CHRYSLER Jeep DODGE **SERVICE BULLETIN**

NUMBER: 23-004-06

GROUP: Body

DATE: January 21, 2006

SUBJECT:
Passenger Cabin Water Leakage And/Or Wind-Like Sound

OVERVIEW:
This bulletin provides diagnosis for either water leakage and/or wind-like sound(s).

MODELS:

2006	(XK/XH)	Commander

DISCUSSION:
The customer may experience a water leak or a wind whistle-like sound coming from the front passenger compartment. The source of the leak or sound may be difficult to root cause. Refer to the following information as an assistance to your diagnosis process.

A. Wind Whistle-Like Sound Or Water Leak At Primary Door Seal (Any Door)

Possible Cause and Solution:

1. Primary door seal not fully installed or seated. Fix: Fully install door seal. If necessary, apply a suitable adhesive sealant between body flange and door seal.
2. Primary door seal buckled or kinked. Fix: Reposition primary door seal on body flange.

B. Wind Rush-Like Sound Near Accelerator Pedal Area On 5.7L Equipped Vehicles

Possible Cause and Solution:

1. Accelerator cable delete plug missing from or loose to bulkhead panel (Fig. 6). Fix: Install plug.

C. Water Leak From A-Pillar Grab Handle, Front Edge Of Headliner, Or Sunvisor Attachment

Possible Cause and Solution:

1. Sunroof drain(s) restricted. Drain hoses may have come loose. Drain hoses may be out of position and collapsed when headliner was installed. Drain hose end nipple restricted or blocked. Apply air pressure to each drain. Apply water to sunroof trough to determine if each hose is draining properly. Lower front portion of headliner to inspect sunroof drain connections and drain hoses. Fix: Repair as required. Refer to Service Bulletin 23-050-04.
2. Secondary door seal metal retention bracket has voids in its baked-on adhesive sealant (Fig. 1). Fix: Refer to Service Bulletin 23-050-05.

D. Water Leak From Headliner Above Doors Or At Base Of A-Pillar, B-Pillar, or C-Pillar

Possible Cause and Solution:

1. Secondary door seal metal retention bracket has voids in its baked-on adhesive sealant (Fig. 1). Fix: Refer to Service Bulletin 23-050-05.

E. Wind Whistle-Like Sound At Top Of Windshield

Possible Cause and Solution:

1. Top lip of the rubber seal along the top edge of the windshield is too high (Fig. 1). Fix: Top edge of the rubber seal must be below the radius (bend) of the leading edge of the roof panel. Apply a suitable adhesive to secure seal lip to body.

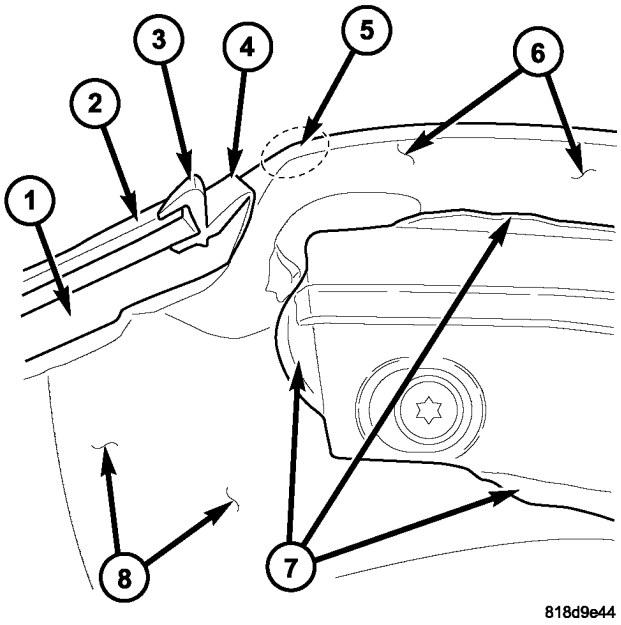

Fig. 1 WINDSHIELD TOP SEAL LIP

1 - Windshield Urethane

2 - Windshield Glass

3 - Rubber Seal

4 - Top Edge Of Rubber Seal - Edge MUST BE Below Radius Of Roof Panel

5 - Radius Of Roof Panel

6 - Roof Panel

7 - Baked-On Adhesive - Door Secondary Seal Retainer

8 - A-Pillar

F. Wind Whistle-Like Sound At Sunroof

Possible Cause and Solution:

