

Saab 900 Convertible



Troubleshooting Guide:

Troubleshooting Information and
Service Information Bulletins

1995 - 900 Convertible



SAAB



PRODUCT INFORMATION

June 5, 1997

Route To: Service Manager

Subject: Convertible Troubleshooting Guide

As part of the new training course, Convertible Top Adjustments and Updates – CNA – a Troubleshooting Guide was produced. Each technician attending this course received his/her own copy of this document.

Enclosed is the final version of this Troubleshooting Guide for your dealership's service library. The information contained in this document is the latest and only information that should be referenced when working on a 1995– 900 Convertible.

In conjunction with the publication of this Guide, several older bulletins have been superseded. Please make certain all superseded bulletins are deleted (crossed out/torn out) of your PSI Supplements. The list of affected bulletins are:

- ⌘ PSI 08/94–0495 Programming Top Mechanism
(See new PSI 04/97–0758 which gives both ISAT and TECH 2 instructions)
- ⌘ PSI 09/94–0499 Adjustment of Tonneau Cover Latches
- ⌘ PSI 03/95–0554 Improvement to Operation of Top Stack Mechanism
(See new PSI 04/97–0753)
- ⌘ PSI 05/95–0570 Correcting Complaint of Water Leakage at Door Mirror
(See new PSI 04/97–0760)
- ⌘ PSI 10/95–0628 Adjustment of 5th Bow Latch Motor
- ⌘ PSI 02/96–0664 Customer Satisfaction Campaign 428
(See new PSI 04/97–0754)
- ⌘ PSI 02/96–0665 Addressing Customer Complaints of Water Leaks
(See new PSI 04/97–0755)
- ⌘ PSI 07/96–0693 Correcting Customer Complaint that Headliner at First Bow is Loose or Hanging Down
(See new PSI 04/97–0756)
- ⌘ PSI 10/96–0716 Installing New Fifth Bow Latch Motor Racks

All technicians who attended the training class will be receiving updated pages for their binders.

If you require additional copies of this Troubleshooting Guide, please contact a Product Information Specialist at 770-279-6484 or 770-279-6324.

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BULLETINS INCLUDED IN THIS GUIDE:

PSI 04/97-0753 Improvement to Operation of Top Stack Mechanism

PSI 04/97-0754 Customer Satisfaction Campaign 428: Top Mechanism Quality Improvement

PSI 04/97-0755 Addressing Customer Complaints of Water Leaks

PSI 04/97-0756 Correcting Customer Complaint that Headliner at First Bow is Loose or Hanging Down

PSI 04/97-0757 New Procedure for Replacement of Convertible Top

PSI 04/97-0758 Programming Top Mechanism (Using ISAT or Tech 2)

MI 811-1758 Customer Satisfaction Campaign 450: Replacement of 5th Bow Latch Motor Assembly (issued as PSI 04/97-0759 in early issues of Troubleshooting Guide)

PSI 04/97-0760 Addressing Complaint of Water Leaks from Area Around Door Mirror

**How to determine if Updates & Campaigns have been performed**

The following chart includes some quick visual checks you can make to determine if a particular campaign or update has actually been performed on a 900 Convertible. Note that this is not a guarantee that all of the steps of a particular PSI or campaign have been performed.

	Old “19 Point” Update, see revised PSI 04/97–0753
1	Right hand 5th bow latch motor microswitch should be disconnected (gone)
2	Check for proper ECM – you SHOULD NOT be able to raise the windows while the top is being raised. (ECM software version 0402 or higher.)
3	Look at header switches through opening in header – silver arm and pure white plastic arm are early versions. Plastic arm on latest switch is an “off white color”.
4	The 5th bow potentiometer should have a “drive bracket” installed, and the potentiometer arm should be approx. 3/8” long
5	The 5th bow motor on the passenger’s side of the car should have a protective plate installed over the gear, so the wiring harness can’t be damaged by the gear.
	Service Campaign #428, see revised PSI 04/97–0754
1	“2nd bow drive link” installed
2	2 holes drilled in bottom of front door pockets. (1997 models have the holes drilled differently from the Factory.)
	Customer Satisfaction Campaign 450, 5th Bow Latch Motor Update, see MI 811-1758 (The 5th bow latch motor assembly has been updated as from VIN V7010306 in Factory production)
1	Round plug in hole over 5th Bow Latch Motor

	How to Determine Which Type of Top is Installed on the Convertible you are going to work on:
1	Original M95 900 Top is “ASC”: rear window is glued in place
2	Later style Top is “CTS”: rear window is clipped in place.

**Inoperative Top/Operational Problems/Unsatisfactory Performance**

(Note that problems are listed in order of top operating sequence, beginning with top fully raised)

	PROBLEM	POSSIBLE CAUSE	ACTION
1	Nothing happens when attempting to lower top (no movement at all, no noises, etc.)	a. Top switch on center console defective b. Fuse blown c. Trunk bag raised?	See page 1
2	First bow raises a few inches and stops	Fifth Bow latch motor stuck or inoperative	See page 1
3	Fifth bow raises all the way, then top stops other movement	a. Header Switches closed by dowel pin b. 5th bow potentiometer will not reach high limit c. Tonneau motor disengaged	See pages 1 – 3
4	Tonneau cover catches going up – “snaps” when opening	Latch Adjustment	See page 4
5	Grinding, ticking when tonneau goes up	Tonneau motor not fully engaged	See page 4
6	Top stops 1/2 way when lowering the top	a. Missing 2nd bow drive link or 2nd bow binding on fabric b. Programming c. Main motor or 5th bow potentiometer faulty	See pages 5-6
7	Top hesitates when lowering top	a. Programming b. 2nd bow catching on fabric	See pages 6–7
8	Rear window hits rear headrest when lowering top	Programming	See page 7
9	5th bow hits Tonneau cover hinges when lowering top	a. Programming b. Tonneau motor drive shaft twisted	See page 7
10	First bow hits Tonneau cover when lowering top	a. Programming b. Twisted Tonneau shaft c. Bent Tonneau cover hinges	See page 8
11	“Snapping” noise from rear as top is being lowered into “boot”	Broken or missing stops on rear window	See page 9

**Inoperative Top/Operational Problems/Unsatisfactory Performance**

(Note that problems are listed in order of top operating sequence, beginning with top fully raised)

	PROBLEM	POSSIBLE CAUSE	ACTION
12	Top gets caught on interior trim panel on way down	Early interior trim panel not cut at rear edge	See page 10
13	Top won't park low enough	a. Main motor low limit b. Side rail screws loose c. Side rail laying on main motor – balance link bent d. B-pillar hinge hitting main motors when top is lowered	See page 11-12
14	Tonneau cover does not close all the way	a. Top not down all the way b. Tonneau latches out of adjustment c. Tonneau motor drive shaft twisted	See page 12
15	SID does not beep when top is fully lowered	a. SID incorrectly programmed b. Tonneau cover latch micro-switches not closing properly	See page 12
16	First bow has white mark near "grab handle"	First bow rubs on 5th bow latch motor cover	See page 13
17	Tonneau cover catches going up – "snaps" when opening	Latch Adjustment	See page 13
18	Top stops or hesitates when raising the top	2nd bow is bent – flat steel piece on the side of the drive link is bent	See page 14
19	Grinding/ticking when raising top	Tonneau motor not fully engaged	See page 15
20	Top does not go up (rise) evenly – one side rises quicker than the other	Weak main motor	See page 15
21	First bow slams header when raising top (pin alignment ok)	a. Top stops misadjusted b. Loose screws	See Page 15
22	First bow header pins do not reach guide holes in header	a. Top stops misadjusted b. Shim adjustment c. Loose screws	See page 15–16

**Inoperative Top/Operational Problems/Unsatisfactory Performance**

(Note that problems are listed in order of top operating sequence, beginning with top fully raised)

23	First bow comes down on header crooked, straightens as 5th bow latches	Top out of adjustment	See page 16
24	Access flaps won't open (raise) when raising top – flaps may be broken off	5th bow latch motor jammed with latches closed or inoperative	See page 16
25	Tonneau cover slams closed	a. Tonneau cover catches on fabric when closing b. Tonneau cover latches not aligned properly c. Tonneau motor drive shaft twisted	See pages 17
26	5th Bow won't close properly	a. 5th bow latch motor jammed b. Misaligned strikers c. Incorrect programming?	See page 18
27	SID does not beep when top is fully raised	a. SID incorrectly programmed b. 5th bow latch microswitches or Tonneau cover latch microswitches not closing properly	See page 18

