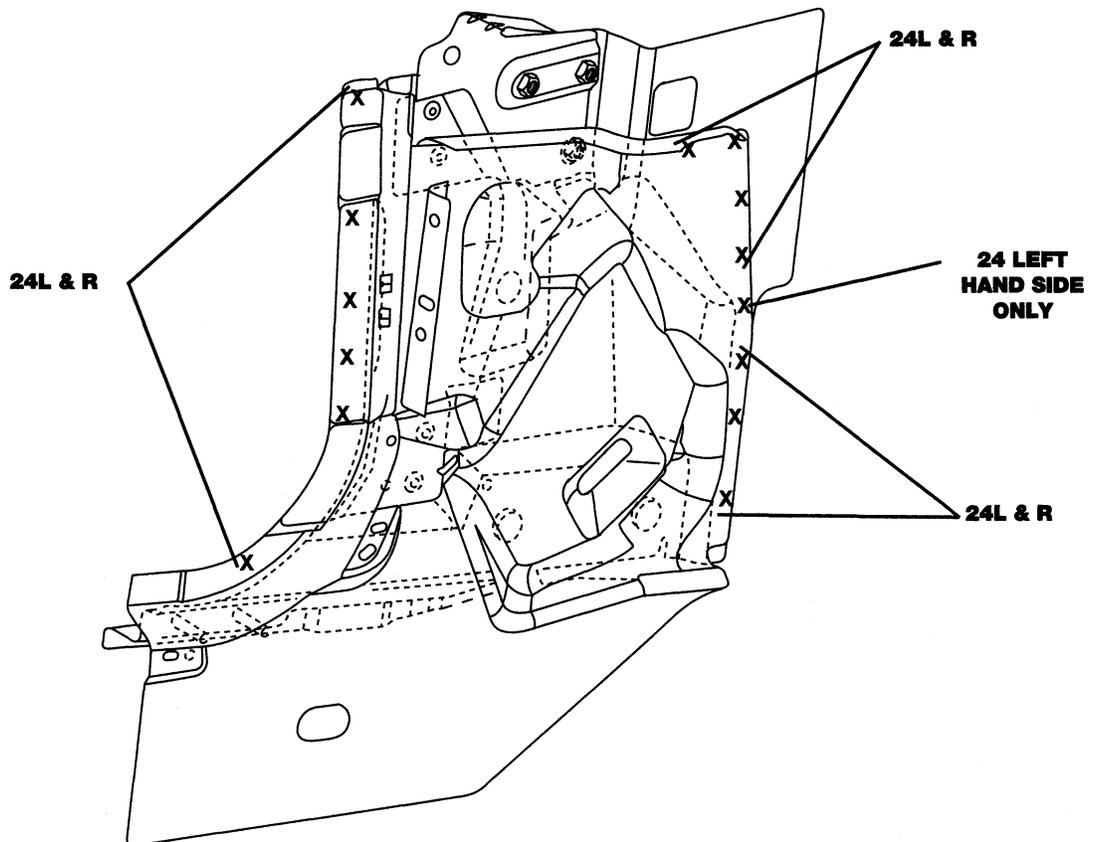
Prow-047



Prow-048



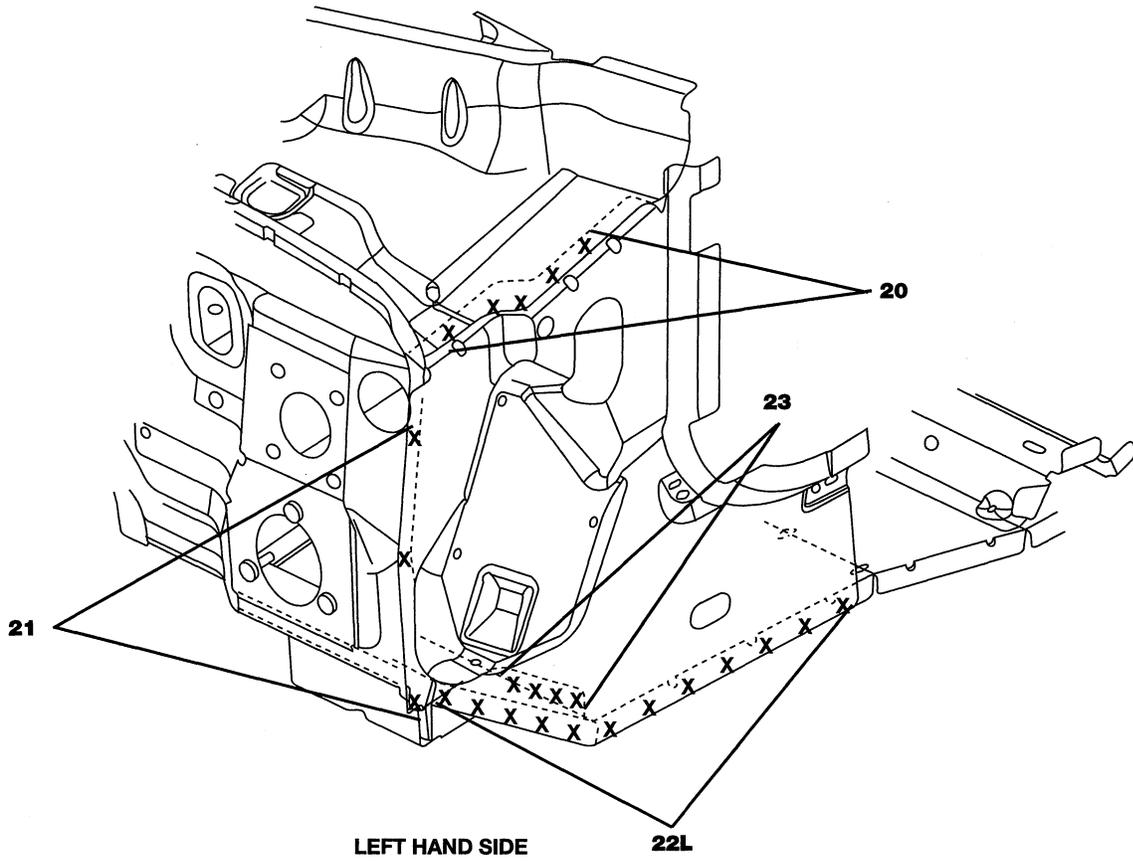
Prow-051



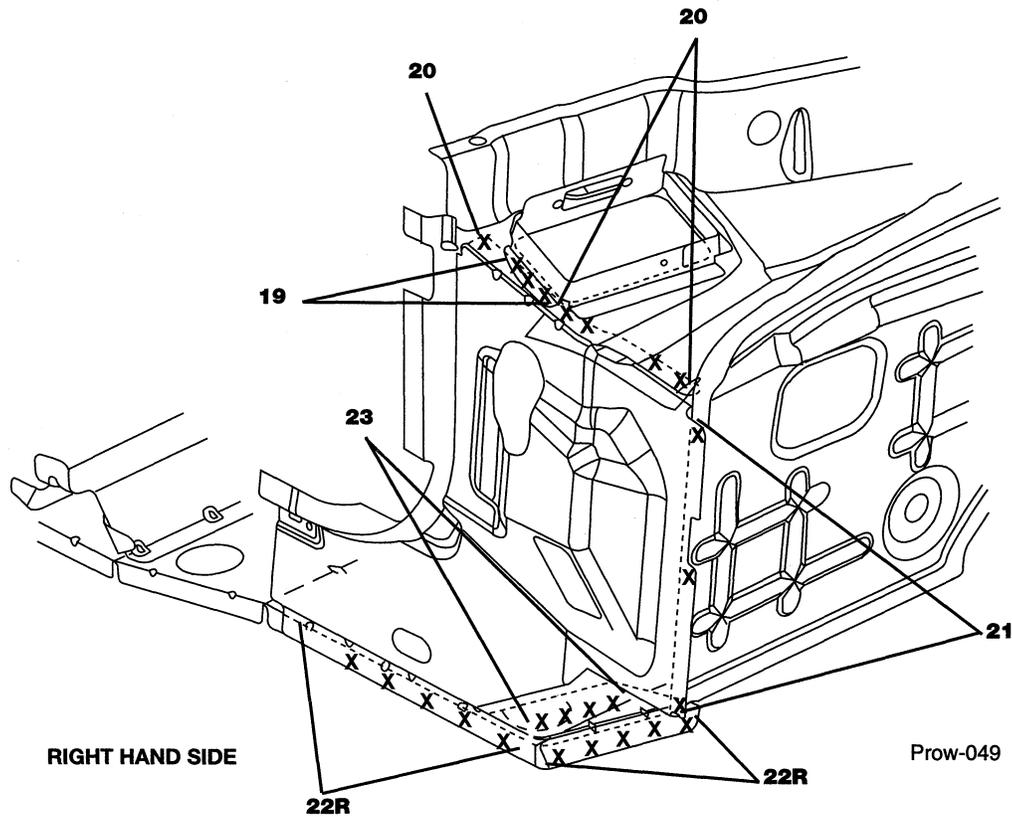
Prow-052



# Dash, Cowl, and Plenum Assembly



Prow-050



Prow-049



## NOTES WITH REGARD TO REPAIR WORK

- The rivets must be coated to control galvanic corrosion.
- Use 3M structural adhesive #08115, or equivalent.

## REMOVAL

Use one of the following procedures to remove the rivet:

### Drill Procedure

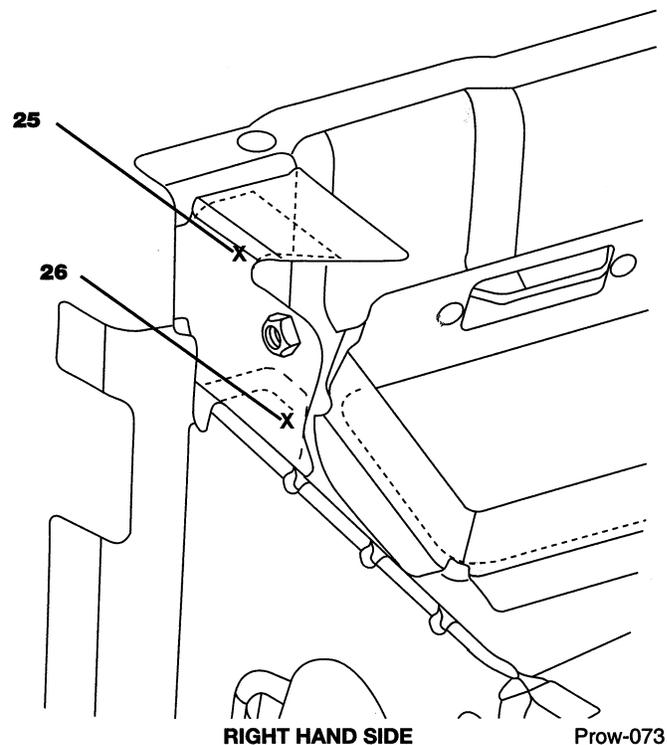
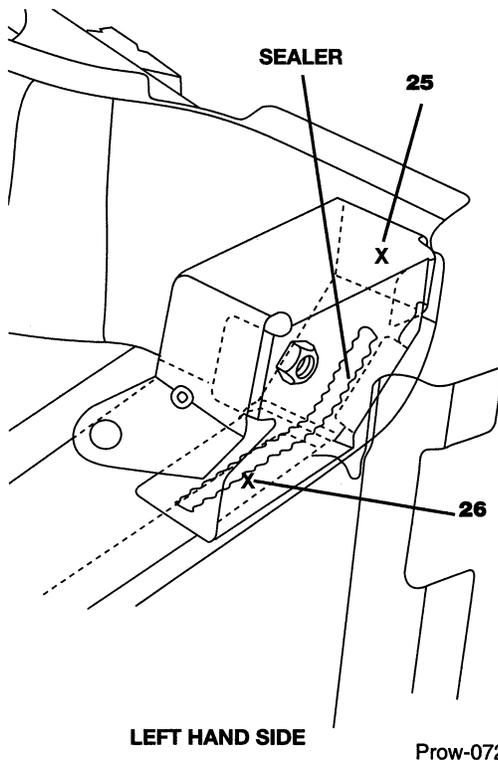
1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

### Grind Procedure

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

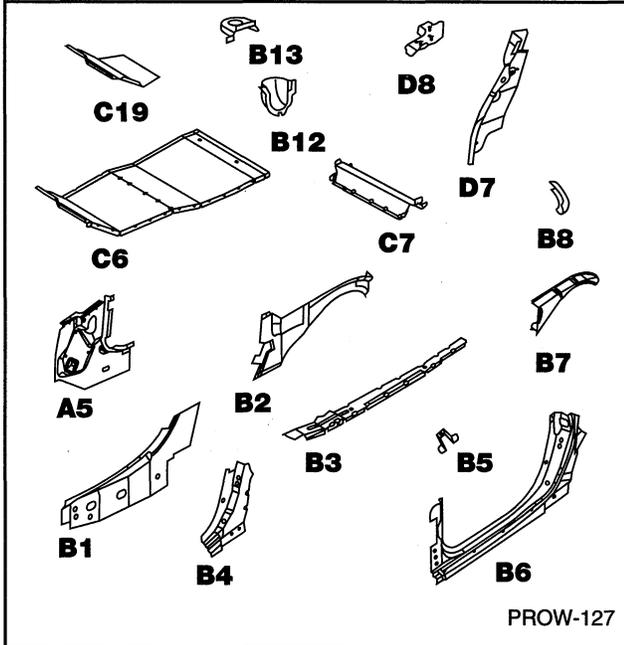
## INSTALLATION

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.





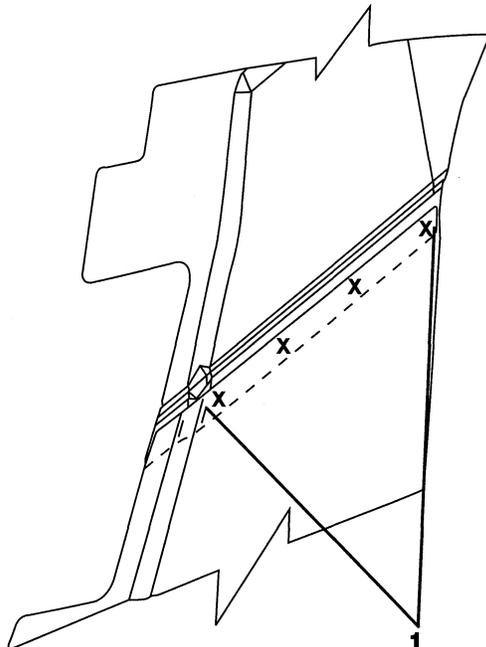
# Body Side



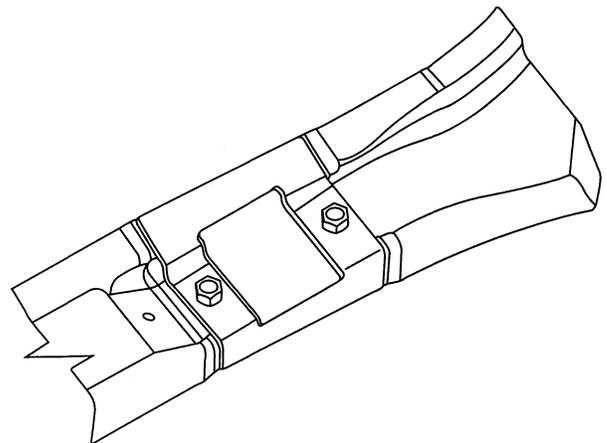
No.	Assy of Parts	F	R
1	B1 + B2	R/A4	R/A4
2	B13 + B12	R/A7	R/A7
3	B13 + B12 + B2	R/A1	R/A1
4	B13 + B2	R/A3	R/A3
5	B12 + B2	R/A4	R/A4
6	B5 + B1	R/A2	R/A2

R = Right Hand Side of Vehicle L = Left Hand Side of Vehicle

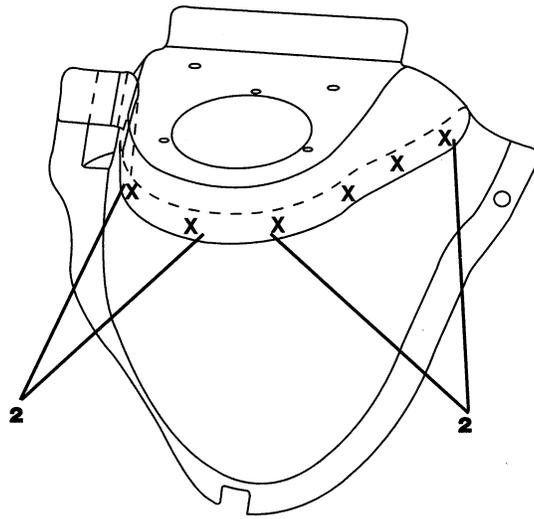
No.	Assy of Parts	F	R
6	B5 + B1	R/A2	R/A2
7	B3 + B1	R/A11	R/A11
8	B8 + B9	R/A3	R/A3
9	B8 + B7	R/A15	R/A15
10	B4 + B6	R/A5	R/A5
11	B6 + B4 + B7	?	?
12	C6 + B3 + A5	R/A1	R/A1
13	C19 + A5 + B3	R/A1	R/A1
14	A5 + B3	R/A7	R/A7
15	A5 + B3 + B1	R/A1	R/A1
16	B1 + A5	R/A1	R/A1
17	B1 + A5 + C6	R/A1	R/A1
18	B13 + B1	R/A5	R/A5
19	C6 + B1	R/A14	R/A14
20	B1 + A5	R/A2	R/A2
21	B1 + A5 + C6	R/A1	R/A1
22	A5 + B3 + C19	R/A2	R/A2
23	A5 + B3	R/A1	R/A1
24	B1 + B2	R/A7	R/A7
25	D8 + B2	R/A2	R/A2
26	D7 + B1	R/A5	R/A5
27R	C7 + B1	R4	R4
27L	C7 + B1	R3	R3



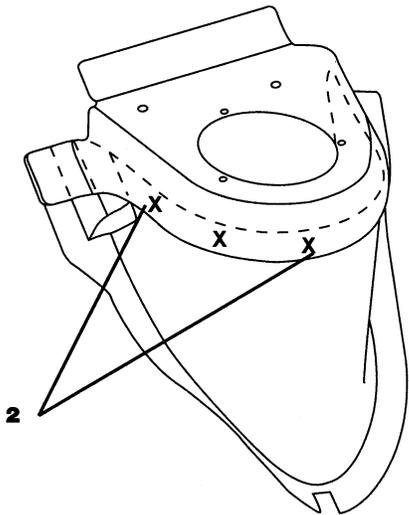
PROW-053



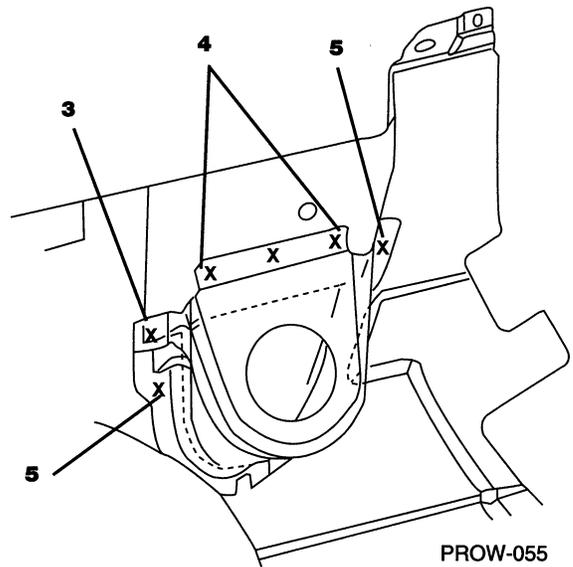
PROW-124



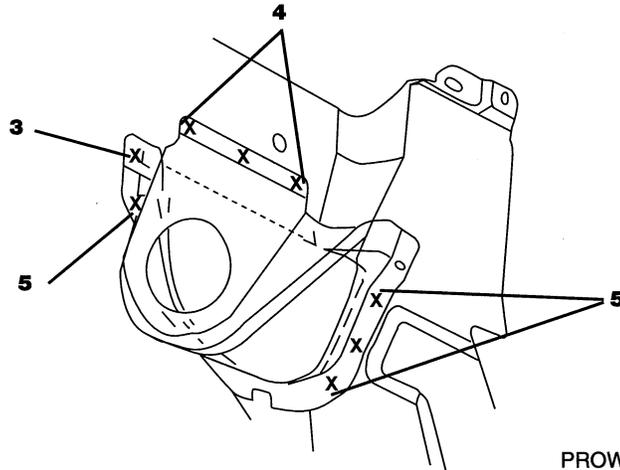
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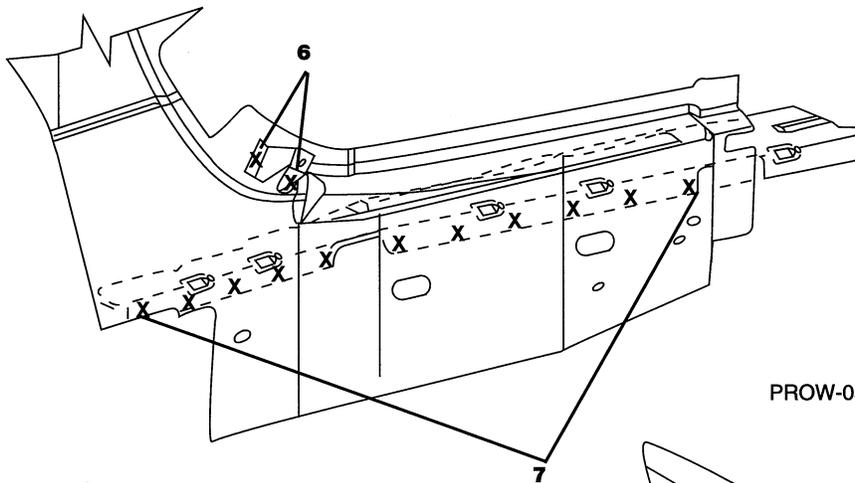
PROW-125



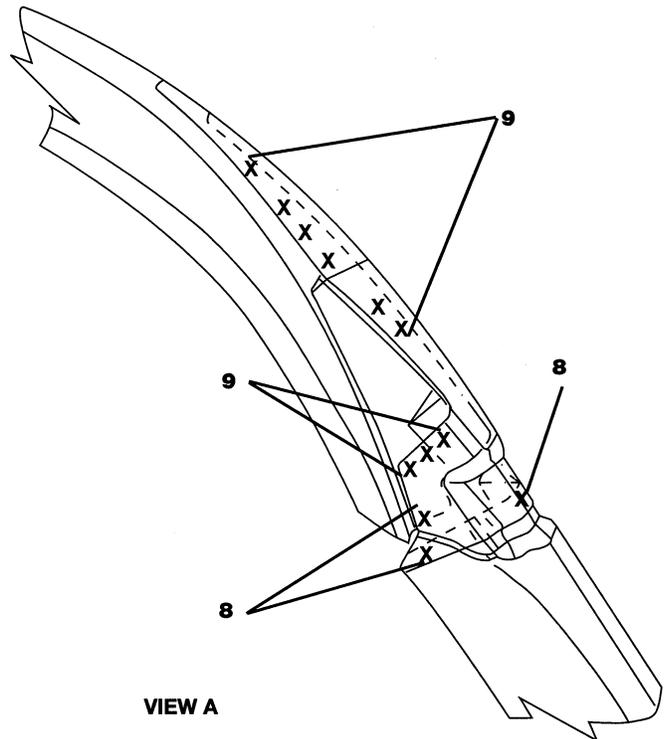
PROW-055



PROW-126

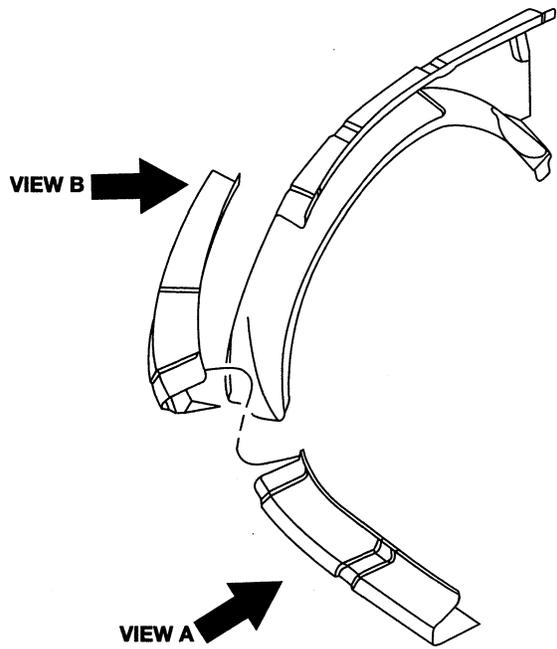
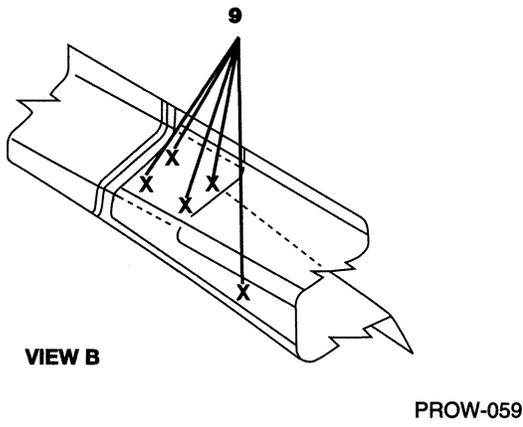
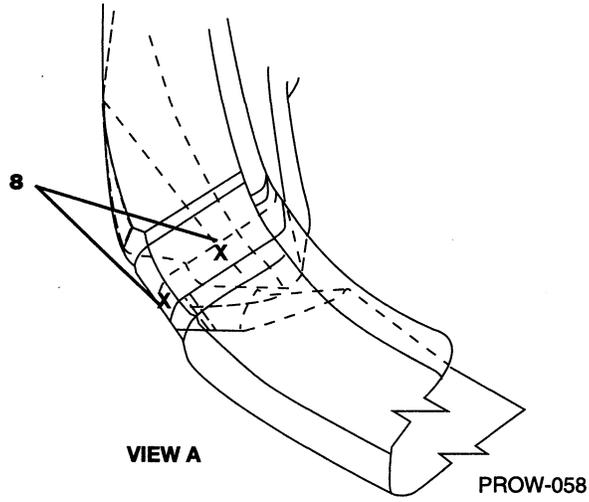


PROW-056



VIEW A

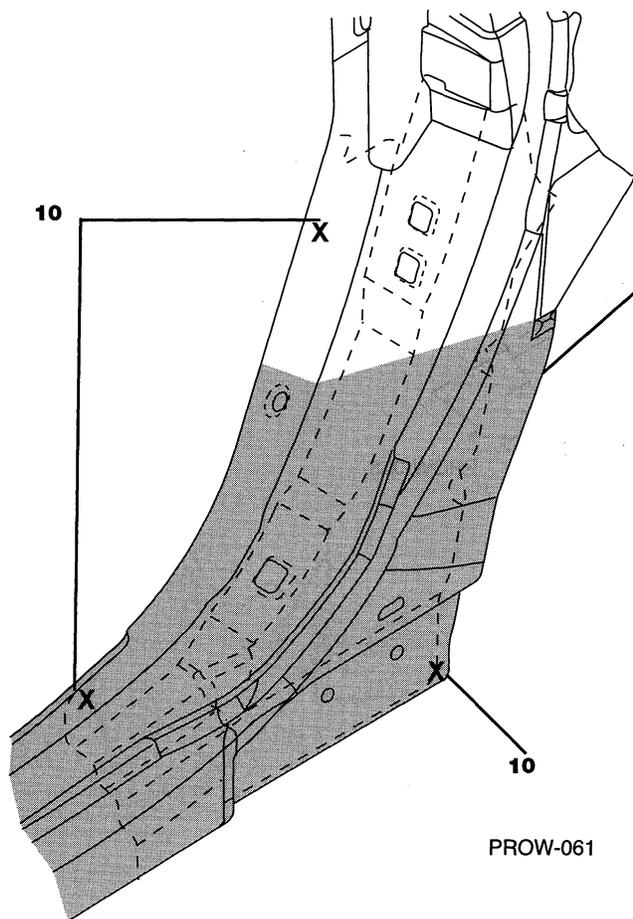
PROW-057



PROW-060

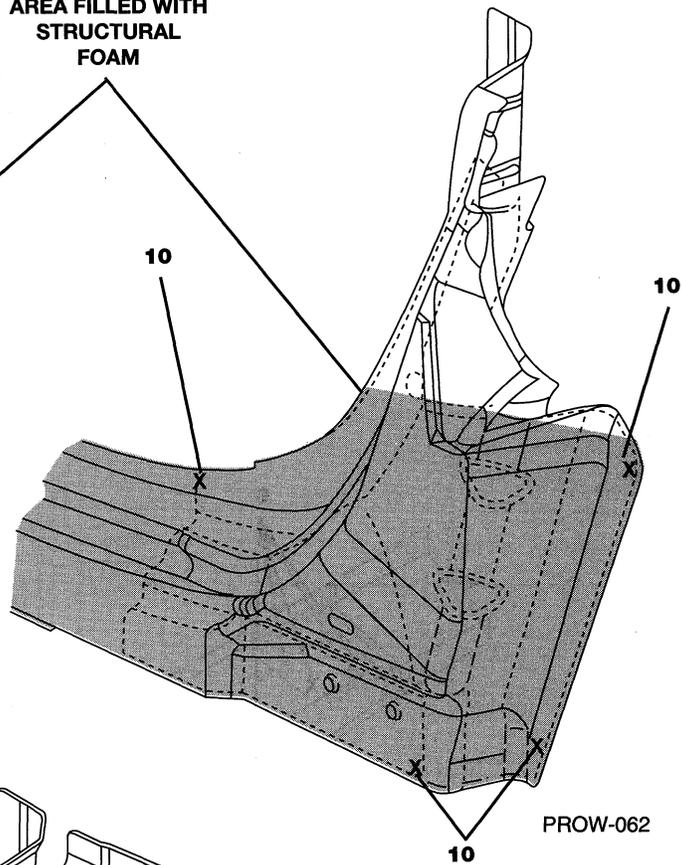


# Body Side



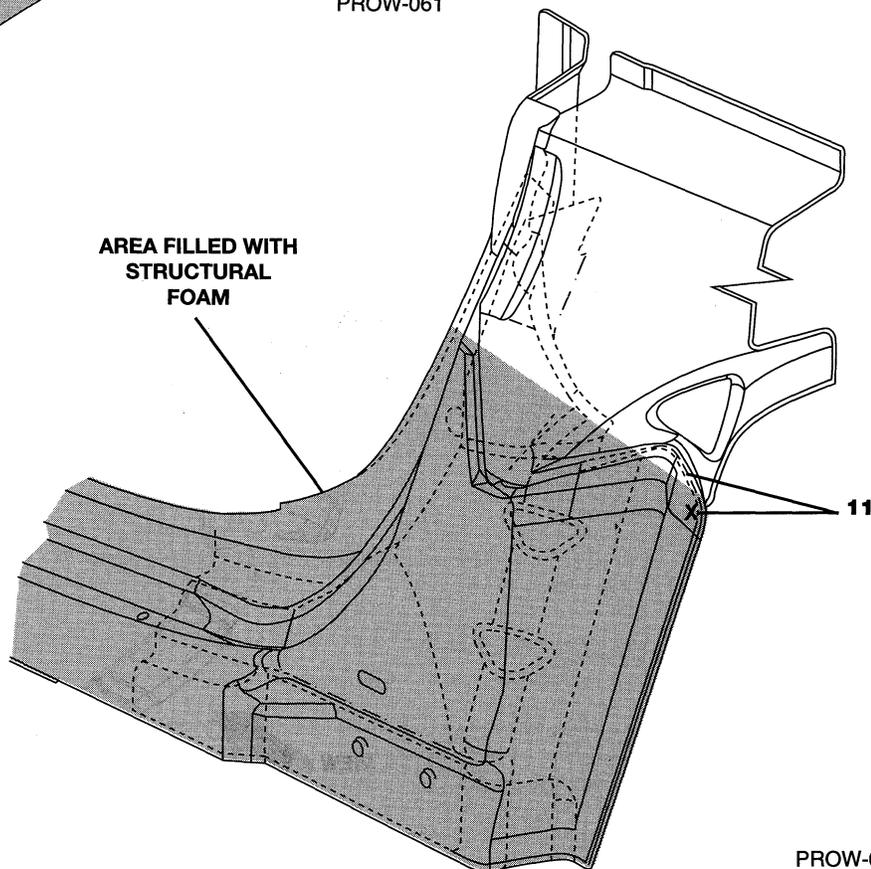
PROW-061

AREA FILLED WITH  
STRUCTURAL  
FOAM

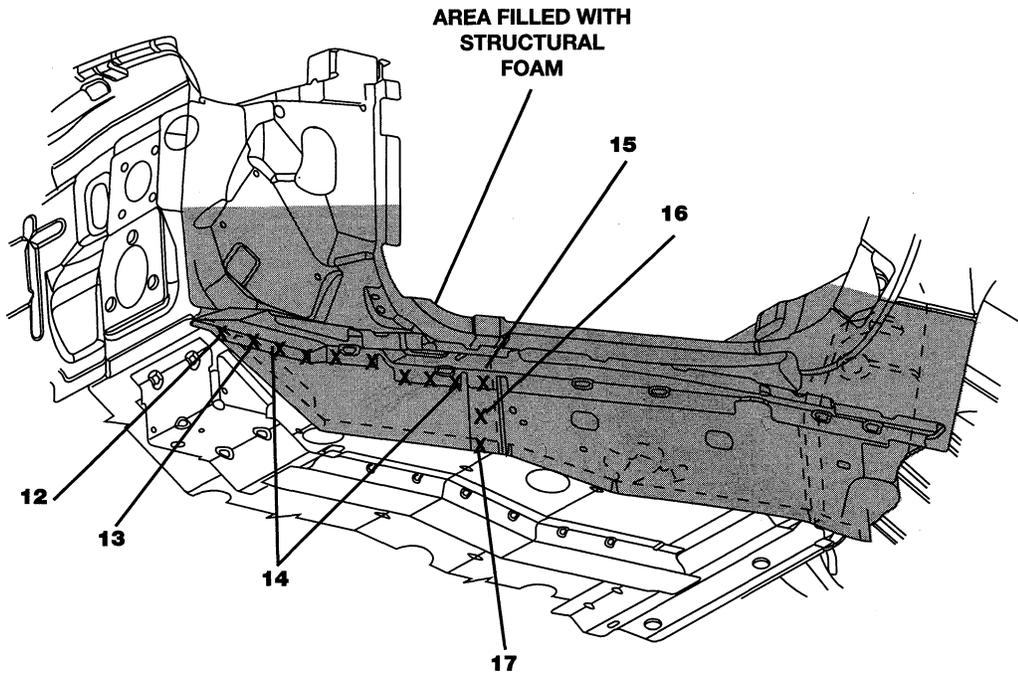


PROW-062

AREA FILLED WITH  
STRUCTURAL  
FOAM

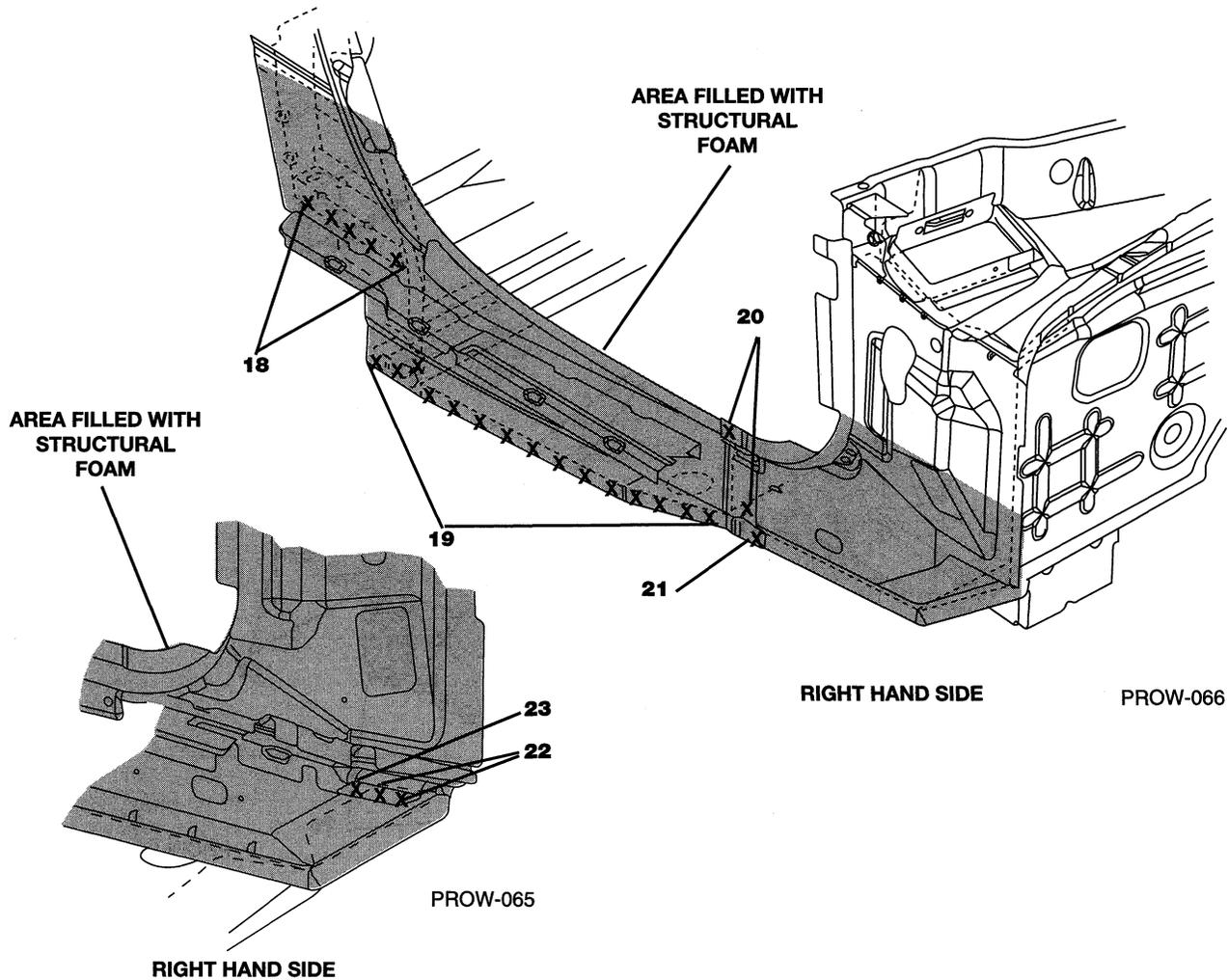


PROW-063



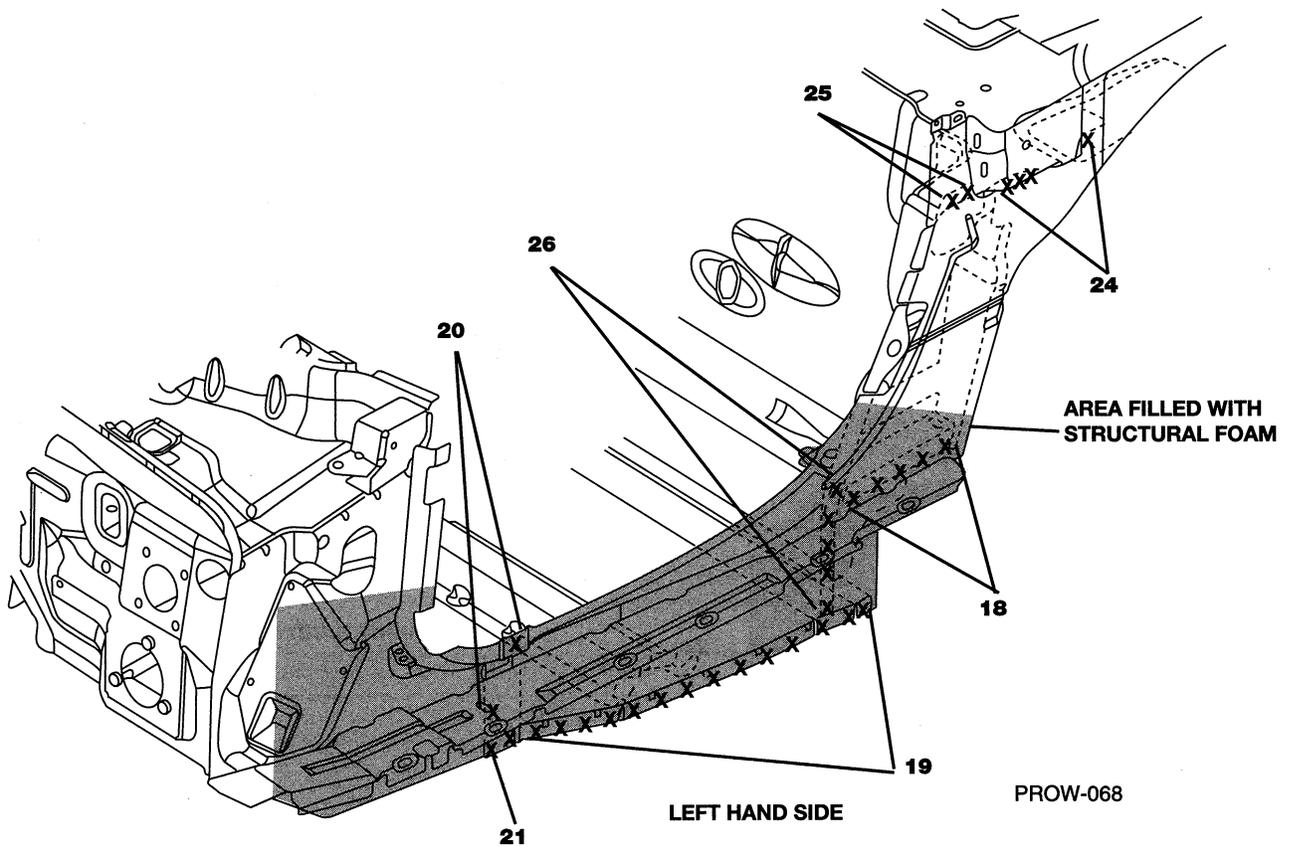
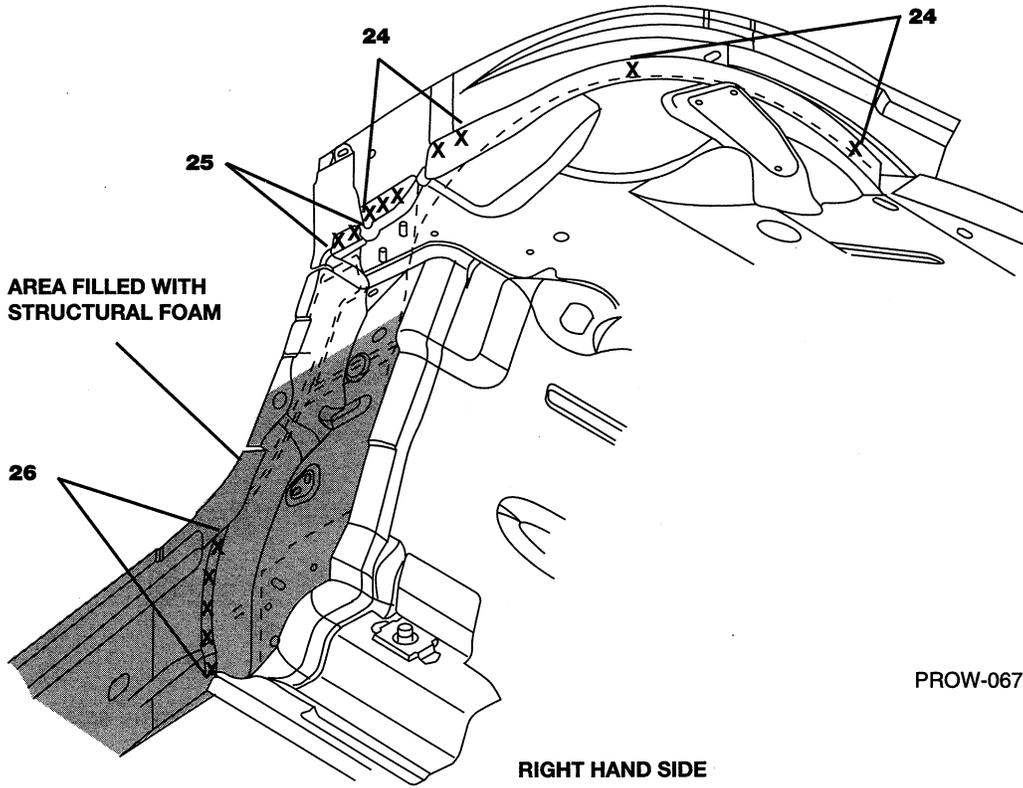
LEFT HAND SIDE