1. Sunroof over/under flush to the outside surface of the roof panel (Fig. 2). Fix: Adjust sunroof (glass) to obtain the following flush measurement to the roof panel:
   a. Front edge of sunroof glass: -1.0 mm (+/- 1.0 mm). Glass range: from -2 mm (under flush) to 0 mm (flush) to roof panel.
   b. Rear edge of sunroof glass: +1.0 mm (+/- 1.0 mm). Glass range: +2 mm (over flush) to 0 mm (flush) to roof panel.
2. Sunroof not centered in roof panel opening. Fix: Adjust sunroof module so that it is centered in opening.
3. Sunroof-to-roof seal has gaps, appears pinched or warped. Fix: Adjust sunroof module to remove imperfections in seal.

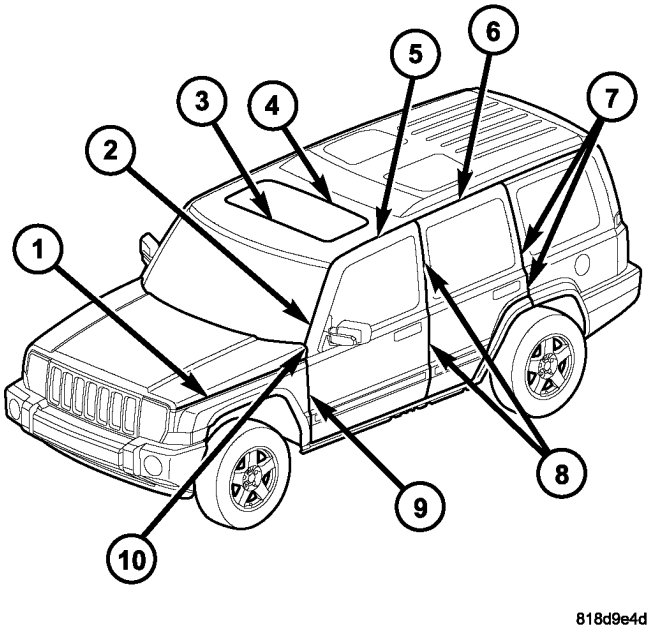

Fig. 2 XK - GAP & FLUSH

1 - Hood-To-Fender Fit

2 - Front Door Window Frame-To-Windshield Side Plastic Molding Fit

3 - Sunroof Front/Leading Edge-To-Roof Panel Fit

4 - Sunroof Rear/Trailing Edge-To-Roof Panel Fit

5 - Front Door-To-Roof Panel Fit

6 - Rear Door-To-Roof Panel Fit

7 - Rear Door-To-Quarter Panel Fit

8 - Front Door-To-Rear Door Fit

9 - Front Door-To-Fender Fit

10 - Front Door-To-Hood Fit

G. Wind Whistle-Like Sound At Front Door

Possible Cause and Solution:

1. Front door is over/under flush to surrounding panels (Fig. 2). Fix: Adjust front door to obtain the following flush measurement with adjacent body panel:
   a. Front Door to Roof Panel: +3.0 mm (+/- 1.5 mm). Front door range: +1.5 mm (over flush) to +4.5 mm (over flush) to roof panel.
   b. Front Door to Rear Door: 0.0 mm (+/- 1.0 mm). Front door range: -1.0 mm (under flush) to +1.0 mm (over flush) to rear door
   c. Front Door to Fender: +0.5 mm (+/- 1.0 mm). Front door range: -0.5 mm (under flush) to +1.5 mm (over flush) to front fender.
   d. Front Door to Windshield Molding: +3.0 mm (+/- 1.0 mm). Molding range: +2.0 mm (over flush) to +4.0 mm (over flush) to front door.
   e. Front Door to Fender Alignment: 0.0 mm (+/- 1.5 mm). Front door body line alignment range: - 1.5 mm (below) to +1.5 mm (above) body line of fender.
2. Front door gap is not to specification (Fig. 2). Fix Adjust front door to obtain following gap measurement with adjacent body panel:
   a. Front Door to Roof Panel: 6.0 mm (+/- 1.5 mm). Front door range: 4.5 mm to 7.5 mm gap between front door and roof panel.
   b. Front Door to Rear Door: 4.5 mm (+/- 1.0 mm). Front door range: 3.5 mm to 5.5 mm gap between front door and rear door.
   c. Front Door to Fender: 4.5 mm (+/- 1.25 mm). Front door range: 3.25 mm to 5.75 mm gap between front door and fender.
   d. Front Door to Hood: 6.0 mm (+5.0mm / -1.0 mm). Front door range: 5.0 mm to 11.0 mm gap between front door and hood.
   e. Front Door to Windshield Molding: 6.0 mm (+/- 2.0 mm). Front door range: 4.0 mm to 8.0 mm gap between front door and plastic windshield molding.

H. Wind Whistle-Like Sound At Rear Door

Possible Cause and Solution:

1. Rear door is over/under flush to surrounding panels (Fig. 2). Fix: Adjust rear door to obtain the following flush measurement with adjacent body panel:
   a. Rear Door to Roof Panel: +3.0 mm (+/- 1.5 mm). Rear door range: +1.5 mm (over flush) to +4.5 mm (over flush) to roof panel.
   b. Rear Door to Rear Quarter Panel: 0.0 mm (+/- 1.0 mm). Rear door range: -1.0 mm (under flush) to +1.0 mm (over flush) to rear quarter panel.
   c. Rear Door to Front Door: 0.0 mm (+/- 1.0 mm). Rear door range: -1.0 mm (under flush) to +1.0 mm (over flush) to front door.
2. Rear door gap is not to specification (Fig. 2). Fix Adjust rear door to obtain following gap measurement with adjacent body panel:
   a. Rear Door to Roof Panel: 6.0 mm (+/- 1.5 mm). Rear door range: 4.5 mm to 7.5 mm gap between rear door and roof panel.
   b. Rear Door to Rear Quarter Panel: 4.5 mm (+/- 1.0 mm). Rear door range: 3.5 mm to 5.5 mm gap between rear door and rear quarter panel.
   c. Rear Door to Front Door: 4.5 mm (+/- 1.0 mm). Rear door range: 3.5 mm to 5.5 mm gap between rear door and front door.

I. Wind Whistle-Like Sound or Water Leak At Inside Center Area Of Cowl Panel

Possible Cause and Solution:

1. Two cowl panel studs, that are used to support the IP and the inside IP insulation blanket, are not sealed to the inside cowl panel. The head of each stud is sealed by a round mastic patch from outside of the vehicle, in the cowl plenum chamber. Studs can not easily be inspected from inside vehicle. Remove the cowl screen. With a mirror or hand, inspect both stud heads for the round mastic patch and proper centering of the patch over the stud head. Inspection may be difficult (Fig. 3). Fix: From the cowl plenum chamber, apply a suitable adhesive sealant to stud heads.

