

# Parts & Service Information

**Subject: Customer Satisfaction Campaign 428:** 

**Top Mechanism Quality Improvement** 

Application: All 1995 900 Convertibles

CATEGORY		
Body		
SECTION	PAGE	
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ISSUE	CODE	
04/97–0754	812	



Supersedes PSI 02/96-0664

The measures described herein should be carried out to improve the operation of the top mechanism on all 1995 900 Convertibles. See below for the quality improvement measures that should be taken.

Customer Satisfaction Campaign 428

#### Cars Affected:

All 1995 900 Convertibles

#### **Important**

The measures described in PSI 04/97–0753 <u>must</u> be carried out as applicable before the work covered by this PSI is started.

Check whether box B5 on the campaign plate is marked.

#### Procedures to be followed:

- A. Replacing Latch Housings in Windshield Frame and Microswitches if needed (see VIN Range)
  - B. Replacing Guide Pins in First Bow
  - C. Modification of 2nd bow Drive Link
  - D. Tightening of Screws Connecting the Front Rail to the First Bow
  - E. Tightening Screws in the Balance Link and Adding Thread Locking Adhesive (Loctite)
  - F. Fixing Elastic Strap at Rear of Headliner with Pop Rivets
- G. Changing the Rollers for the Power Windows
  - H. Putting Drain Holes in Door Pockets

Saab Cars USA, Inc. Service bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have the condition. See your authorized Saab Dealer for information on whether your vehicle may benefit from the information.

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#### Parts:

An initial parts order of two (2) Kits, P/N 74 97 555 was released automatically to you in February, 1996.

#### Kit P/N 74 97 555 contents:

Latch housing (2)	47 67 794
Cable tie (2)	79 71 864
Guide pins (2)	47 66 895
Intermediate linkage set	74 97 480
Drive link set	47 67 513
Pop rivet (2)	45 56 <b>015</b>
Washer (2)	45 55 975
Rivet	82 35 178
Trim cap (2)	46 29 093
Lock washer (2)	94 41 221
Roller (4)	47 66 465
Tape	46 95 870
Tape	48 08 176

#### Each dealer was also issued:

Threadlocking Adhesive (50ml)

74 96 268 (equivalent = Loctite 242 Blue)

(This is more than adequate to use on 20 or more cars.)

The following items were included in your initial order and were meant to be used for PSI 04/97-0755 (Sec. 8, p. 136) Addressing Customer Complaints of Water Leaks:

Sikaflex glue (310ml)

30 07 127

(This is adequate to use on 10 cars. This tube of glue will last one month if sealed carefully after each use. Can be applied using standard caulking gun.)

Foam rubber seal

45 58 086

Nut (8)\*

79 77 911

Bolt (8)\*

69 59 464

Butyl tape

source locally

See individual steps in the bulletin. We have listed individual part numbers with each step to make identifying them easier.

Additional quantities should be ordered using VOR ordering procedures.

A video (P/N 02 18 099) was released at the end of February explaining the procedures covered in this bulletin and PSI 04/97–0755. Please make certain all personnel in your dealership review this video when received.

<sup>\*</sup>Used twice: each use requires four (4). (Two of each per side rail seal, per side.)

### A. Replacing Latch Housings in Windshield Frame Models Affected: All 1995 900 Convertibles

Deformation of the latch housings in the windshield frame by the first bow's guide pins may sometimes occur, resulting in the lever arm on the microswitch not having enough room to move. The housing should be replaced. The new parts have been modified to relieve excess material in this area. Also note that within certain VIN Serial No. ranges the microswitches may also have to be replaced.

#### Important

Check that the microswitches have been changed and that the microswitches, P/N 46 95 979 (Figure 1, point A) are fitted as described in PSI 04/97-0753. Also check that the lever arm on the microswitch has not been damaged by this interference. If the microswitch is damaged, replace it.