**Squeaks & Rattles**

	PROBLEM	POSSIBLE CAUSE	ACTION
1	Clicking/snapping noise from the 1st bow header	Loose bolts at front side rail	See page 19
2	Rattle from "pull down" handle at center of 1 st bow	Incorrect fit	See page 19
3	Rattle from tonneau cover with 5th bow latched	5th bow fabric rubbing on tonneau	See page 19
4	Rattle at 2nd bow (above driver's or passenger's head)	a. Incorrect cut at ends of 2nd bow b. Round rubber plug not inserted in square rubber stop between 1st and 2nd side rail c. 2nd bow flipper rod rattling	See page 20
5	Rattle from C-pillar area while driving	Bolts beneath 2nd side rail loose	See page 21
6	Rattle in rear side trim area by rear speaker (only 1995 VIN up to S7003000)	Seat belt pretensioner tube contacting sheet metal	See page 21
7	Creaking or rattling noise when raising front windows	Improper window rollers (must be lubricated)	See page 21
8	Creaking or rattling noise while driving down road	Improper window rollers (must be lubricated)	See page 21
9	Squeaking noise from rear when driving with the top raised	Access flap lower surface rubbing on 5th bow motor	See page 21

**Water Leaks**

	PROBLEM	POSSIBLE CAUSE	ACTION
1	Leaks from header while driving (determine whether water comes in while driving only, or while sitting still)	a. Water coming in between header and front side rail seal b. Water coming in under header seal (only while driving)	See page 22
2	Water leaks at outside rear view mirror "bird beak" seal	a. Seal deformed or damaged b. Sheet metal not straight – (vertical "bird's beak" surface)	See page 22
3	Leaks at A-pillar and B-pillar (side windows wet inside)	Seals improperly adjusted	See page 22

SID Messages

	PROBLEM	POSSIBLE CAUSE	ACTION
1	"Check Soft Top" while top is operating, top works O.K.		See page 23
2	"Check Latches"		See page 22
3	"Check Trunk"		See page 23
4	"Close Trunk Lid"		See page 23

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Miscellaneous

	PROBLEM	POSSIBLE CAUSE	ACTION
1	DTC B1605, top works O.K.		See page 24
2	ACC does not switch to manual mode when lowering top	SID misprogrammed	See page 24
3	ACC does not switch to automatic mode when raising top	Stuck / defective header switch	See page 24
4	No convertible top SID messages	SID misprogrammed	See page 24
5	Side rail seals drooping	Side rail seal not secured	See page 24–25
6	Trunk release button inoperative	a. Programming b. Is fuse 25 blown?	See page 26
7	DTC B1309 – Potentiometer Fault	Variety of reasons	See page 26

**Inoperative Top/Operational Problems/Unsatisfactory Performance:**

(Note that problems are listed in order of top operating sequence, beginning with top fully raised)

1. Nothing happens when attempting to lower top (no movement at all, no noises, etc.)

- a. "ROOF" switch on center console defective?

Monitor switch with Tech 2, "Read Values/Roof Switch". Tech 2 should respond DOWN when you push the ROOF switch backward.

If Tech 2 does not respond correctly, check for power into switch at pin 10 of the switch. Check for power at pin 4 of the switch pack and pin 42 of K42 when opening, and power at pin 3 of switch pack and pin 28 of K42 when closing. Check for continuity to ground at pin 8 & 12 of the switch pack. Replace switch pack or repair wiring as needed.

- b. Fuse blown? (If you cannot contact the TSAS system with Tech 2, you may have a blown fuse.)

Check Maxi fuse #5 (underhood). Check fuse #7 (+15 circuit) and #17 (+54 circuit) in fuse box 22a at the end of the dash.

Replace fuse, determine cause of fuse blowing (short circuit to ground, etc.).

- c. Trunk bag raised?

If SID is incorrectly programmed, when you attempt to lower the top with the trunk stowage bag raised, nothing will happen, and SID will not display any messages.

2. First bow raises a few inches and stops

- Fifth bow latch motor stuck or inoperative?

If the car has the "older" design 5th bow latch motor, replace 5th bow latch motor. See MI 811-I 758. (From V7010306 new latch motor assemblies are Factory installed.)

Use Tech 2 to "Activate/5th Bow Latch Motor". If motor does not operate correctly, perform electrical tests – there may be a wiring fault.

3. Fifth bow raises all the way, then top stops other movement

- a. Header switches closed by dowel pin?

The first bow settles when the fifth bow is released. If the "top stops" are misadjusted too loose, this allows the header pins to re-enter the header switches and stop the top movement. This may happen before the 5th bow is all the way up. Note that SID will also display "Check Latches" when this occurs. An easy way to check for this condition is to raise the first bow with your hand when the top movement stops. If the top movement continues, the stops need adjustment,

Adjust the top stops correctly. See page 130 of Service Manual 8:5 Cabriolet. Re-program according to PSI 04/97-0758.



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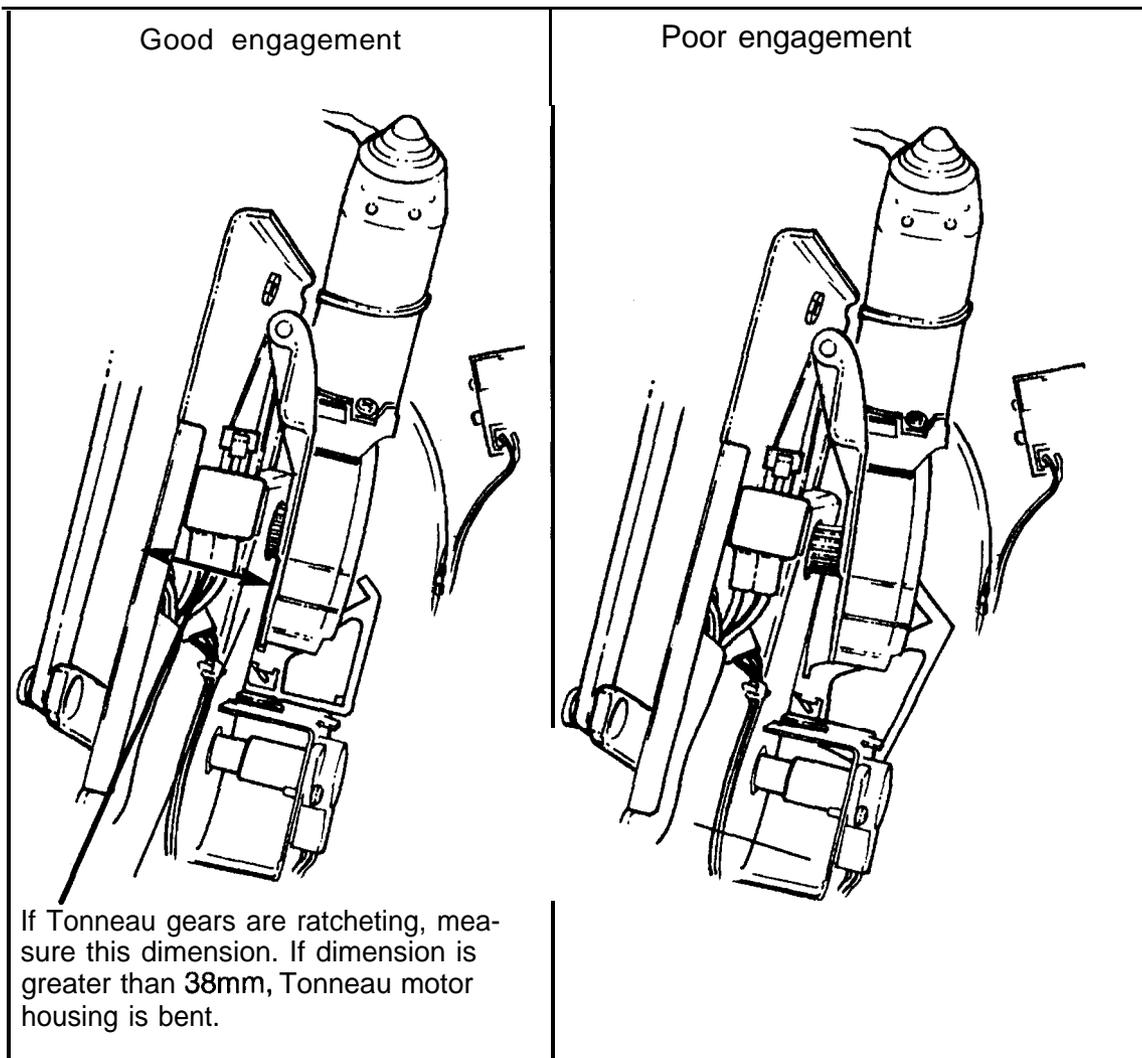
- b. 5th bow potentiometer will not reach high limit. "Check Soft Top" appears on SID.