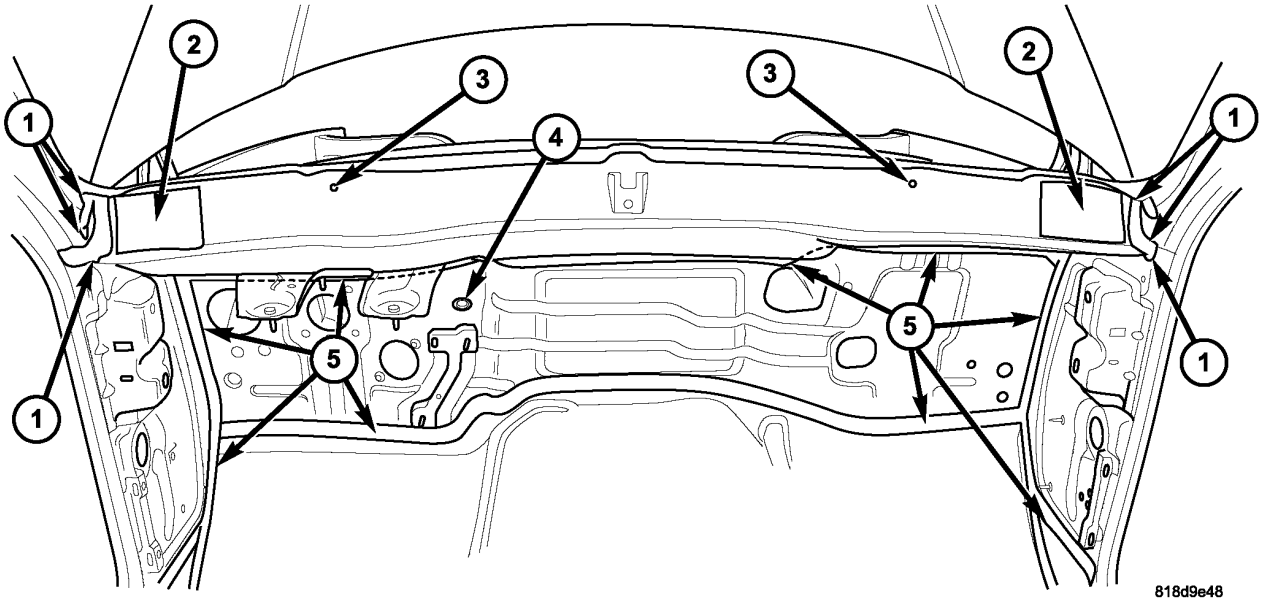

Fig. 3 COWL - INTERIOR VIEW

1 - Cowl To A-Pillar Joints

2 - Melt Down Patch - Covering Rectangular Hole/Opening In Cowl

3 - Cowl Stud Holes

4 - Accelerator Cable Delete Plug - Used On 5.7L Equipped Vehicles

5 - Bulkhead And Floor Pan Joints

J. Wind Whistle-Like Sound or Water Leak From Inside Bulkhead Panel Seams

Possible Cause and Solution:

1. Gap or voids in bulkhead panel seam sealer. Bulkhead panel joints with other body panels (cowl, A-Pillar side panel, floor, etc) may not be completely sealed. Remove inside kick panel trim. Pull back front of carpeting and sound insulation blanket to inspect bulkhead seams (Fig. 3). Fix: Apply a suitable flowable or pumpable adhesive sealant into the various bulkhead joint seams.

K. Wind Whistle-Like Sound At Inside Lower Corner Of Windshield

Possible Cause and Solution:

1. Melt down patch not covering opening in inside cowl panel. A melt down patch is located behind instrument panel (IP) at each far end of the inside cowl panel. Remove IP plastic side panels (end caps) from IP. Use your hand to reach up and feel for the melt down patch and its proper centering to over the cowl opening (Fig. 3) (Fig. 4). Fix: First attempt to press patch to the cowl body panel. Verify if patch adhesive is sufficient to remain retained to the cowl body. Apply a suitable flowable or pumpable adhesive sealant or mastic tape into the cover opening, as required.