#### Parts:

Latch housing (2)

47 67 794

Cable tie (2)

79 71 864

Microswitch (only if needed)

46 95 979 for VIN Serial Nos. S7000216-S7016595

#### Action:

1. Change the latch housings. See "Removal and Fitting" on page 244 in Service Manual 8:5 Cabriolet.

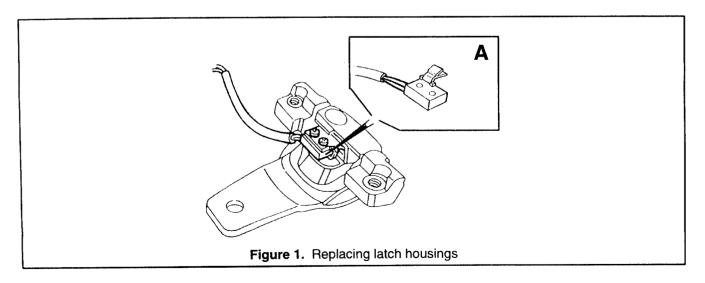
Tightening torque: 157in.lbs. (18Nm)

2. If the microswitches (Figure 1, point A) are undamaged, transfer them to the new housing.

If the vehicles is within VIN Serial No. range S7000216-S7016595, change them if they have not yet been replaced.

Tightening torque: Max. 8.88in.lbs. (1Nm). Do NOT overtorque. Overtightening can affect switch function.

- 3. Reassemble header seal and retainer.
- 4. Spray water diagonally from above to check whether any water leakage occurs.
  - Do NOT use a high-pressure hose.
- If water leakage occurs, see point 5: "Gluing the windshield frame seal at the corners" under Step B in PSI 04/97-0755.



# B. Replacing Guide Pins in First Bow Models Affected: All 1995 900 Convertibles

In some cars, compression of the header seal is insufficient (the guide pins are too long and bottom in the microswitch housings). For this reason, a shorter guide pin has been developed.

#### Parts:

Guide pins (2)

47 66 895

#### **Action**

Change to guide pin P/N 47 66 895.

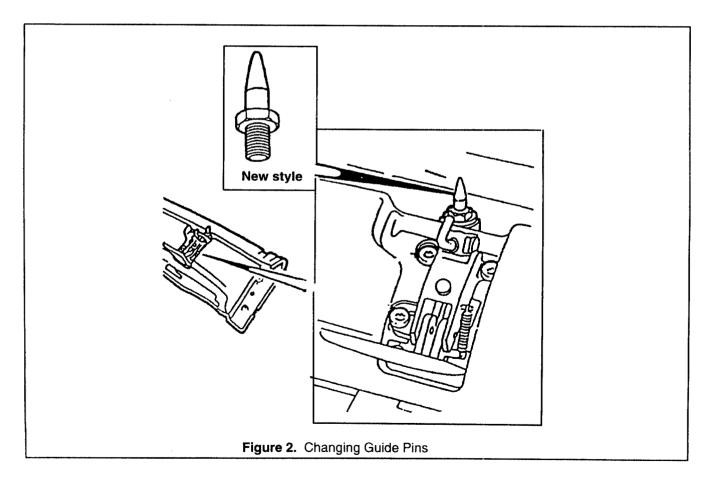
#### **Important**

Since the guide pin on the right-hand side is adjustable, mark its position before removing it.

Be sure to hold the loose nut to prevent it from dropping out of place.

Adjust top stops as described in Service Manual 8:5 Cabriolet, page 130.

If necessary, also adjust the J-hooks as described on page 132 of Service Manual 8:5. Check the up stop height and adjust as necessary. Reprogram.



# C. Modification of 2nd Bow Drive Link Models Affected: All 1995 900 Convertibles

On some cars the second bow may not retract correctly when the top is lowered, resulting in deformation of components in the top mechanism. To counteract this, a mechanical actuating linkage system for the second bow has been introduced on the left—hand side. Also be sure to see Step 4 in PSI 04/97–0753.