PROW-064





# Body Side



**NOTES WITH REGARD TO REPAIR WORK**

- The rivets must be coated to control galvanic corrosion.
- Use 3M structural adhesive #08115, or equivalent.

**REMOVAL**

Use one of the following procedures to remove the rivet:

**Drill Procedure**

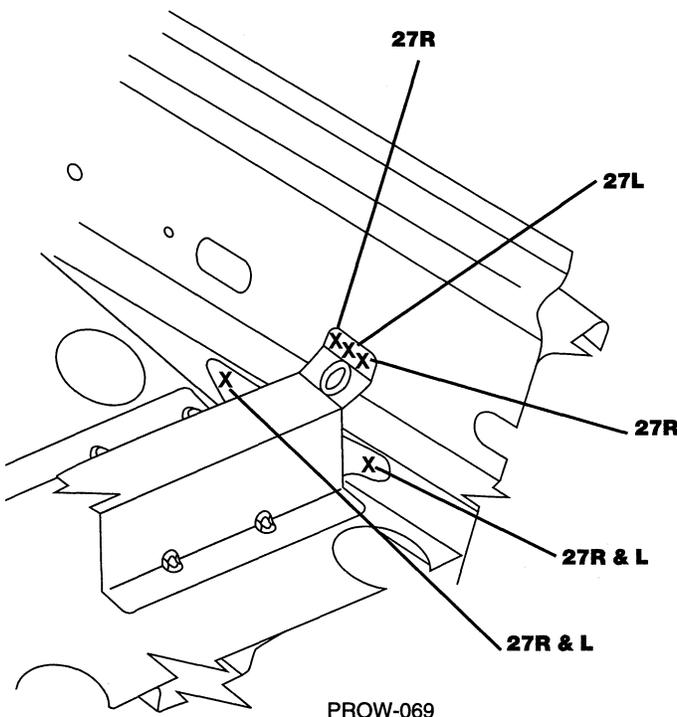
1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

**Grind Procedure**

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

**INSTALLATION**

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.

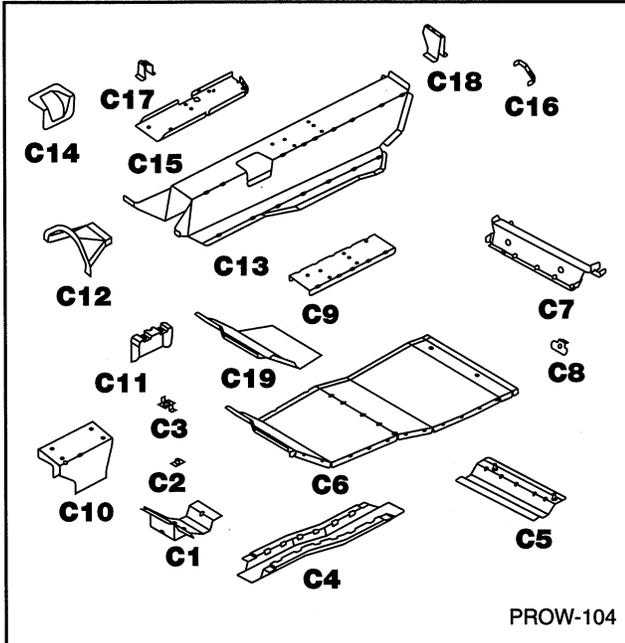


**HENROB RIVETS**





# Front Floor Pan and Tunnel

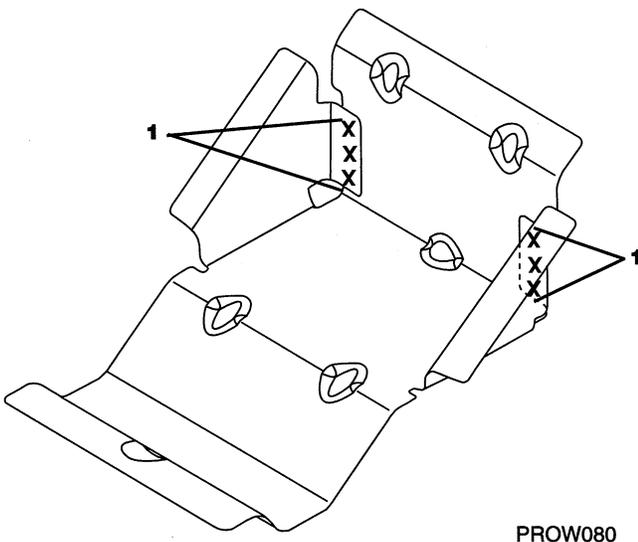


PROW-104

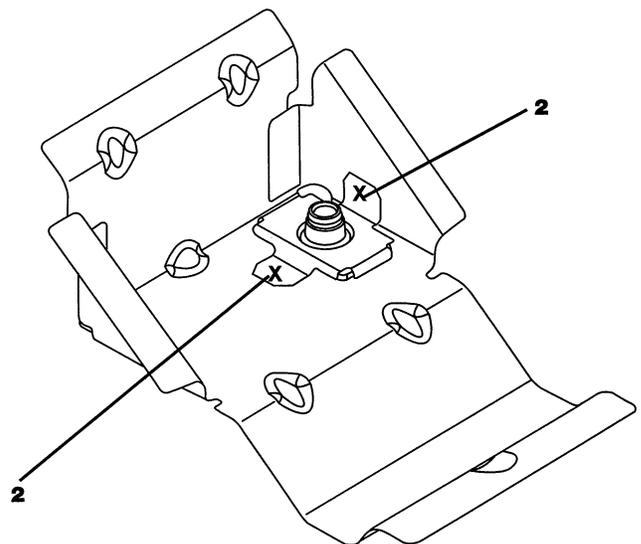
No.	Assy of Parts	F	R
1	C1 + C1	R6	R6
2	C1 + C3	R/A2	R/A2
3	C7 + C8	R/A1	R/A1
4	C1 + C4	R/A5	R/A5
5	C4 + C5	R/A5	R/A5
6	C1 + C6	R/A10	R/A10

R = Right Hand Side of Vehicle L = Left Hand Side of Vehicle

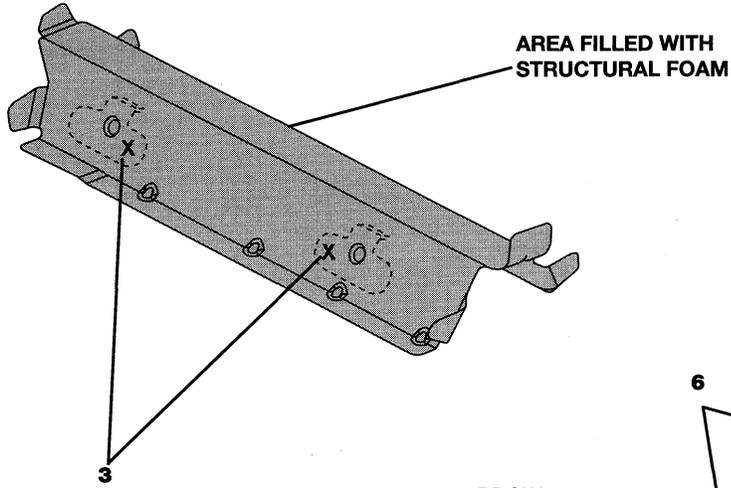
No.	Assy of Parts	F	R
7	C5 + C6	R/A15	R/A15
8	C4 + C6	R/A23	R/A23
9	C18 + C15	R/A12	R/A12
10	C17 + C15	R/A4	R/A4
11	C16 + C15	R/A2	R/A2
12	C9 + C13	R25	R25
13	C14 + C13	R16	R16
14	C12 + C13	R/A11	R/A11
15	C11 + C13	R3	R3
16	C10 + C13	R4	R4
17	C10 + C13 + C11	R1	R1
18L	C6 + C13	R/A28	R/A28
18R	C6 + C13	R/A22	R/A22
19L	C12 + C6 + C13	R/A1	R/A1
19R	C12 + C6 + C13	R/A2	R/A2
20	C7 + C13	R3	R3
21	C7 + C6	R/A19	R/A19
22R	C6 + A1 + C19	R/A5	R/A5
22L	C6 + A1 + C19	R/A9	R/A9
23	C6 + A1 + C12 + C13	R/A1	R/A1
24	C6 + A1 + C12 + C13	R1	R1
25	C12 + A1	R/A7	R/A7