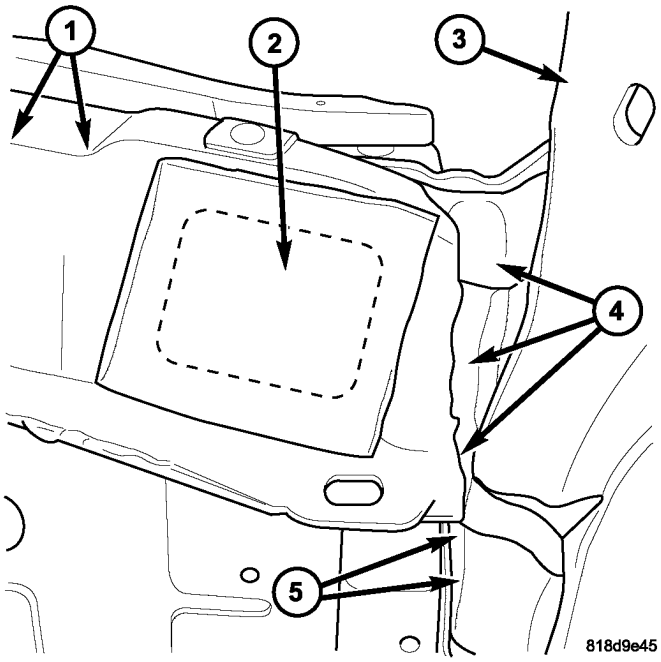

Fig. 4 COWL OPENING MELT DOWN PATCH

1 - Cowl Panel - Interior Section

2 - Melt Down Patch - Patch Must Adhere Properly And Fully Cover Rectangular Hole

3 - A-Pillar

4 - Upper Cowl To A-Pillar Joint - Seal Joint Well - A Mastic Patch Normally Covers Joint

5 - Lower Cowl To A-Pillar Joint - Seal Joint Well

2. Large inside joint, at lower corner of windshield, not sealed. A mastic (foil backed) patch is applied to joint. Patch may not be positioned correctly or properly pressed in place. Several panels come together to create the joint. Remove upper A-Pillar interior trim at windshield. Remove IP plastic side covers (end caps). Use a bright shop light to help with repair. Joint must be inspected from two locations. The top portion of the joint can be inspected while viewing through the windshield and with the shop light placed inside IP through side cover opening. The lower portion of the joint can be inspected through the side of the IP when the side cover is removed and the shop light is placed above at the top portion of the joint (Fig. 3) (Fig. 4) (Fig. 5). Fix: Apply a suitable flowable or pumpable adhesive sealant into joint. Seal entire joint well.

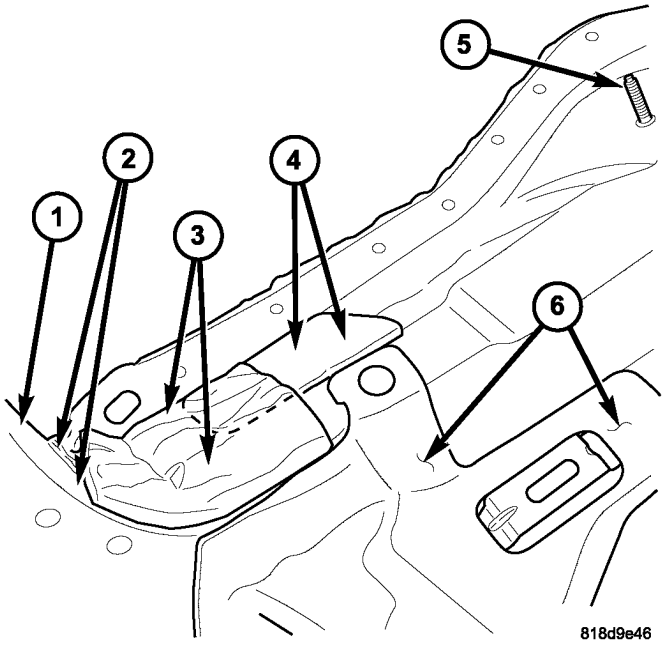

Fig. 5 A-PILLAR TO COWL MASTIC PATCH

1 - A-Pillar

2 - Cowl To A-Pillar Joint - Must Be Sealed Completely

3 - Foil Backed Mastic Patch - Used To Seal Cowl To A-Pillar Joint

4 - Melt Down Patch - Covers Rectangular Opening In Cowl

5 - Cowl Stud - Seal Hole And Stud Head From Outside Vehicle Through Cowl Chamber