#### Parts:

Intermediate linkage set 74 97 480

Consisting of:

Intermediate link (1), Bushing (3), Washer, black plastic (3), Trim cap (3), Screw (3)

Drive link set 47 67 513

Consisting of:

Threaded rod (1), Auxiliary link (1), Screw (3), Bushing, black (3), Bushing, yellow (1)

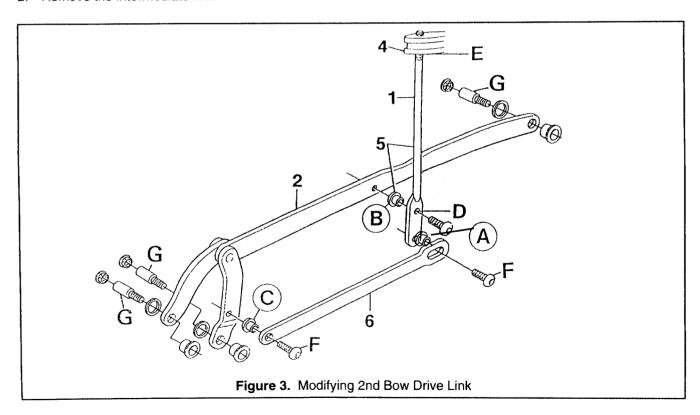
Thread locking adhesive (50ml) 74 96 268 (Equivalent is Loctite 242 Blue)

#### Action:

#### Left-hand side:

#### To remove:

- 1. Remove the screw securing the threaded rod to the intermediate link. Measure the distance between the center of screw hole D (see Figure) and the bottom edge E of the second bow (see Figure 3). Make a note of this distance and remove the threaded rod.
- 2. Remove the intermediate link.



To fit:

#### **Important**

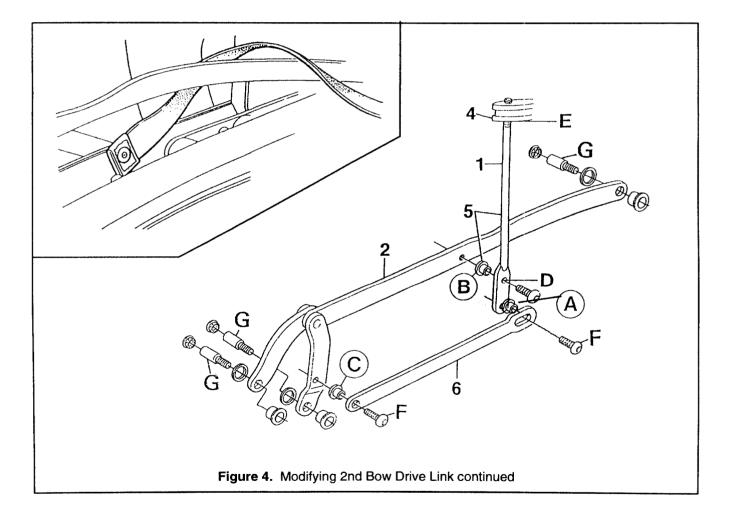
Carefully center the screw in the bronze bushing.

- 3. Fit the intermediate link, making sure that the elastic strap passes over it. See inset, Figure 4.
- 4. Screw the threaded rod into the second bow until the distance between D and E is the same as it was when the rod was removed.
- 5. Fit the threaded rod in the intermediate link by means of black bushing B.
- 6. Fit the auxiliary link as shown in Figure 4 (C is a black bushing and A is a yellow one).

#### **Tightening torques:**

Screws F = 52.8in.lbs. (6Nm) Screws G = 157.2in.lbs. (18Nm)

Do NOT overtighten or binding of the linkage can occur. Let Loctite secure the screw.