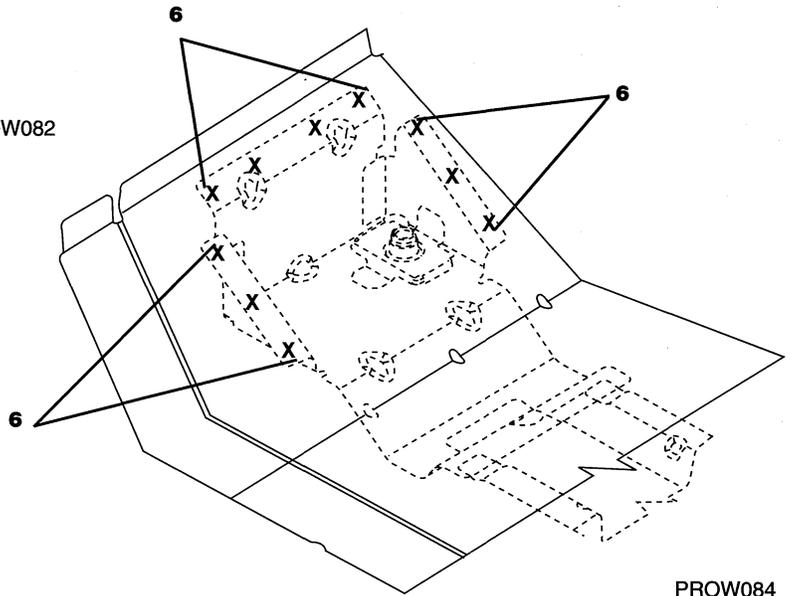
PROW080



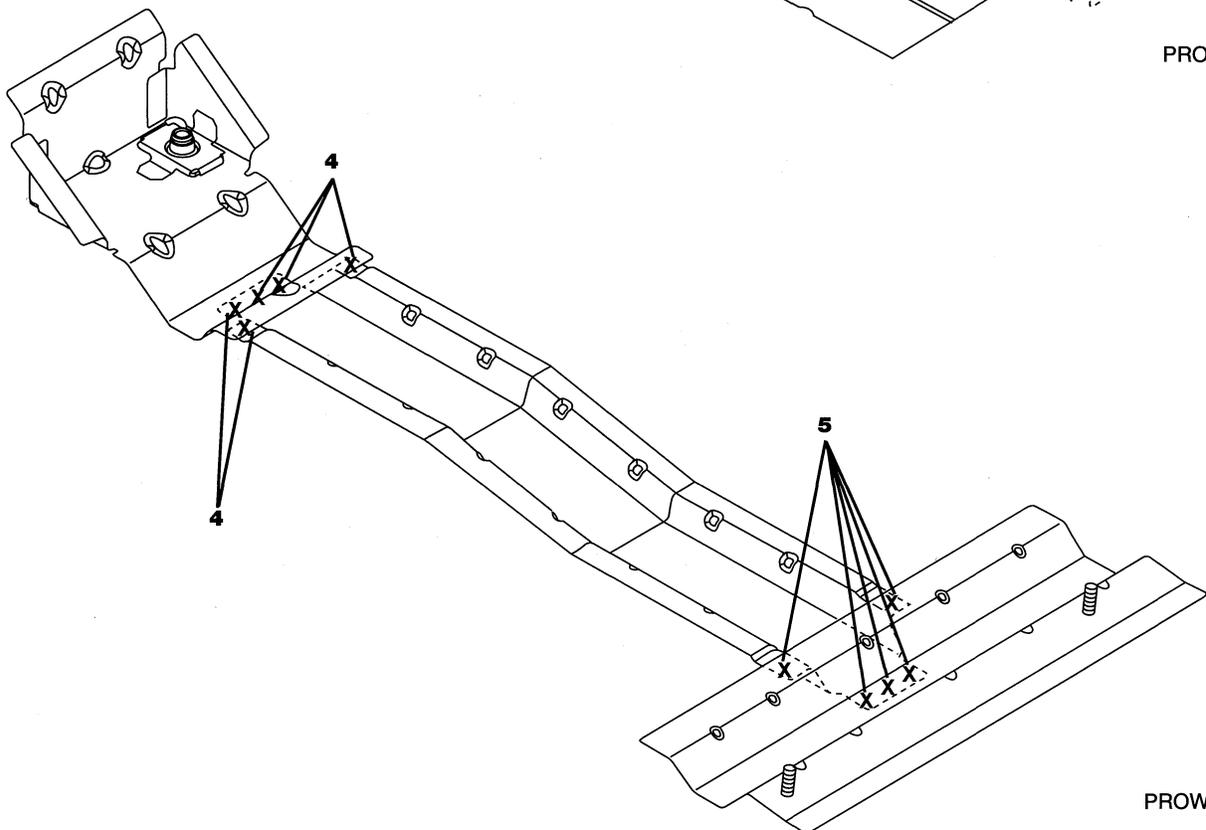
PROW081



PROW082



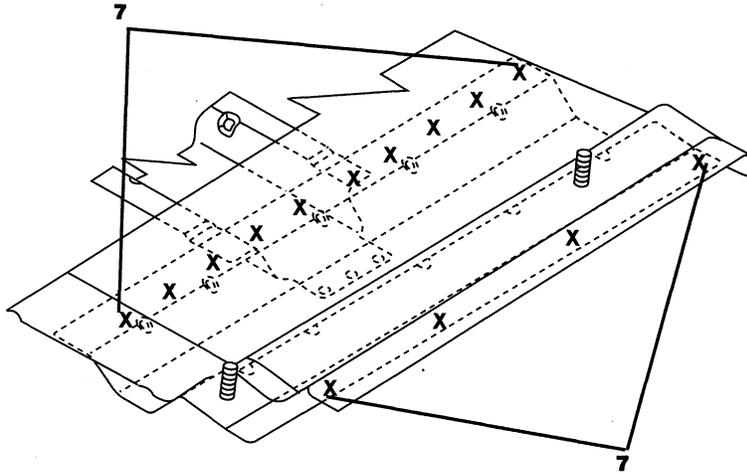
PROW084



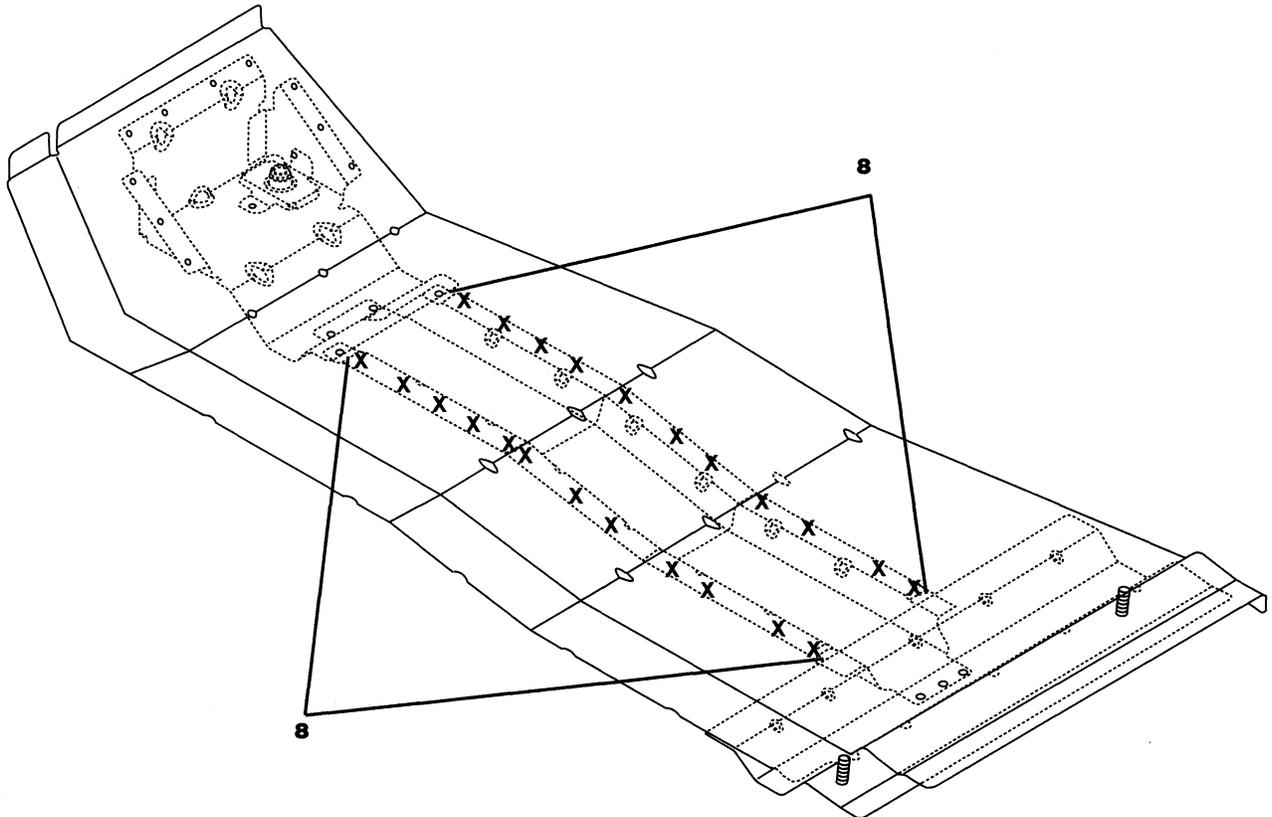
PROW083



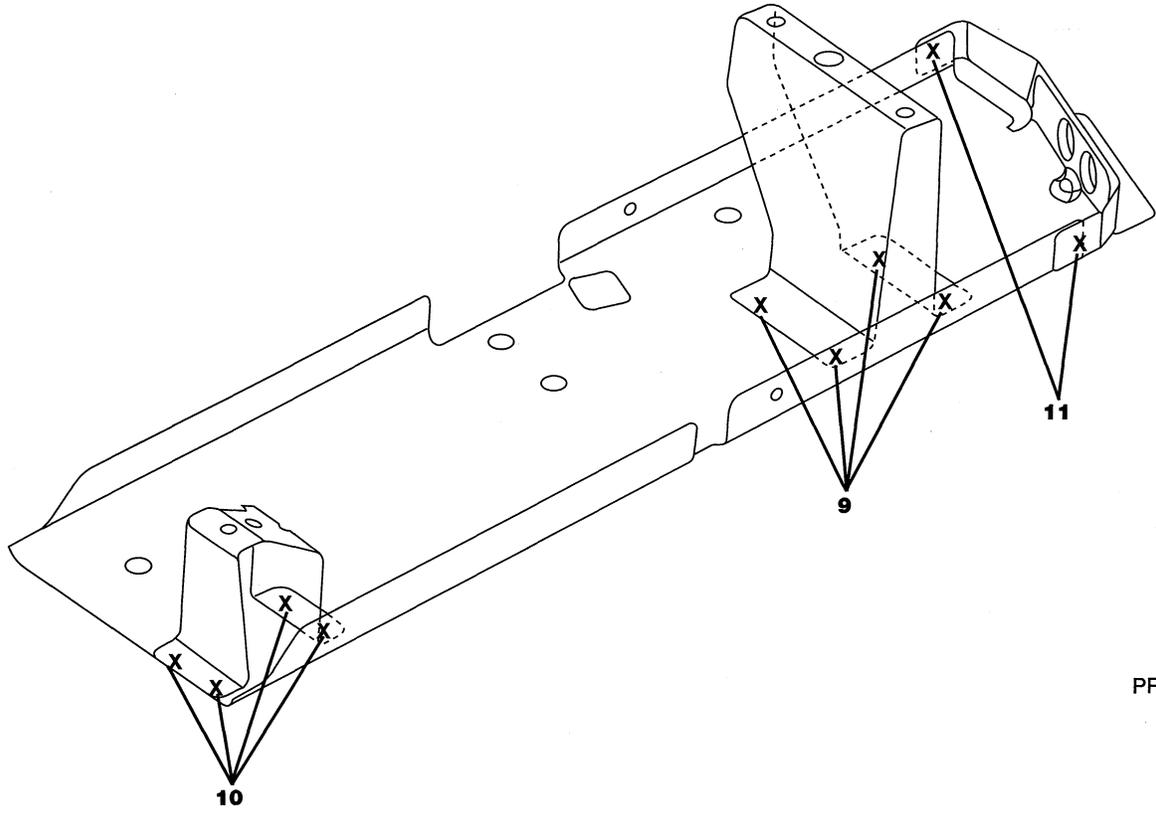
# Front Floor Pan and Tunnel



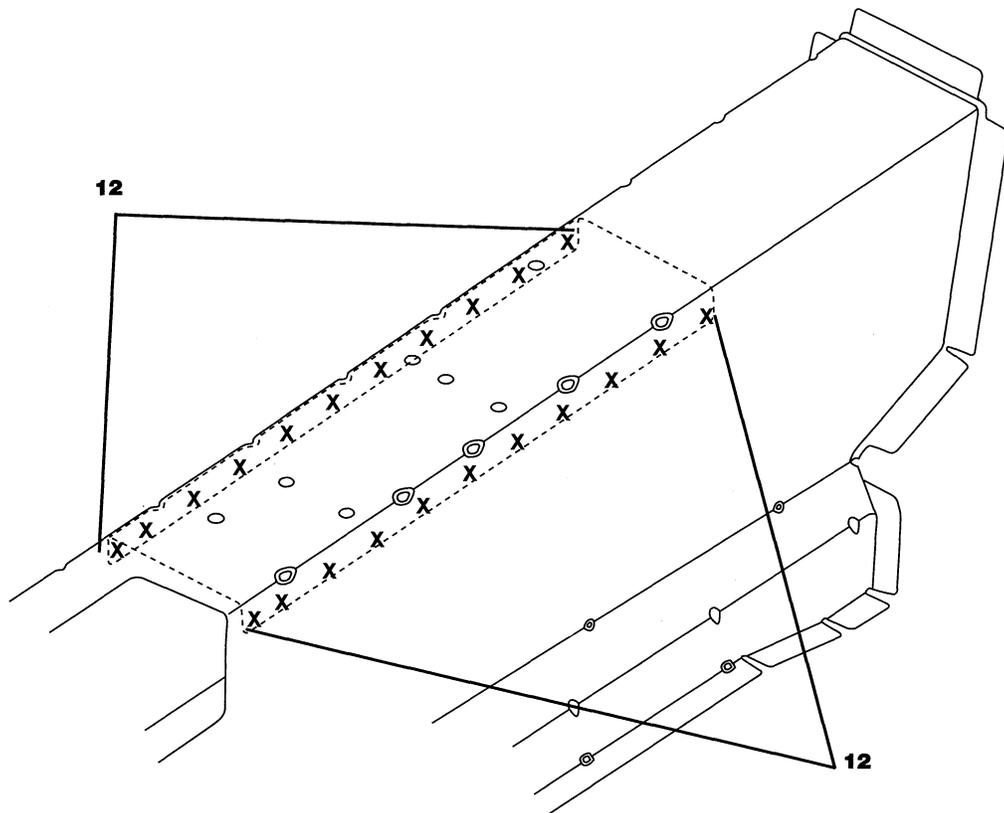
PROW-085



PROW-086



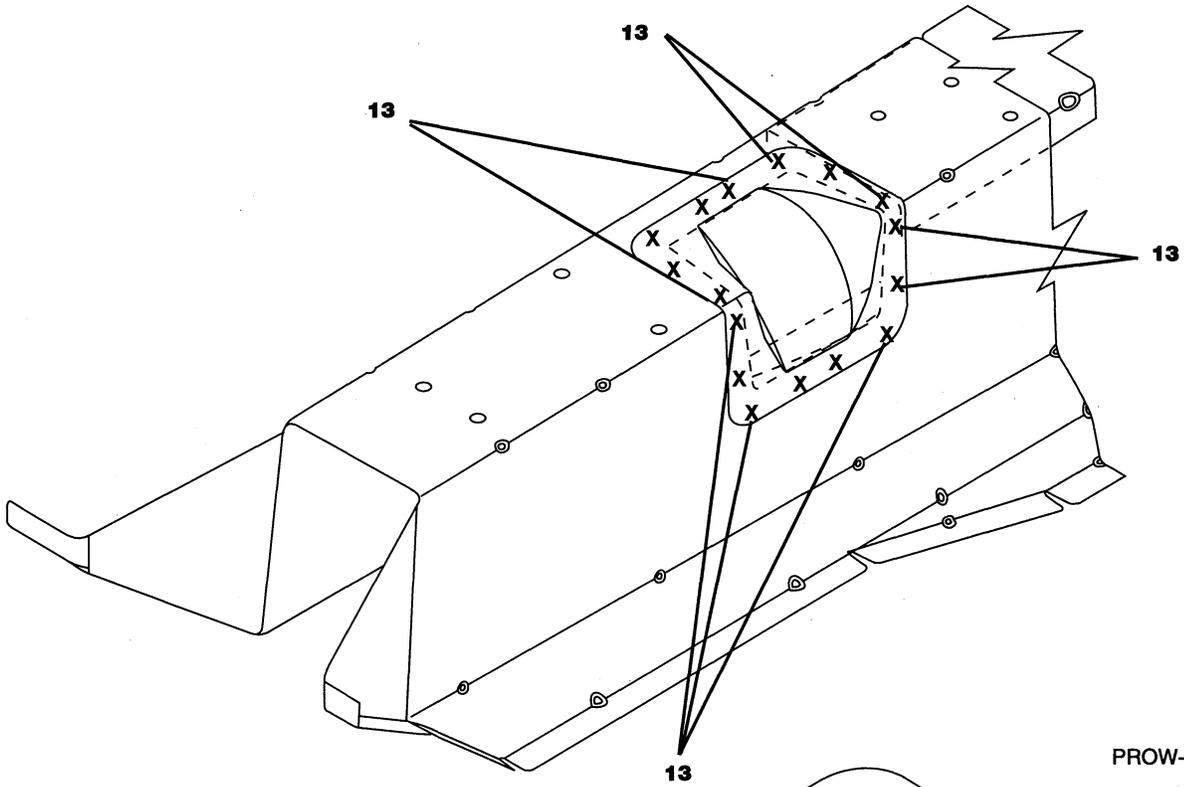
PROW-087



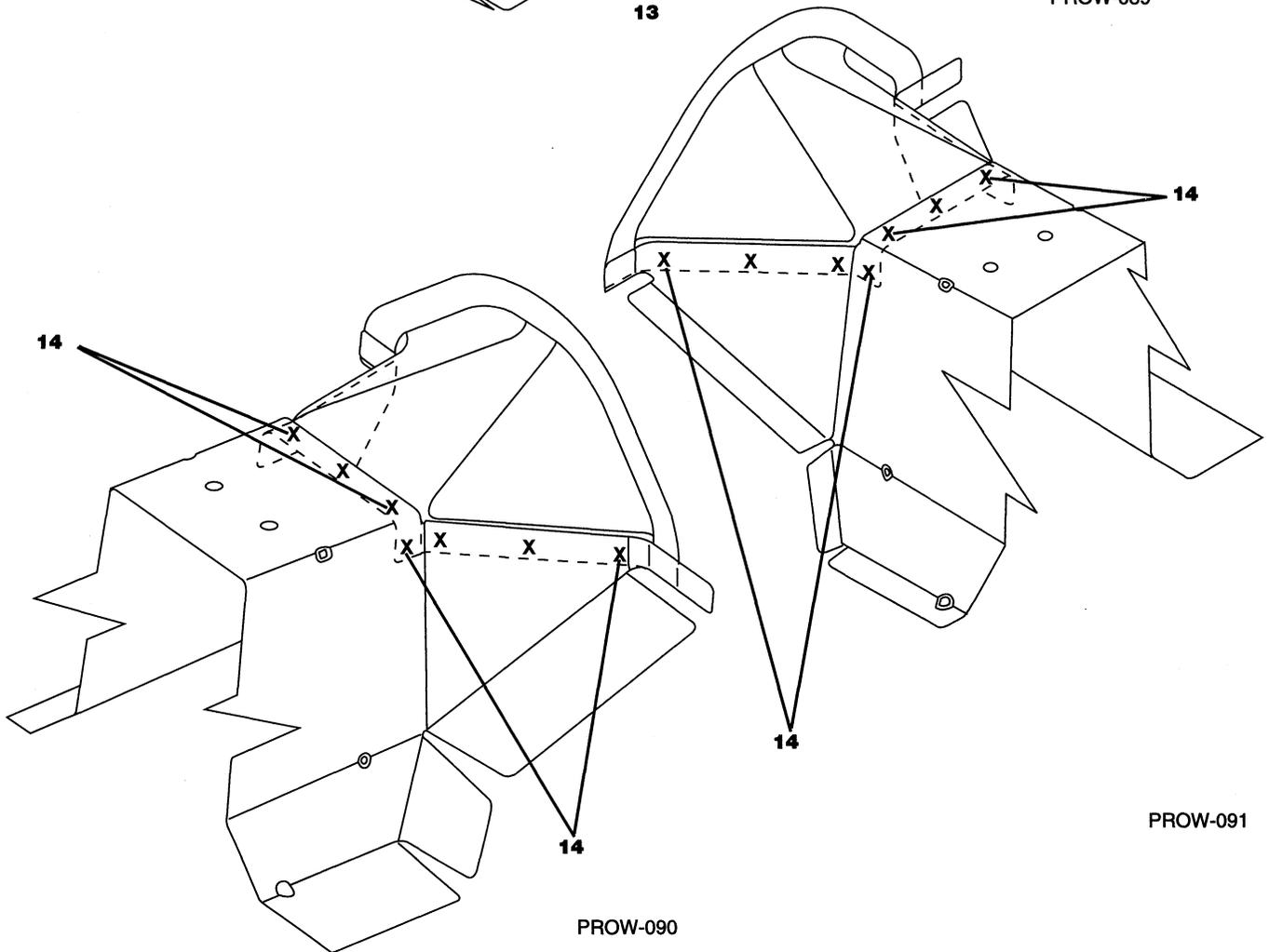
PROW-088



# Front Floor Pan and Tunnel

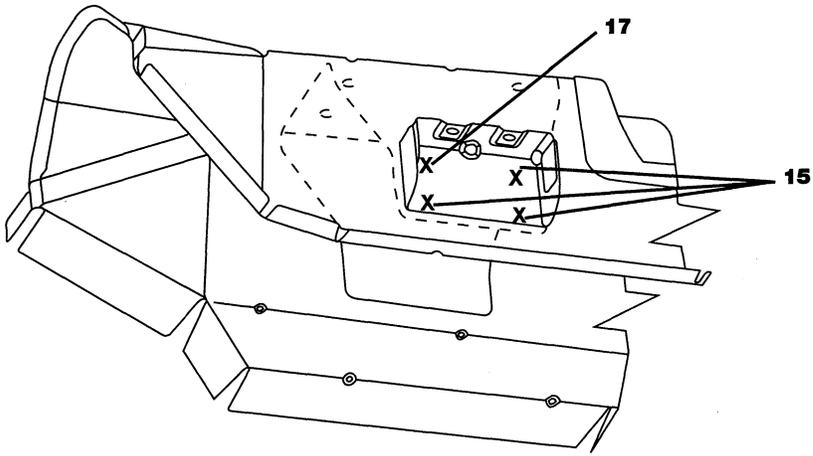


PROW-089

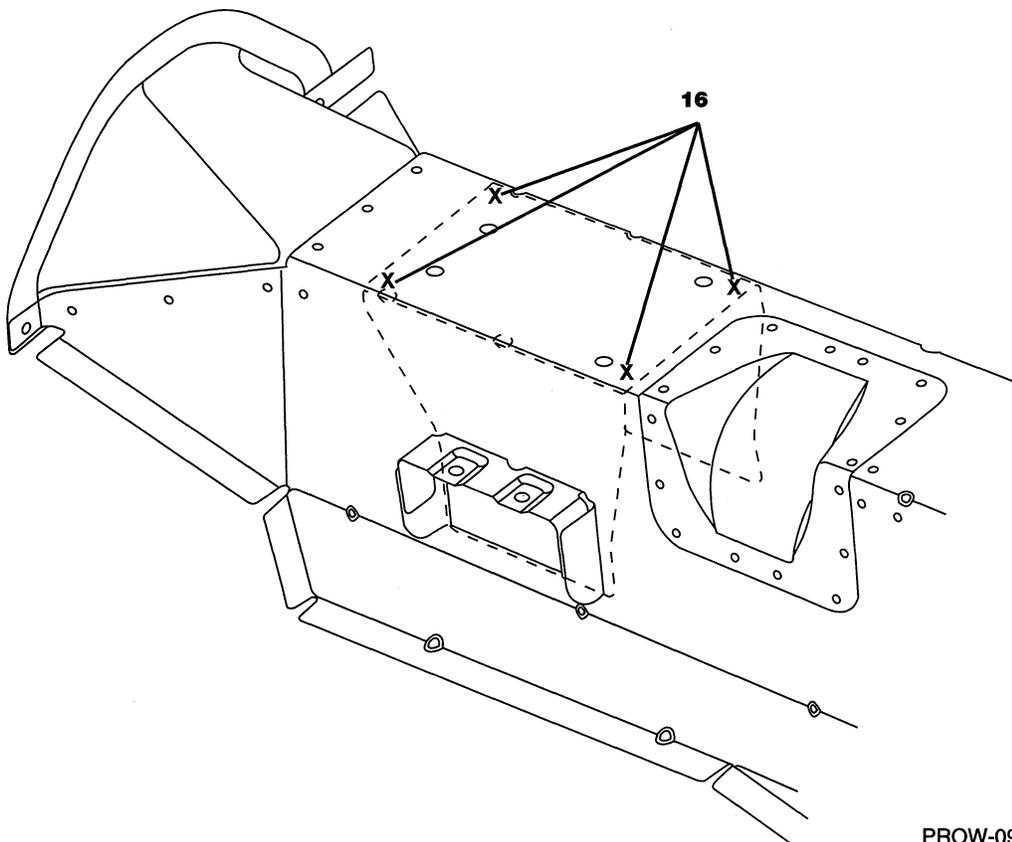


PROW-091

PROW-090



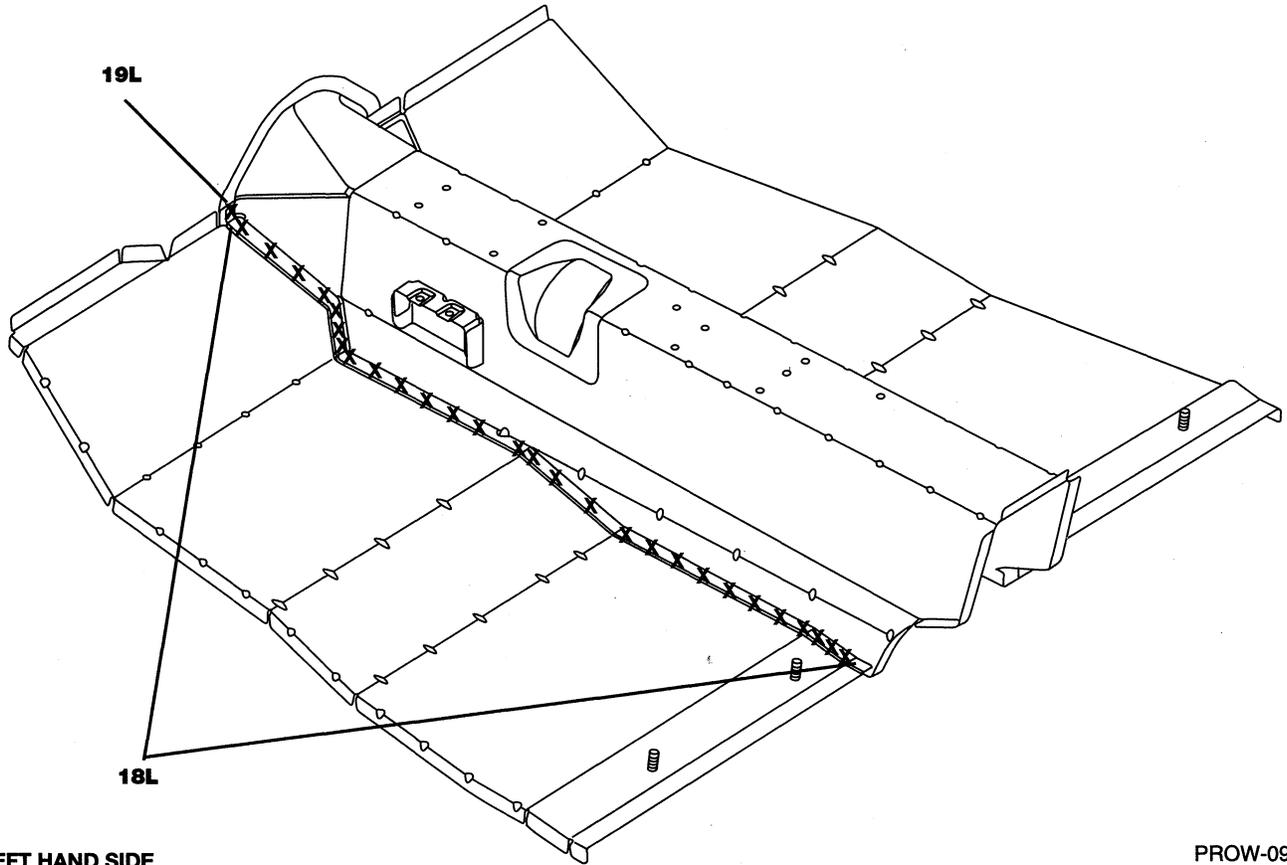
PROW-094



PROW-093

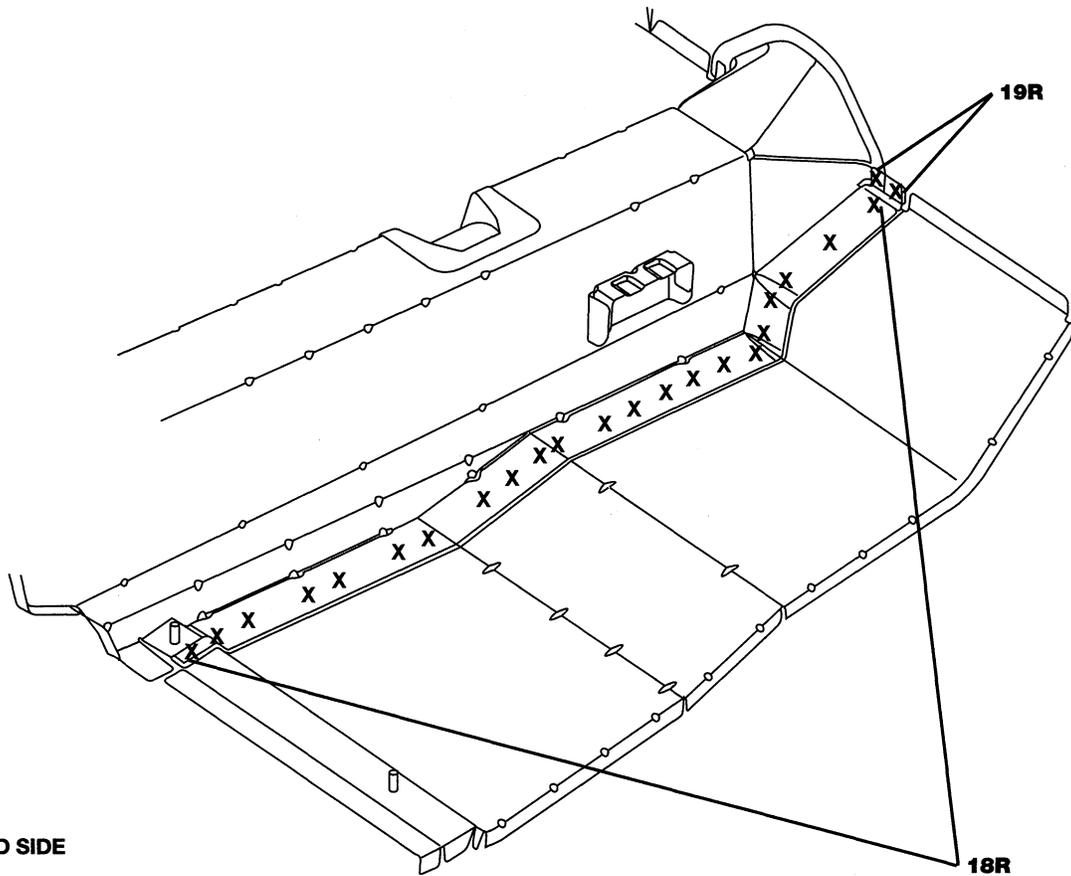


# Front Floor Pan and Tunnel



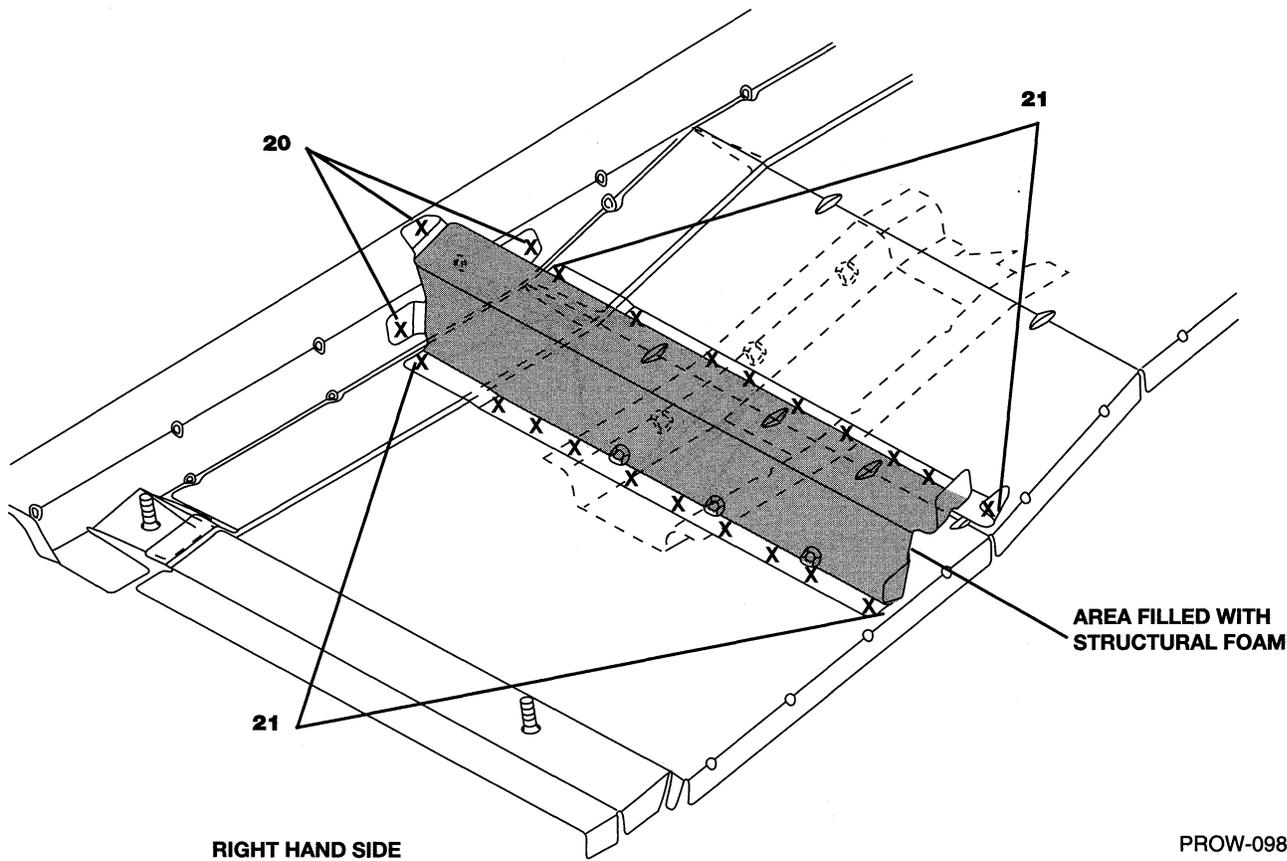
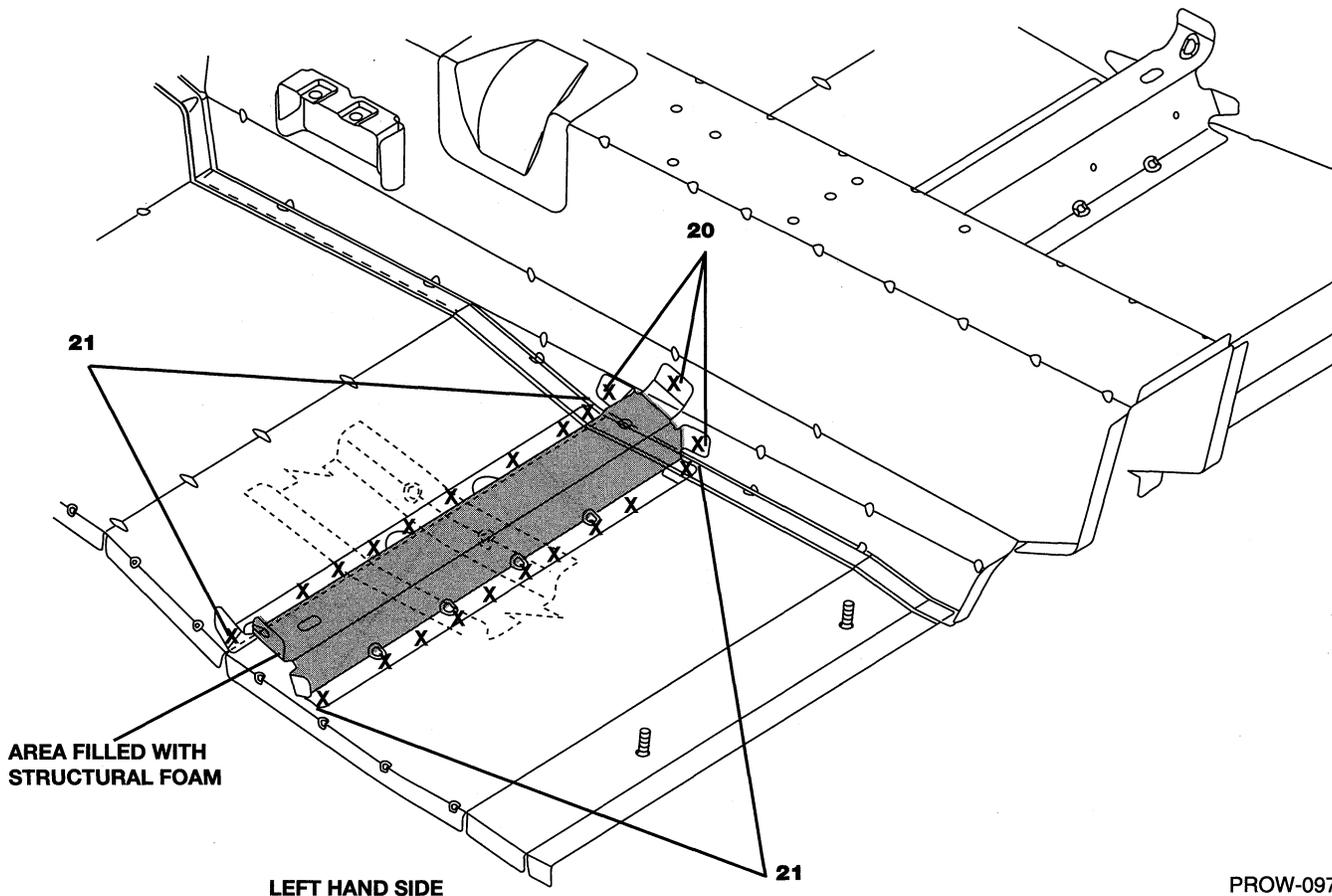
LEFT HAND SIDE

PROW-095



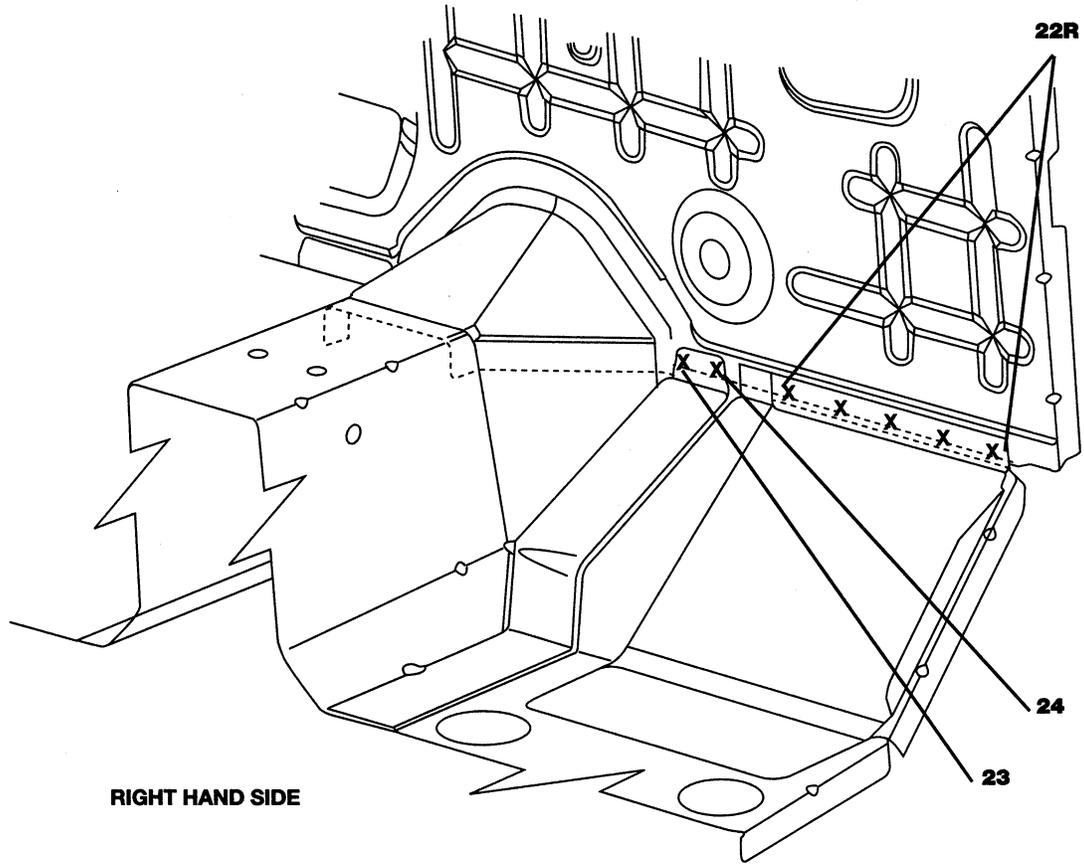
RIGHT HAND SIDE

PROW-096

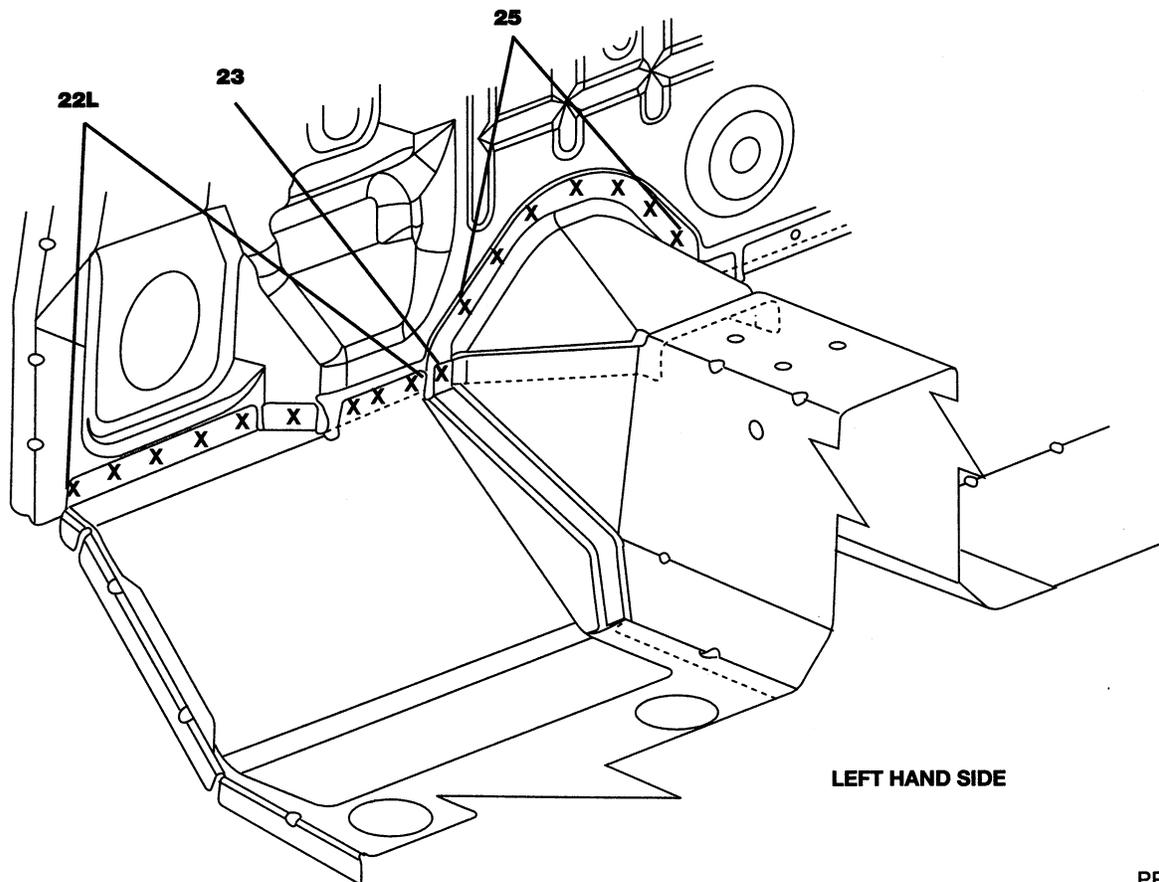




# Front Floor Pan and Tunnel



PROW-070



PROW-071



## NOTES WITH REGARD TO REPAIR WORK

- The rivets must be coated to control galvanic corrosion.
- Use 3M structural adhesive #08115, or equivalent.

## REMOVAL

Use one of the following procedures to remove the rivet:

### Drill Procedure

1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

## HENROB RIVETS



Triple Thickness Henrob Rivet



Double Thickness Henrob Rivet

## Grind Procedure

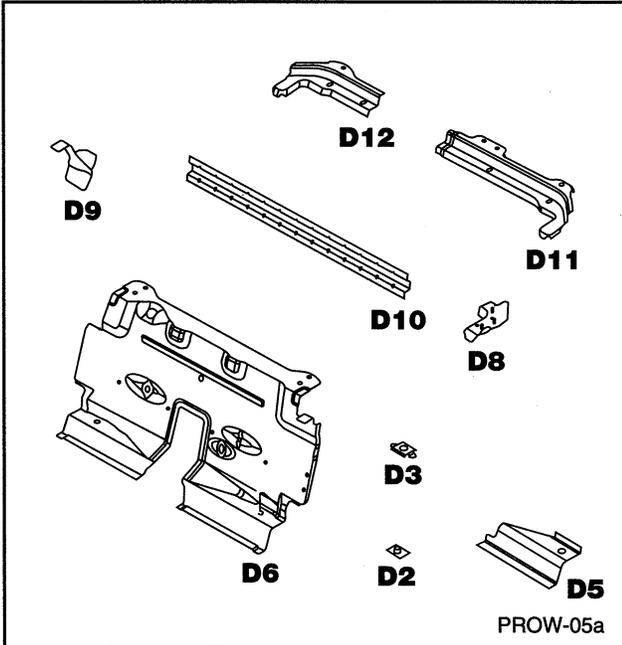
1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

## INSTALLATION

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.



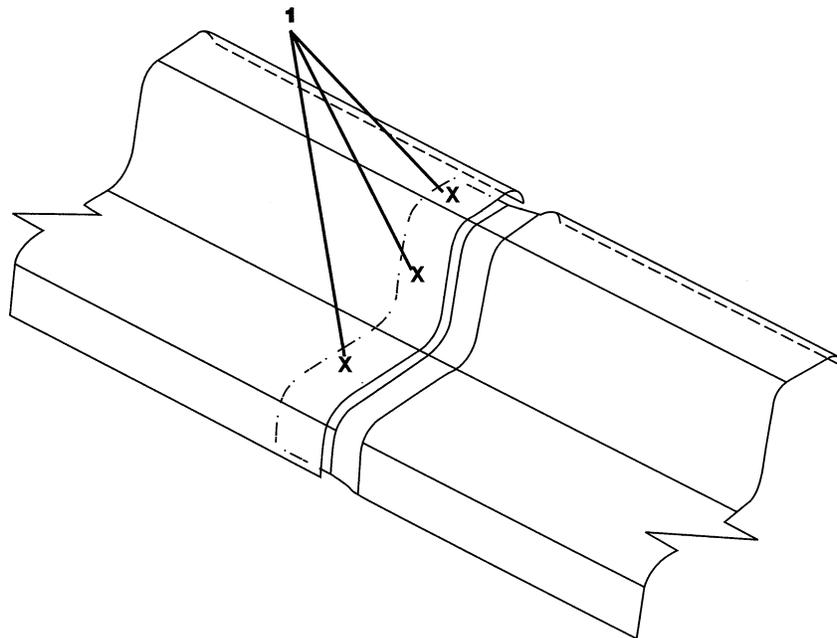
# Bulkhead Shelf



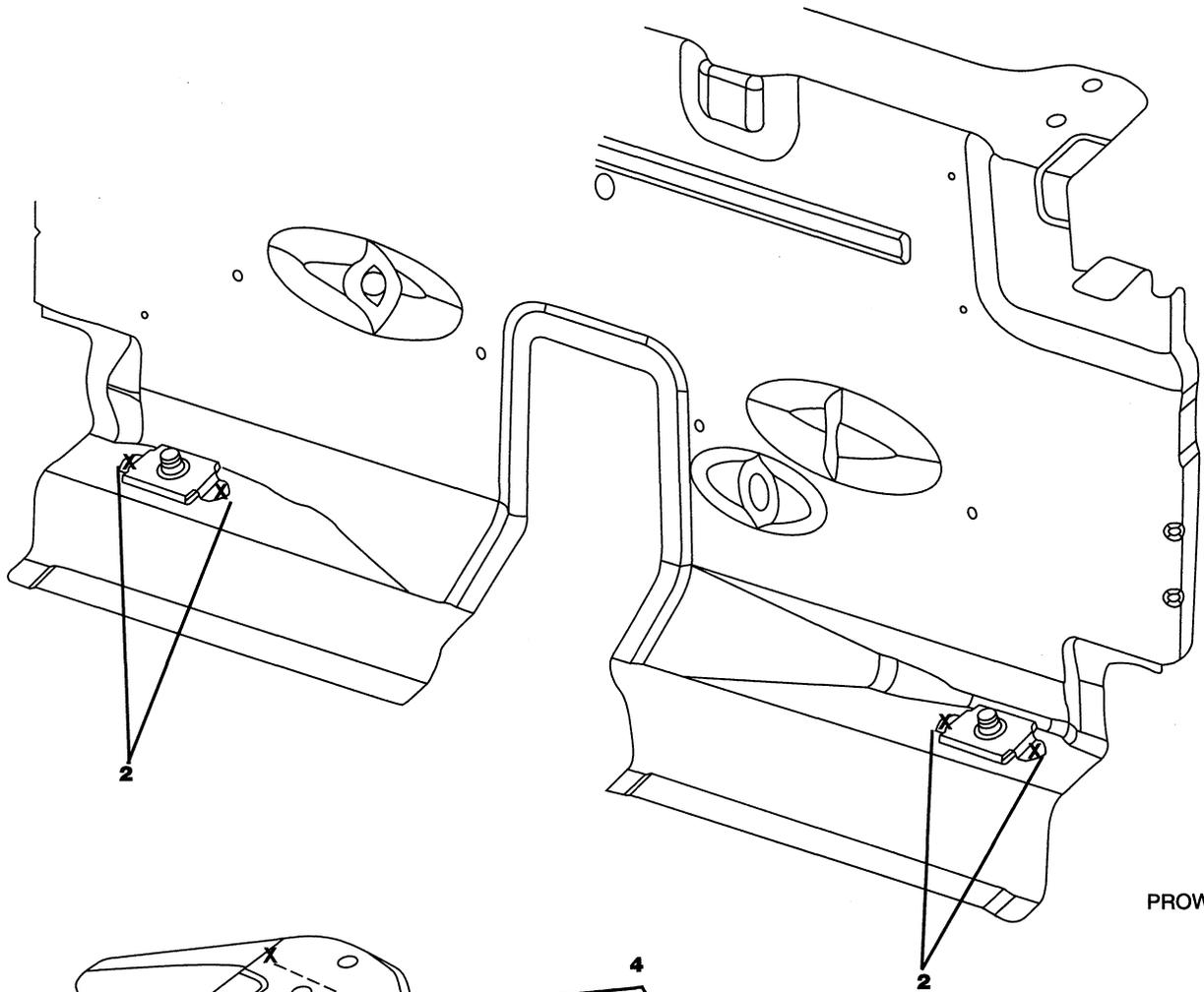
No.	Assy of Parts	F	R
5	D9 + D12	R/A2	R/A2
6	D9 + D6 + D10	R/A3	R/A3
7	D6 + D8	R/A2	R/A2
8R	D6 + D5	R/A14	R/A14
8L	D6 + D5	R/A12	R/A12
9	D6 + D10	R/A53	R/A53

No.	Assy of Parts	F	R
1	D11 + D12	R/A3	R/A3
2	D3 + D6	R/A2	R/A2
3	D11 + D6	R/A10	R/A10
4	D12 + D6	R/A13	R/A13

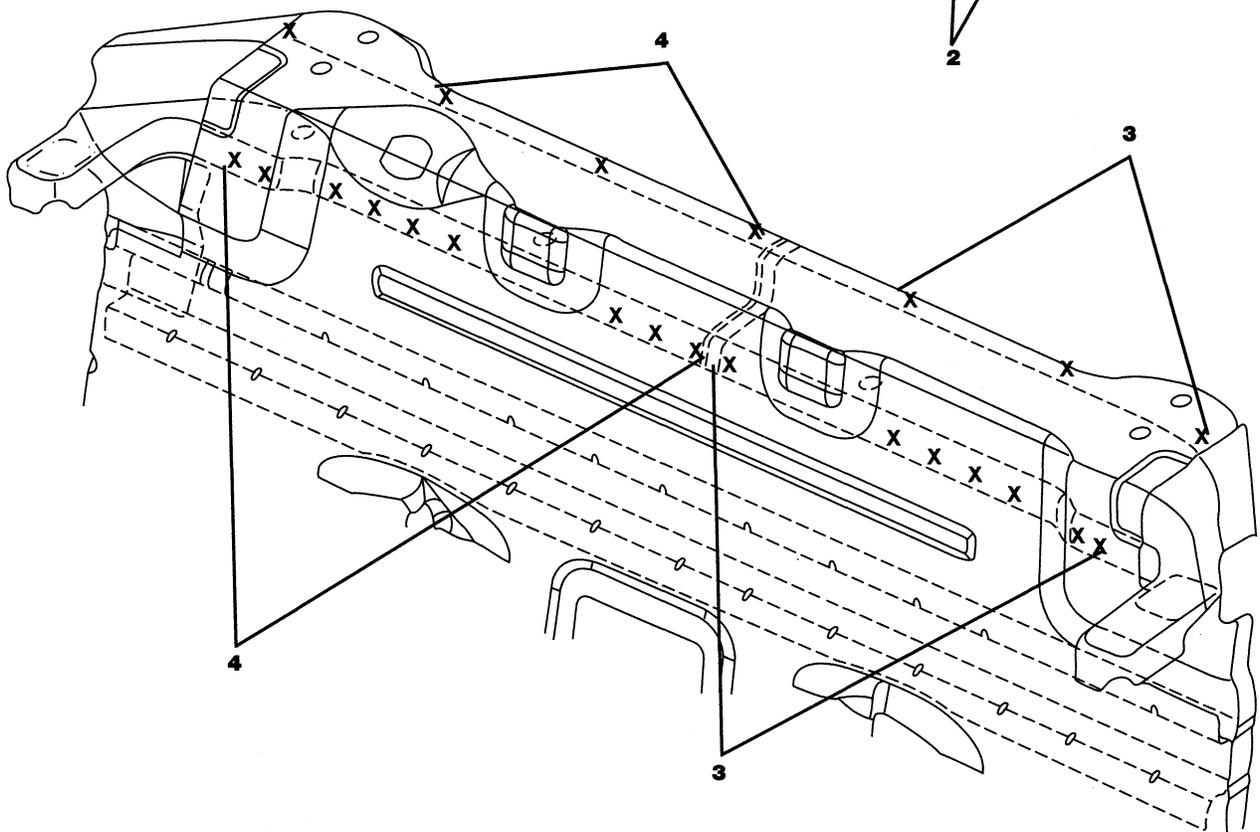
R = Right Hand Side of Vehicle    L = Left Hand Side of Vehicle



PROW-040



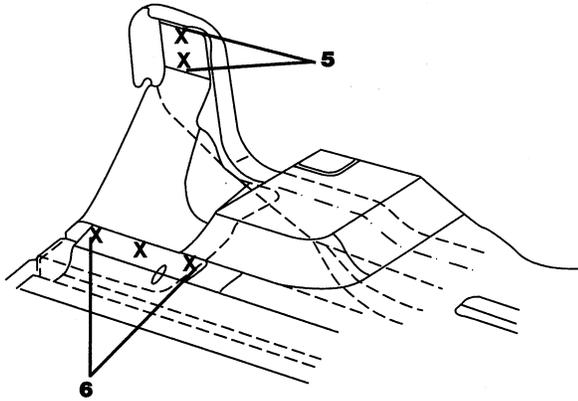
PROW-043



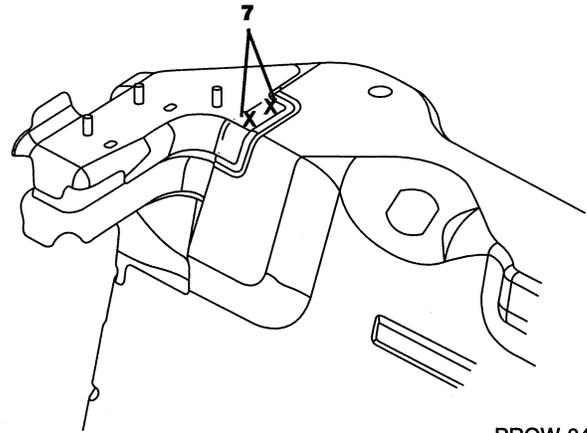
PROW-044



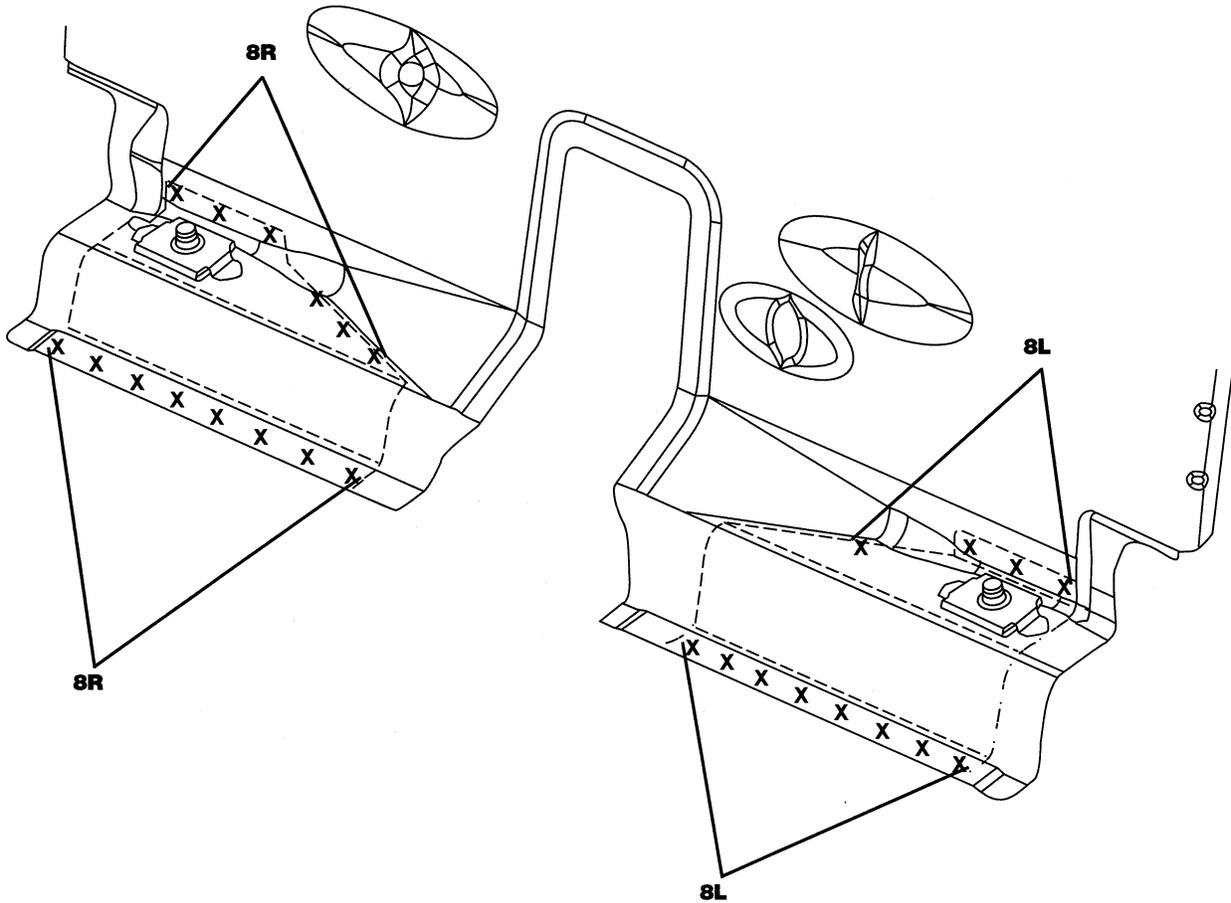
# Bulkhead Shelf



PROW-046



PROW-045



PROW-042



**NOTES WITH REGARD TO REPAIR WORK**

- The rivets must be coated to control galvanic corrosion.
- Use 3M structural adhesive #08115, or equivalent.