6 - Melt Down Patch - Covers Exterior Cowl To Fender Joints

L. Wind Whistle-Like Sound or Water Leak At Cowl Panel To A-Pillar Side Panel Joint

Possible Cause and Solution:

1. Gap or voids in cowl joint seam sealer. Remove the cowl screen and HVAC baffle screen. HVAC baffle screen may not need to be fully removed to effect a good seal repair. With a mirror or hand, inspect inside the cowl plenum chamber. Inspect all cowl panel seams, especially the various seams at either end of the cowl plenum chamber (top joints and lower joints) (Fig. 6). Fix: Joints can be sealed from outside and inside the vehicle. Apply a suitable flowable or pumpable adhesive sealant into the various cowl joint seams. Sealant may be applied to the outside joints visible from the cowl chamber, from outside under the cowl chamber, and from inside under the cowl chamber. The inside joint may require the removal of the side trim panel and pulling the carpet and sound insulation blanket out of the way.

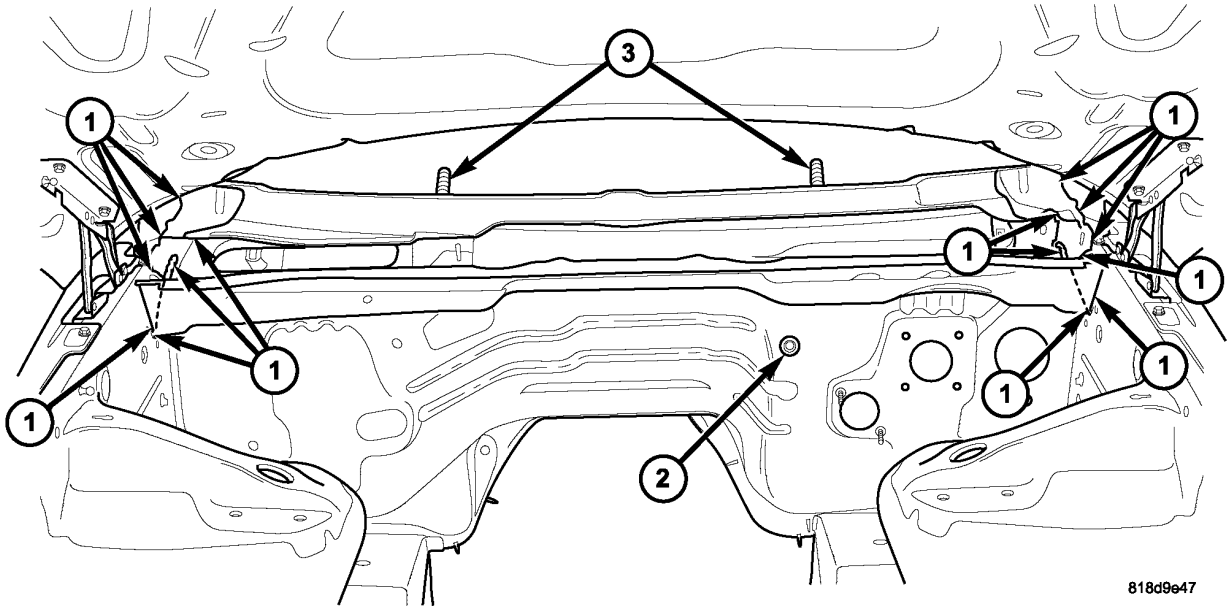

Fig. 6 COWL - EXTERIOR VIEW

1 - Cowl Joints

2 - Accelerator Cable Delete Plug - On 5.7L Equipped Vehicles Only

3 - Cowl Studs - Seal Stud Heads From Cowl Chamber Opening.

POLICY:
Information Only