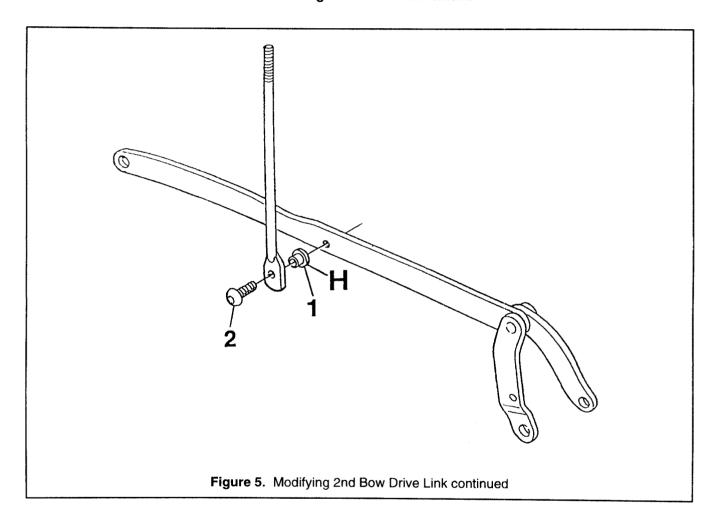


#### Right-hand side:

- 1. Check the color of bushing H. If it is black, nothing further need be done. If it is white, proceed to point 2.
- 2. Undo the screw securing the threaded rod to the link.
- 3. Change the old bushing for a black one (H) in the set of spare parts.
- 4. Apply thread locking adhesive, P/N 74 96 268 (or Loctite 242 blue), to the screw and screw the threaded rod to the link.

Tightening torque: 52.8in.lbs. (6Nm).

Too much Loctite can flow into the bushing and restrict movement.



# D. Tightening the Screws Connecting the Front Rail to the First Bow Models Affected: All 1995 900 Convertibles

On some cars the screws between the front rail and first bow may work loose, resulting in noise and excessive free play.

#### Parts:

Thread locking adhesive

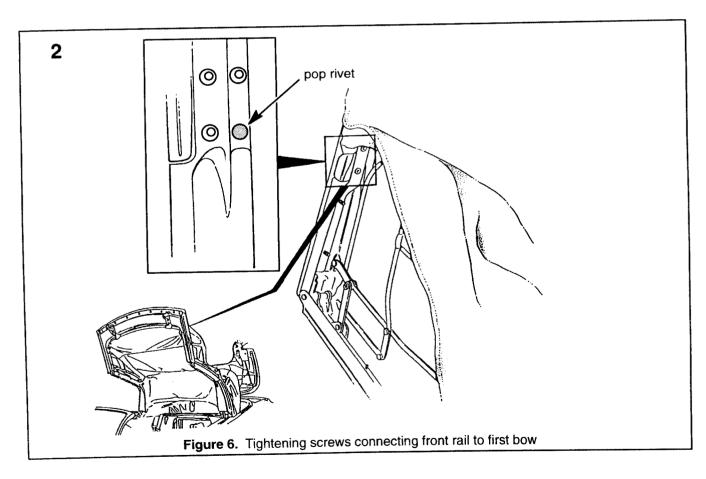
74 96 268 (Equivalent is Loctite 242 Blue)

#### Action:

The procedure described should be carried out on both the left and right-hand sides of the vehicle.

- Operate the top by means of the ROOF switch until it is halfway open at the same time as the Tonneau cover is in the vertical position. The door windows and side windows should be lowered.
- 2. Lift up the top cover to expose the screws.
- 3. Remove one screw at a time and apply thread locking adhesive, P/N 74 96 268 (or Loctite 242 Blue) to each screw.
- 4. Tighten the screws.

Tightening torque: 88.8in.lbs. (10Nm)



# E. Tightening the Screws in the Balance Link & Adding Thread Locking Adhesive (Loctite) Models Affected: All 1995 900 Convertibles

On some cars the screws for the balance link's extension may work loose, resulting in unwanted noise and excessive free play. This can also cause the guide pins to fall short of the latch housing. Thread locking adhesive should be applied to these screws before they are tightened.