Reprogram top according to PSI 04/97-0758.

- c. Tonneau motor disengaged?

Remove the right taillight assembly to inspect the Tonneau motor. Check for proper engagement of Tonneau motor. If the dimension shown in the illustration is greater than 38mm and the Tonneau gears are making ratcheting noise, the Tonneau motor housing is bent. If there is insufficient engagement, check for gear damage and check emergency release handle cable adjustment (described on next page). If damage to gears or housing is visible, replace the Tonneau motor. See illustration below.

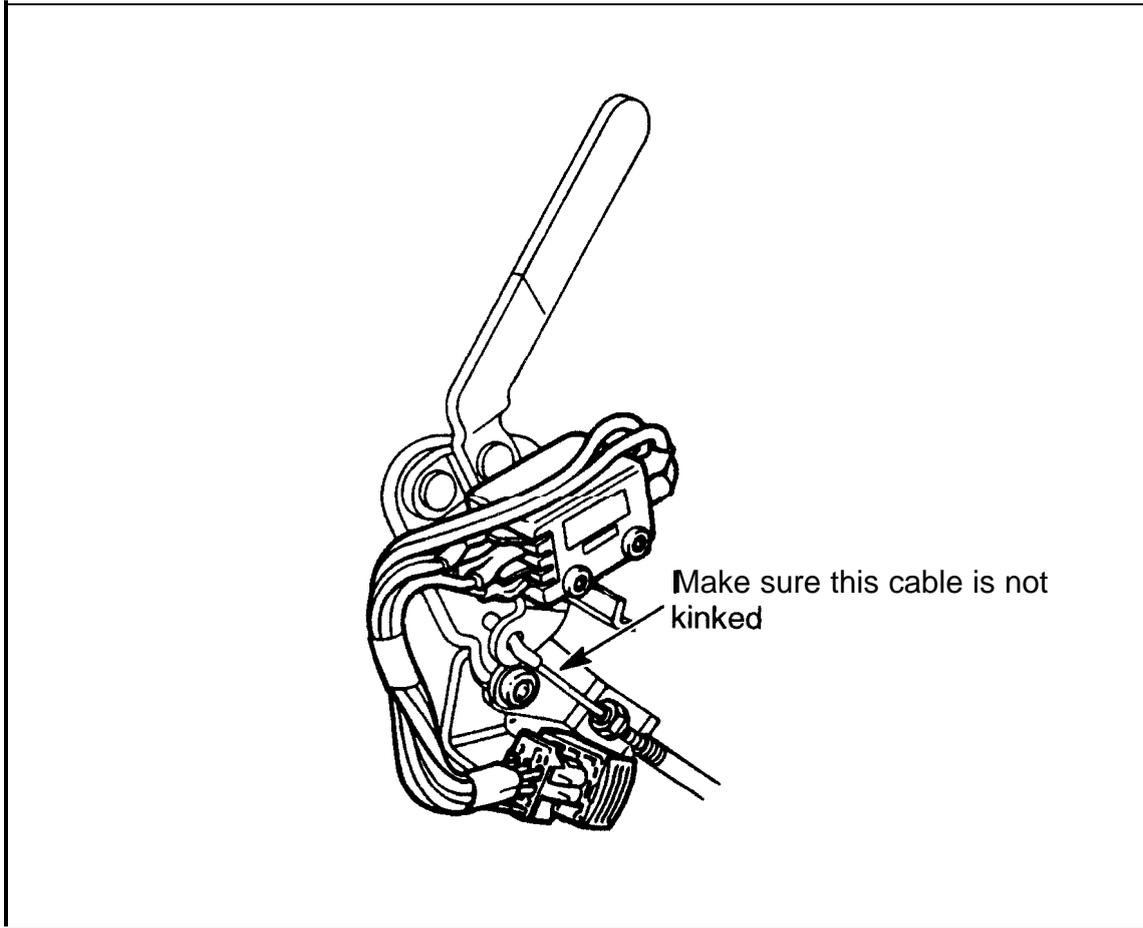
When the motor is properly engaged, note that the motor mounting plate is engaged in the slot and that the latch is parallel to the potentiometer bracket.





c. Tonneau motor disengaged? (continued)

There can be too much friction between the emergency release handle cable and the sheathing because of the way the sheathing/cable is positioned. Cut the ties securing the sheathing/cable to the body so that it finds a more natural position. Make sure that the release handle is pushed all the way to the rear of the car, and that the cable does not kink (see illustration). Resecure sheathing. Re-engage Tonneau motor, check cable adjustment.



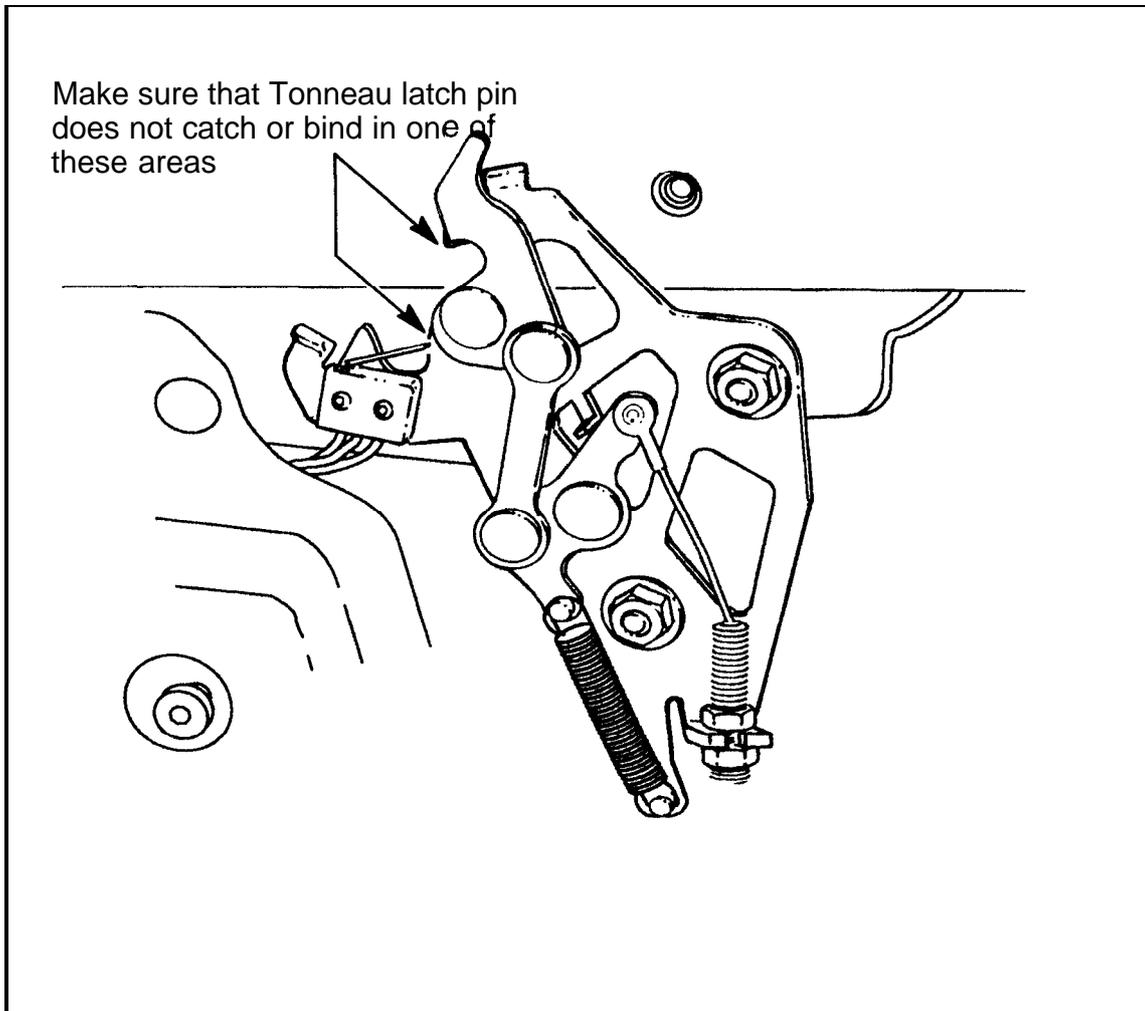


4. Tonneau cover catches going up – “snaps” when opening

- Tonneau latches misaligned?