**REMOVAL**

Use one of the following procedures to remove the rivet:

**Drill Procedure**

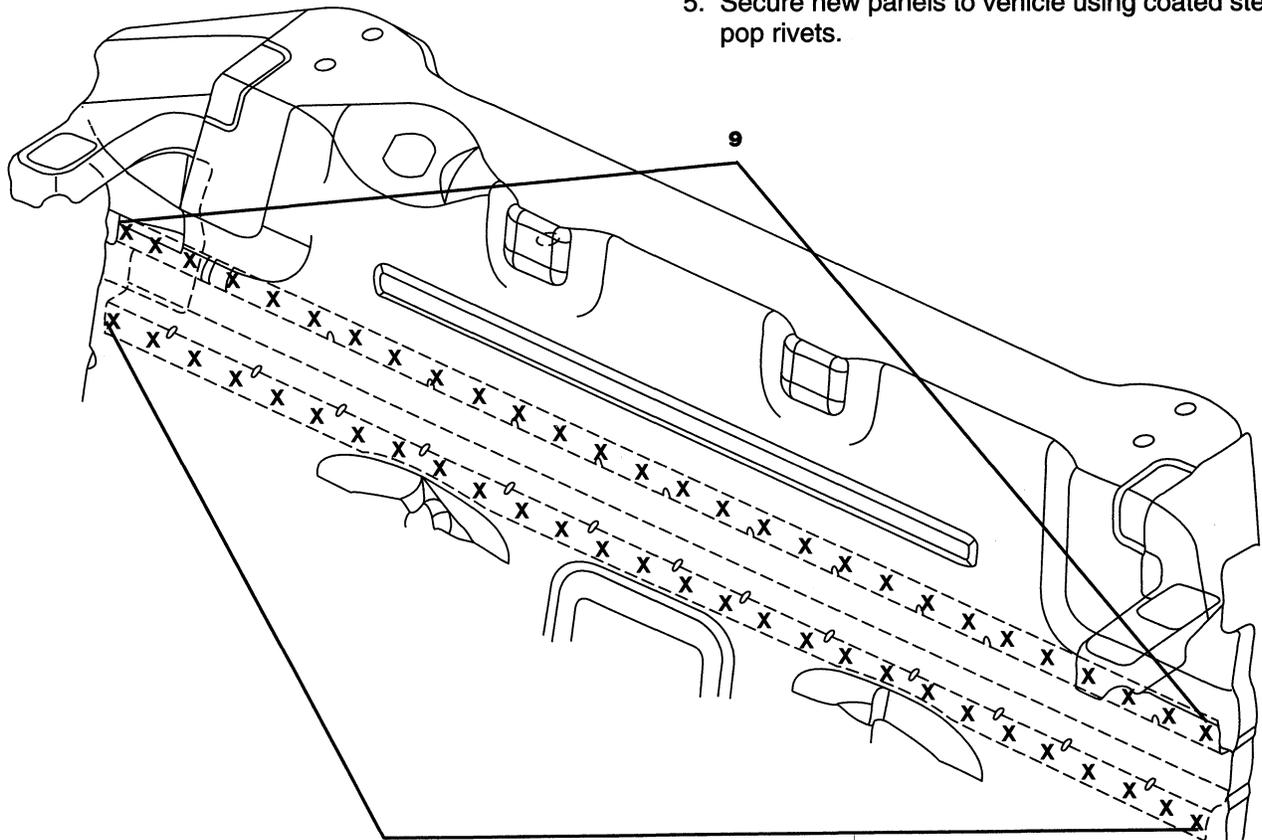
1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

**Grind Procedure**

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

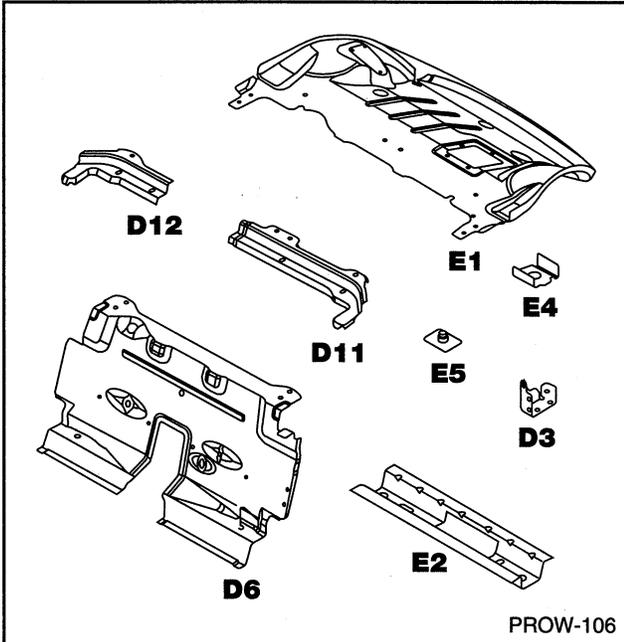
**INSTALLATION**

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.





# Rear Floor Pan

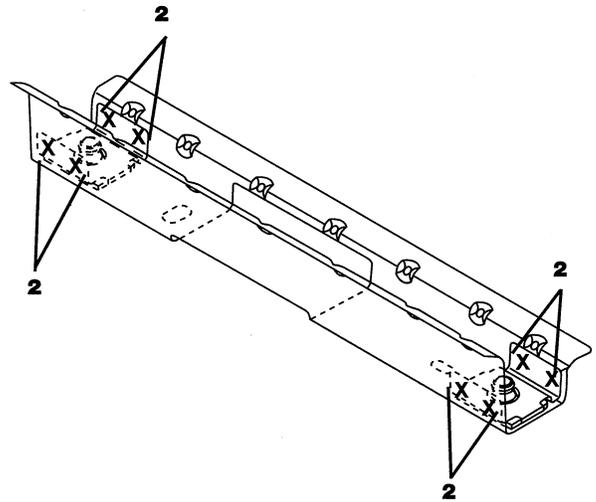


PROW-106

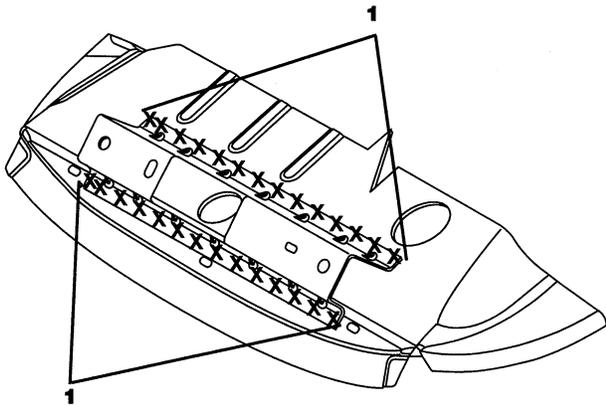
No.	Assy of Parts	F	R
1	E1 + E2	R/A28	R/A28
2	E2 + E3	R/A4	R/A4
3R	E1 + E3 + D12	R/A2	R/A2
3L	E1 + E3 + D11	R/A2	R/A2

R = Right Hand Side of Vehicle    L = Left Hand Side of Vehicle

No.	Assy of Parts	F	R
4	E1 + D6 + D12	R/A9	R/A9
5	E1 + D6 + D11	R/A16	R/A16
6	E1 + D6	R4	R4



PROW-035



PROW-033



## NOTES WITH REGARD TO REPAIR WORK

- The rivets must be coated to control galvanic corrosion
- Use 3M structural adhesive #08115, or equivalent.

## REMOVAL

Use one of the following procedures to remove the rivet:

### Drill Procedure

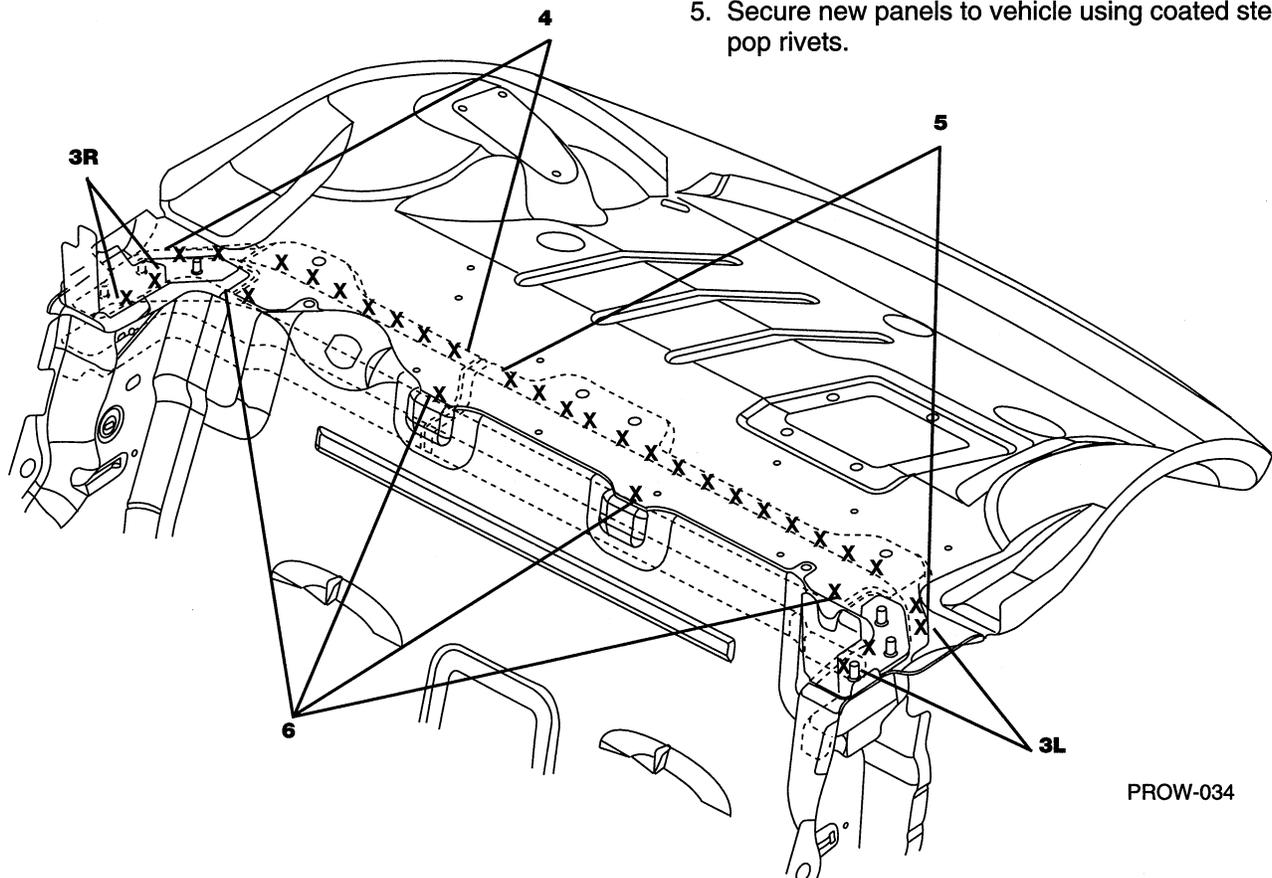
1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

### Grind Procedure

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

## INSTALLATION

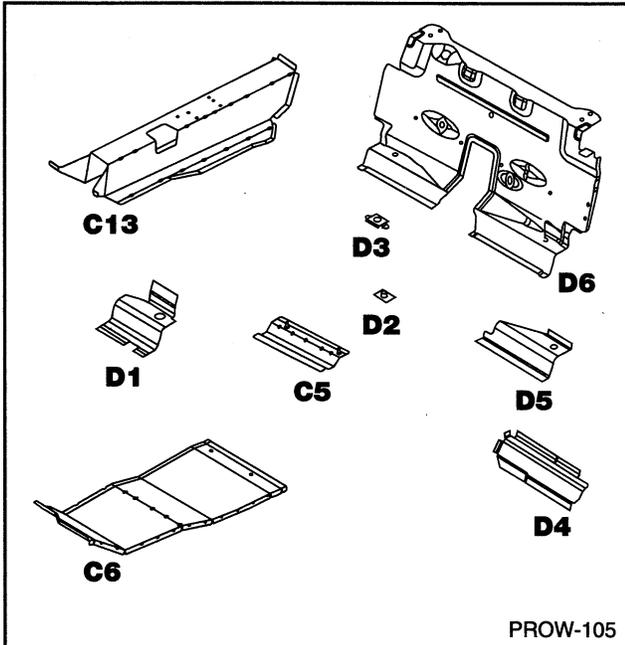
1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.



PROW-034



# Bulkhead to Floor Reinforcements

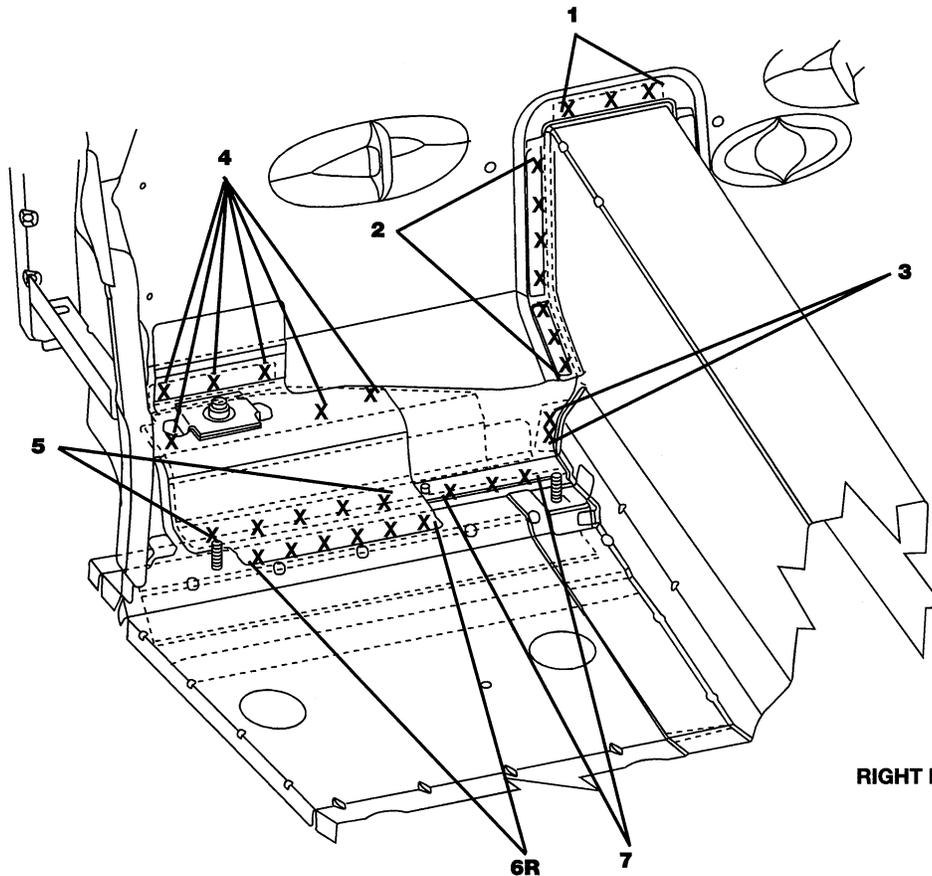


PROW-105

No.	Assy of Parts	F	R
4	D1 + D5 + D6	R/A6	R/A6
5	D1 + D5 + D6 + C6 + C5	R5	R5
6R	D1 + C6 + C5	R/A6	R/A6
6L	D1 + C6 + C5	R/A5	R/A5
7	D5 + D6 + C6 + C5	R/A3	R/A3
8	D1 + D4 + D6	R/A3	R/A3
9	D4 + D6	R/A5	R/A5
10	D4 + C13	R/A3	R/A3
11	D4 + D5 + D6	R/A4	R/A4
12	D1 + D4 + D5 + D6	R/A4	R/A4
13	D1 + D3	R/A4	R/A4

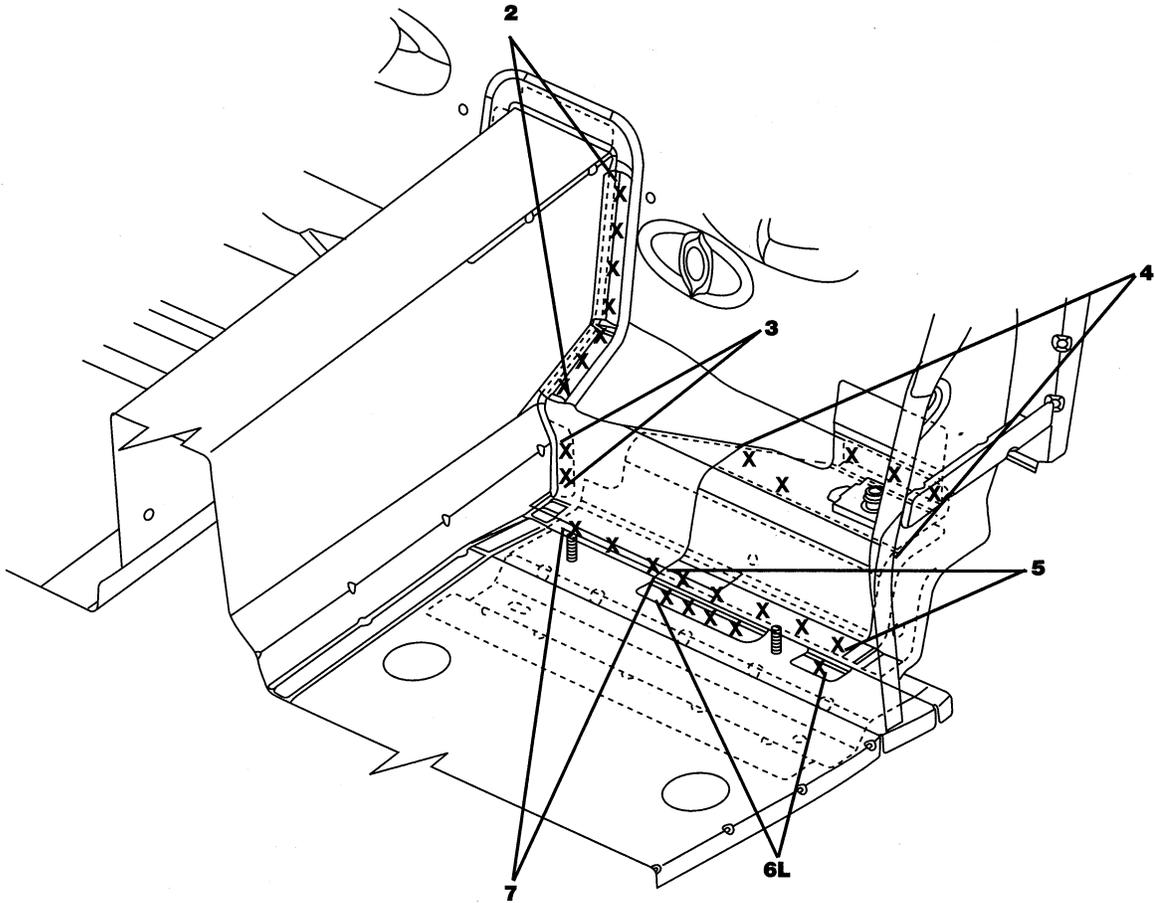
No.	Assy of Parts	F	R
1	C13 + D6	R/A3	R/A3
2	C13 + D6	R/A7	R/A7
3	C13 + D6	R2	R2

R = Right Hand Side of Vehicle    L = Left Hand Side of Vehicle



RIGHT HAND SIDE

PROW-075

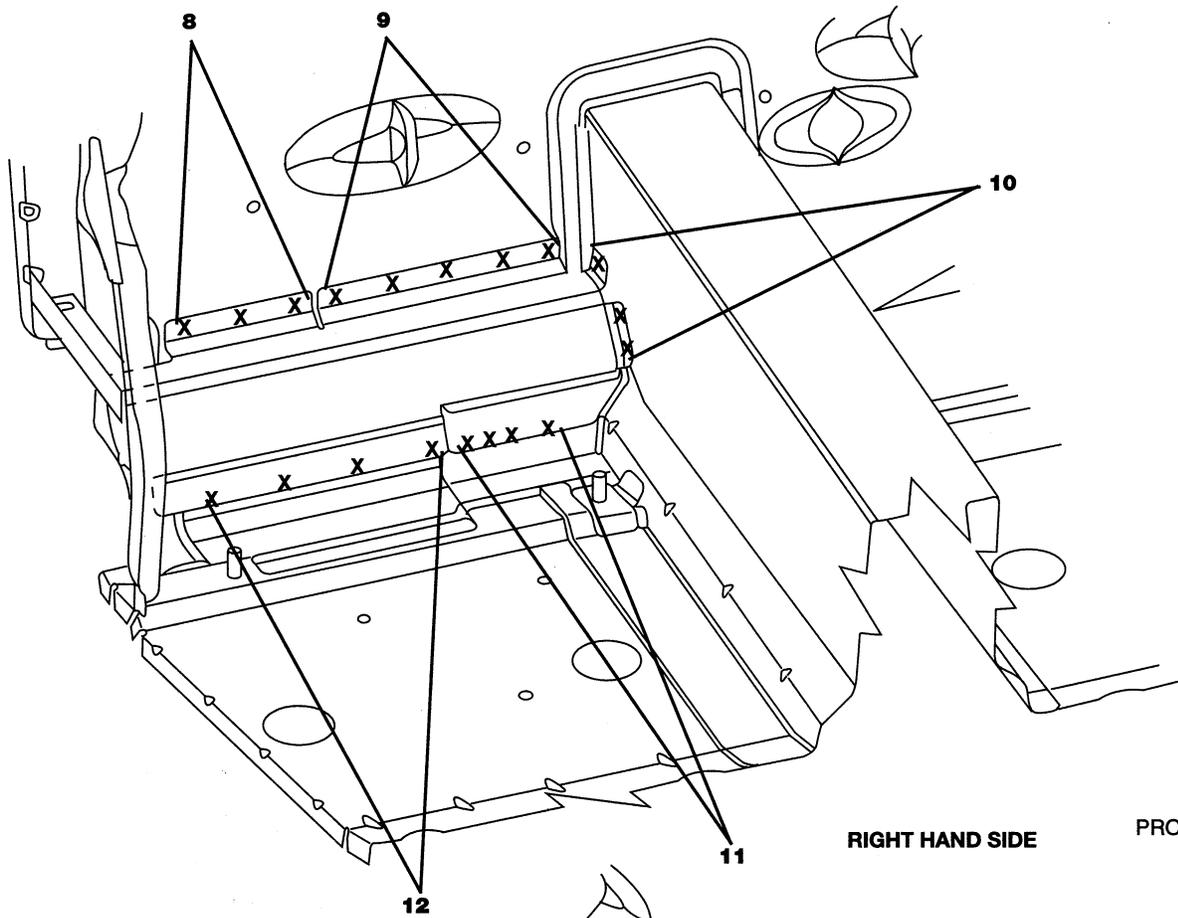


PROW-076

LEFT HAND SIDE

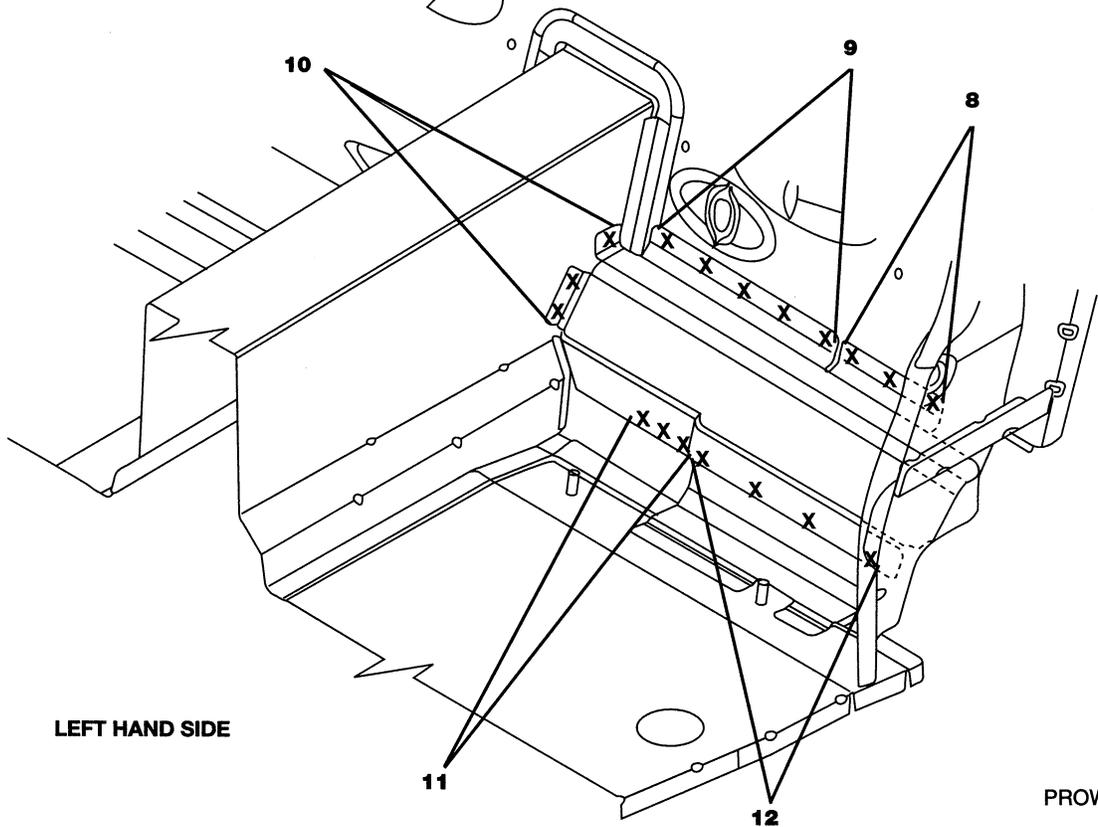


# Bulkhead to Floor Reinforcements



RIGHT HAND SIDE

PROW-077



LEFT HAND SIDE

PROW-079



## NOTES WITH REGARD TO REPAIR WORK

- The rivets must be coated to control galvanic corrosion
- Use 3M structural adhesive #08115, or equivalent.

## REMOVAL

Use one of the following procedures to remove the rivet:

### Drill Procedure

1. Use center punch to create dimple in center of henrob rivet.
2. Drill rivet from front using high-speed drill bit at low speed under 1000 rpm.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

### Grind Procedure

1. Grind back of henrob rivet, removing rivet tines.
2. Punch rivet out of panel.
3. Remove rivet, and clean surrounding area.
4. Use heat gun to release adhesive bond between damaged panels and the vehicle.
5. Clean all adhesive and rivet debris from vehicle surface.
6. Use removed panel as template for rivet and adhesive placement on new panel.

## INSTALLATION

1. Transfer markings to new panel from old for rivet locations.
2. Use a Whitney punch to place rivet holes in the new panel.
3. Clamp new panel in place, and check alignment and measurements.
4. Apply structural adhesive to mating location of panels.
5. Secure new panels to vehicle using coated steel pop rivets.

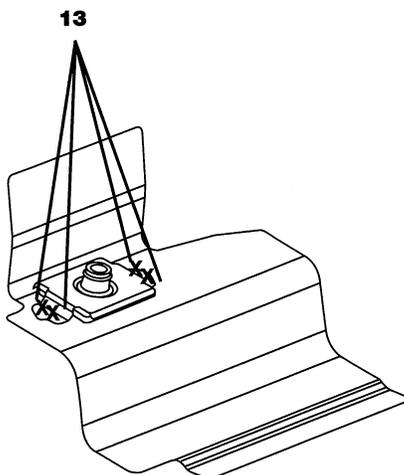
## HENROB RIVETS



Triple Thickness Henrob Rivet



Double Thickness Henrob Rivet

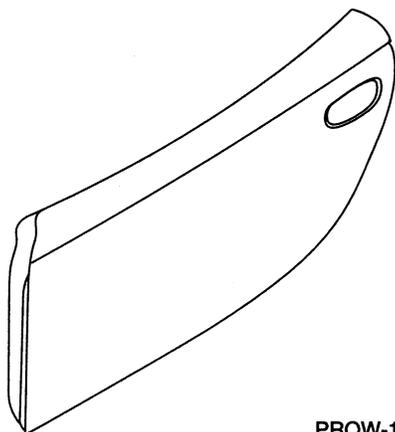


PROW-078

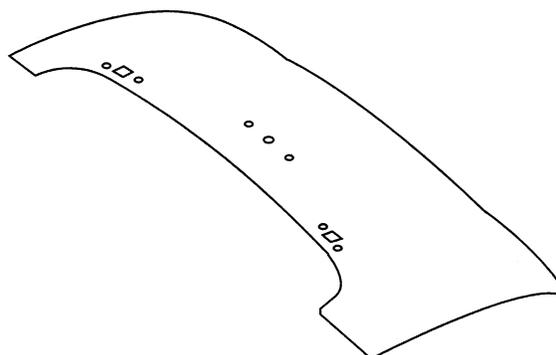
# PROWLER



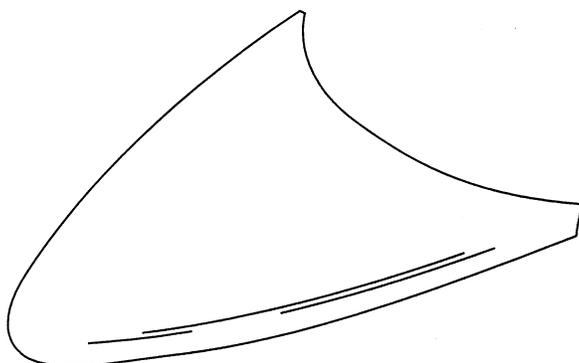
## Door, Hood, and Deck Lid Hardware



PROW-142



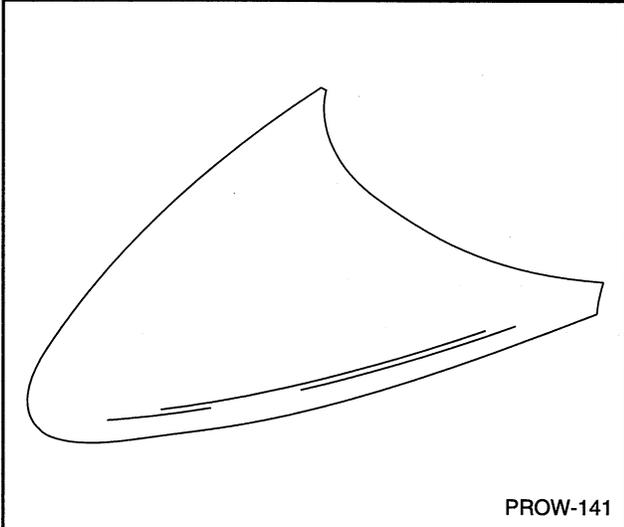
PROW-140



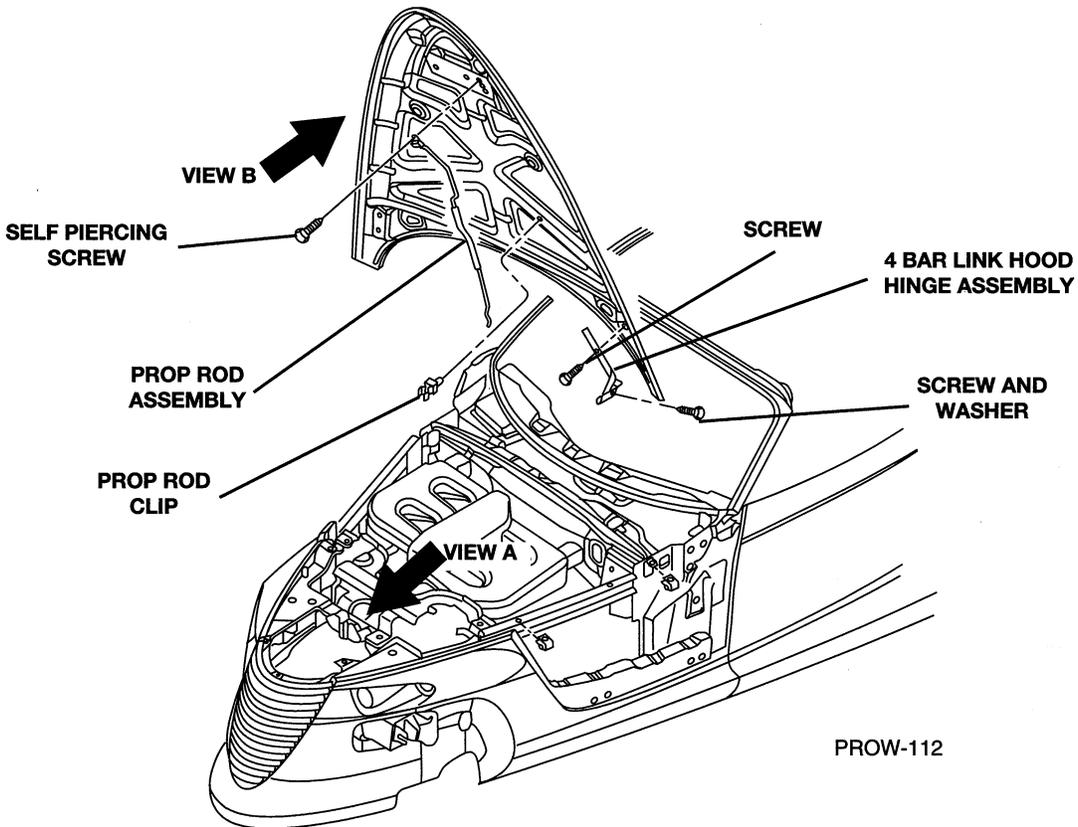
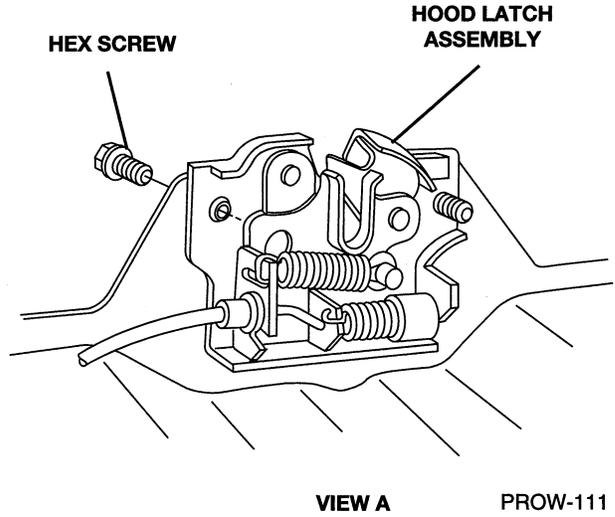
PROW-141



# Hood

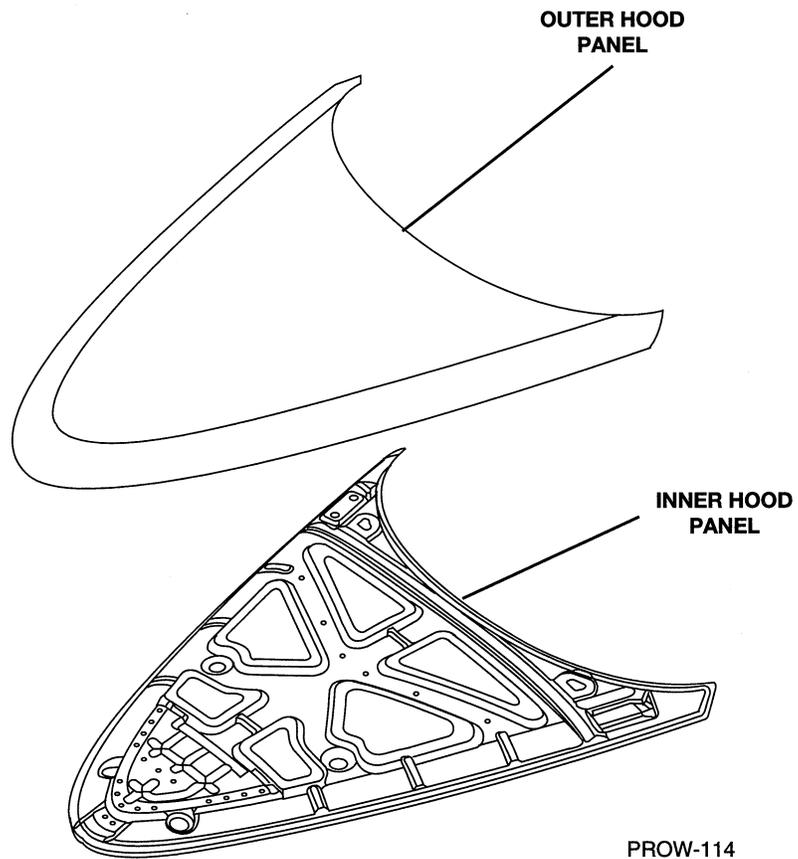
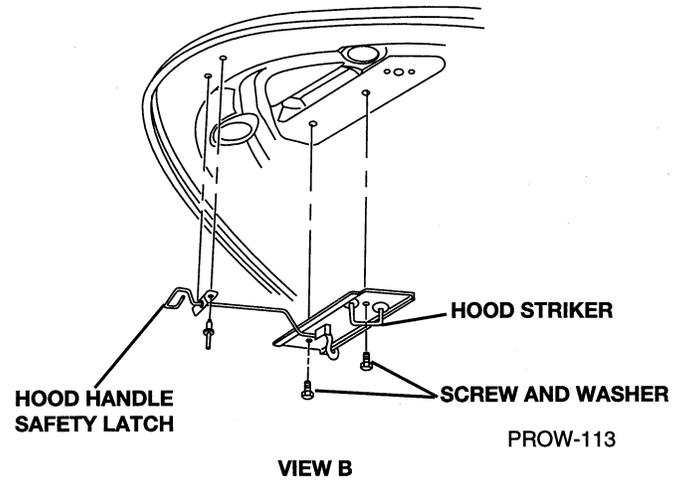


Panel	Fastener Type	No. Req.
Prop Rod to Hood	Self Piercing Screw	2/Side
Hinge Assy to Hood	Screw	2/Side
Hinge to Pillar	Screw & Washer	2/Side
Hood Latch to Body	Hex Screw	2
Safety Latch to Hood	Screw & Washer	2



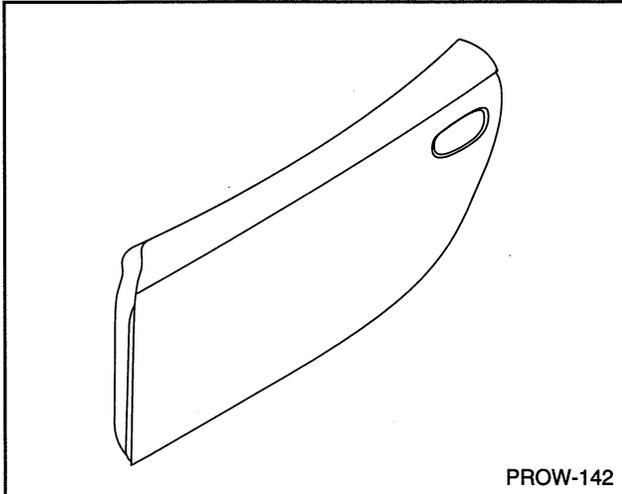
**HOOD ASSEMBLY**

- The hood is serviced as a complete assembly only. The inner and outer panels are not serviced separately. The outer hood panel is bonded to the inner structure panel with adhesive and rivets.
- Hood repair can be performed with common sheet metal repair procedures.
- Shim and adjust at the hood hinges to align and open gaps.