#### Parts:

Thread locking adhesive (50ml)

74 96 268 (Equivalent is Loctite 242 Blue)

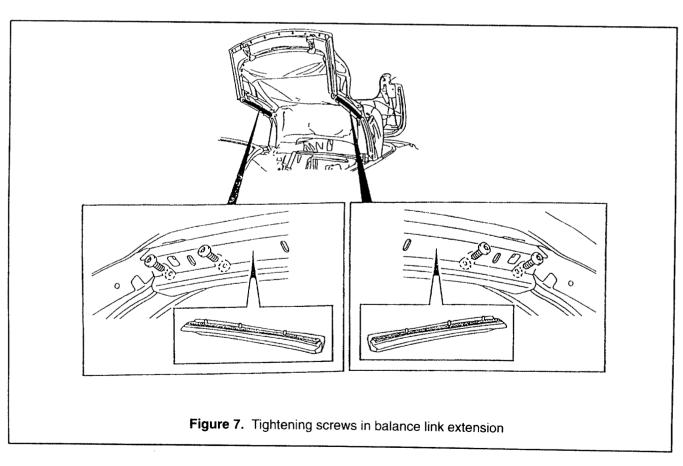
Tape (1 per car)

46 95 870

#### Action:

The procedure described should be carried out on both the left and right-hand sides of the vehicle.

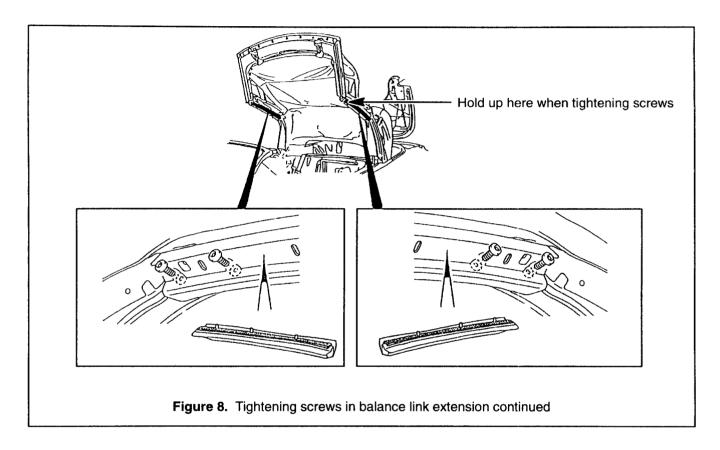
- 1. Operate the top by means of the ROOF switch until it is halfway open at the same time as the Tonneau cover is in the vertical position. The door windows and side windows should be lowered.
- 2. Before removal is started, the positions of the dome nuts securing the side rail seals should be marked so that they can be refitted in the same places. See Figure 7.
- 3. Remove the middle rail's seal retainer with seal. Gently work it loose until it comes away from the rail, being careful to avoid damaging the underlying tape. If the tape is damaged upon removal, it should be replaced.



- 4. Remove the screws for the balance link's extension one at a time and apply thread locking adhesive, P/N 74 96 268 (or Loctite 242 blue), to the screw threads.
- Hold up on the side rail joint just forward of the screws.
  - 6. Tighten the screws.

## Tightening torque: 17ft.lbs. (23Nm)

- 7. Refit the middle rail's seal retainer and seal.
- 8. Check that no water leakage occurs. If it does, carry out PSI 04/97-0755.



# F. Fixing Elastic Strap at Rear of Headliner with Pop Rivets Models Affected: All 1995 900 Convertibles

On some cars, the headliner fabric may catch on the upper bolts of the rear seat belts, beside the head restraints, when the top is lowered. To avoid this, the headliner fabric and the elastic strap should be riveted together so that folding of the headliner is improved.

To further minimize the risk of the headliner catching in the bolts of the rear seat belts, the bolt heads on cars up to and including VIN Serial No. S7011443 should be fitted with a trim cap.