Adjust striker and latch as per Service Manual 8:5 Cabriolet, pages 127-I 28.

Make sure to check the Tonneau cover latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.



5. Grinding/ticking when Tonneau goes up

- Tonneau motor not fully engaged?

Replace Tonneau motor assembly. Recheck cable adjustment. See pages 224-2 of Service Manual 8:5 Cabriolet.

Check emergency release handle cable adjustment as described in Operational Problem 3C.

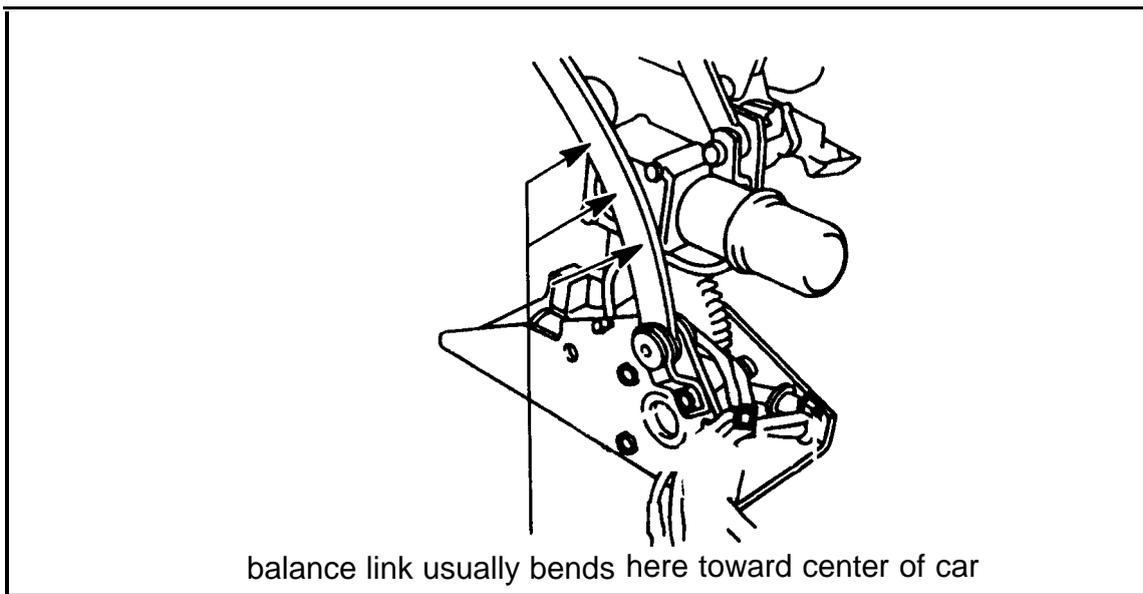


6. Top stops 1/2 way down when lowering the top

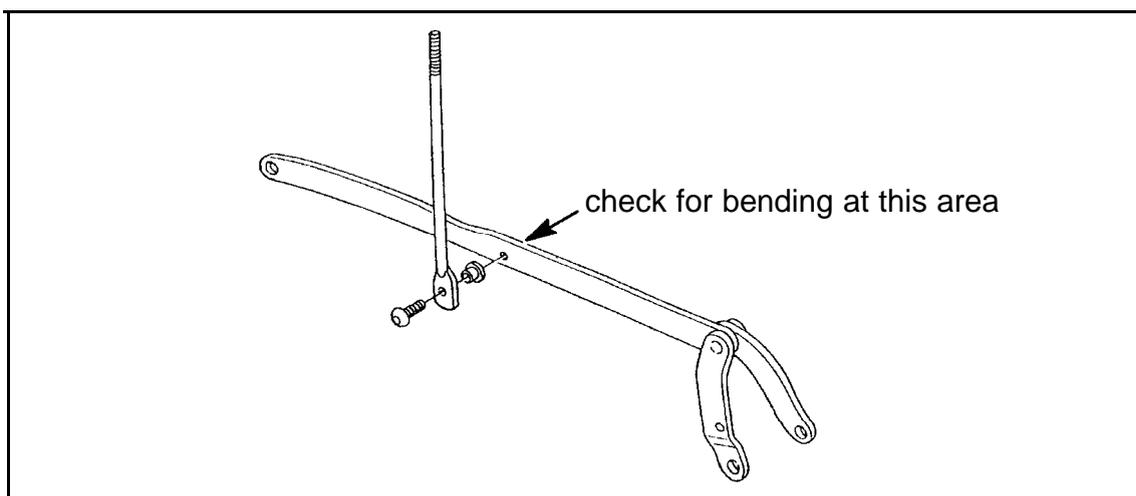
- a. Missing 2nd bow drive link or 2nd bow binding on fabric?

Perform Customer Satisfaction Campaign 428 if it has not been completed. This problem can occur if the 2nd bow does not flip back, causing it to contact the front side rails. This can bend the balance link. If slightly bent, it is OK to straighten it in the car. If balance links are severely bent, they are available as spare parts:

LH 47 67 398, RH 74 97 506



If the balance link is bent, also inspect the control arm on both sides for bending.



**b. Programming?**

Reprogram top according to PSI 04/97-0758.

c. Main motor or 5th bow potentiometer faulty?

Monitor the "Main Motor Potentiometer" and "5 Bow Potentiometer" with Tech 2 using the line graph function as you cycle the top completely. Watch for irregularities in the "Main Motor Potentiometer" and "5 Bow Potentiometer" graph display at the point where the top stopped. If the graph "spikes" dramatically, there is an open or a short in the potentiometer.

Tech 2 may not reveal an open circuit in the potentiometer. You can also use a digital multimeter or a 'scope to measure the potentiometer output voltage. The "Main Motor Potentiometer" voltage can be measured between pins 29 and 30 of connector K42 at the TSAS ECM. The "5 Bow Potentiometer" voltage can be measured between pins 29 and 31 of connector K42 at the TSAS ECM.

Replace potentiometer if needed. Reprogram top according to PSI 04/97-0758.

7. Top hesitates when lowering top**a. Programming?**

When the top is about 1/2 way back, the main motor stops and the 5th bow motor starts an upward motion to bring the 5th bow closer to the 4th bow. If this is the problem you are experiencing, reprogram according to PSI 04/97-0758. Pay special attention to the measurements used to calculate overlap values of the main motors and the 5th bow motors.

If you are still experiencing this problem, you can try:

1. lowering main motor overlap values one unit at a time or
2. raising 5th bow overlap values one unit at a time

Do not change overlaps by more than 3 units because this will cause other problems, such as the rear window hitting the headrests.

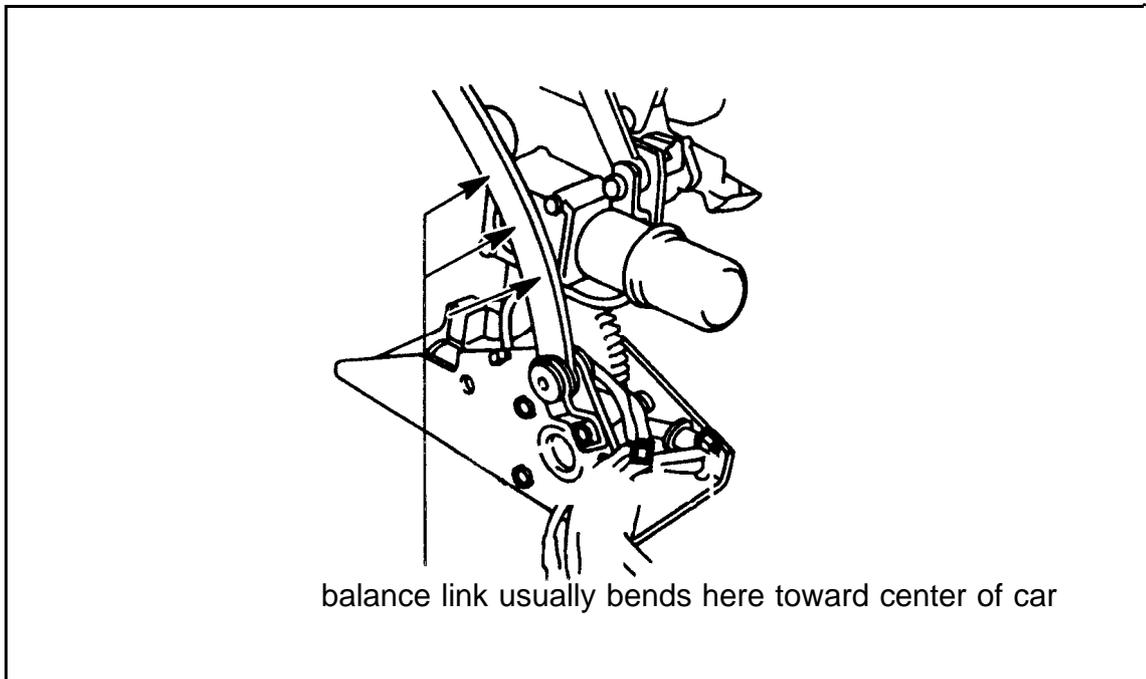
b. 2nd bow catching on fabric?