# Door

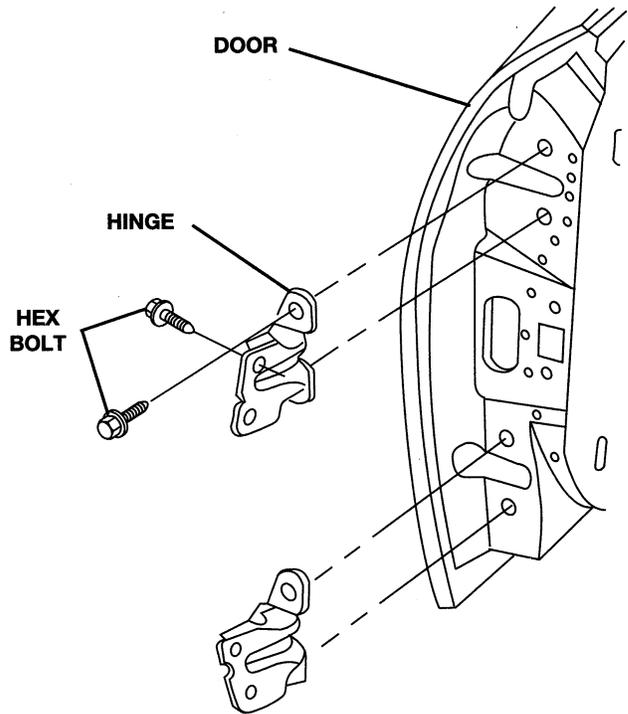


PROW-142

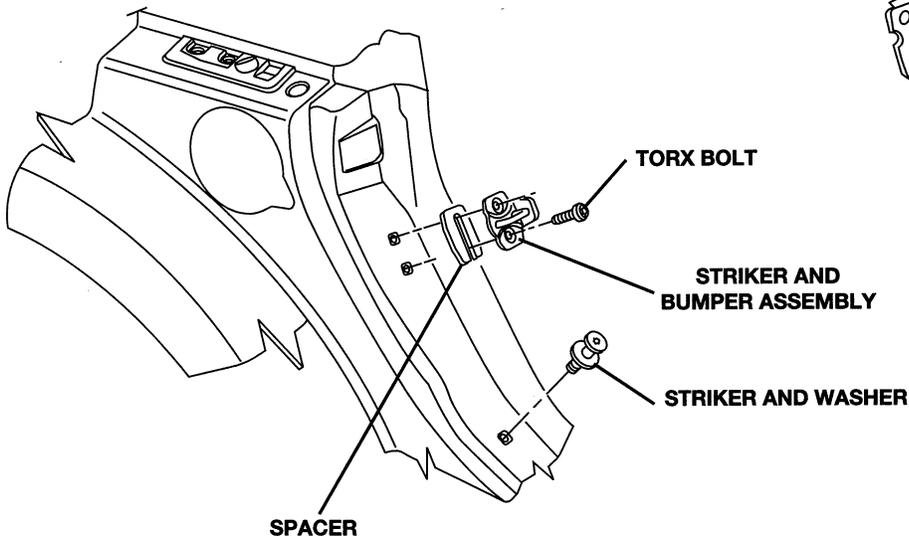
Panel	Fastener Type	No. Req.
Striker & Bumper Assy to Rear Pillar	Screw	2/Side
Strike & Washer to Rear Pillar	Striker	1/Side
Hinge to Door	Hex Bolt	2/Hinge
Handle to Door	Hex Screw	1/Side

## NOTES:

- Refer to the specifications and dimensions for door gaps.



PROW-143

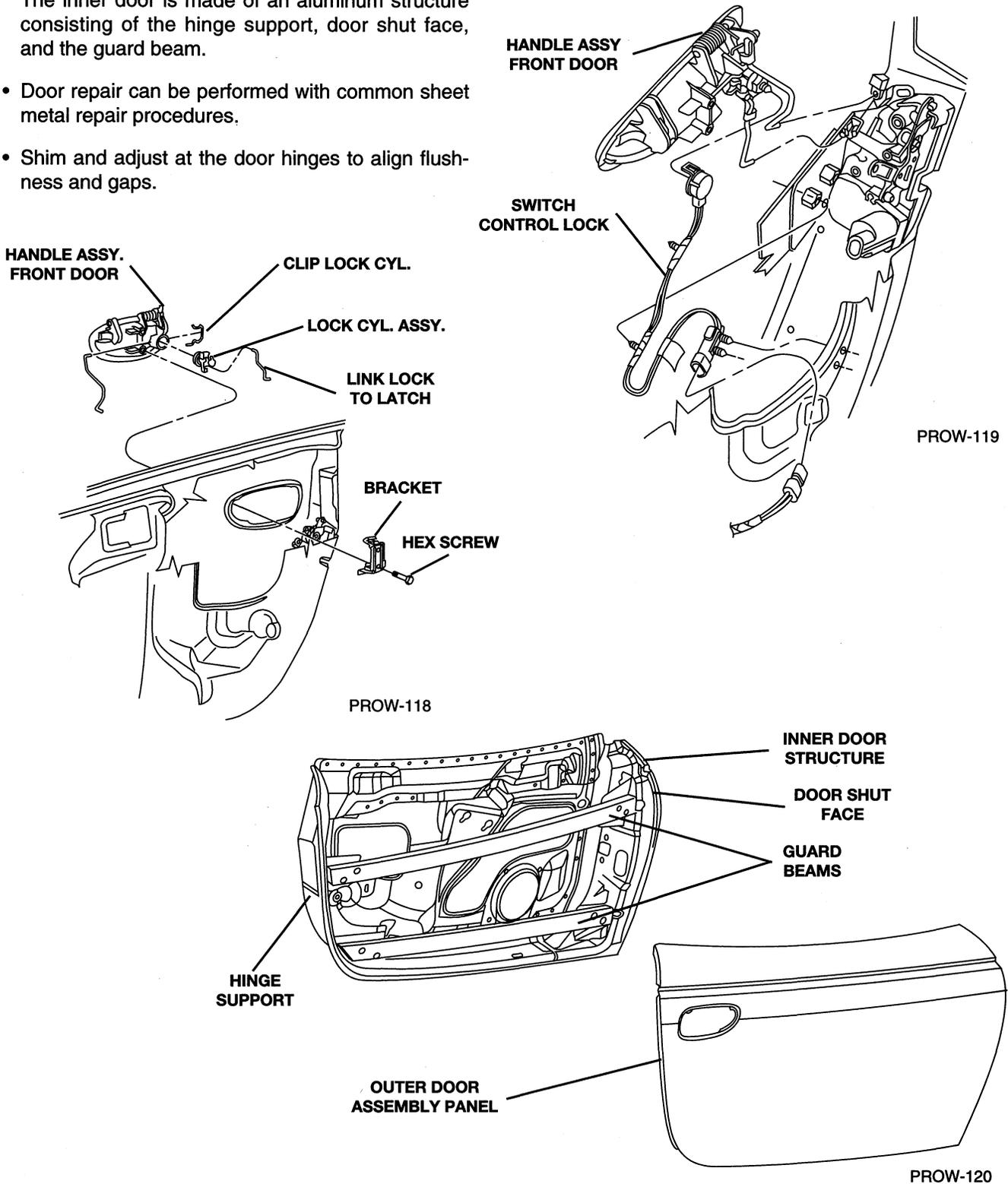


PROW-110

**DOOR**

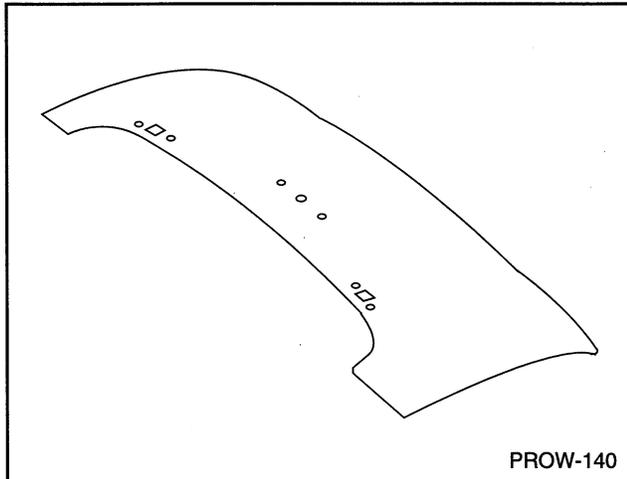
- The door is serviced as a complete assembly only. The inner and outer panels are not serviced separately. The outer door panel is bonded to the inner structure panel with adhesive and rivets. The inner door is made of an aluminum structure consisting of the hinge support, door shut face, and the guard beam.
- Door repair can be performed with common sheet metal repair procedures.
- Shim and adjust at the door hinges to align flushness and gaps.

**NOTE:** The door guard beam is made of high strength aluminum and should not be heated or straightened. The door should be replaced.



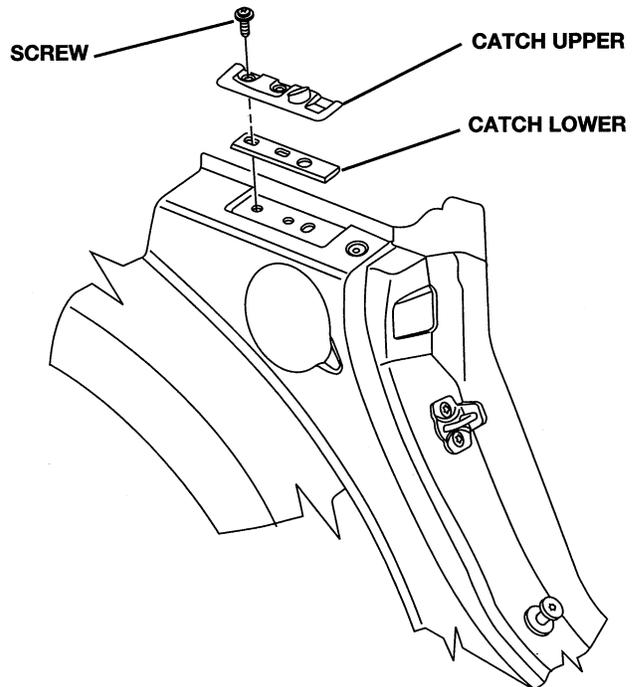


# Deck Lid

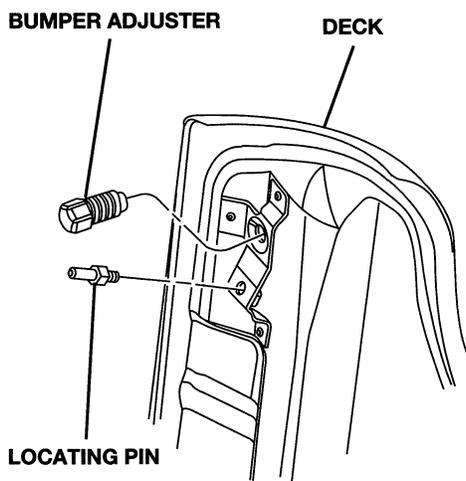


PROW-140

Panel	Fastener Type	No. Req.
Latch Assy. to Deck To Bezel	Screw & Washer	2/Side
Bracket to Latch Handle to Deck	Screw & Washer	2
Bracket to Deck	Screw & Washer	1
Catch Upper to Catch Lower to Rear Quarter Panel	Screw	2/Side
Hinge Assy. To Deck	Screw & Washer	2/Side
Hinge Assy. to Deck Opening	Screw & Washer	2/Side
Bracket Assy. to Rear Floor Pan	Nut & Washer	2
Latch Assy. to Bracket Assy.	Nut & Washer	2

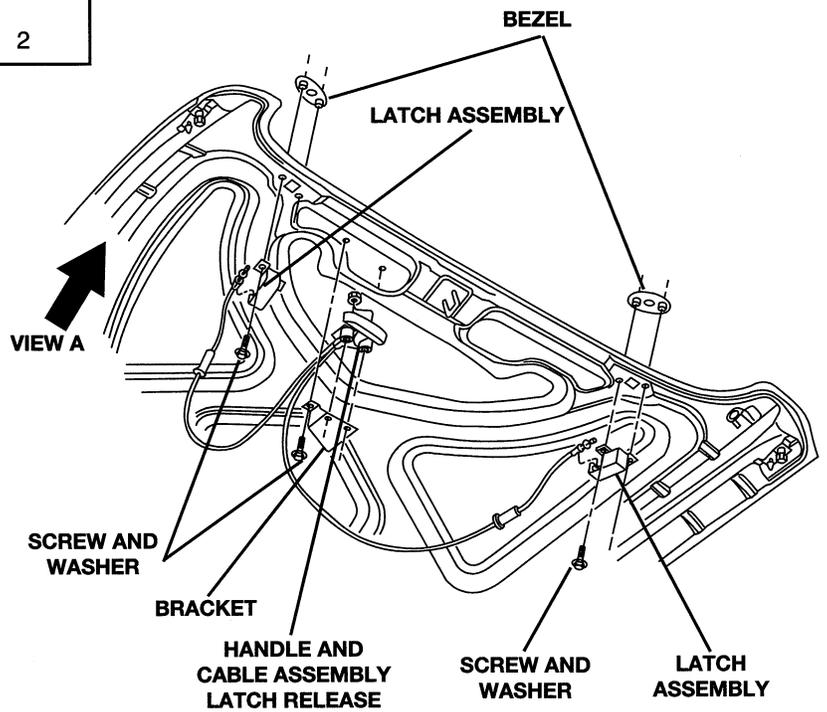


PROW-121



VIEW A

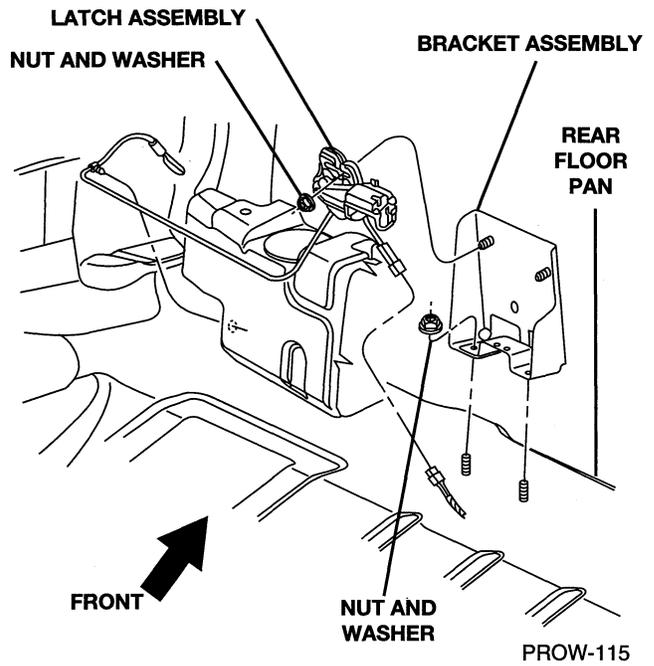
PROW-123



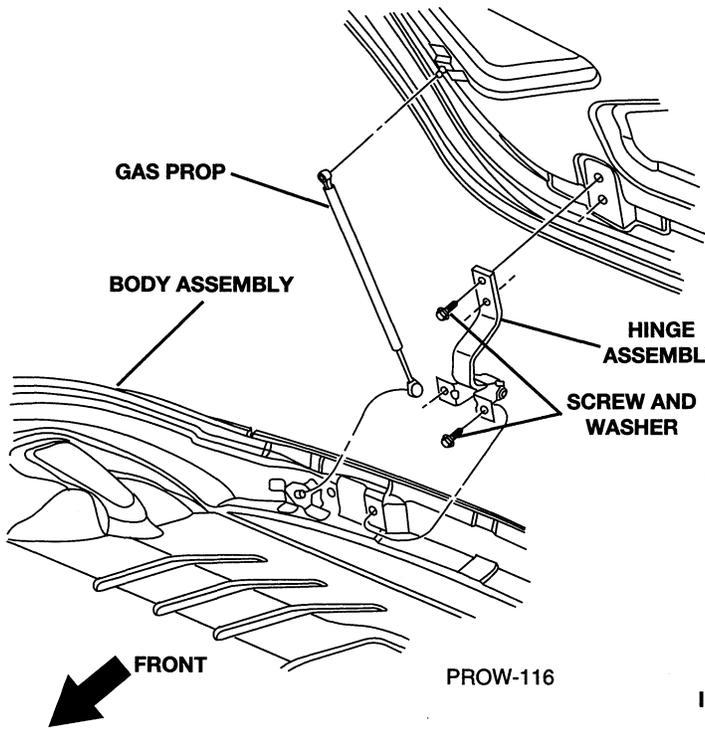
PROW-122

**DECK LID ASSEMBLY**

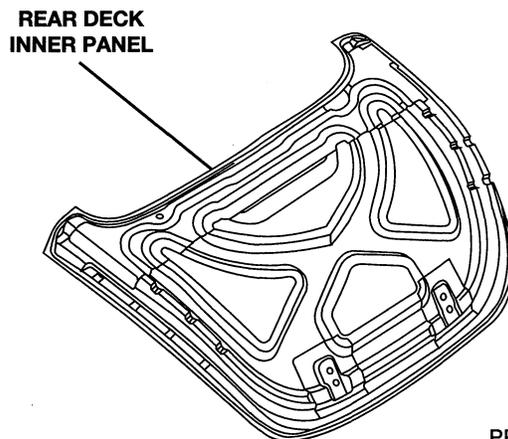
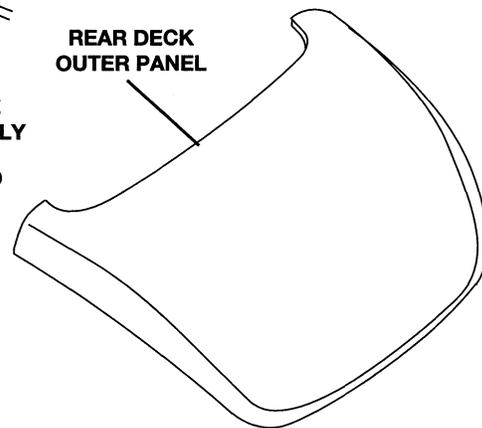
- The deck lid is serviced as a complete assembly only. The inner and outer panels are not serviced separately. The outer deck lid panel is bonded to the inner structure panel with adhesive and rivets.
- Deck lid repair can be performed with common sheet metal repair procedures..
- Shim and adjust at the deck lid hinges to align flushness and gaps.



PROW-115



PROW-116

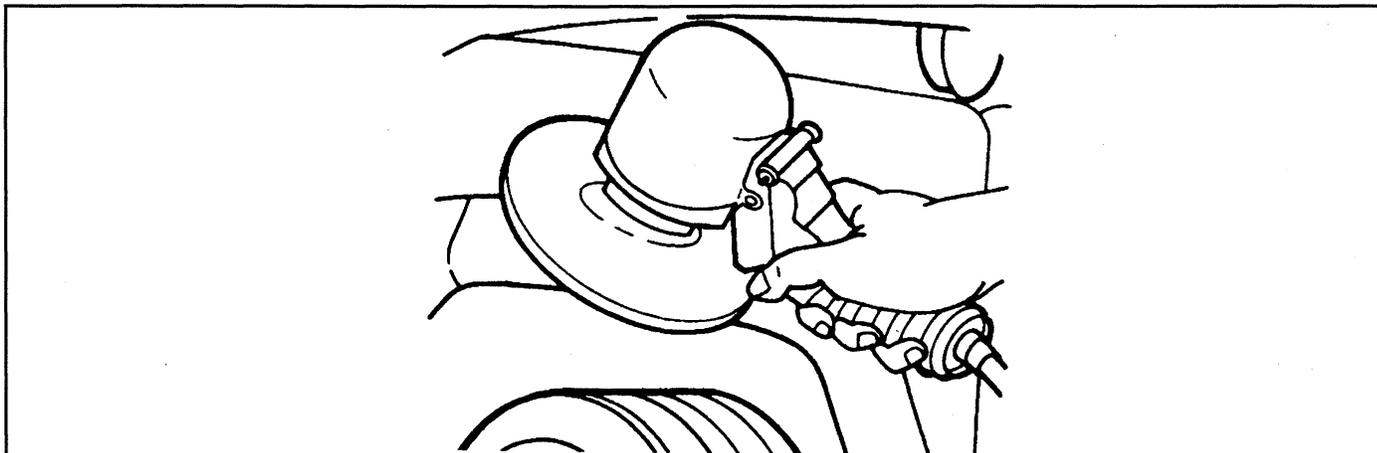


PROW-117

# PROWLER



## Plastic Body Panel Repair



### GENERAL INFORMATION

Sheet molded compound (SMC) body panels are constructed with fiberglass strands usually 1" or shorter, epoxy resin formed into sheet stock and pressed in mold flowing material to form a sheet molded compound (SMC) body panel. SMC body panels can be repaired with epoxy adhesive aftermarket products. Refer to instructions provided by the manufacturer of products being used to repair SMC. Chrysler Corporation recommends that a trained automotive body technician perform body panel repair procedures.

### SAFETY PRECAUTIONS AND WARNINGS

**WARNING: EYE PROTECTION SHOULD BE USED WHEN SERVICING RTM AND SMC COMPONENTS. PERSONAL INJURY CAN RESULT.**

**USE AN OSHA APPROVED BREATHING DEVICE WHEN MIXING EPOXY, GRINDING SMC, AND SPRAYING PAINT OR SOLVENTS IN A CONFINED AREA. PERSONAL INJURY CAN RESULT.**

**AVOID PROLONGED SKIN CONTACT WITH EPOXY RESIN, PETROLEUM, OR ALCOHOL BASED SOLVENTS. PERSONAL INJURY CAN RESULT.**

**DO NOT VENTURE UNDER A HOISTED VEHICLE THAT IS NOT PROPERLY SUPPORTED ON SAFETY STANDS. PERSONAL INJURY CAN RESULT.**

### CAUTIONS:

- When holes must be drilled or cut in body panels, verify locations of internal body components and electrical wiring. Damage to vehicle can result.
- Do not use abrasive chemicals or compounds on undamaged painted surfaces around repair areas. Damage to finish can result.

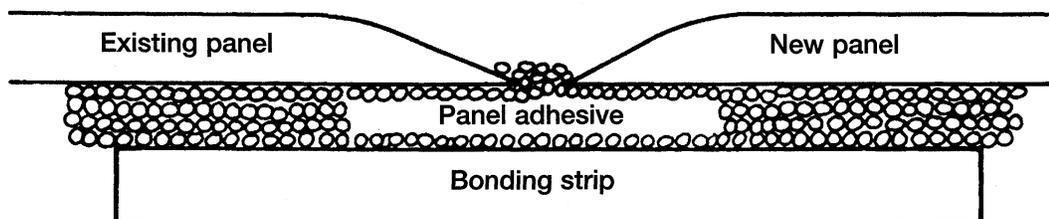


### PANEL SECTIONING

If it is required to section a large panel for an SMC repair, it will be necessary to reinforce the panel with epoxy structural adhesive (rigid repair adhesive). To bond two plastic panels together, a reinforcement must overlap both panels. The panels must be "V'd" at a 20 degree angle. The area to be reinforced should be washed, then sanded. Be sure to wipe off any excess soap and water when finished. Lightly sand or abrade the plastic with an abrasive pad or sandpaper. Blow off any dust with compressed air or wipe with a clean dry rag.

When bonding SMC panels, use a two-part epoxy adhesive. Properly mix parts A and B, and apply it to the panels being repaired. Be sure that enough adhesive has been applied to allow squeeze out and to fill the full bond line. Once the pieces have been brought together, do not move them until the adhesive is cured. The assembly can be held together with clamps, rivets, etc. A faster cure can be obtained by heating with a heat lamp or heat gun.

After the parts have been bonded and have had time to cure, rough sand the seam and apply the final adhesive filler to the area being repaired. Smooth the filler with a spatula, wooden tongue depressor, or squeegee. For fine texturing, a small amount of water can be applied to the filler surface while smoothing. The cured filler can be sanded as necessary and, as a final step, cleanup can be done with soapy water. Wipe the surface clean with a dry cloth allowing time for the panel to dry before moving on with the repair.

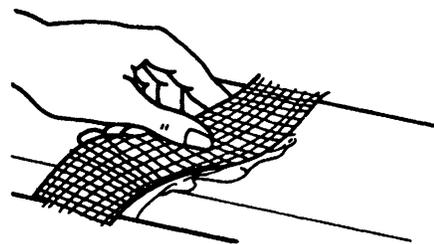
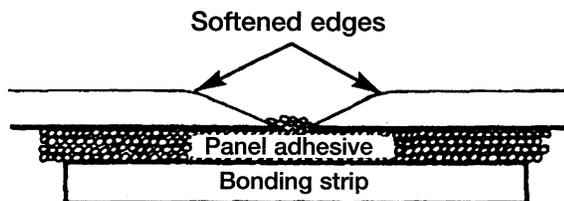
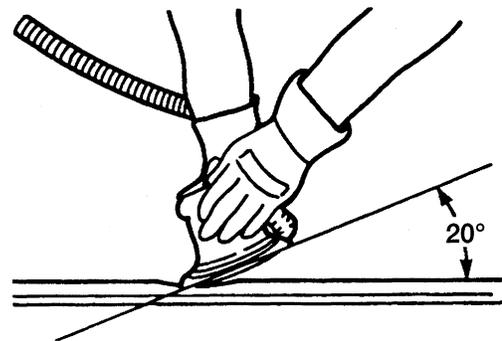


### PANEL REINFORCEMENT

Structural repair procedures for rigid panels, such as Sheet Molding Compound (SMC), with large cracks and holes will require a reinforcement backing. Reinforcements can be made with several applications of glass cloth saturated with epoxy structural adhesive. Semi-rigid or flexible repair materials should be used for semi-rigid or flexible part repairs. Open meshed fiberglass drywall tape can be used to form a reinforcement. The drywall tape allows the resin to penetrate through and make a good bond between the panel and the epoxy adhesive. Structurally, the more drywall tape used, the stronger the repair.

Another kind of repair that can be done to repair large cracks and holes is to use a scrap piece of similar plastic and bond with structural adhesive. The reinforcement should cover the entire break and should have a generous amount of overlap on either side of the cracked or broken area.

When repairing plastic, the damaged area is first "V'd" out, or beveled. Large bonding areas are desirable when repairing plastic because small repairs are less likely to hold permanently. Beveling the area around a crack at a 20 degree angle will increase the bonding surface for a repair. It is recommended that sharp edges be avoided because the joint may show through after the panel is refinished.





## NOTES:

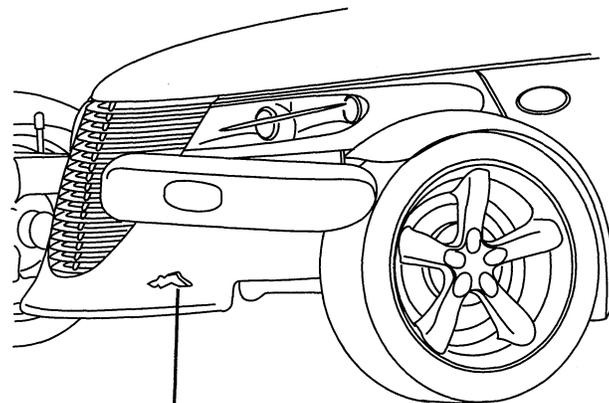
- Panel repair for both flexible (RRIM) and rigid (SMC) panels are basically the same. The primary difference between flexible panel repair and rigid panel repair is in the adhesive materials used.
- The technician should first decide what needs to be done when working on any type of body panel. One should determine if it is possible to return the damaged part to its original strength and appearance without exceeding the value of the replacement part.
- When plastic repairs are required, it is recommended that the part be left on the vehicle whenever possible. That will save time, and the panel will remain stationary during the repair. Misalignment can cause stress in the repair areas and can result in future failure.

## VISUAL INSPECTION

Sheet Molded Compound (SMC), because it is a composite, reacts differently to impact than sheet metal does. Composite materials can mask the severity of an accident. Adhesive bond lines, interior structure of the doors, and steel structure need to be inspected carefully to get a true damage assessment. Close inspection may require partial removal of interior trim or inner panels.

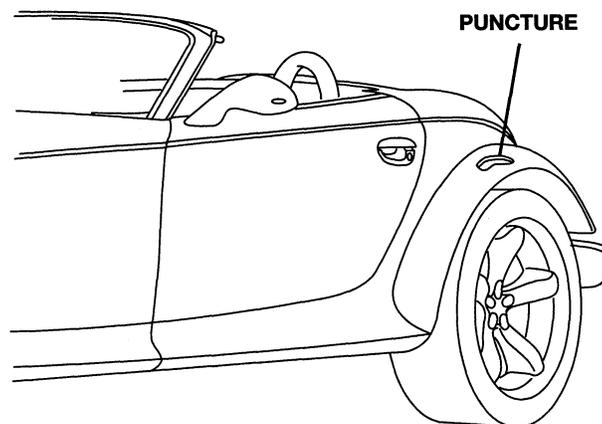
Identify the type of repair:

**Puncture or Crack** - Damage that has penetrated completely through the panel. Damage is confined to one general area; a panel section is not required. However, a backer panel, open fiberglass tape, or matted material must be bonded from behind.



PUNCTURE

REPAIR2



PUNCTURE

REPAIR

**PANEL SURFACE PREPARATION**

If a body panel has been punctured, cracked, or crushed, the damaged area must be removed from the panel to achieve a successful repair. All spider web cracks leading away from a damaged area must be stopped or removed. To stop a running crack in a SMC panel, drill a 6mm (0.250 in.) hole at the end of the crack farthest away from the damage. If spider web cracks cannot be stopped, the panel would require replacement. The surfaces around the damaged area should be stripped of paint and freed from wax and oil. Scuff surfaces around repair area with 360 grit wet/dry sand paper, or equivalent, to assure adhesion of epoxy repair materials.

**PATCHING PANELS**

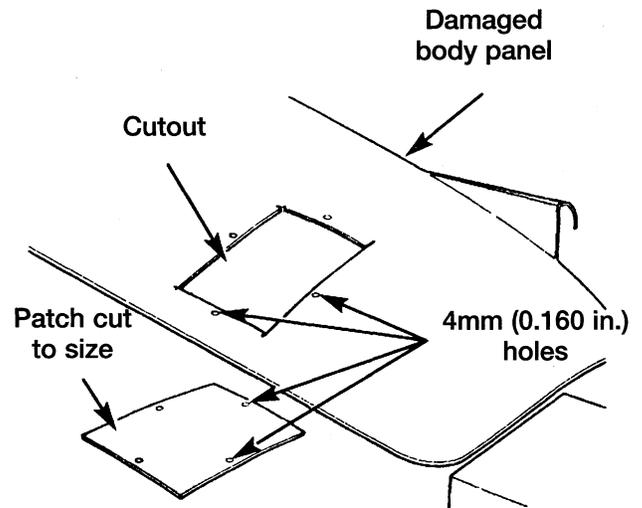
An SMC panel that has extensive puncture type damage can be repaired by cutting out the damaged material (Fig. 1). Use a suitable reciprocating saw or cut-off wheel to remove the section of the SMC panel that is damaged. The piece cut out can be used as a template to shape the new patch. It is not necessary to have access to the back of the panel to install a patch. Bevel edges of cutout at 20 degrees to expose a larger bonding area on the outer side. This will allow for an increased reinforcement area.

**PANEL PATCH FABRICATIONS**

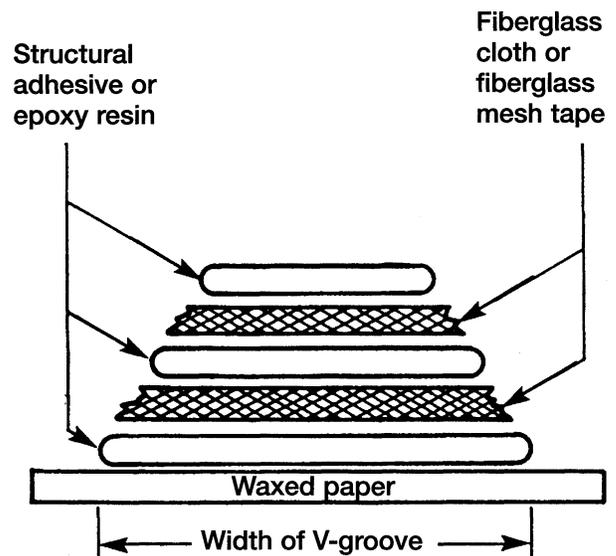
A patch can be fabricated from any rigid fiberglass panel that has compatible contour with the repair area. Discard SMC panels. Deck and fenders can be used to supply patch material. If existing material is not available or compatible, a patch can be constructed with epoxy and reinforcement mesh (drywall tape). Perform the following operation if required:

1. Cover waxed paper or plastic with adhesive backed nylon mesh (drywall tape) larger than the patch required (Fig. 2).
2. Tape waxed paper or plastic sheet with mesh to a surface that has a compatible contour to the repair area.
3. Apply a liberal coat of epoxy adhesive over the reinforcement mesh (Fig. 2). If necessary apply a second or third coat of epoxy and mesh after first coat has cured. The thickness of the patch should be the same as the repair area.

4. After patch has cured, peel waxed paper or plastic from the back of the patch.
5. If desired, a thin film coat of epoxy can be applied to the back of the patch to cover mesh for added strength.



**Fig. 1 Damaged Panel Cutout and Patch**



**Fig. 2 Fabricated Panel**



## PANEL PATCH INSTALLATION

1. Make a paper or cardboard pattern the size and shape of the cutout hole in the panel.
2. Trim 3mm (0.125 in.) from edges of pattern so patch will have a gap between connecting surfaces.
3. Using the pattern as a guide, cut the patch to size.
4. Cut scrap pieces of patch material into 50mm (2 in.) squares to use as patch supports to sustain the patch in the cutout.
5. Drill 4mm (0.160 in.) holes 13mm (0.5 in.) in from edge of cutout hole (Fig. 1).
6. Drill 4mm (0.160 in.) holes 13mm (0.5 in.) away from edge of patch across from holes drilled around cutout (Fig. 1).
7. Drill 3mm (0.125 in.) holes in the support squares 13mm (0.5 in.) from the edge in the center of one side.
8. Scuff the backside of the body panel around the cutout hole with a scuff pad or sandpaper.
9. Mix enough epoxy to cover one side of all support squares.
10. Apply epoxy to the support squares on the half with the hole predrilled in it.
11. Using number 8 sheet metal screws, secure support squares to back side of body panel with epoxy sandwiched between the panel and the squares (Fig. 3).
12. Position patch in cutout against support squares and adjust patch until the gap is equal along all sides (Fig. 5).
13. Drill 3mm (0.125 in.) holes in the support squares through the pre-drilled holes in the patch.
14. Apply a coat of epoxy to the exposed ends of the support squares (Fig. 4).

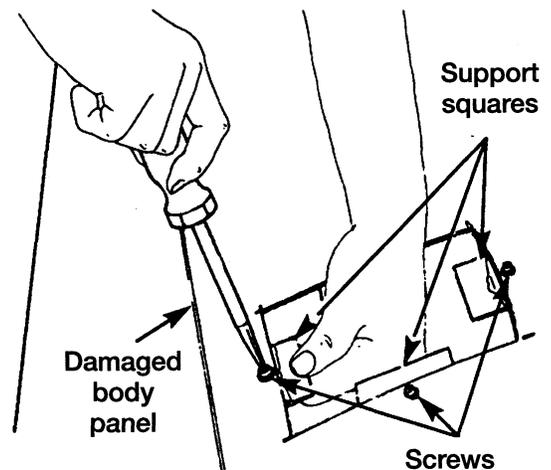


Fig. 3 Secure Support Squares to Body Panel

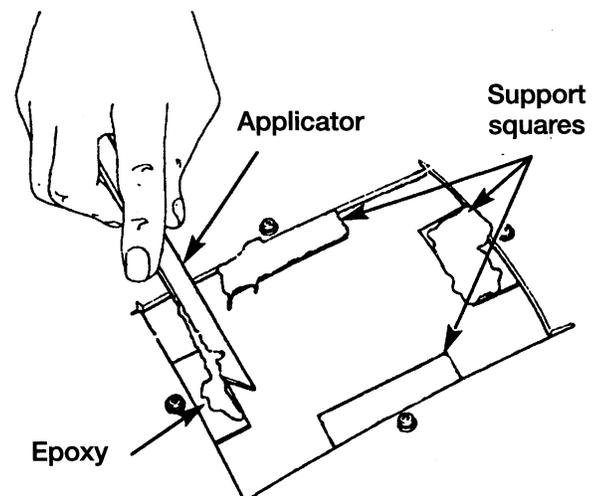


Fig. 4 Apply Epoxy to Support Squares

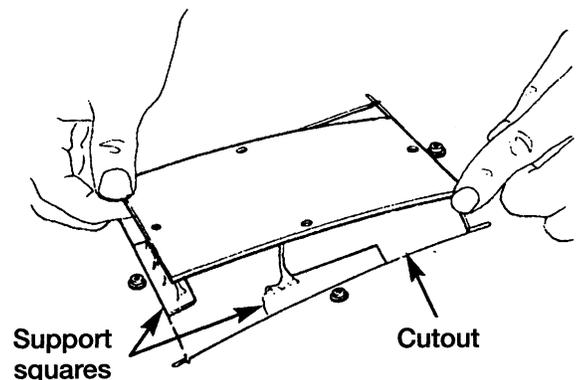
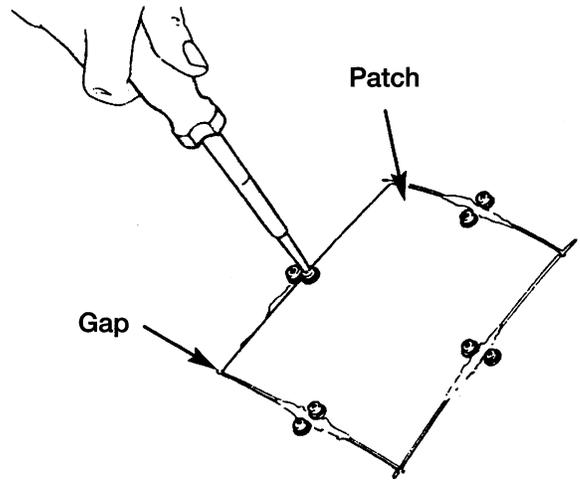


Fig. 5 Position Patch in Cutout and Align

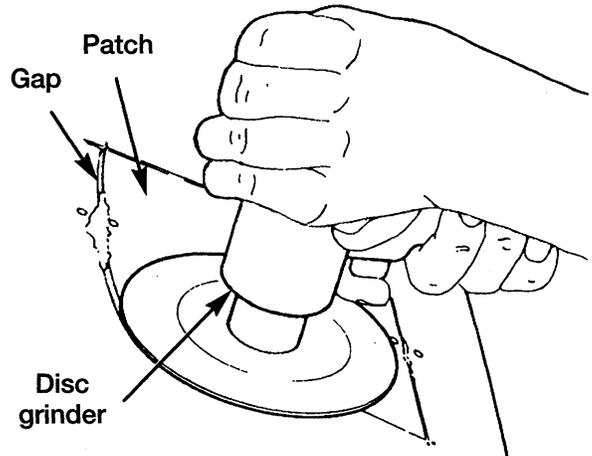
15. Install screws to hold the patch to support squares (Fig. 6). Tighten screws until patch surface is flush with panel surface.
16. Allow epoxy to cure, and remove all screws.
17. Using a 125mm (5 in.) 24 grit disc grinder, grind a 50mm (2 in.) to 75mm (3 in.) wide and 2mm (0.080 in.) deep path across the gaps around the patch (Fig. 7). With compressed air, blow dust from around patch.
18. Apply adhesive backed nylon mesh (drywall tape) over gaps around patch (Fig. 8).
19. Mix enough epoxy to cover the entire patch area.
20. Apply epoxy over the mesh around patch, and smooth epoxy with a wide spreader to reduce finish grinding. Use two to three layers of mesh and epoxy to create a stronger repair (Fig. 9).