#### Parts:

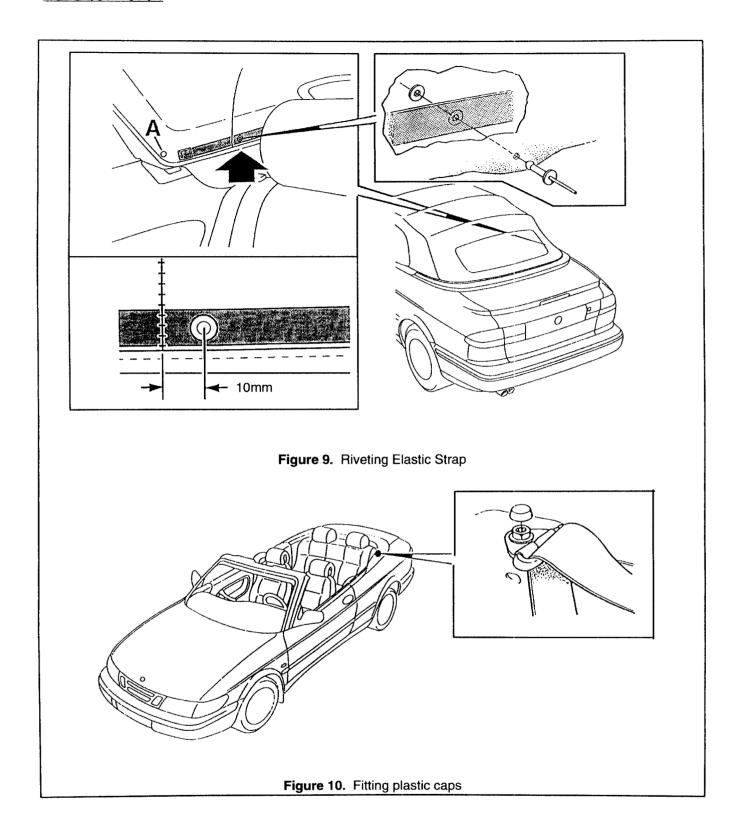
Pop rivet (2) (small head)	45 56 015
Washer (2)	45 55 975
Rivet IF NEEDED (large head)	82 35 178
Trim Cap (2) IF NEEDED	46 29 093

#### Action:

The procedure should be carried out on both left and right-hand sides of the vehicle:

- 1. Raise (close) the top fully and lower the seat backrest.
- 2. Check whether the headliner fabric has come loose at rivet A (see Figure 9 on following page). If it has come loose, fit a new rivet, P/N 82 35 178.
- 3. If elastic strap has been stitched from earlier repair (PSI 05/95–0572) cut this stitching.
  - 4. Hold the headliner and elastic strap together so that the underside of the strap is level with and just above the stitched edge of the headliner.
  - 5. Using a pair of punch pliers or an awl, make a hole about 5/32" (4mm) in diameter through the headliner and elastic strap about 3/8" (10mm) behind the headliner seam. Make sure that the hole comes in the middle of the elastic strap. See Figure 9 on the following page.
  - 6. Join the elastic strap and headliner together by means of a pop rivet, not forgetting washer, P/N 45 55 975. The pop rivet should be fitted with the black head facing the inside of the car.
  - 7. Check the riveted joints.
  - 8. On cars having VIN Serial No. up to and including S7011443:

Fit the trim caps, P/N 46 29 093, on the rear retaining bolt of the seat belts, beside the head restraints. See Figure 10 on following page.



# G. Changing the Rollers in Front Door Window Models Affected: All 1995 900 Convertibles and some early 1996 Convertibles

On certain cars there can be play between the rollers and the window track on the front door windows. As a result, a creaking noise is heard when the window is closed. The new rollers have a rubber o—ring that allows them to expand and contract, always filling the window track.