Perform Customer Satisfaction Campaign 428 if it has not been completed.

The 2nd bow does not flip back, causing it to contact the front side rails. This can bend the balance link. If balance links are bent, they are available as spare parts:

LH 47 67 398, RH 74 97 506

See illustration on following page.



8. Rear window hits rear headrest when lowering top

- Programming problem?

Reprogram top according to PSI 04/97–0758, paying particular attention to overlap values. If you still experience this problem, you can try lowering the 5th bow overlaps one unit at a time until the problem ceases. (Do not lower the 5th bow overlaps by more than 3 units, because this will cause other problems – such as hesitation of the main motors while lowering the top).

9. 5th bow hits Tonneau cover hinges

- a. Programming

Reprogram top according to PSI 04/97–0758. Pay special attention to the measurements used to calculate main motor overlap values.

- b. Tonneau motor drive shaft twisted

If the Tonneau motor drive shaft is twisted, the 5th bow may hit the Tonneau cover hinges. If you think that this situation exists, you may have to remove the u-joint at the end of the shaft to inspect it for a twist. If the shaft is twisted, you must replace the Tonneau motor assembly and determine the cause of the twist. A twisted shaft is usually due to misadjusted Tonneau cover latches. Make sure the latches are carefully adjusted according to **Service Manual 8:5**, pages 127 & 128. Make sure to check the Tonneau latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.

See illustration in Step 4 of this guide.

**10. First bow hits Tonneau cover when lowering top**

a. Programming

Reprogram top according to PSI 04/97-0758. Pay special attention to the Tonneau motor high limit,

b. Tonneau motor drive shaft twisted?

If the Tonneau motor drive shaft is twisted, the 5th bow may hit the Tonneau cover hinges. If you think that this situation exists, you may have to remove the u-joint at the end of the shaft to inspect it for a twist. If the shaft is twisted, you must replace the Tonneau motor assembly and determine the cause of the twist. A twisted shaft is usually due to misadjusted Tonneau cover latches. Make sure the latches are carefully adjusted according to Service Manual 8:5, pages 127 & 128. Make sure to check the Tonneau latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.

c. Bent Tonneau cover hinges?

The Tonneau cover may not open far enough because the Tonneau hinges are bent.

Note that this condition is not very common. If you have determined that the Tonneau cover hinges are actually bent, you must replace the hinges. See Service Manual 8:5 Cabriolet, pages 218-219.

You must also determine the cause of the bent hinges. Tonneau hinges could bend due to incorrect Tonneau latch adjustment. See the illustration in Step #4 of this guide.



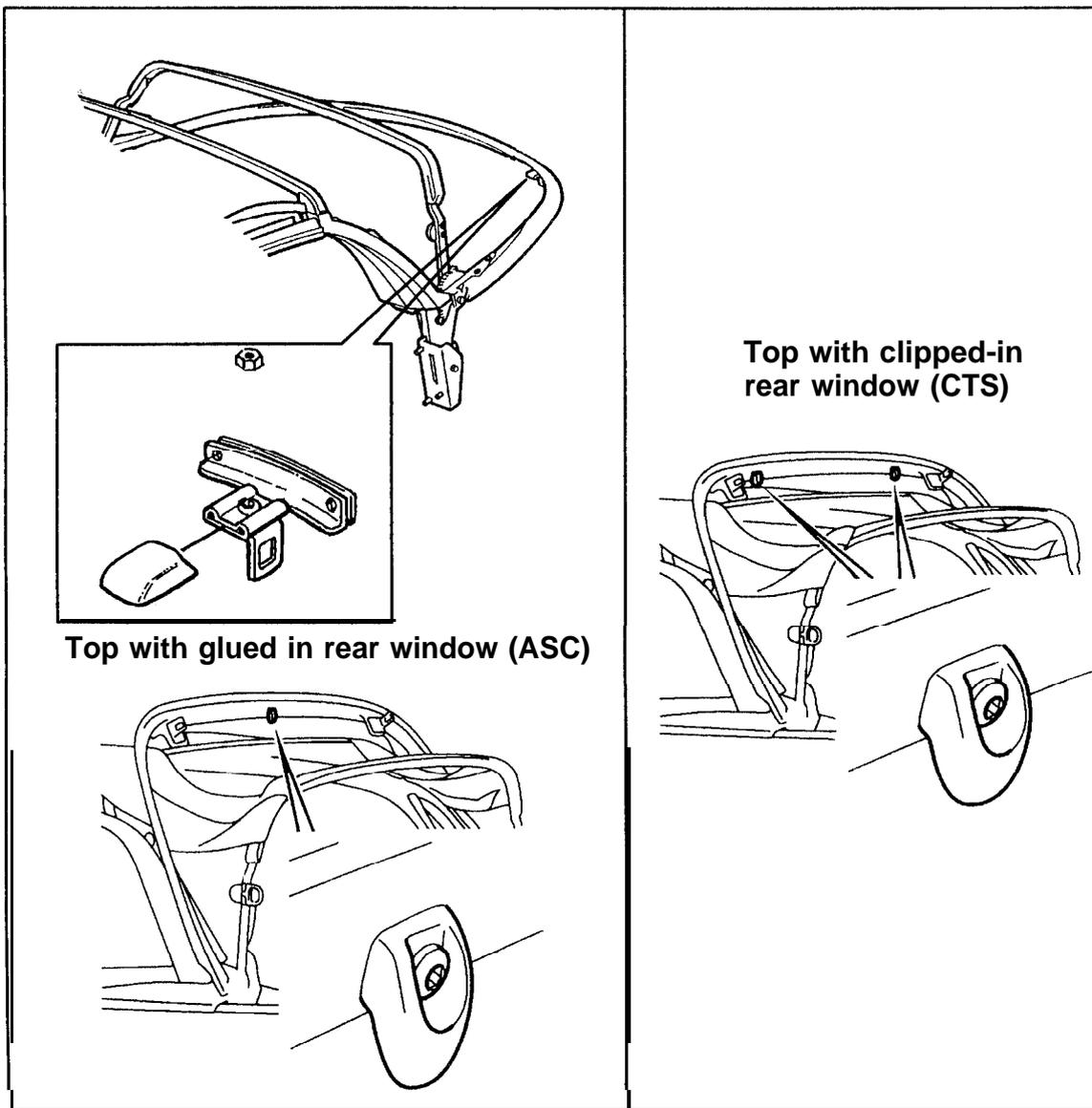
11. ‘Snapping’ noise from rear as top is lowered into boot

- Broken or missing stops on rear window?

The rear window may be catching on the 5th bow latch hooks as the top is being lowered. There are 3 different designs of “rear window stops” which have been used. ANY ONE OF THESE 3 STYLES IS ACCEPTABLE.

If you are working on a Convertible which has none of these, install covers on 5th bow latches, P/N 45 59 431 LH, 45 59 456 RH.