**PATCHED PANEL SURFACING**

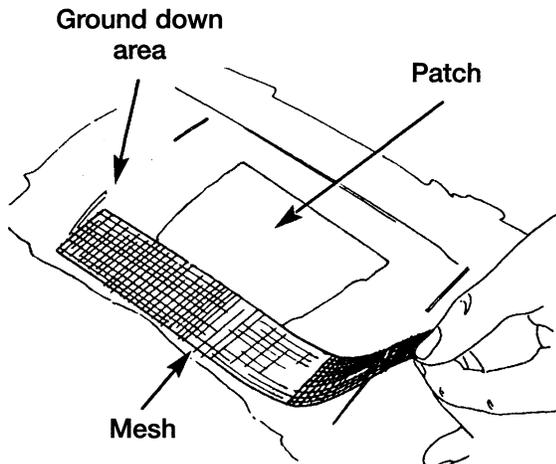
After patch panel is installed, the patch area can be finished using the same methods as finishing other types of body panels. If mesh material is exposed in the patched area, grind surface down, and apply a coat of high quality rigid plastic body filler. Prime, block sand, and paint as required.



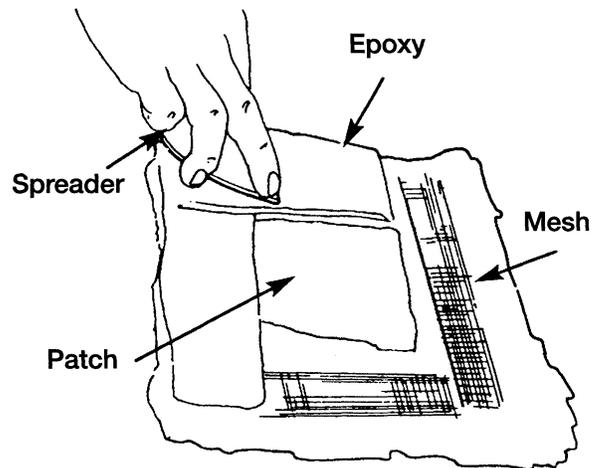
**Fig. 6 Install Screws**



**Fig. 7 Grind Surface**



**Fig. 8 Cover Gaps with Mesh**



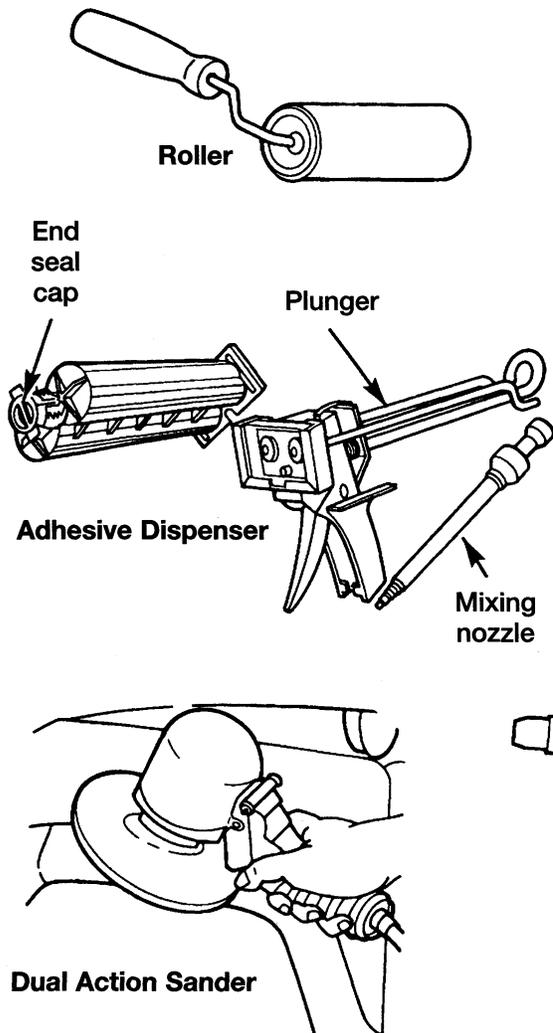
**Fig. 9 Cover Mesh with Epoxy**



## REFINISHING

Plastic panel refinishing is not different from refinishing metal surfaces, except that plastic panels do not require corrosion protection. After the damaged area has been repaired, the surface is then sanded, filled, and sanded again, to provide a smooth finish into the surrounding painted area. A plastic parts primer coating may be required with some plastics to enhance paint or filler adhesion (adhesion promoter). When applying the final coats of paint, they must be blended into the surrounding undamaged area in the usual fashion. During the final steps of the refinishing process, it is recommended that you follow the paint manufacturer's instructions for painting plastic surfaces.

## TOOLS

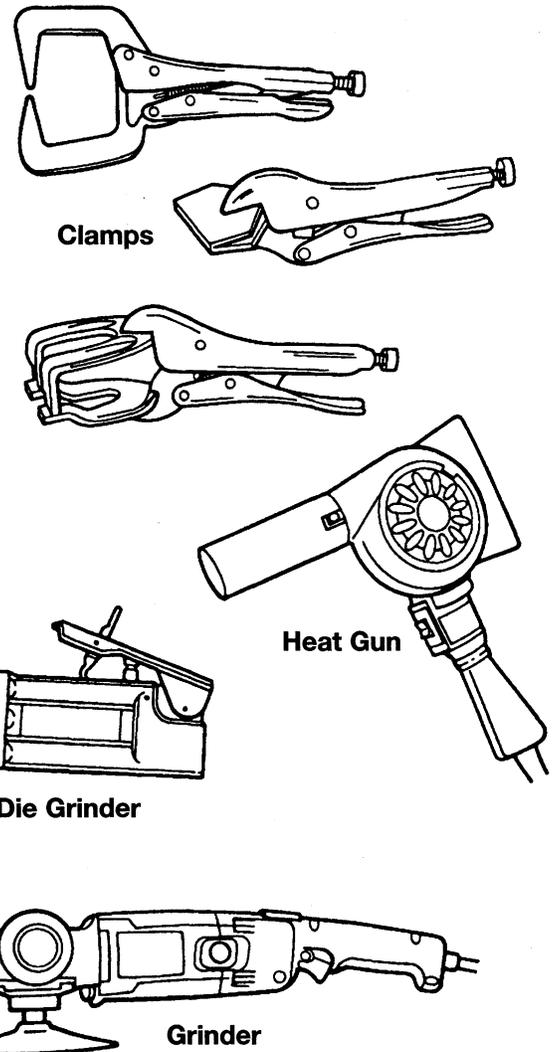


## ADHESIVES

Structural adhesives are available from American Sure Seal, Kent, 3M, and other manufacturers. The bonding procedures must be performed using a structural compound for rigid panels and a flexible compound for flexible plastics.

## MATERIALS

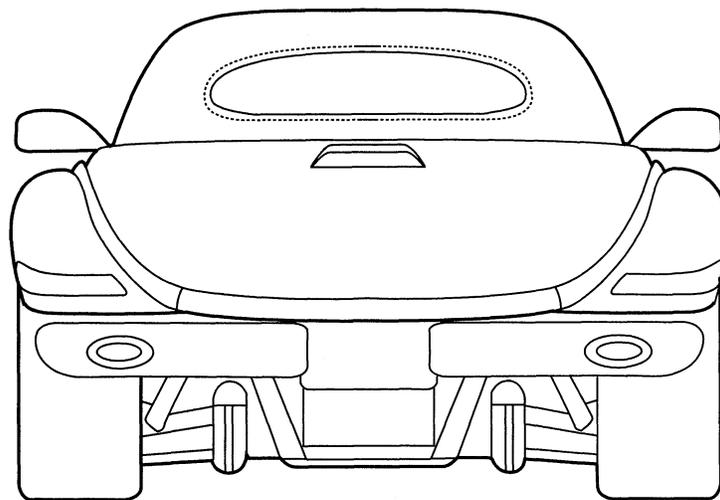
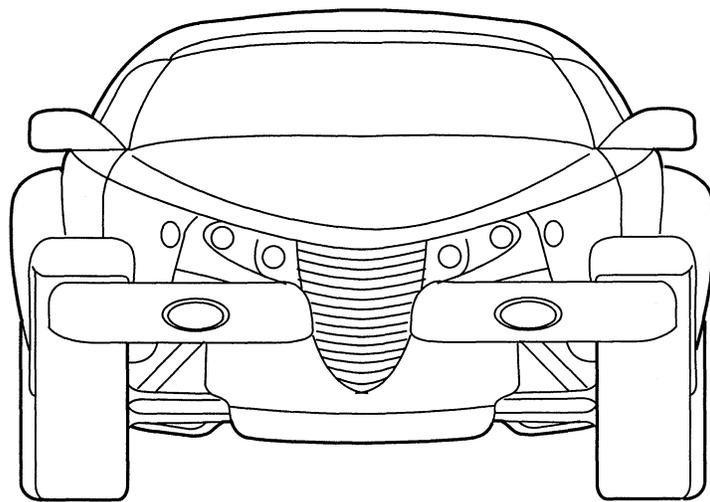
- Fiberglass Cloth or Mat
- Open Mesh Fiberglass or Nylon Drywall Tape (Available at hardware stores)
- Rigid Adhesives
- Flexible Adhesives
- Finishing Products
- Wax Paper



# PROWLER



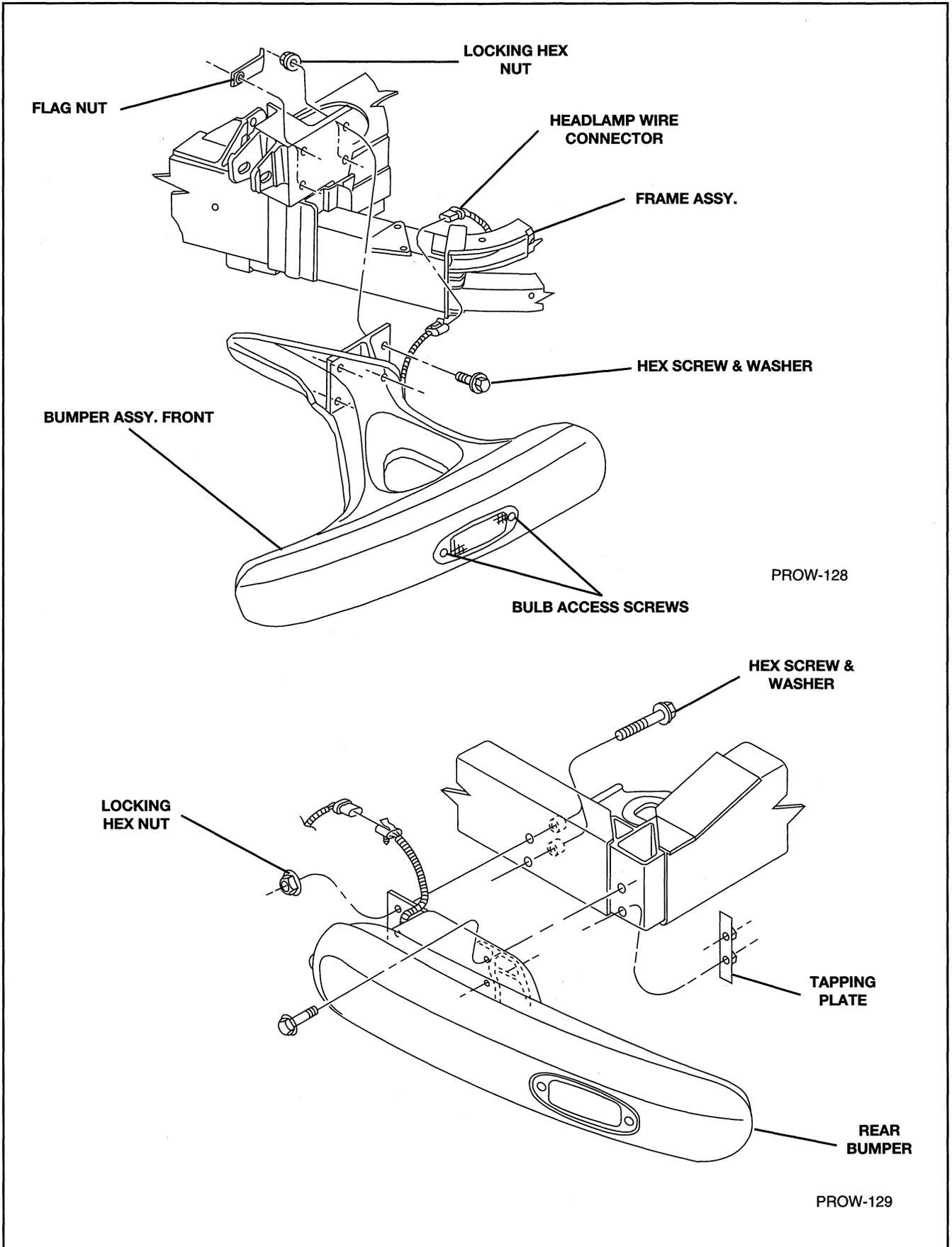
## Bumper Systems



PROW-145



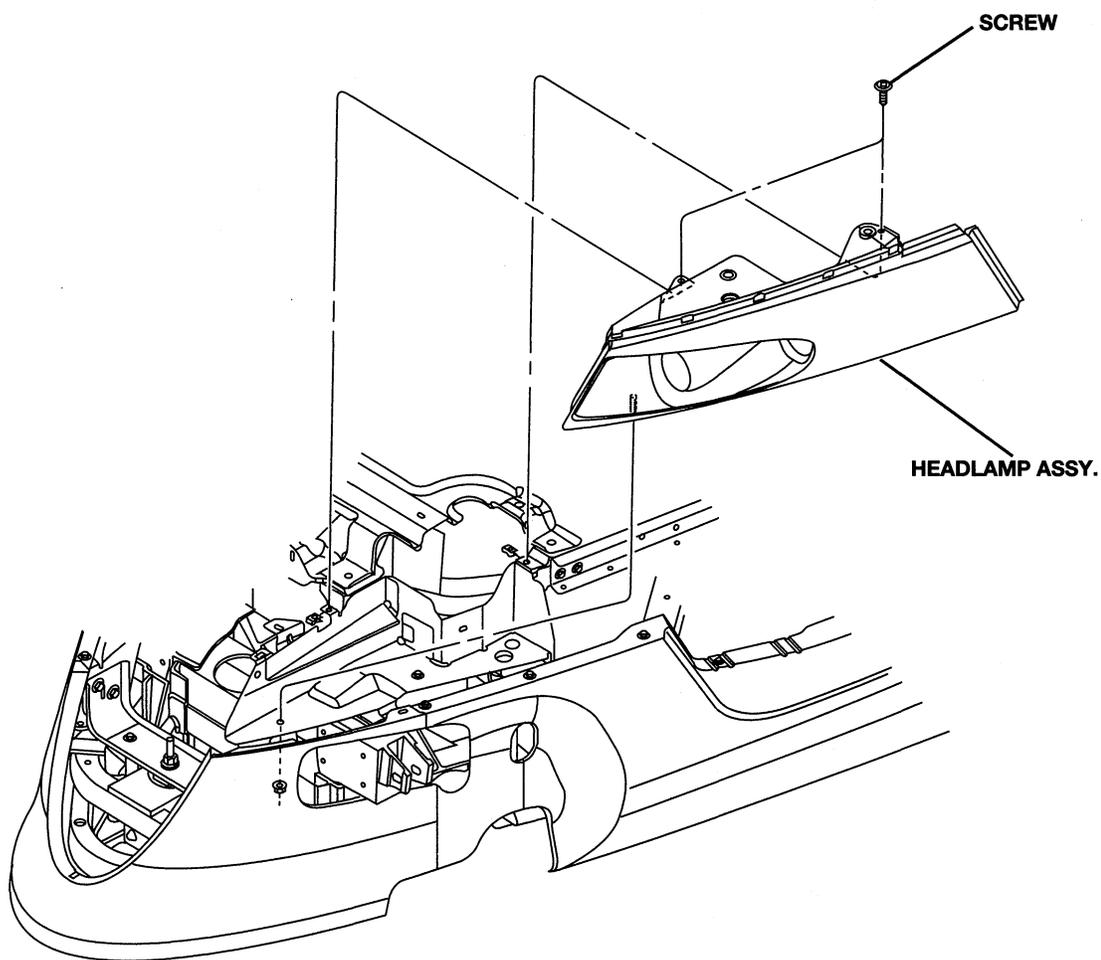
# Bumper Assembly



# PROWLER



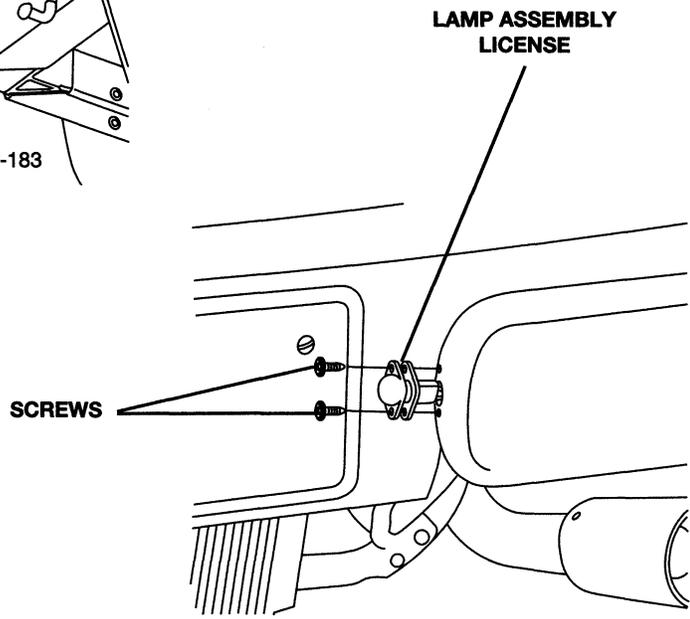
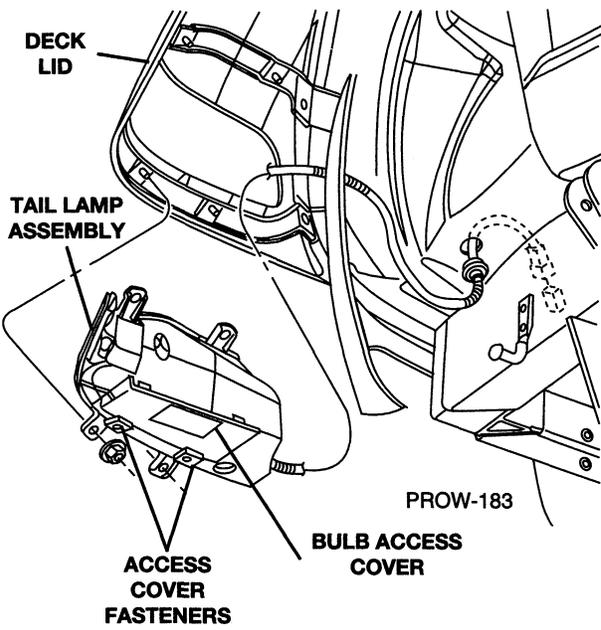
## Exterior Lighting



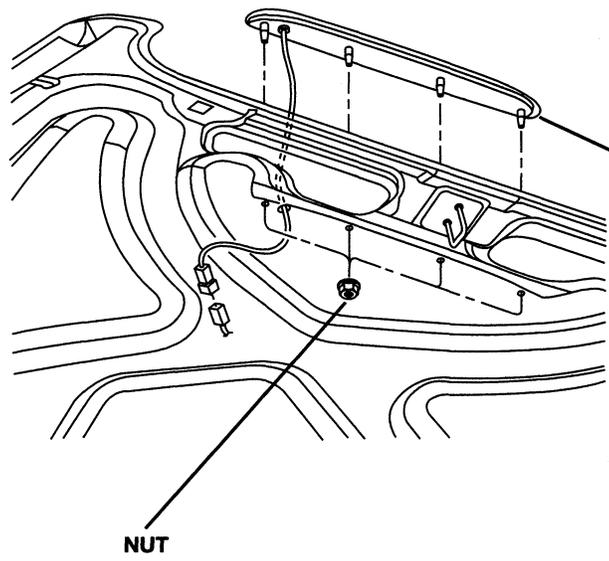
PROW-130



# Exterior Lighting



PROW-181

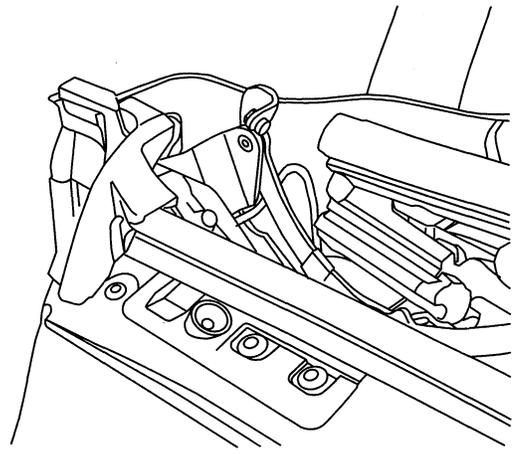
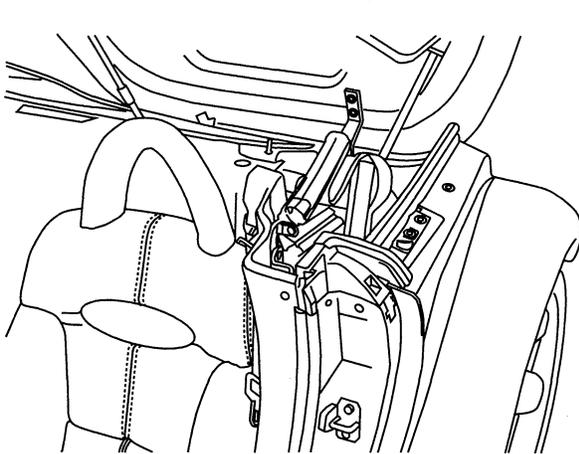
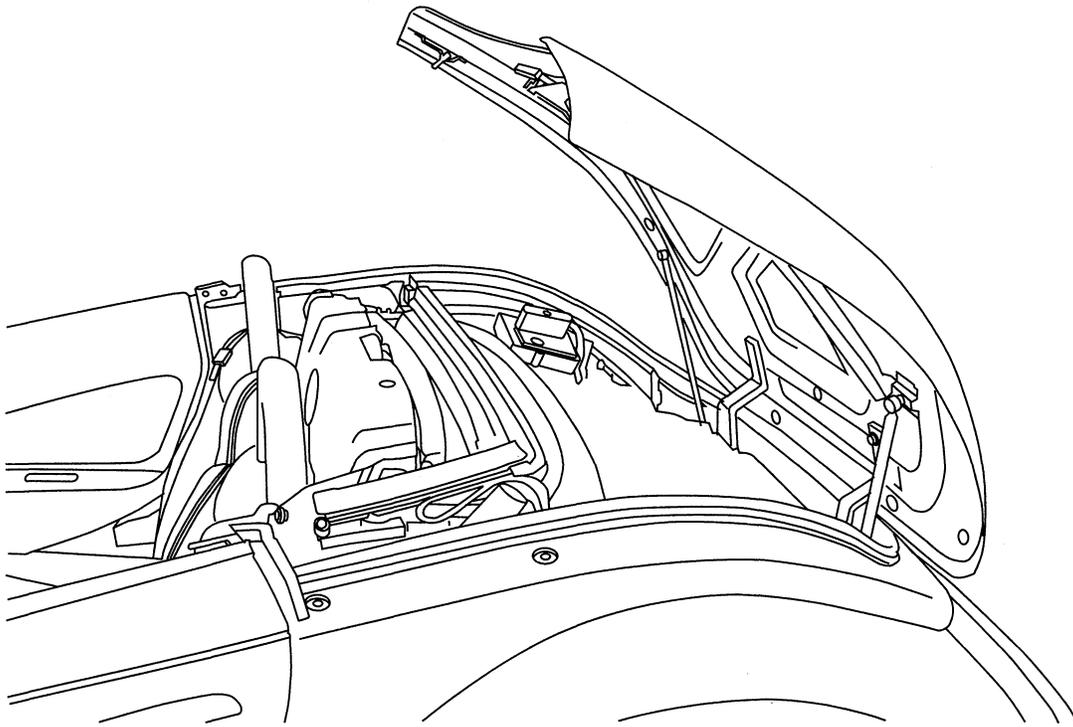


PROW-144

# PROWLER



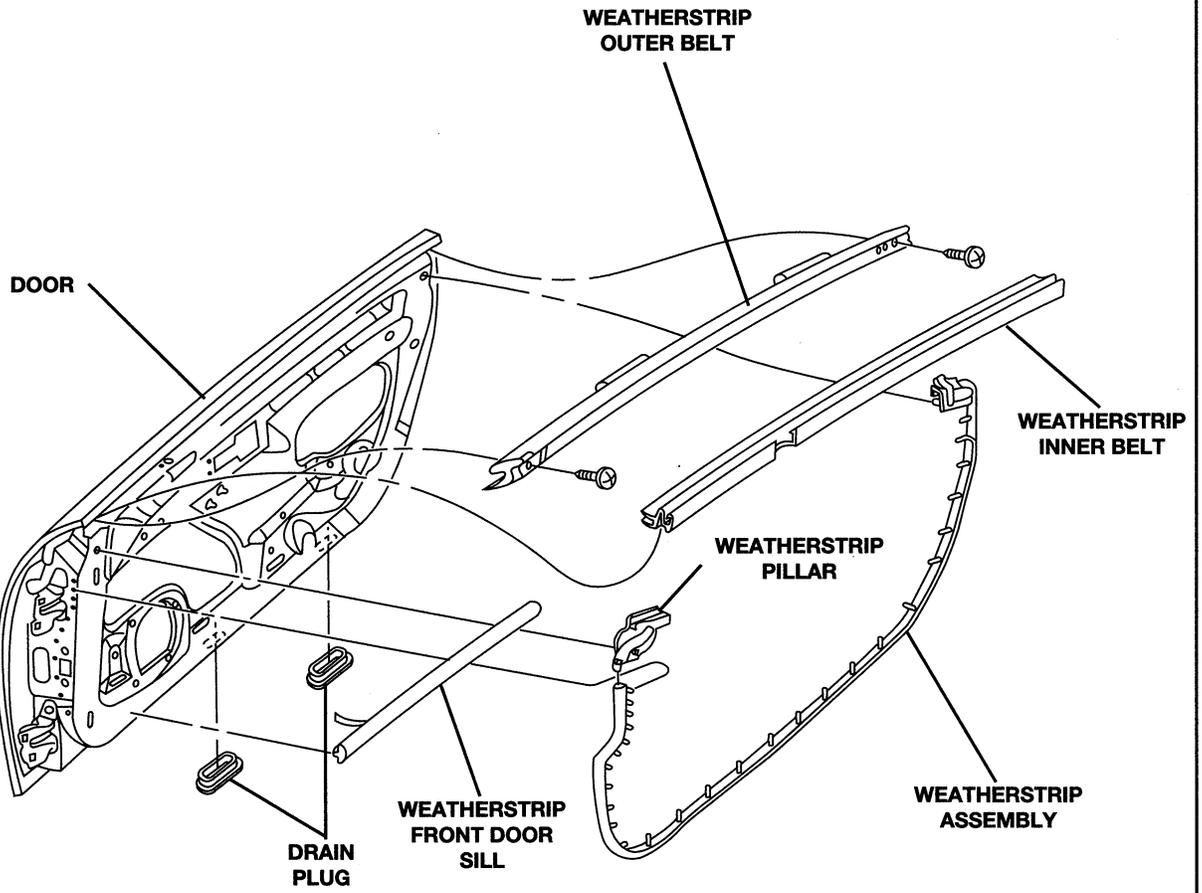
## Weatherstripping



5537\_001



# Weatherstripping

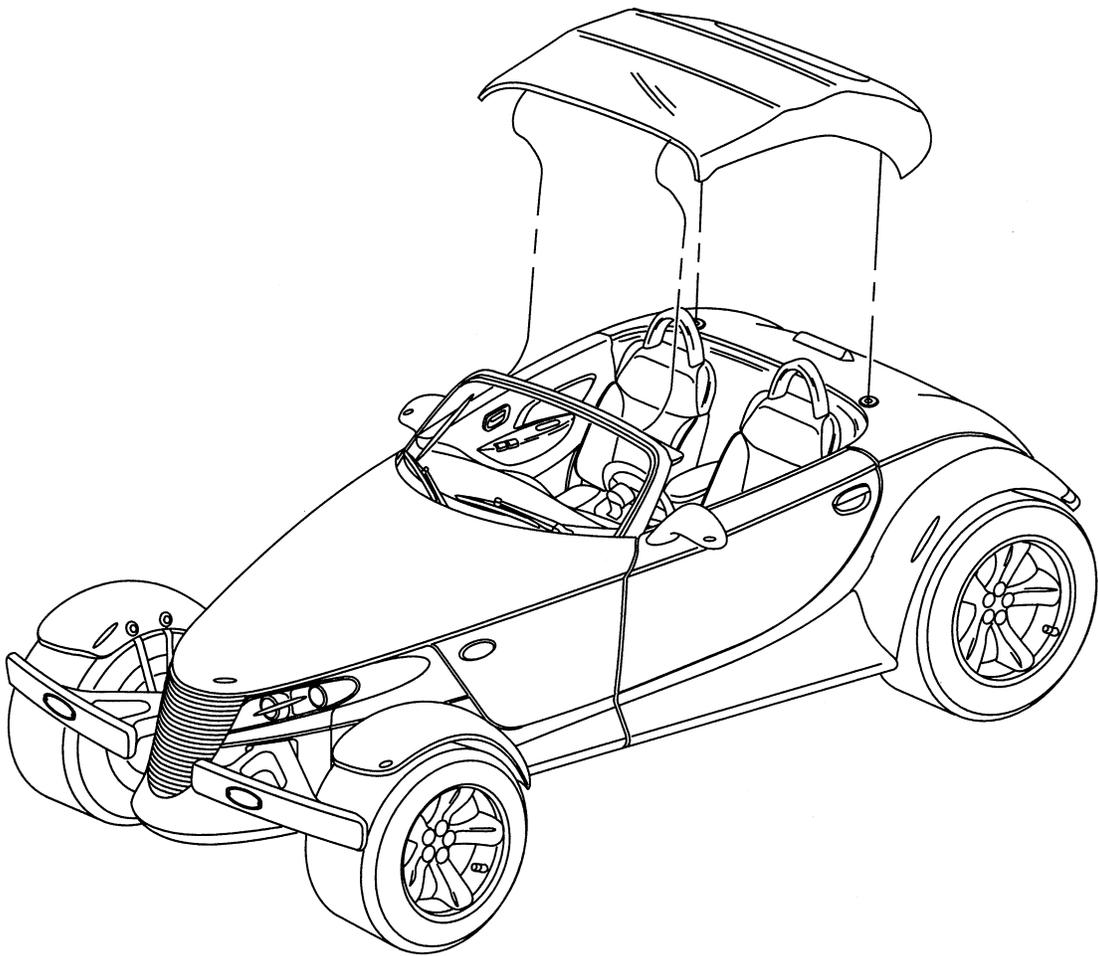


PROW\_133

# PROWLER



## Windshield and Convertible Top Assembly



PROW-132



## Windshield and Convertible Top Assembly

### SAFETY PRECAUTIONS

**WARNING: DO NOT OPERATE THE VEHICLE WITHIN 24 HOURS OF WINDSHIELD INSTALLATION. IT TAKES AT LEAST 24 HOURS FOR URETHANE ADHESIVE TO CURE. IF IT IS NOT CURED, THE WINDSHIELD MAY NOT PERFORM PROPERLY IN AN ACCIDENT.**

URETHANE ADHESIVES ARE APPLIED AS A SYSTEM. USE GLASS CLEANER, GLASS PREP SOLVENT, GLASS PRIMER, PVC (VINYL) PRIMER AND PINCHWELD (FENCE) PRIMER PROVIDED BY THE ADHESIVE MANUFACTURER. IF NOT, STRUCTURAL INTEGRITY COULD BE COMPROMISED.

CHRYSLER DOES NOT RECOMMEND GLASS ADHESIVE BY BRAND. TECHNICIANS SHOULD REVIEW PRODUCT LABELS AND TECHNICAL DATA SHEETS AND USE ONLY ADHESIVES THAT THEIR MANUFACTURERS WARRANT WILL RESTORE A VEHICLE TO THE REQUIREMENTS OF FMVSS 212. TECHNICIANS SHOULD ALSO INSURE THAT PRIMERS AND CLEANERS ARE COMPATIBLE WITH THE PARTICULAR ADHESIVE USED.

BE SURE TO REFER TO THE URETHANE MANUFACTURER'S DIRECTIONS FOR CURING TIME SPECIFICATIONS, AND DO NOT USE ADHESIVE AFTER ITS EXPIRATION DATE.

VAPORS THAT ARE EMITTED FROM THE URETHANE ADHESIVE OR PRIMER COULD CAUSE PERSONAL INJURY. USE THEM IN A WELL-VENTILATED AREA.

SKIN CONTACT WITH URETHANE ADHESIVE SHOULD BE AVOIDED. PERSONAL INJURY MAY RESULT.

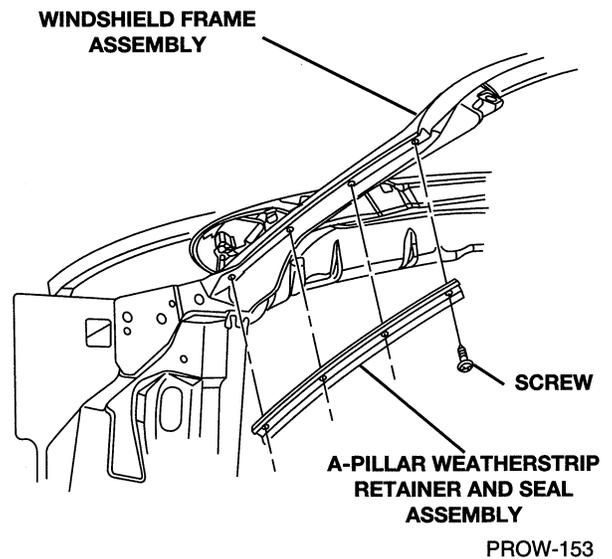
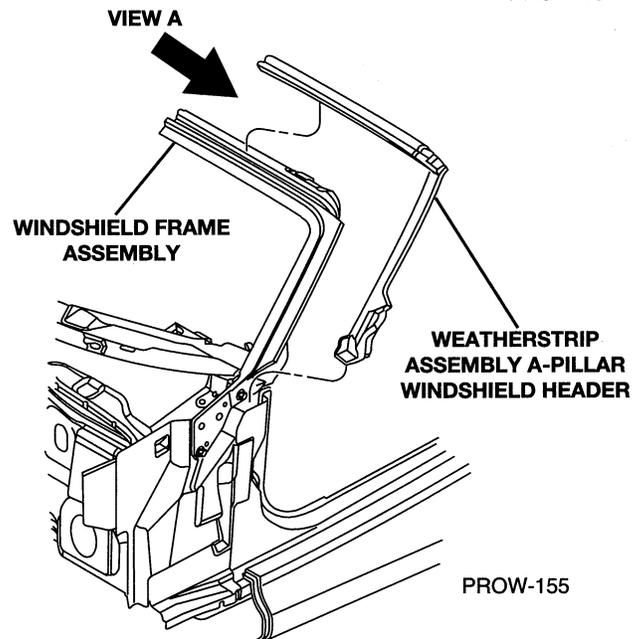
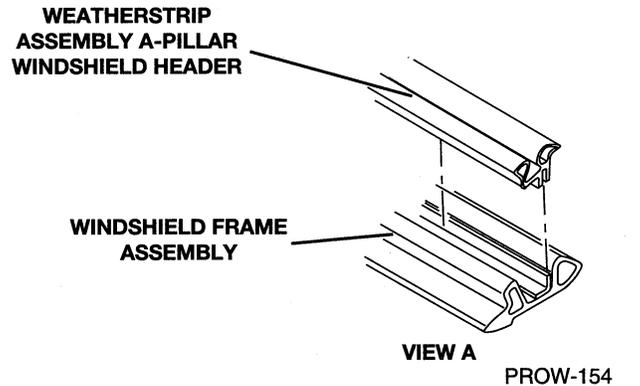
ALWAYS WEAR EYE AND HAND PROTECTION WHEN WORKING WITH GLASS.

### CAUTIONS:

Protect all painted and trimmed surfaces from coming in contact with urethane or primers.

Be careful not to damage painted surfaces when removing moldings or cutting urethane around windshield.

It is difficult to salvage a windshield during the removal operation. The windshield is part of the structural support for the roof. The urethane bonding used to secure the windshield to the fence is difficult to cut or clean from any surface. If the moldings are set in urethane, it would also be unlikely they could be salvaged. Before removing the windshield, check the availability of the windshield and moldings from the parts supplier.





## WINDSHIELD

The urethane adhesive holding the windshield to the opening pinch weld (fence) can be cut using a sharp cold knife from the exterior of the vehicle. Using the cold knife method is effective if the windshield is already broken. If the glass must be salvaged, cutting the urethane adhesive from the interior of the vehicle using a reciprocating or oscillating power knife is recommended.

## RECOMMENDED TOOLS AND ADHESIVE

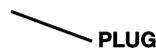
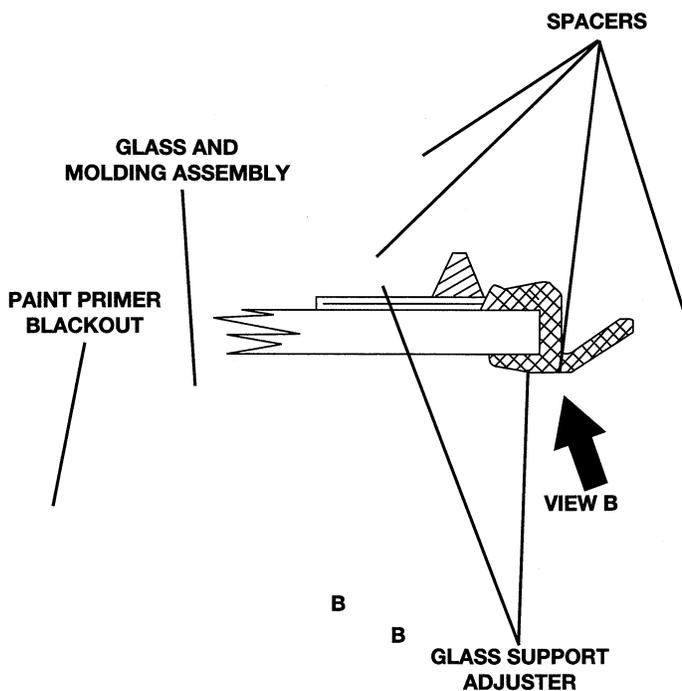
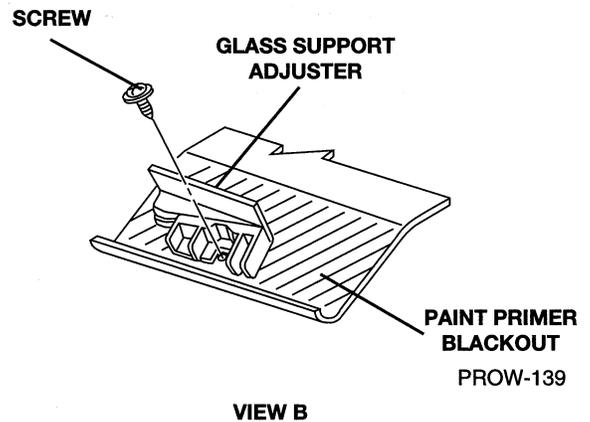
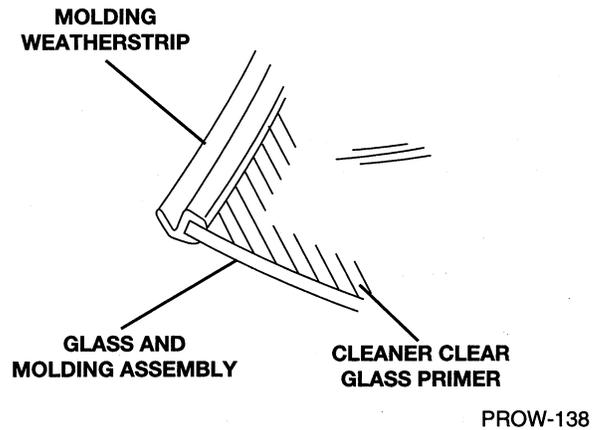
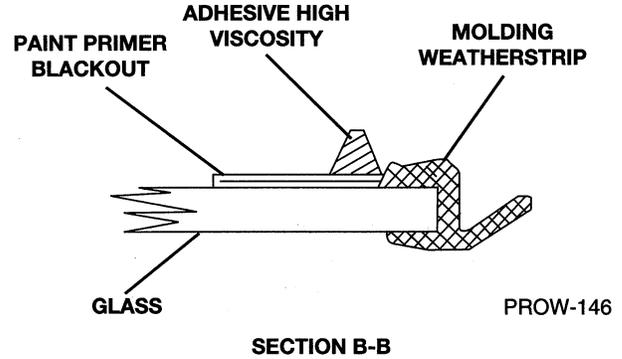
- Fein® Power Cut-Out Knife
- Equalizer® Magnum, Interior Auto Glass Cut-Out Knife

## WINDSHIELD REMOVAL

1. Remove inside rear view mirror.
2. Remove cowl cover. Refer to bolt on section.
3. Remove windshield molding.

**NOTE:** Pull outward on molding at the bottom of A-pillars using pliers.

4. Cut urethane bonding from around windshield using a suitable sharp cold knife. A pneumatic cutting device can be used if available.
5. Separate windshield from vehicle.