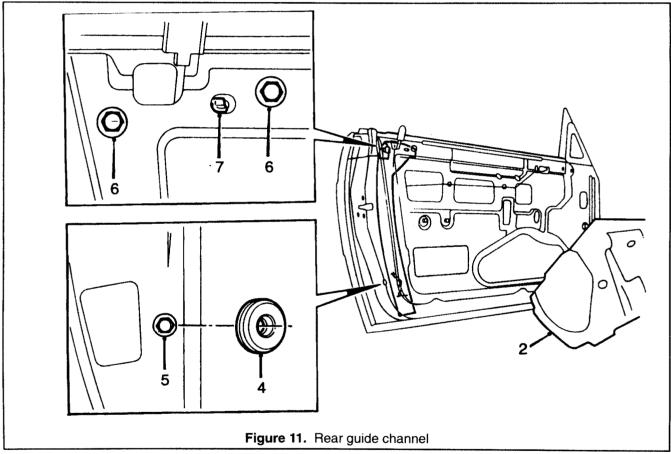
#### Parts:

Roller (2 per front window)

47 66 465

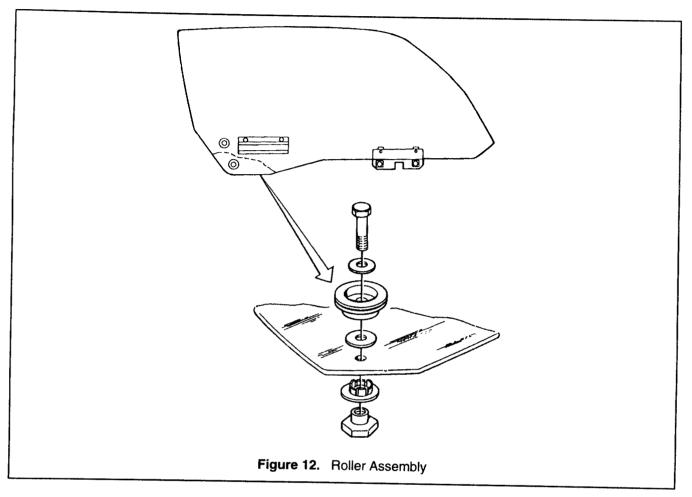
#### Action:

Remove the door window rear guide channel and replace window rollers as follows:



- I. Remove the door trim. See page 268 of Service Manual 8:5 Cabriolet.
- 2. Fold down the moisture barrier.
- Raise the window fully.
- 4. Remove the rubber plug from the bottom of the trailing edge of the door.
- 5. Note the position of the rear guide channel adjusting screw by marking with a scribe on the bracket. Then, remove the channel.
- 6. Remove the screws securing the upper end of the guide channel.
- 7. Carefully push the glass outward and unhook the upper end of the guide channel from the door metal.

- 8. Lift up the guide channel and pull it away from the plastic bushings on the trailing edge of the glass.
- 9. Lower the window slightly.
- 10. Use a 10mm flex socket to remove both rollers.



- 11. Install new rollers, P/N 47 66 465.
- 12. Tighten the bolts.

## Tightening torque: 80.4in.lbs. (9Nm)

- 13. Carefully lubricate the inside of the guide channel.
  - a. Make sure the entire inside of the channel is lubricated.
  - b. Be careful do not allow any lubricant on the outside of the channel: it will transfer to the glass.
- 14. Reinstall window guide channel, lining up with the scribed mark.
- 15. Reinstall the door panel.

# H. Putting Drain Holes in Door Pockets Models Affected: 1995 900 Convertibles and some early 1996 Convertibles

Customers may complain that the door pockets on their Convertible fill with water during a hard rain, when the vehicle is left parked in rain or if the windows are left slightly open. To rectify this complaint, drill drain holes in door pockets as indicated below.