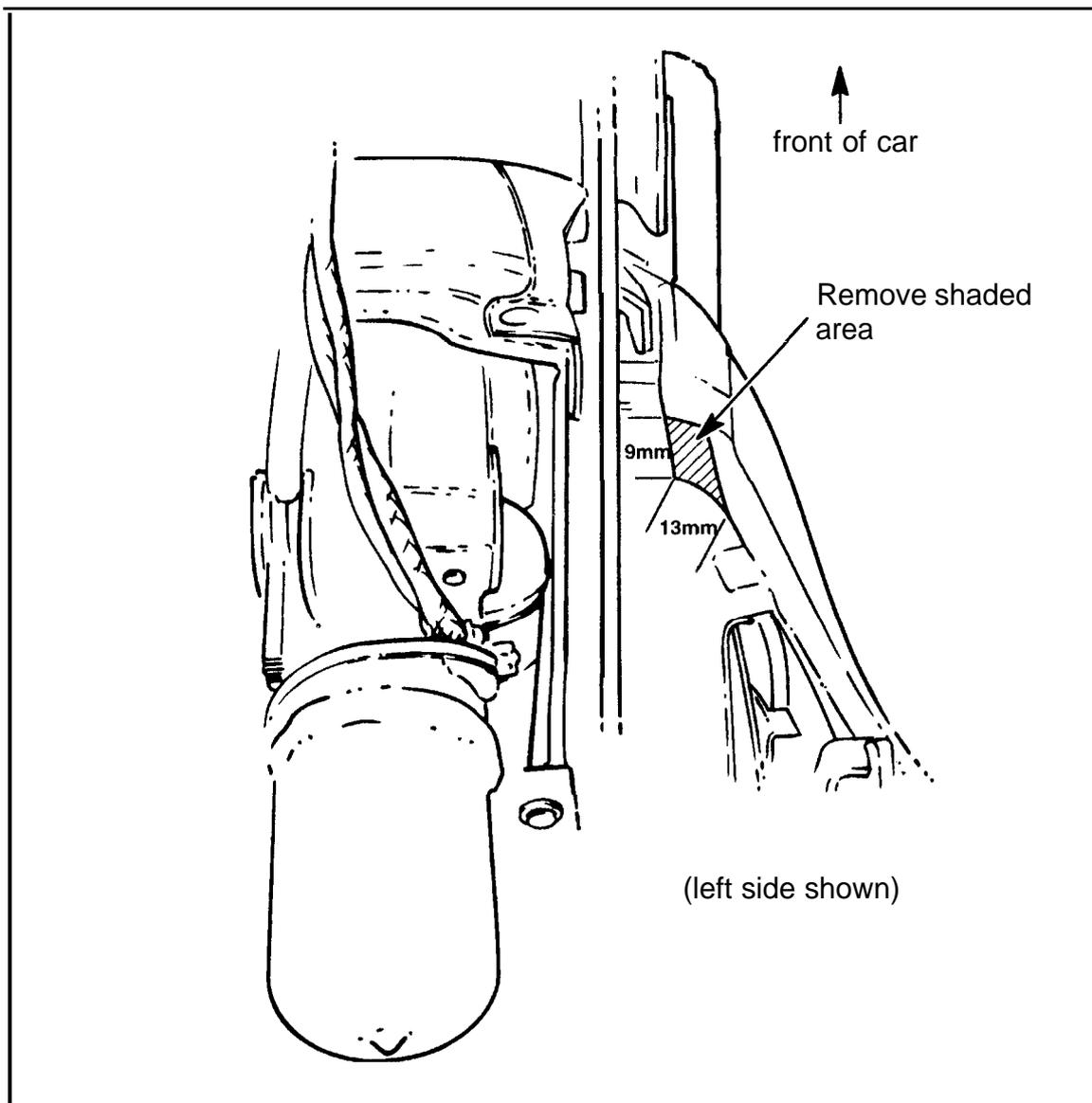
See PSI 04/97-0753 Subject #9 for further details. Check to be sure that all of the steps in this PSI have been performed.





12. Top gets caught on interior trim panel on way down

- Early interior trim panel not cut at rear edge?
Cut panel – see illustration.





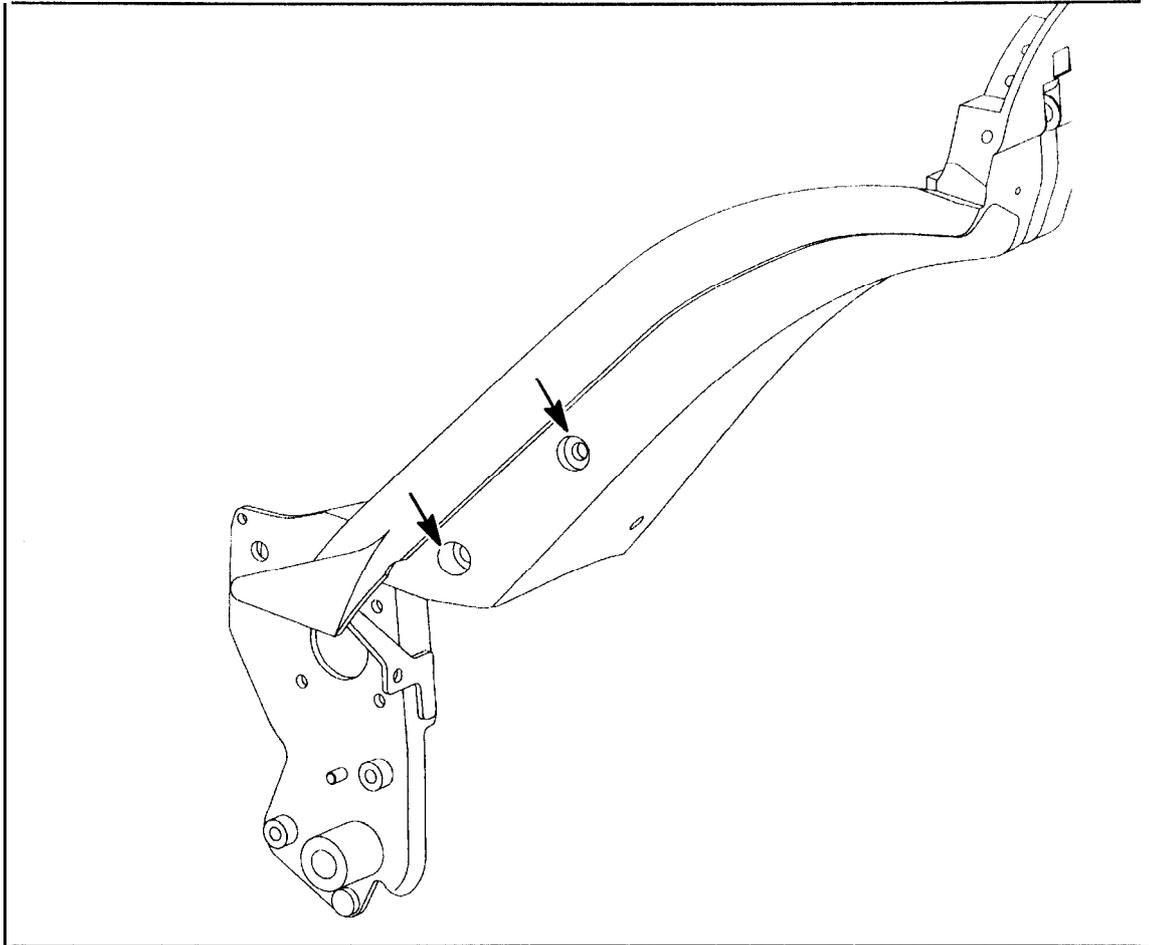
13. Top won't park low enough

- a. Main motor low limit not programmed correctly?

Reprogram according to PSI 04/97-0758

- b. Side rail screws loose?

Tighten screws as per Customer Satisfaction Campaign 428, item E, page 9 as well as the two noted in the illustration below.



- c. Side rail lying on main motor – balance link bent?

Possible bent linkage – order a new balance link. These balance links are now available as spare parts:

LH 47 67 398, RH 74 97 506

Perform Customer Satisfaction Campaign 428 if it has not been completed.



- d. "B-pillar" hinge hitting main motors when top is lowered?
 - 1. Determine which side is causing the problem
 - 2. Remove the three 13mm nuts securing the top stack to the chassis
 - 3. Raise the top assembly out of the boot slightly on one side. Support it with a piece of wood. Be careful of sharp edges – don't damage the boot liner.
 - 4. Loosen four main motor mounting bolts, rotate motor housing slightly forward.
 - 5. Reassemble.

14. Tonneau cover does not close all the way

- a, Top not down all the way?
 - See #13 above.
- b. Tonneau latches out of adjustment?
 - Adjust Tonneau latches – see Service Manual 8:5, pages 127 & 128. See illustration in Step 4 of this guide.
- c. Tonneau motor drive shaft twisted?
 - If the Tonneau motor drive shaft is twisted slightly, the latches may close before the Tonneau cover is completely closed. If you think that this situation exists, you may have to remove the u-joint at the end of the shaft to inspect it for a twist. If the shaft is twisted, you must replace the Tonneau motor assembly and determine the cause of the twist. A twisted shaft is usually due to misadjusted Tonneau cover latches. Make sure the latches are carefully adjusted according to Service Manual 8:5, pages 127 & 128. Make sure to check the Tonneau latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.