# Windshield and Convertible Top Assembly

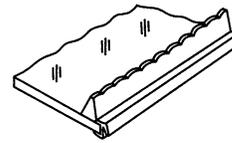
## INSTALLATION

### CAUTION:

Allow the urethane at least 24 hours to cure before retuning the vehicle to use.

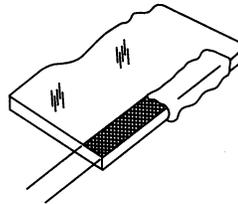
To avoid stressing the replacement windshield, the urethane bonding material on the windshield fence should be smooth and consistent to the shape of the replacement windshield. The support spacers should be cleaned and properly installed on weld studs or repair screws at bottom of windshield opening.

1. Place replacement windshield into windshield opening and position glass in the center of the opening against the support spacers. Mark the glass at the support spacers with a grease pencil or pieces of masking tape and ink pen to use as a reference for installation. Remove replacement windshield from windshield opening.
2. Position the windshield inside up on a suitable work surface with two padded, wood 10 cm by 10 cm by 50 cm (4 i. by 4 in. by 20 in.) blocks, placed parallel 75 cm (2.5 ft.) apart.
3. Clean inside of windshield with Mopar® Glass Cleaner and lint-free cloth.
4. Apply clear glass primer 25 mm (1 in.) wide around perimeter of windshield, and wipe clean/dry with lint-free cloth.
5. Apply black-out primer 15 mm (.75 in.) wide on top and sides of windshield and 25 mm (1 in.) on bottom of windshield. Allow at least three minutes drying time.

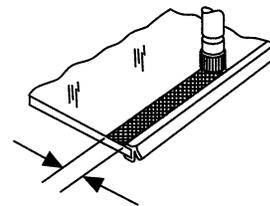


PROW-136

LOCATE URETHANE BEAD 5.0 MM OFF EDGE OF GLASS (ALL SIDES)

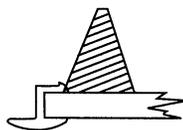


PROW-134

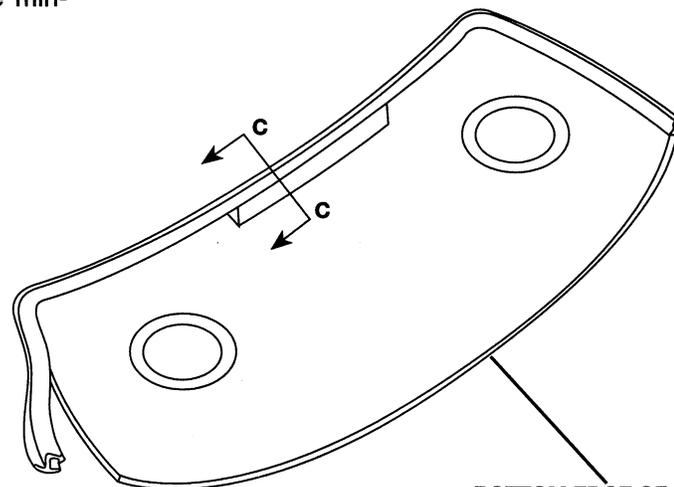


PROW-135

FROM EDGE OF MOLDING (TOP AND SIDES) 20 MM FROM EDGE OF GLASS (BOTTOM), OVERLAP MOLDING FOOT BY 1.5 MM



SECTION C-C

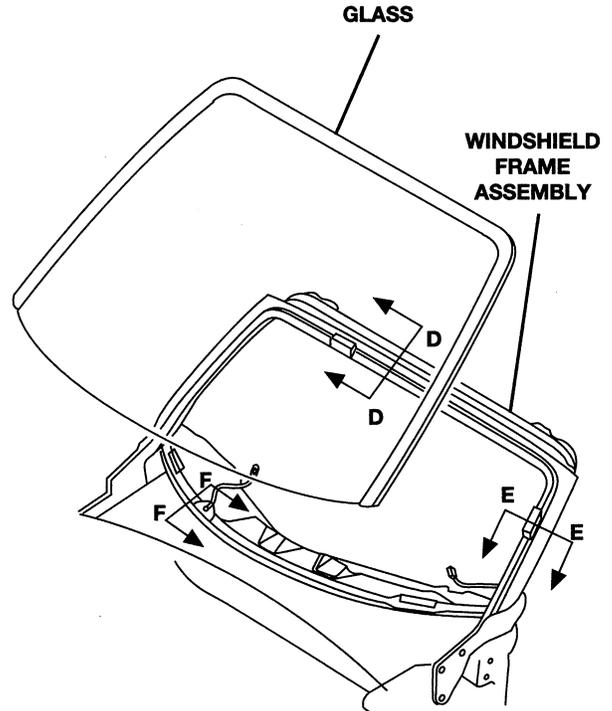


BOTTOM EDGE OF GLASS

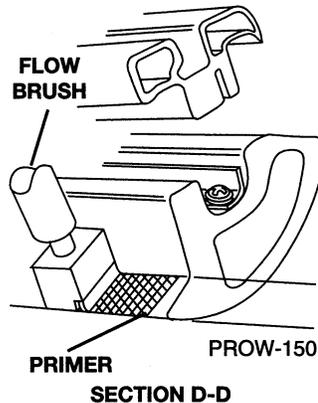
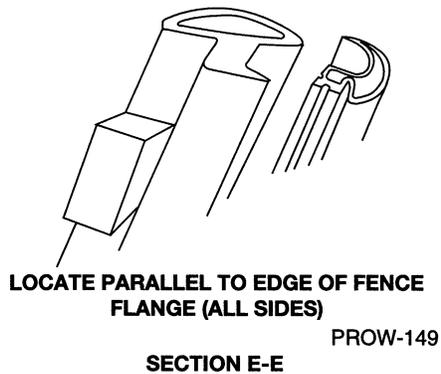
PROW-137



6. Using a razor knife, remove as much original urethane as possible. Do not damage paint on windshield fence.
  7. Apply a 10 mm (0.4 in.) bead of urethane on centerline of windshield fence.
  8. Position spacers on windshield opening fence as indicated.
  9. With the aid of a helper, position the windshield over the windshield opening. Align the reference marks at the bottom of the windshield to the support spacers.
  10. Slowly lower windshield glass to windshield opening fence. Guide the top molding into proper position if necessary. Push windshield inward to fence spacers at bottom and until top molding is flush to roof line.
  11. Clean excess urethane from exterior with Mopar® Super Kleen or equivalent.
  12. Apply 150 mm (6 in.) lengths of 50 mm (2 in.) masking tape spaced 250 mm (10 in.) apart to hold molding in place until urethane cures.
  13. Install cowl cover and wipers.
  14. Install inside rear view mirror.
- NOTE:** Make sure that the urethane has completely cured before continuing to the next procedure.
15. Remove tape strips and water test windshield to verify proper repair.



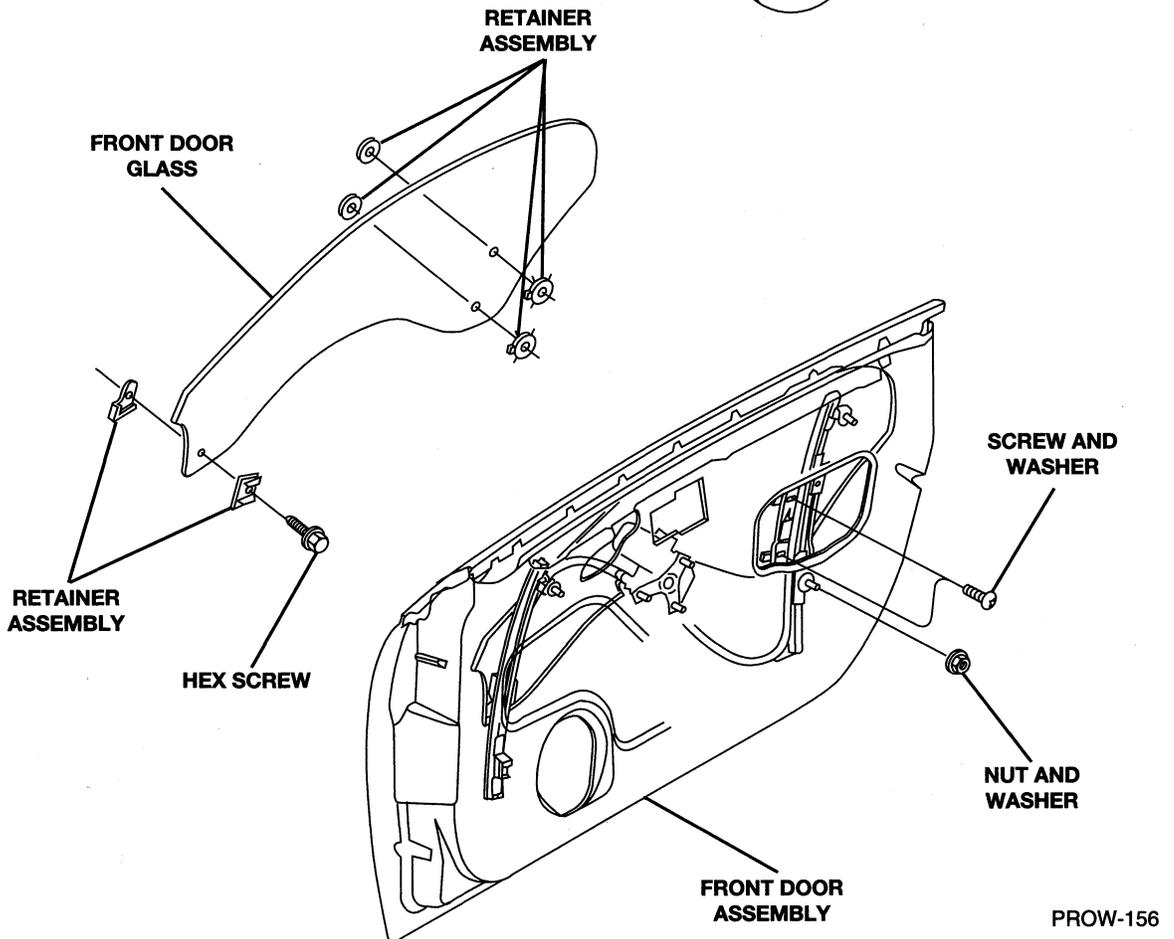
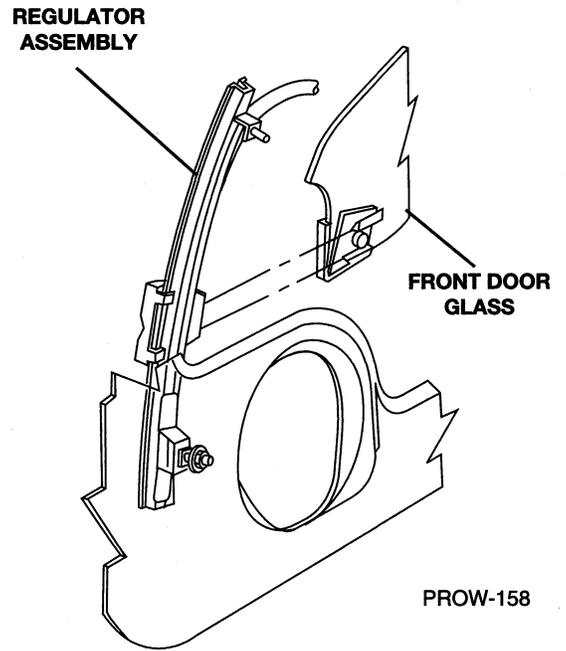
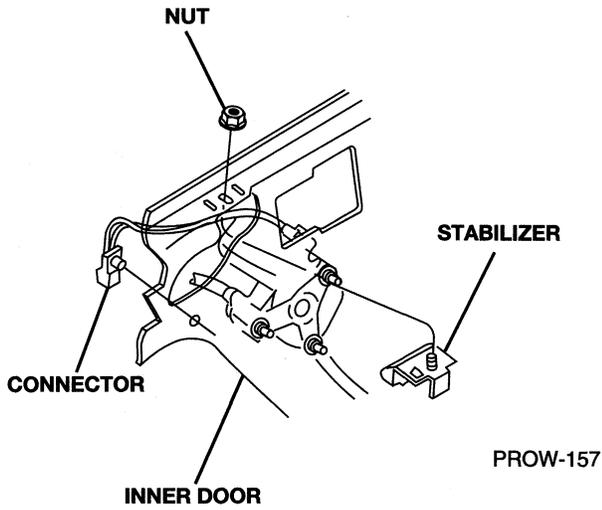
PROW-152





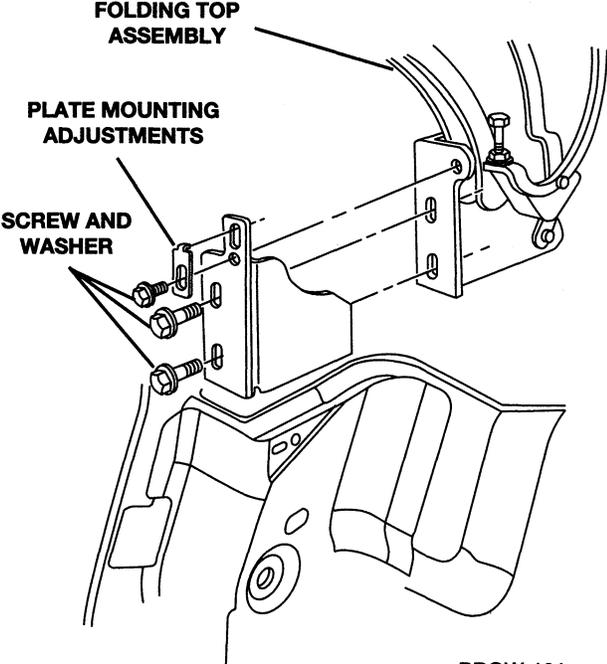
# Windshield and Convertible Top Assembly

## DOOR GLASS

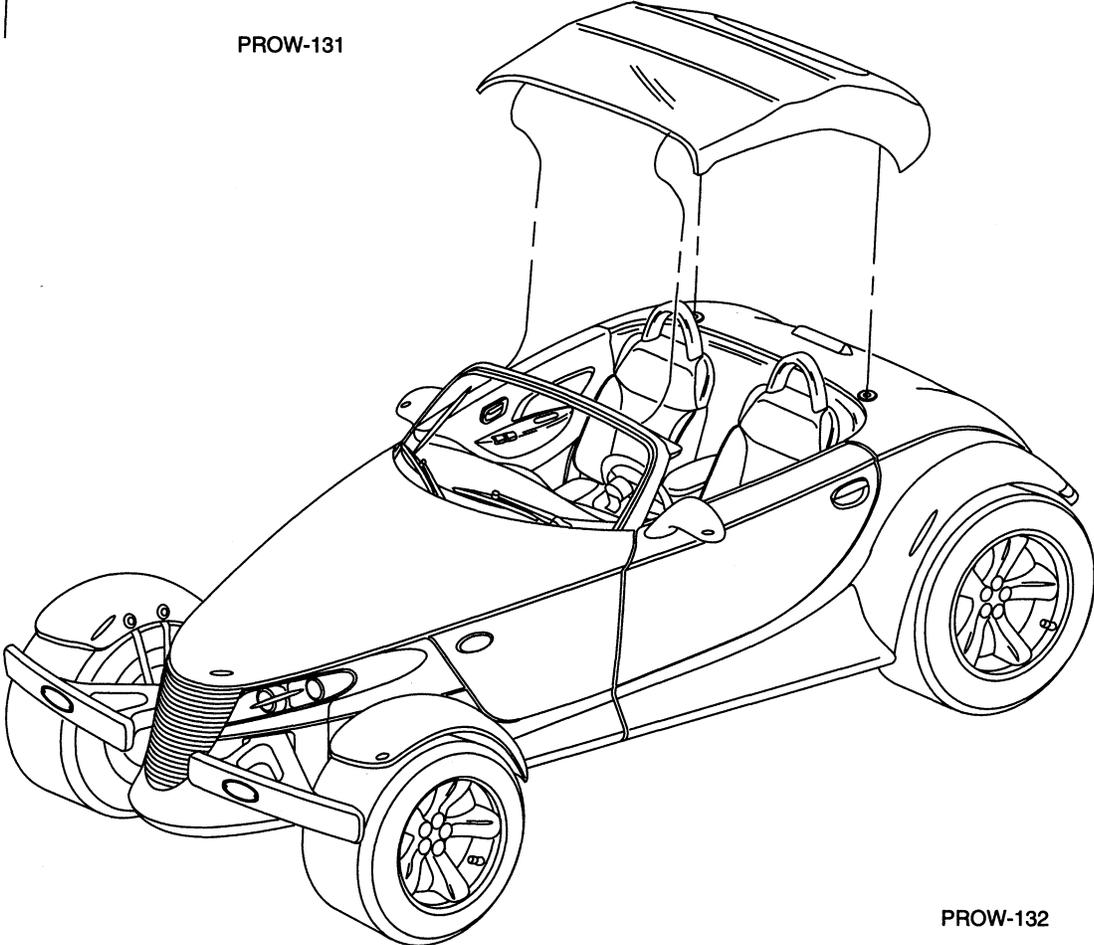




**CONVERTIBLE TOP ASSEMBLY**



PROW-131



PROW-132

# PROWLER

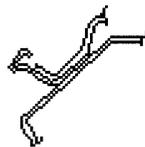


## Body Sealing Locations

All repairs where panels were replaced have crevices that must be filled with sealant. Sealant should be applied to all skips, pin holes in sealers, and weld burn through holes on the interior and exterior of the vehicle that would permit water, air, or exhaust fume leakage.

Typical areas of the exterior that must be sealed are listed in this section. Areas of the interior that must be sealed are floor pans, wheelhouses, dash panels, and cowl sides.

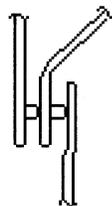
### METHODS OF APPLYING AUTO BODY SEALANT



Hold gun nozzle in direction of arrow in order to effectively seal metal joints.



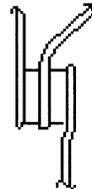
Do not hold gun nozzle in direction of arrow. Sealer applied as shown is ineffective



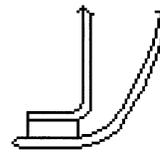
3 metal thickness



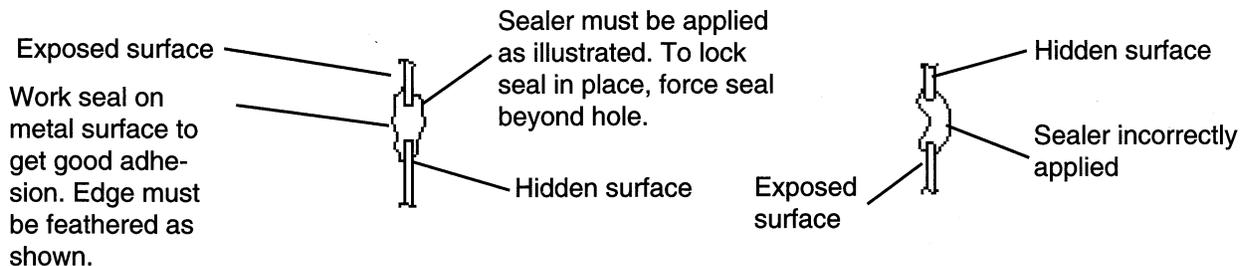
2 metal thickness



3 metal thickness



2 metal thickness



#### SYMBOLS

Extrudable thermoplastic

Exposed sealant

Hidden Sealant

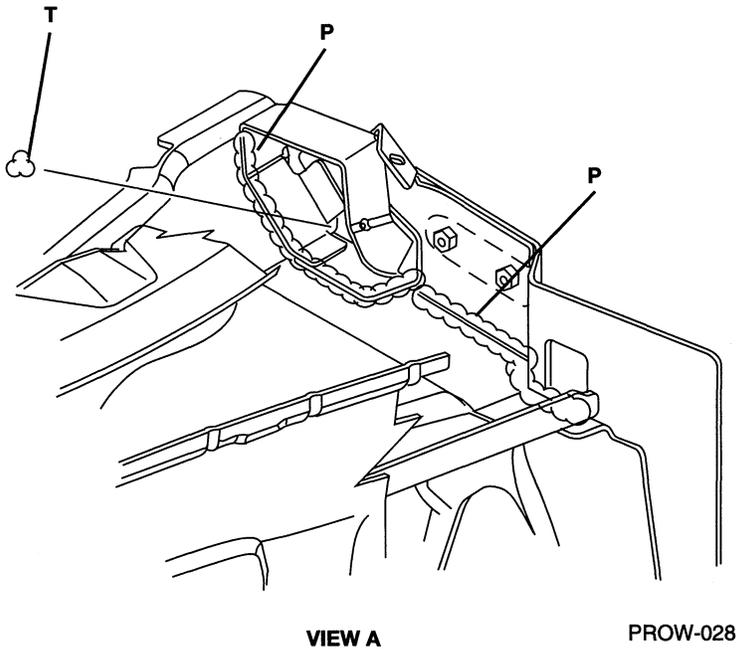
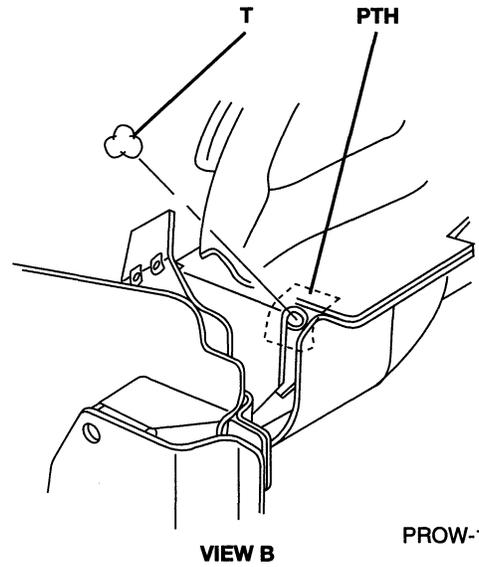
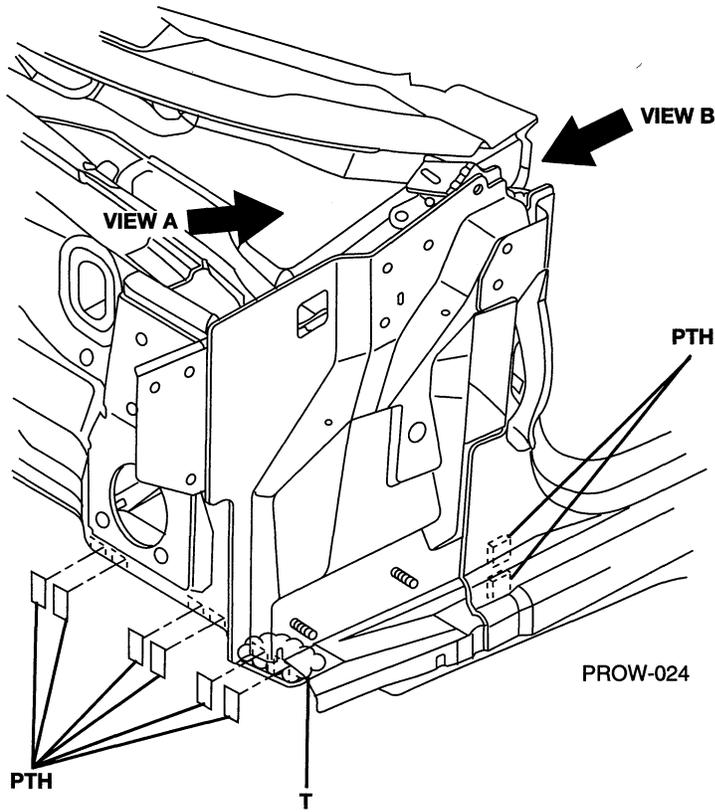
00095R



# Body Sealing Locations

## COWL AND PLENUM AREA LEFT SIDE

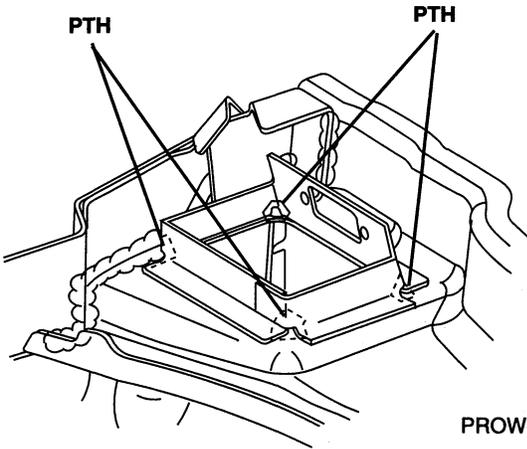
T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



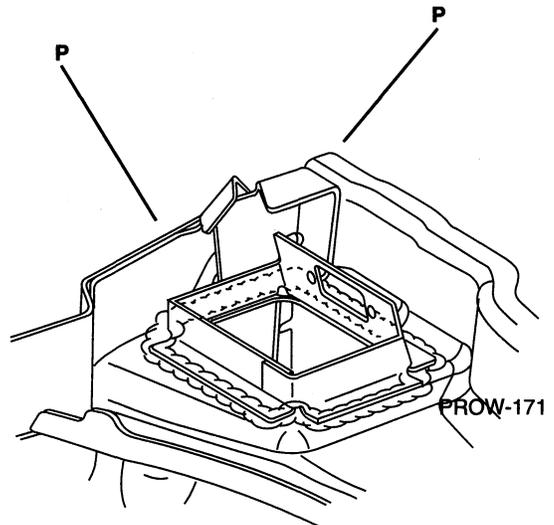


**COWL AND PLENUM AREA  
RIGHT SIDE**

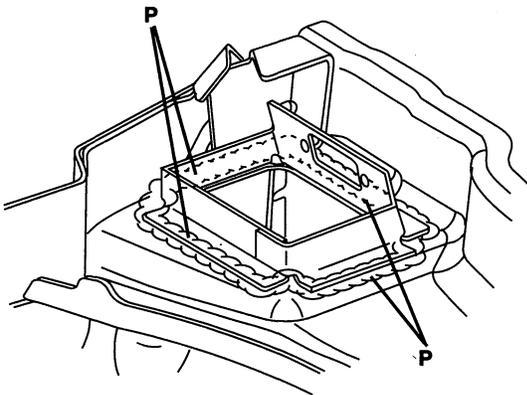
T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



PROW-170



PROW-171



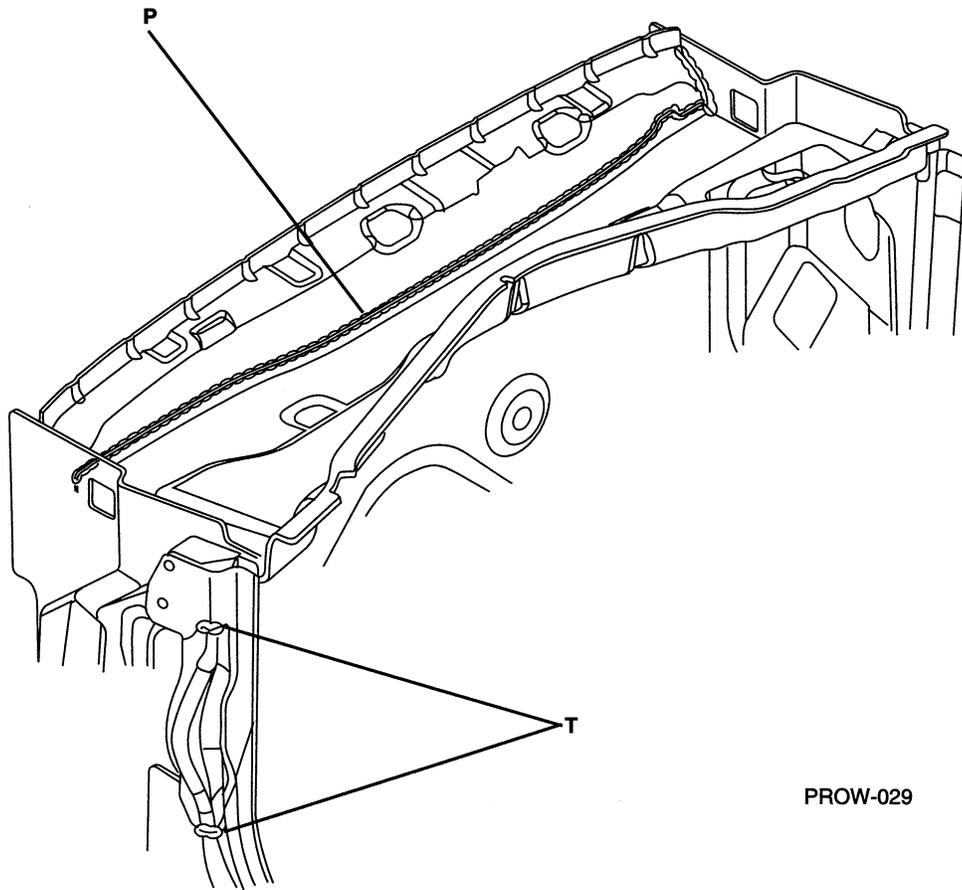
PROW-172



# Body Sealing Locations

## DASH TO COWL PLENUM

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH

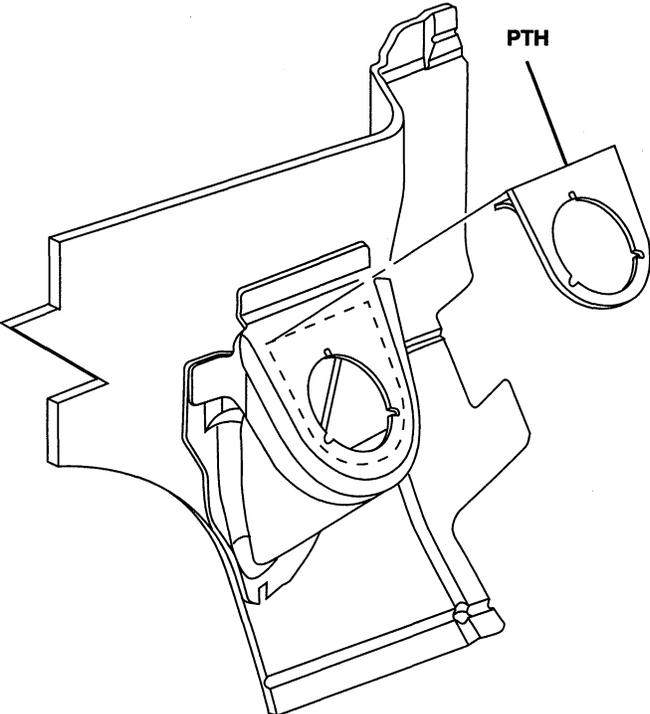
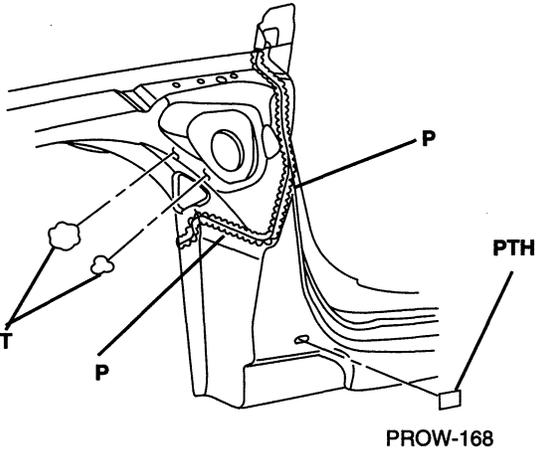


PROW-029

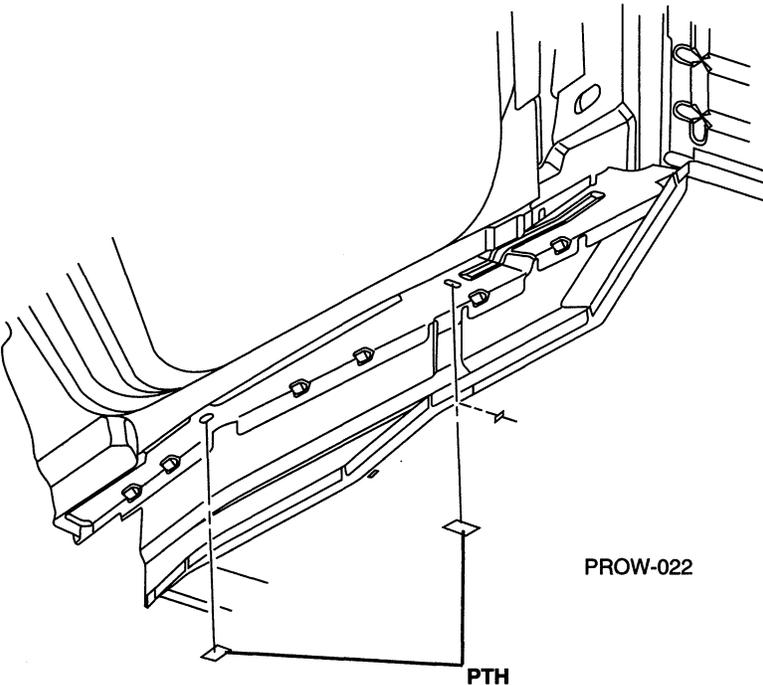


**BODY SIDE SILL REAR**

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



**BODY SIDE SILL**



PROW-018

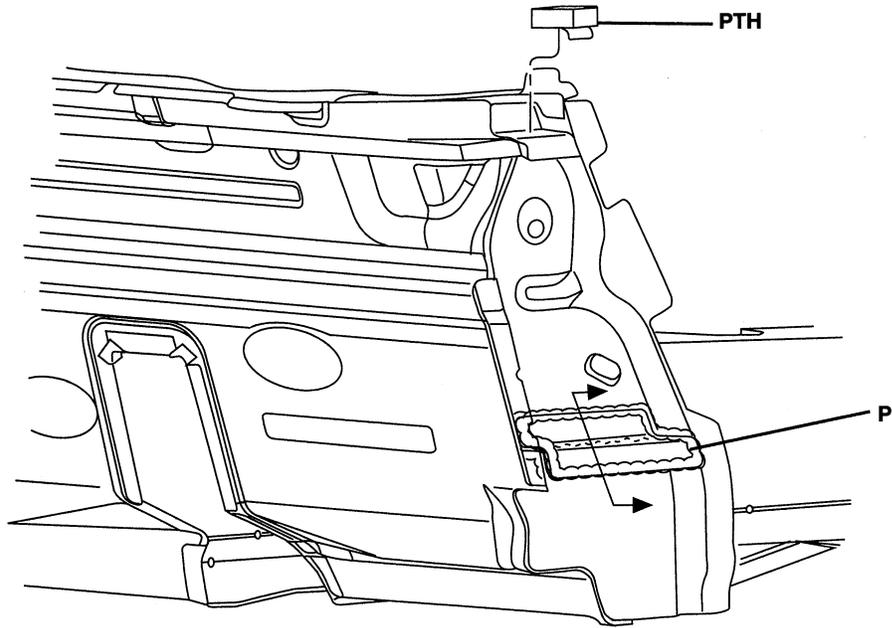
PROW-022



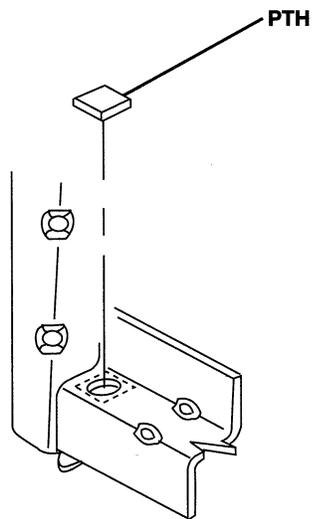
# Body Sealing Locations

## BULKHEAD EXTENSION

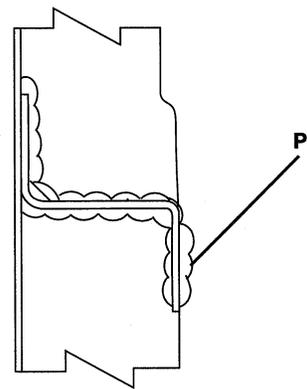
T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