### **Cars Affected:**

■ All 1995 900 Convertibles and some early 1996 Convertibles

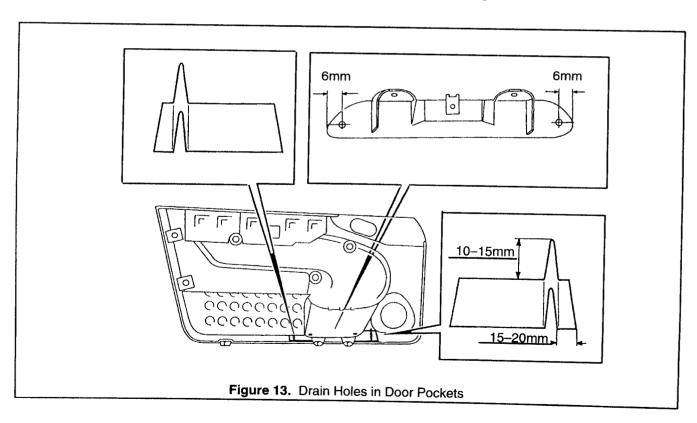
#### Parts:

Tape (4 per car)
1/4" (6mm) drill bit
1/4" (6mm) punch pliers

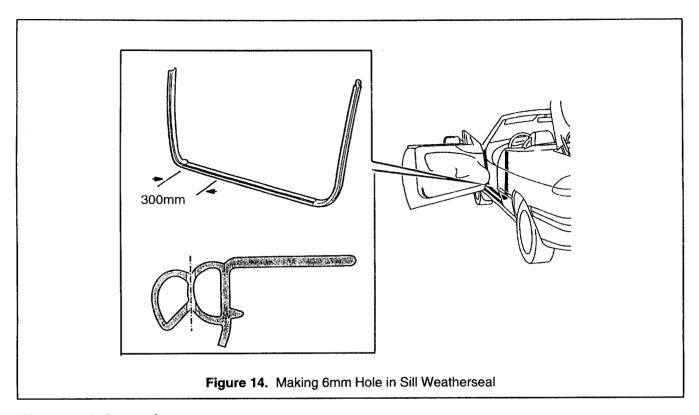
46 65 840

#### Action:

- 1. Remove the door panel.
- 2. Undo the screw in the bottom of the door pocket. Pry out the pocket and mark the positions of the holes that are to be drilled. Use the mold joint as a center line. See Figure 13.
- Drill holes where marked. Do not drill too deep as this could leave ugly marks in the pocket. Remove all plastic pieces from the pocket.
- 4. Fold the tape and place it as shown. The fold is to guide the water out through the hole in the seal and prevent water from running along to the front or rear of the door panel. See Figure 13.



- 5. Use the punch pliers to make a 1/4" (6mm) hole in the sill weatherseal 12" (300mm) from the mold joint on the seal. See Figure 14.
- 6. Fit the door panel to the door.



# **Warranty Information:**

Submit a claim using the following information:

Failure code: 10428–71–0–02–01 Labor operation: 10428 for 3.4hr. No sublet allowance for shop supplies

The text below is being inserted as an Owner letter into the Owner Notice for Recall 298, Steering Column Shaft Misalignment.

#### **SAMPLE OWNER INSERT**

# IMPORTANT INFORMATION CONCERNING YOUR SAAB CONVERTIBLE TOP OPERATION

Over the past few months, Saab Automobile AB has integrated several technical refinements that will enhance the performance of your 900 Convertible top. As our valued customer, your complete satisfaction with your car is our first consideration. Therefore, we would like to offer you this upgrade free of charge. We expect to have parts available at the end of March 1996 and will send a follow—up letter advising you that parts are now available.

You can elect to have this update made anytime during your bumper-to-bumper coverage at your convenience.

A limited supply of parts are currently available if you wish to have the enhancement made at the same time that Recall No. 298 is completed. Please advise your Saab dealer of this when you make your appointment.

Should you require alternate transportation while your car is being serviced, our authorized Saab dealers are ready to assist you.

Thank you.

Saab Cars USA, Inc