15. SID does not beep when top is fully lowered

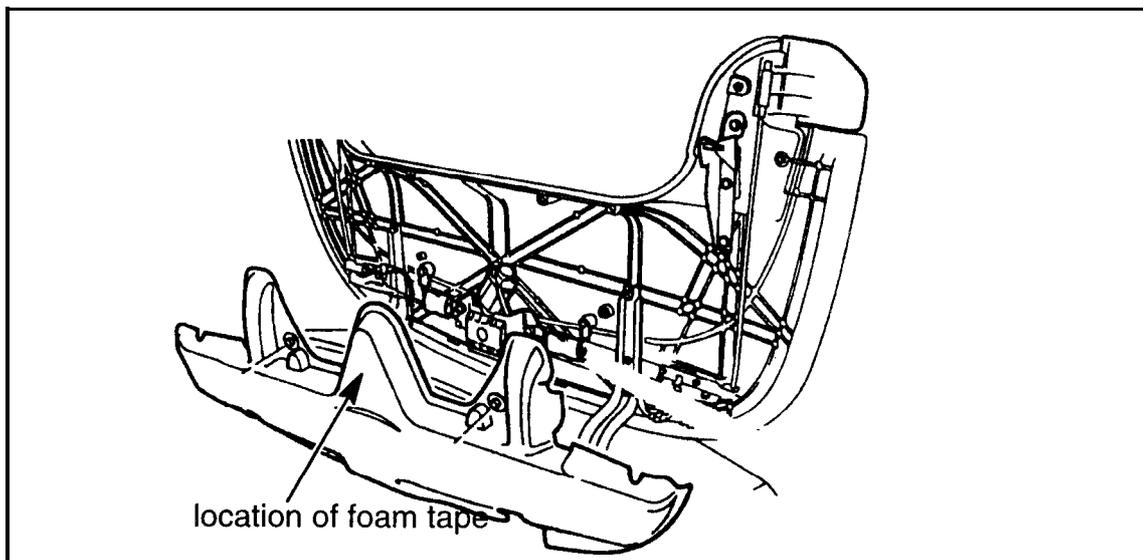
- a. SID incorrectly programmed?
 - Program SID for "hood".
 - Refer to Service Manual 3:5 Electrical System, SID, page 43 for programming procedure.
- b. Tonneau cover latch microswitches not closing properly?
 - Read switches with Tech 2. Adjust or replace as necessary.



16. First bow has white mark near “grab handle”

- When top is fully lowered, first bow rubs on 5th bow latch motor cover while driving

Install foam tape on underside of Tonneau cover. See illustration.



17. Tonneau cover catches going up – “snaps” when opening

- Tonneau cover latch misadjusted?

Adjust Tonneau latches according to Service Manual 8:5 Cabriolet, pages 127 & 128. Make sure to check the Tonneau latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.

See illustration in Step 4 of this guide.

Check Tonneau cover hinges for straightness. Check cover motor engagement. These may not be the cause but rather the result from the latch being out of adjustment.

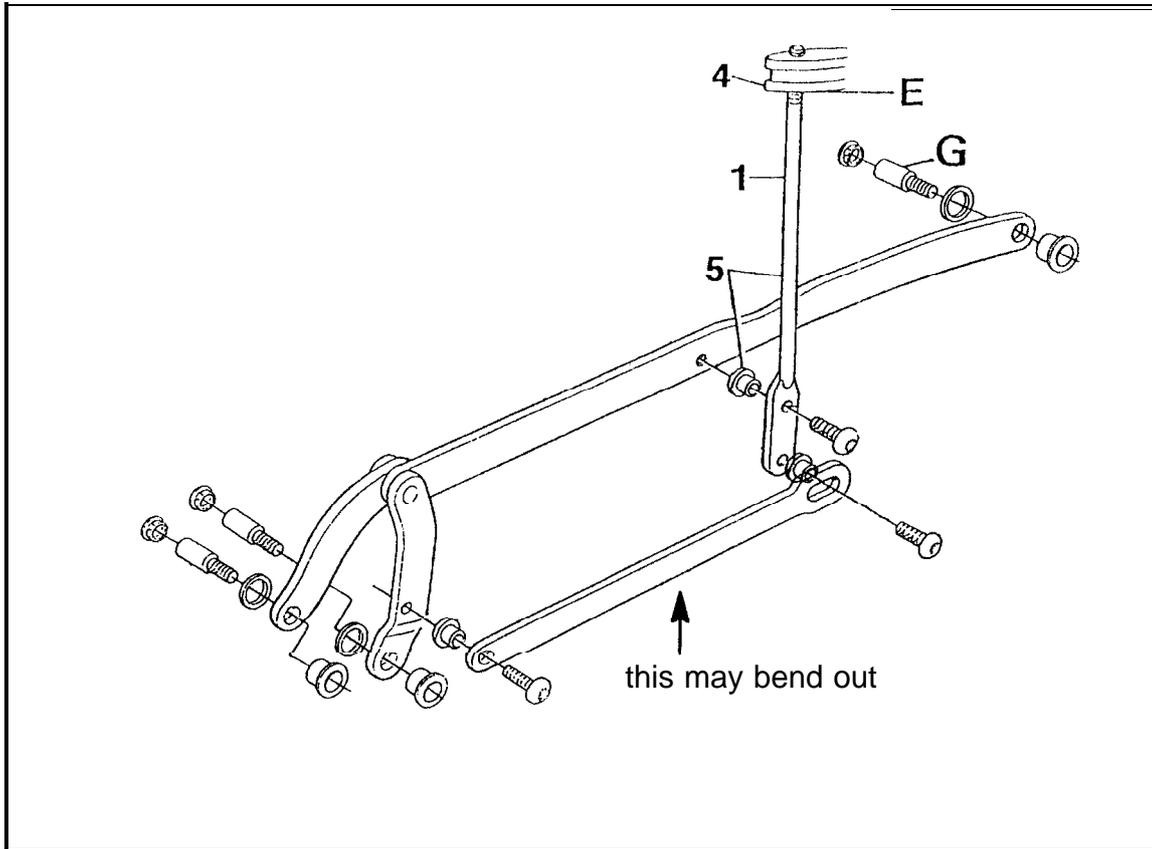


18. Top stops or hesitates when raising the top

- 2nd bow bent? Flat steel piece on the side of the drive link bent (bends out)?

Open the top so that the front side rail is in a near vertical position. Note the angle of the 2nd bow flipper rod and compare it to the angle of the flipper rod on the other side of the car. If the bow is twisted, there will be an obvious difference in the angles of the rods.

Straighten or replace 2nd bow, and straighten or replace 2nd bow drive link.



**19. Grinding, ticking when raising top**

- Tonneau motor not fully engaged?

Replace Tonneau motor assembly. Recheck cable adjustment. See pages 22-227 of Service Manual 8:5 and also Operational Problem #3 above for additional illustration.

20. Top does not go up (rise) evenly – one side rises quicker than the other

- Weak main motor?

Replace faulty motor and reprogram top. See page 222 of Service Manual 8:5 Cabriolet.

21. First bow slams header when raising top

- a. Top stops misadjusted?

Adjust top stops. See page 130 of Service Manual 8:5 Cabriolet. Reprogram top.

If problem persists, when calculating main motor high limit on Line A, subtract 4 units rather than 3.

- b. Shim adjustment?

Remove shims (if present) to move top stack forward. Add shims to move top stack rearward.

- c. Loose screws

See Step E in Customer Satisfaction Campaign 428, PSI 04/97–0754.

22. 1st bow header pins do not reach guide holes in header

- a. Top stops misadjusted?