PROW-177



PROW-026

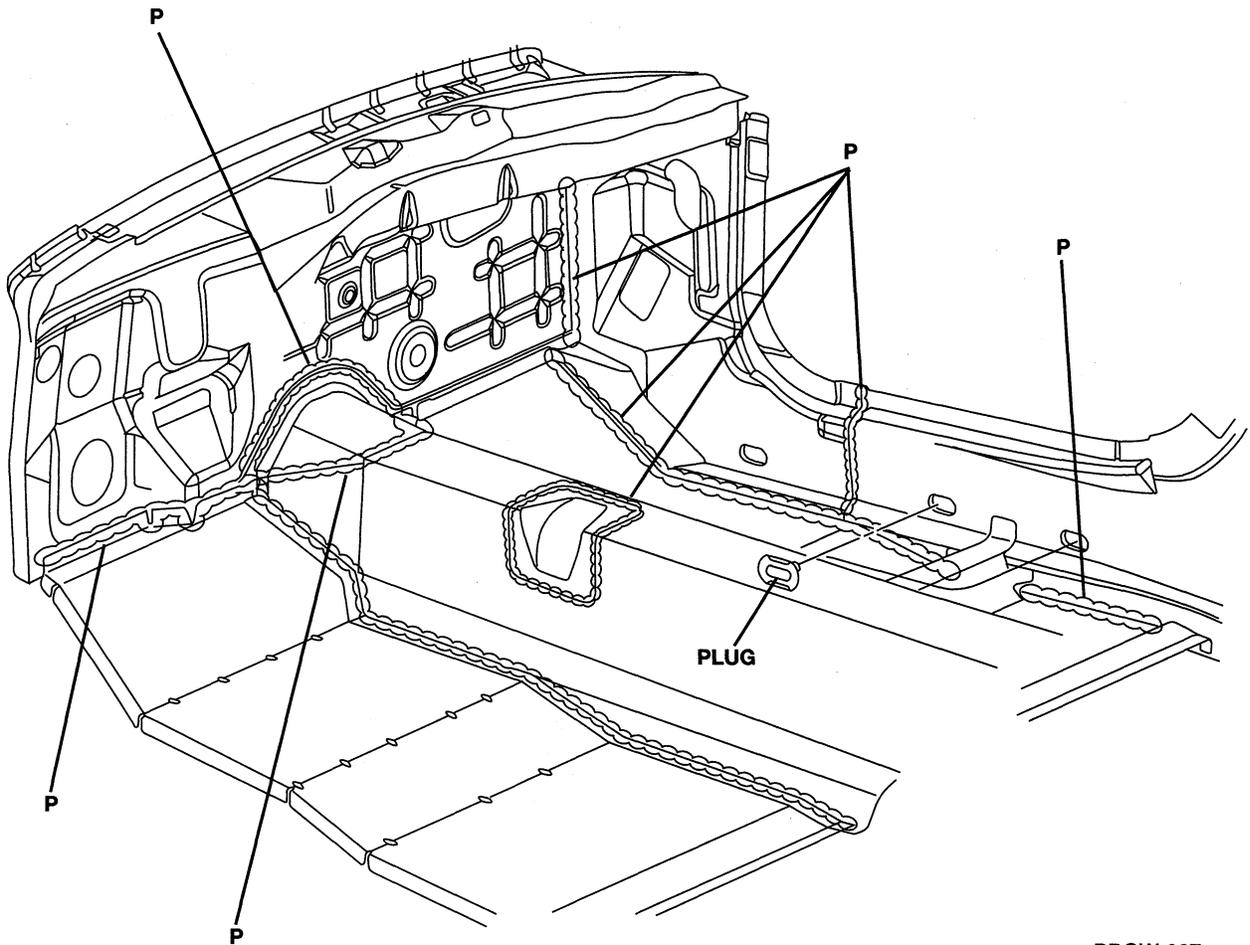


PROW-176



**FRONT FLOOR PAN TO DASH**

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



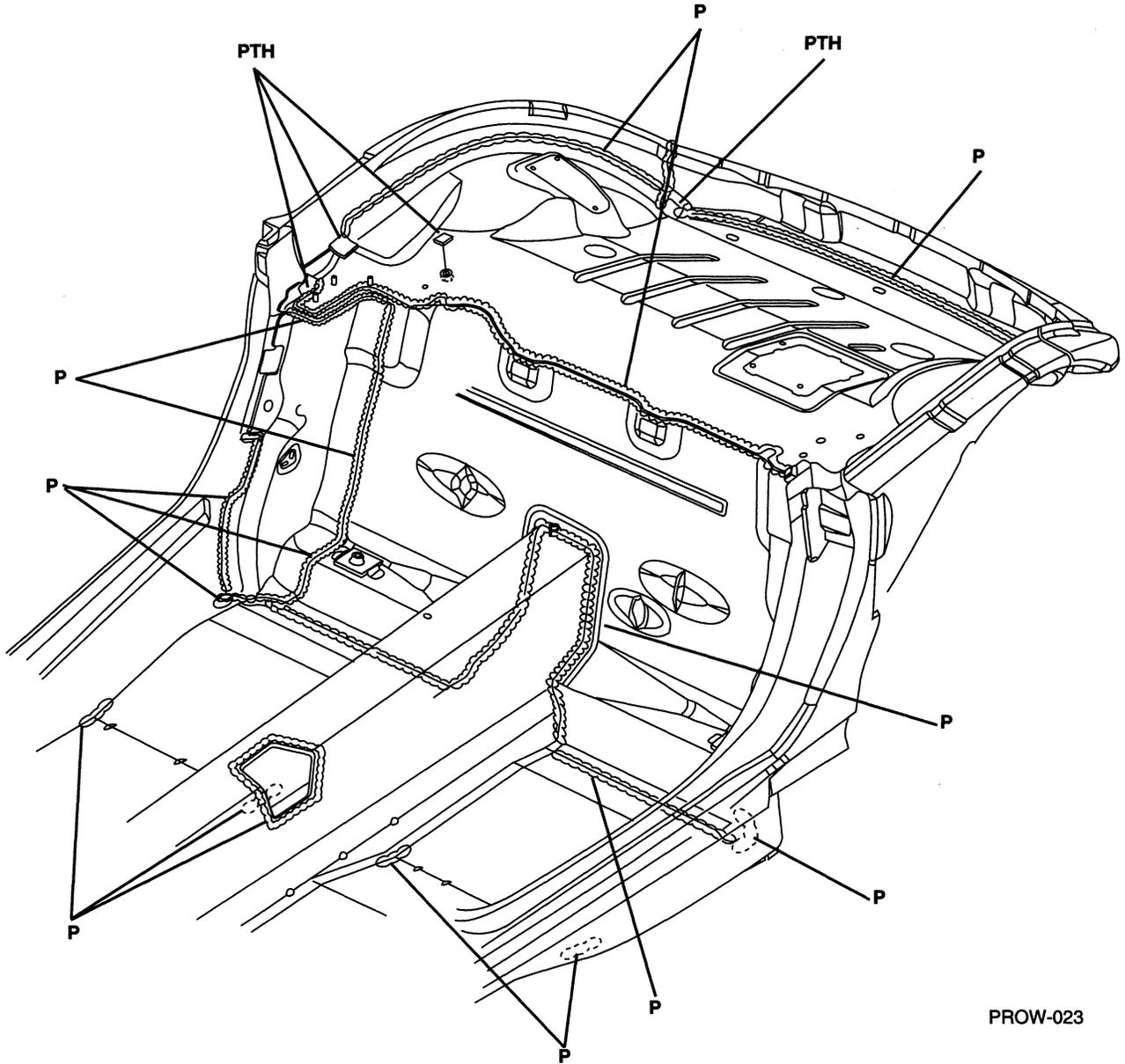
PROW-027



# Body Sealing Locations

## BULKHEAD EXTENSION

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH

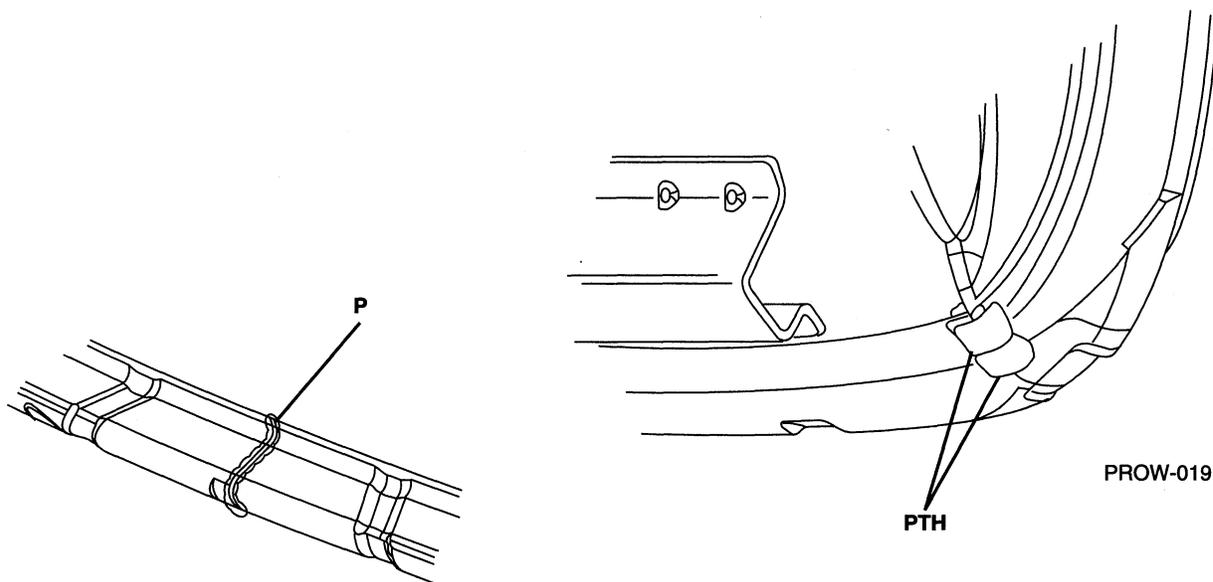


PROW-023



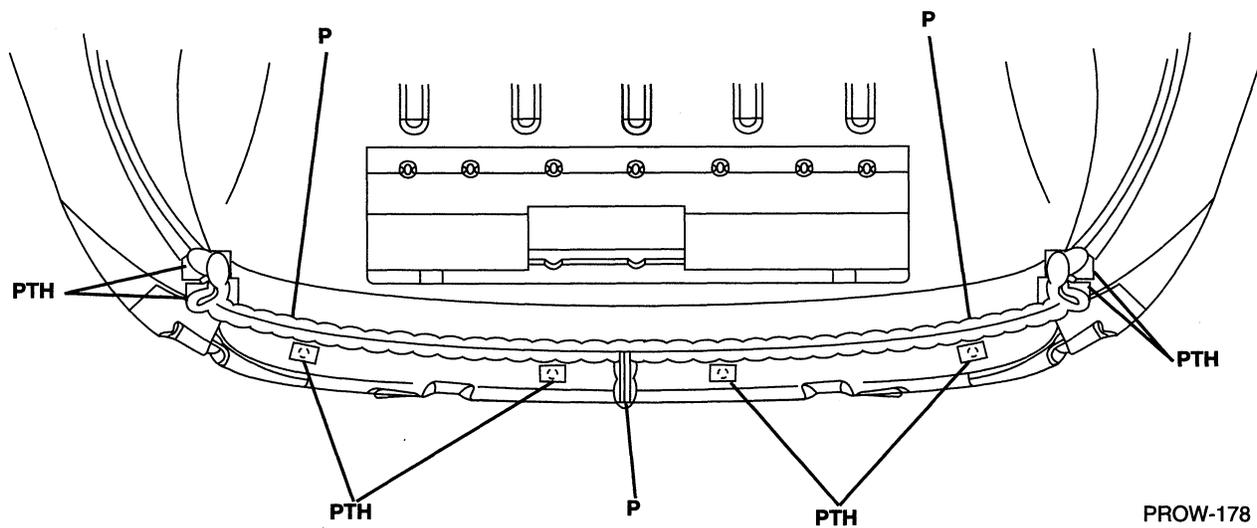
## REAR FLOOR TO DECK OPENING REAR

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



PROW-017

PROW-019



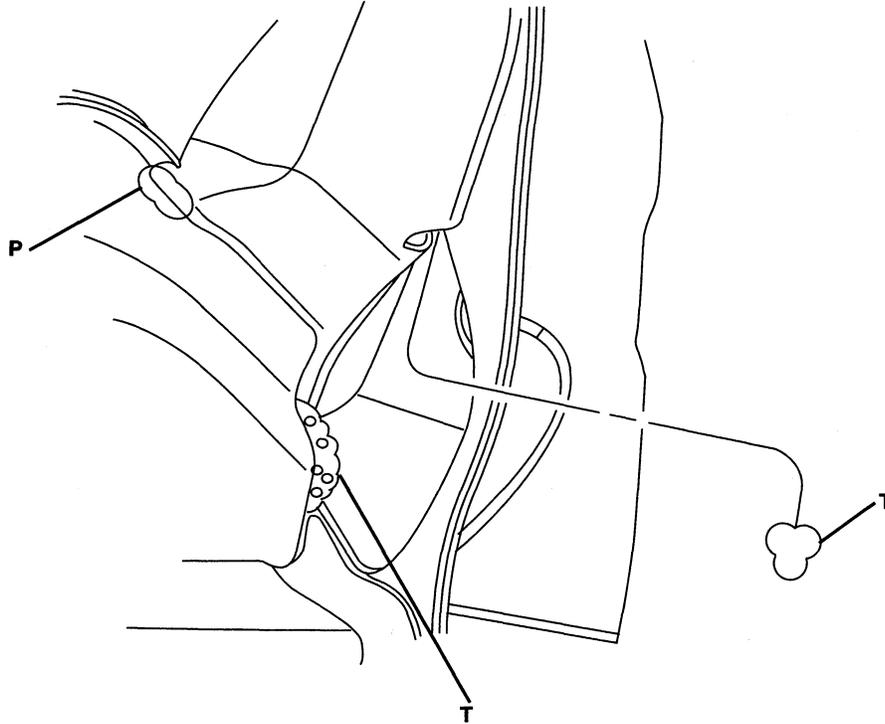
PROW-178



# Body Sealing Locations

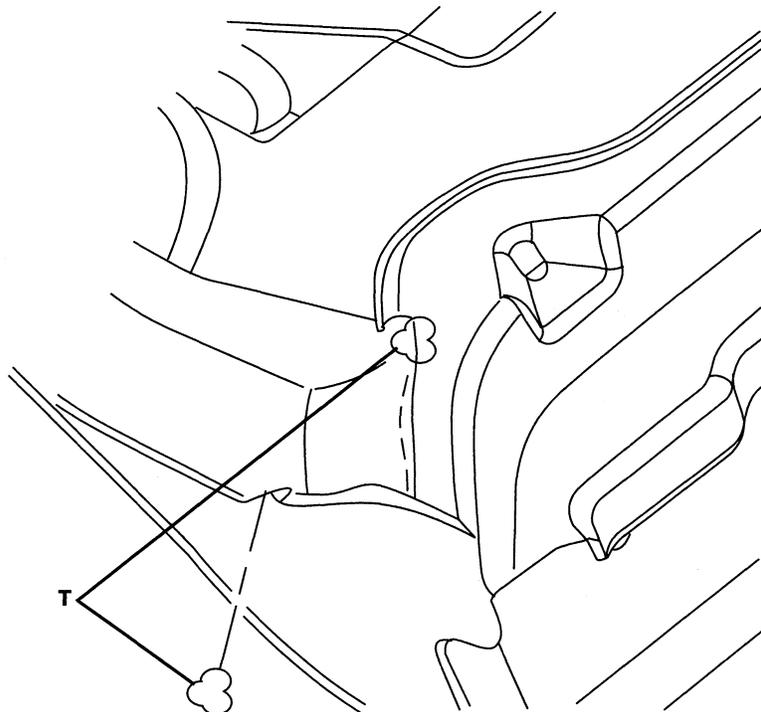
## REAR WHEEL WELL (LEFT)

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



PROW-174

## REAR WHEEL WELL (RIGHT)

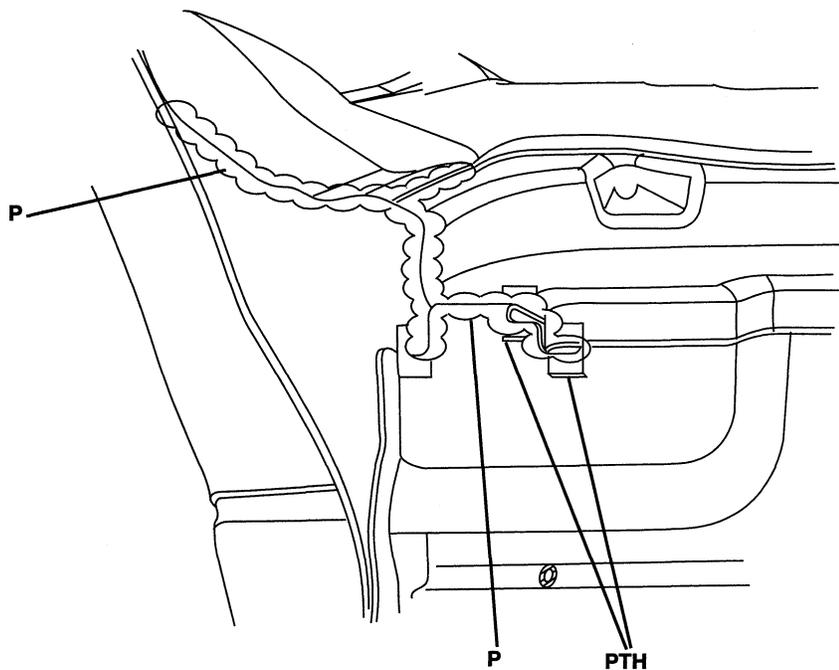


PROW-030



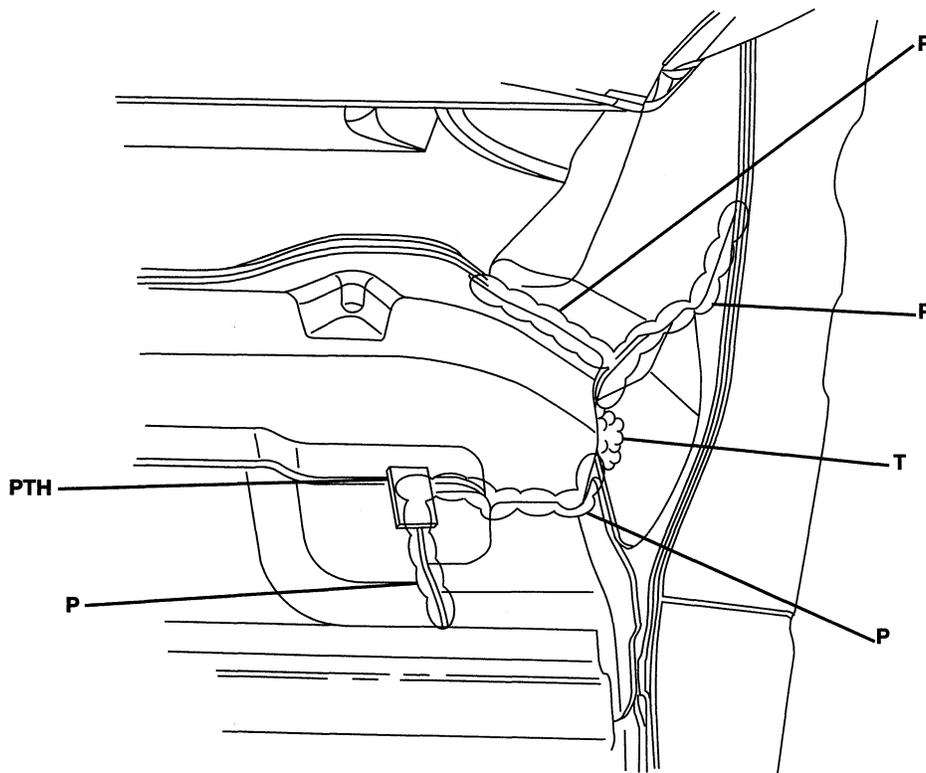
## REAR WHEEL WELL (LEFT)

T = THUMBGRADABLE  
P = PUMPABLE  
PTH = PATCH



PROW-175

## REAR WHEEL WELL (RIGHT)

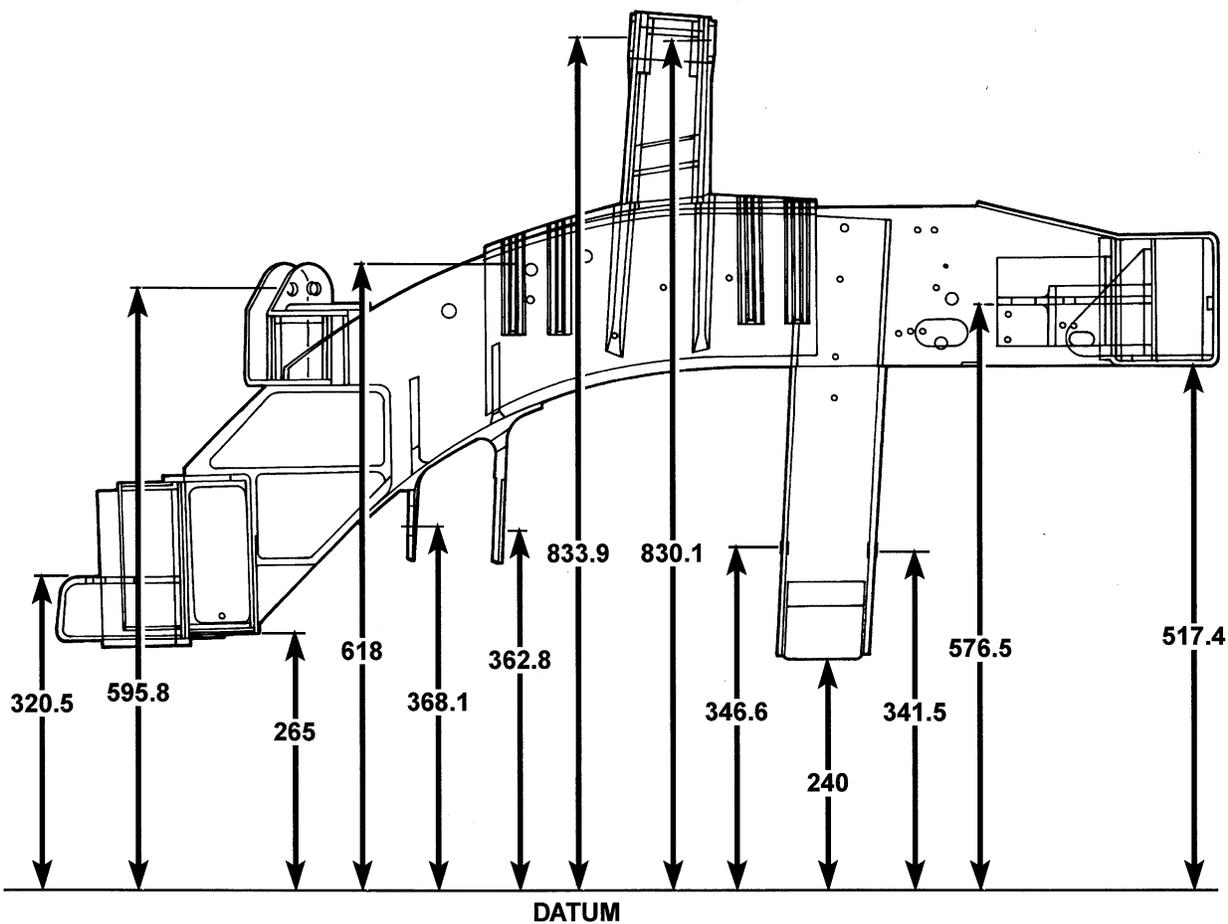


PROW-020

# PROWLER



## Specifications & Dimensions

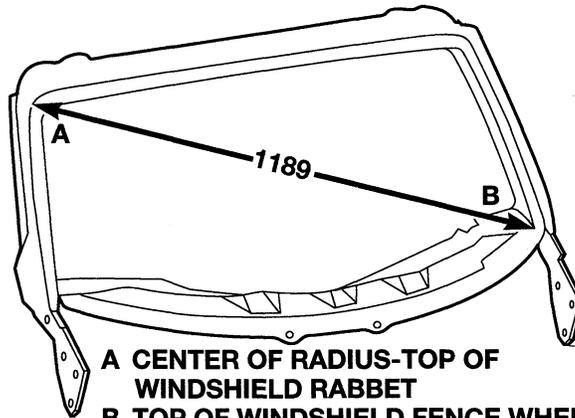


80aac321

80aac321



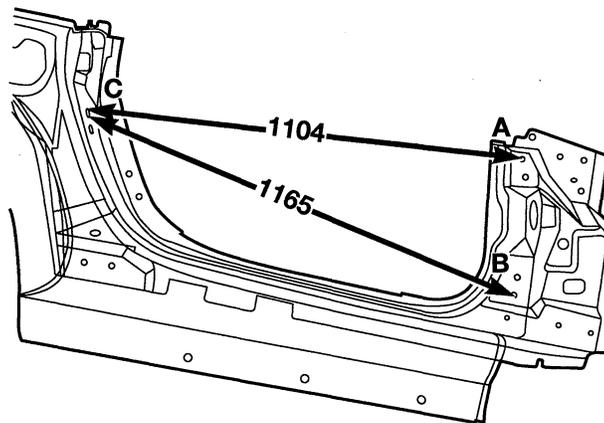
## WINDSHIELD OPENING



**A CENTER OF RADIUS-TOP OF WINDSHIELD RABBET**  
**B TOP OF WINDSHIELD FENCE WHERE METAL COWL MEETS PLASTIC FRAME**

80ad8482

## DOOR OPENING



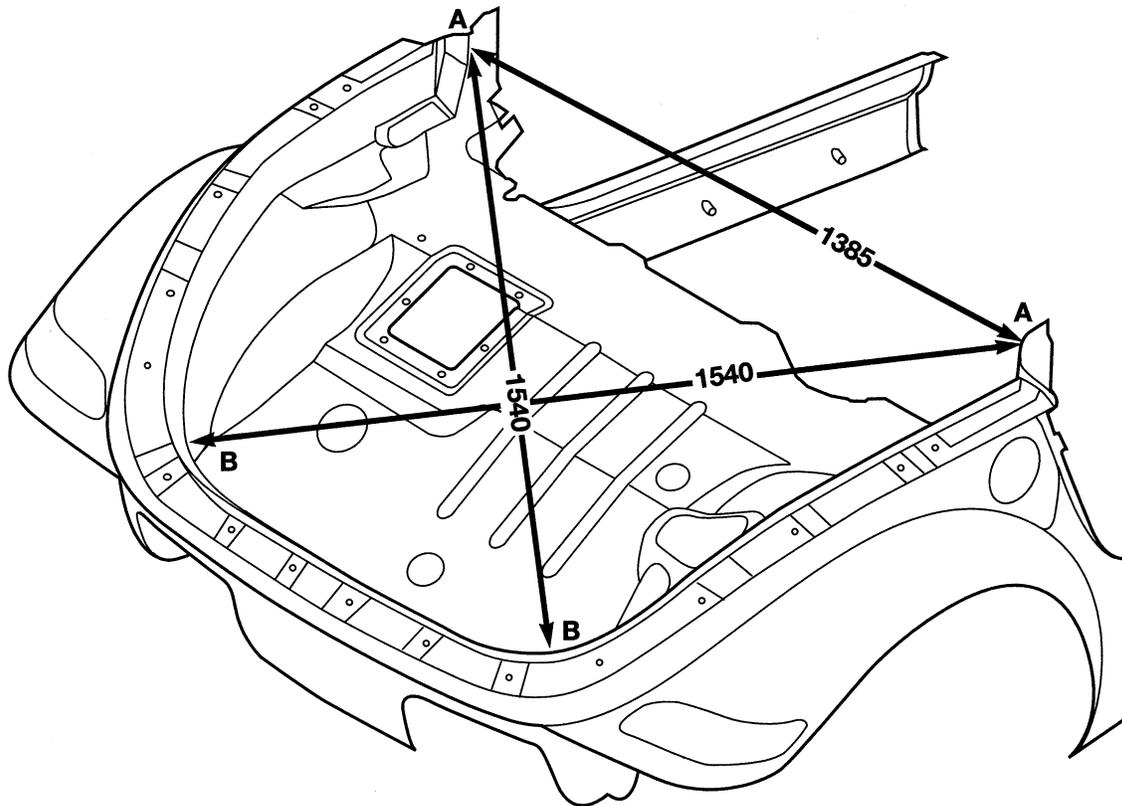
**A UPPER HINGE UPPER ATTACHMENT HOLE**  
**B LOWER HINGE LOWER ATTACHMENT HOLE**  
**C STRIKER UPPER ATTACHMENT HOLE**

80ad8481

Note: All measurements are in mm. Dimensions referenced from PLP holes are from centerline of hole.



**DECK OPENING**



80ad8480

**A INBOARD FOR ON INNER SHEET METAL  
B CENTER OF RADIUS OF LOWER DECK OPENING**

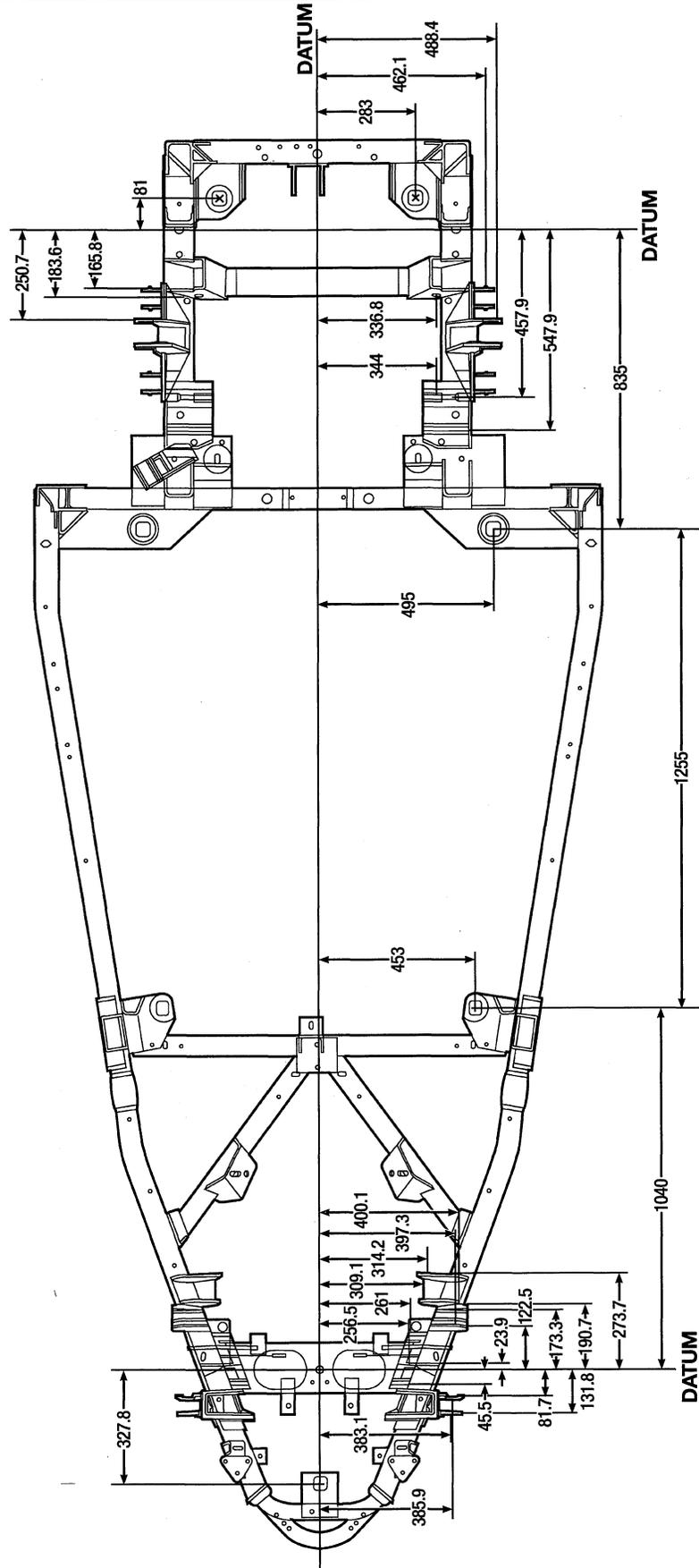
Note: All measurements are in mm. Dimensions referenced from PLP holes are from centerline of hole.



# Body Dimensions and Specifications

80abrfac6

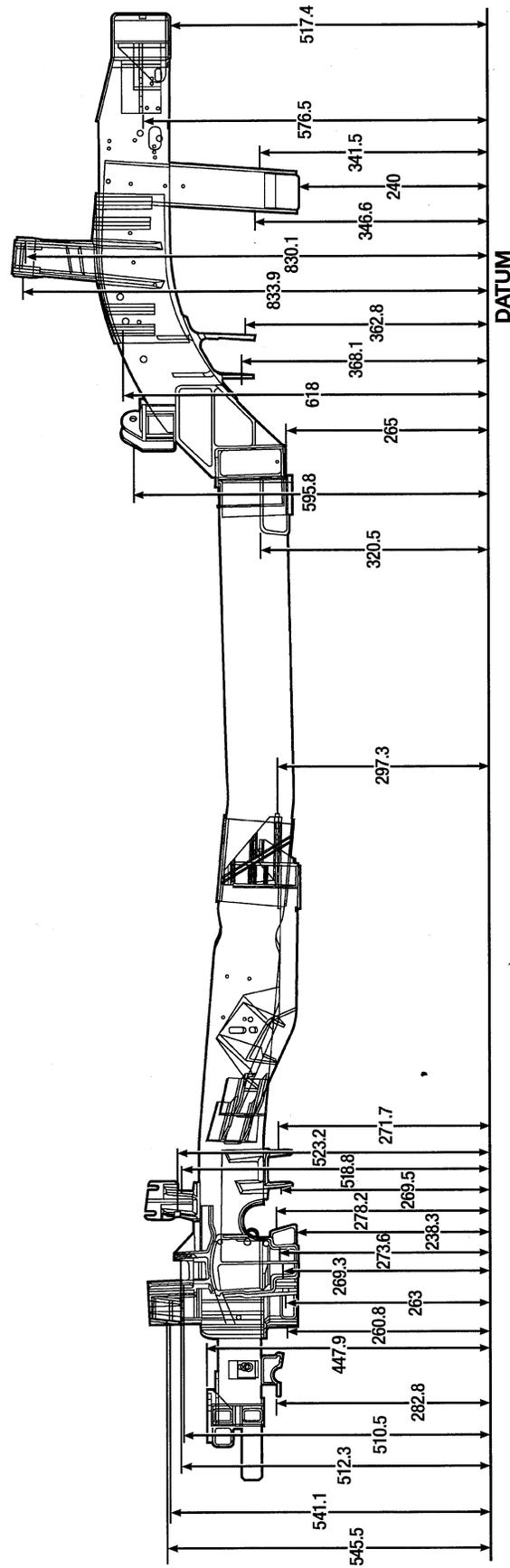
**FULL FRAME TOP VIEW**





80abrfc5

**FULL FRAME SIDE VIEW**





## Frame Dimensions

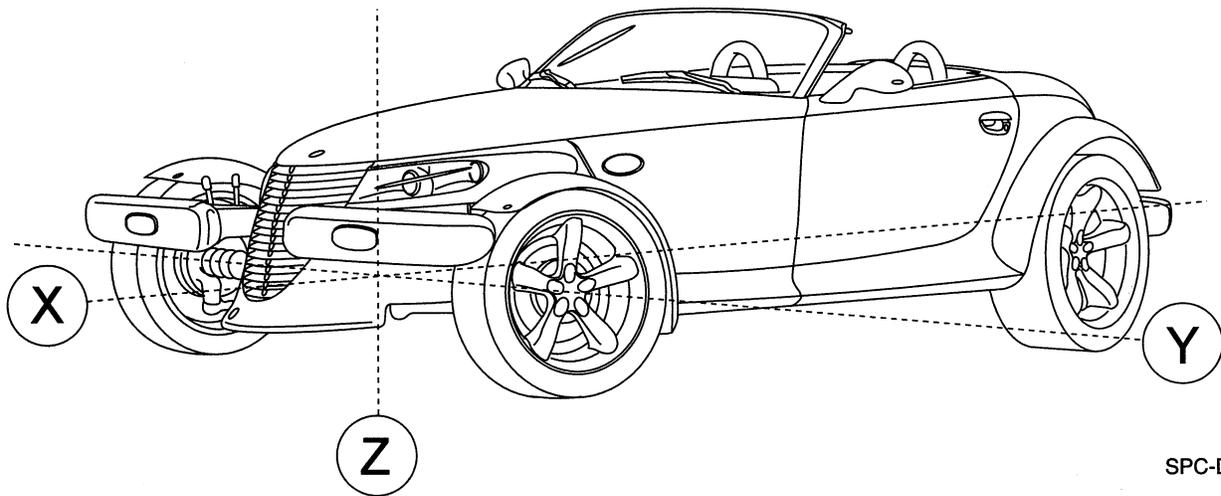
### GENERAL INFORMATION

A vehicle is designed within a three dimensional grid partitioned into 100 mm (3.92 in.) cubes. The lines that make the grid run in three planes are defined as X, Y, and Z. The X-plane extends from the front to the rear of the vehicle. The Y-plane extends from the center line (C/L) of the vehicle outward. The Z-plane extends from the Datum (312 mm or 12.28 in.) below the frame rails upward. Most Y-plane dimensions are symmetrical to the center line.

### CAUTIONS:

Do not anchor or support vehicle on suspension components during frame straightening operations. Damage to suspension can result.

Do not anchor vehicle frame rails to pulling device at locations that are not reinforced. Damage to frame rails can result.



SPC-DEM

Fig. 1 - X, Y, and Z Planes

### SAFETY PRECAUTIONS AND WARNINGS

**WARNING: DO NOT VENTURE UNDER A HOISTED VEHICLE THAT IS NOT SUPPORTED ON SAFETY STANDS OR EQUIVALENT.**

**WEAR EYE PROTECTION WHEN STRAIGHTENING, CUTTING, OR GRINDING METAL OR PLASTIC MATERIALS. PERSONAL INJURY CAN RESULT.**

**DO NOT CUT OR GRIND FRAME COMPONENTS THAT ARE IN CONTACT WITH FUEL SYSTEM COMPONENTS. FIRE OR EXPLOSION CAN RESULT.**

**DO NOT ALLOW OPEN FLAME TO CONTACT PLASTIC BODY PANELS. FIRE OR EXPLOSION CAN RESULT.**

**WHEN WELDED FRAME COMPONENTS ARE REPLACED, 100% PENETRATION WELD MUST BE ACHIEVED DURING INSTALLATION. IF NOT, DANGEROUS OPERATING CONDITIONS CAN RESULT.**



1	2	3	4	5	6	7	8	9	10	11	12	13	14	
A														
B														
C														
D														
E														
F														
G														
H														
I														
J														
K														
L														
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S														
T														
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V														
W														

This is a very easy way to write up your measurement information. You can tell at a glance when a dimension changes, and you can do what is necessary to stay in specification before you proceed.

Here's how to use this sheet or a similar one since each vehicle manufacturer supplies critical measuring point information.

Each time a correction is made to restore the body to its proper dimension, all readings should be taken again, in addition to the dimension you have just corrected.

The A-B-C, etc. are the measuring point dimensions. The 1-2-3, etc. are the readings taken at measurement step 1— measurement step 2, etc.

This sheet tells you at a glance how you stand in restoring the body to its proper state.

**When using the tram and centering gage system, *always* compile a list of dimensions each time you measure. This provides the information for measurement comparison, especially during the pulling and straightening phase of body collision repair.**

**The manufacturer of the equipment supplies information, so be sure you constantly review it and bulletins so you will be up to date on repair techniques.**