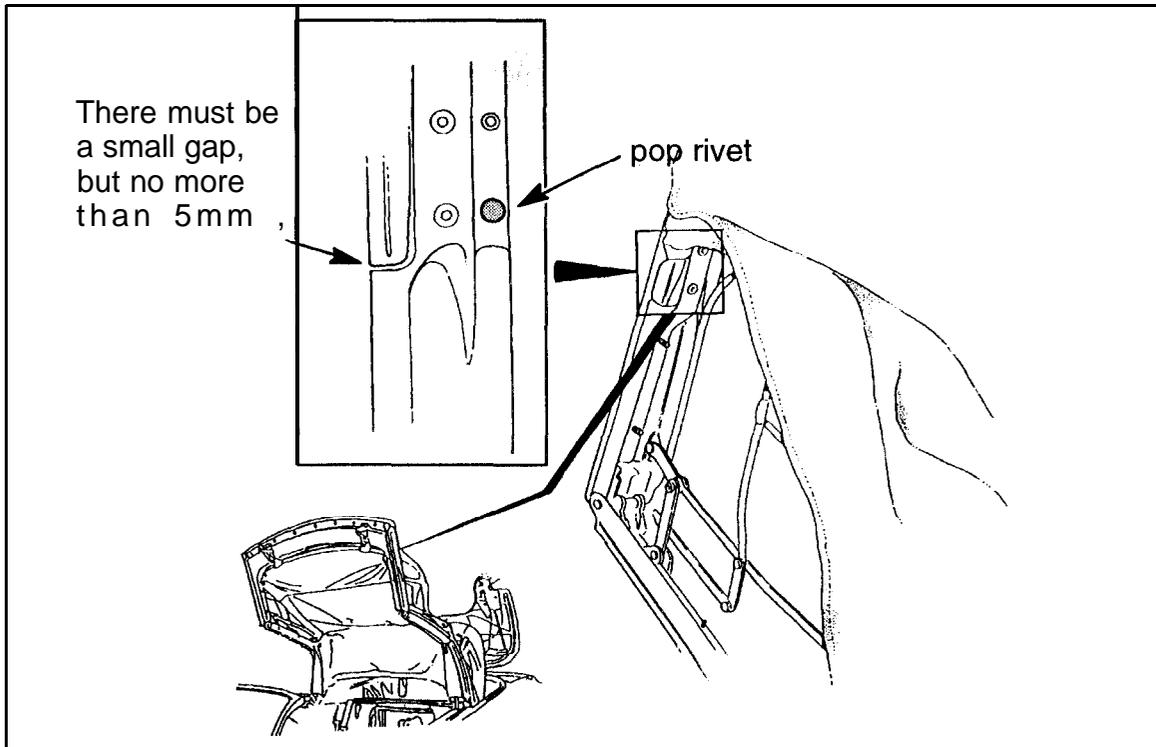
Adjust top stops. See page 130 of Service Manual 8:5 Cabriolet. Reprogram top.

- b. Shim adjustment?

Remove shims (if present) to move top stack forward. Add shims to move top stack rearward.



c. Does first bow need to be moved forward?



1. Partially lower the top
2. Remove the front side rail seals on both sides
3. Remove three bolts and pop rivet (one side at a time)
4. Elongate the holes in the side rail 3–4mm
5. Replace bolts
6. Repeat on other side
7. Adjust first bow so that header pins properly enter holes

23. 1st bow comes down on header crooked, straightens as 5th bow /atches

- Top out of adjustment?
See adjustments.

24. Tonneau cover “access flaps” don’t open (raise) when raising top – flaps may be broken off

- 5th bow latch motor jammed with latches closed or inoperative?

If the car has the “older” design 5th bow latch motor, replace 5th bow latch motor. See MI 81 I-I 758.

Use Tech 2 to “Activate/5th Bow Latch Motor”. If motor does not operate correctly, perform electrical tests -there may be wiring fault.

**25. Tonneau cover slams closed**

- a. Tonneau cover catches on fabric when closing?

Install rivets as per Customer Satisfaction Campaign 428, item F, page 11. Remove any stitching previously installed on the elastic straps per earlier PSI 05/95-0572 .

- b. Tonneau cover latches not aligned properly?

Readjust latches according to Service Manual 8:5, pages 127 & 128 and re-program.

See illustration in Step 4 of this guide,

- c. Tonneau motor drive shaft twisted?

If the Tonneau motor drive shaft is twisted, the Tonneau cover may slam closed. If you think that this situation exists you may have to remove the u-joint at the end of the shaft to inspect it for a twist. If the shaft is twisted, you must replace the Tonneau motor assembly and determine the cause of the twist. A twisted shaft is usually due to misadjusted Tonneau cover latches. Make sure the latches are carefully adjusted according to Service Manual 8:5, pages 127 & 128. Make sure to check the Tonneau latch adjustment with top fully raised, because the 5th bow pushes the Tonneau cover down when the top is fully raised.

**26. 5th bow won't close properly**

- a. 5th bow latch motor jammed or inoperative?

If the car has the "older" design 5th bow latch motor, replace 5th bow latch motor. See MI 811-1758.

Use Tech 2 to "Activate&h Bow Latch Motor". If motor does not operate correctly, perform electrical tests. There may be a wiring fault.

- b. Misaligned strikers?

Adjust strikers.

- c. Incorrect programming?

Reprogram top according to PSI 04/97-0758.

27. SID does not beep when top is fully raised

- a. SID incorrectly programmed?

Program SID for "hood".

See Service Manual 3:5 Electrical system, SID for programming procedure.

- b. 5th bow latch microswitches or Tonneau cover latch microswitches not closing properly?

"Check Soft Top" message may appear on SID if one Tonneau switch is open and the other is closed.

Read switches with Tech 2. Adjust or replace as necessary.



Squeaks & Rattles

1. *Clicking/snapping noise from the 1st bow header*

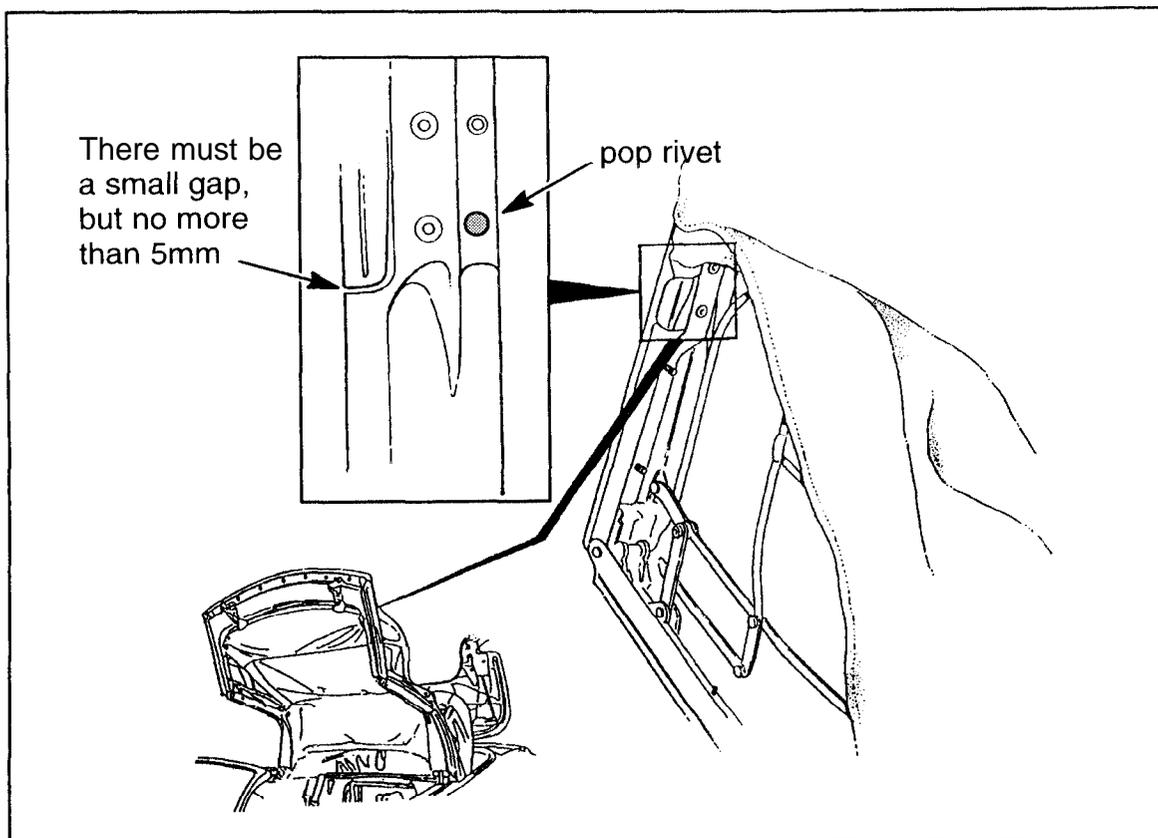
(Note: noise comes from the corner where the header meets the side rail.
The noise disappears with the latch released.)

- Loose bolts at front side rail?

Remove bolts, Loctite and retighten 3 **bolts**.

Tighten bolts as per Customer Satisfaction Campaign 428, item D, page 8.

If these screws have been loose for some time, the pop rivet may have worked loose. Drill & reinstall a new pop rivet.



2. *Rattle from "pull down" handle at center of 1st bow*

- Loose fit between handle and opening in first bow?

Remove handle. Grind off the small ribs at the outer edges of the handle.
Wrap outside of handle with felt tape, P/N 96 98 846.

3. *Rattle from Tonneau cover with top raised and 5th bow latched*

- Welting at lower edge of 5th bow fabric rubbing on Tonneau?

Gently tap on the edge of the 5th bow to re-form the metal surface of the 5th bow. The rubber seal, not the fabric, should contact the Tonneau cover.

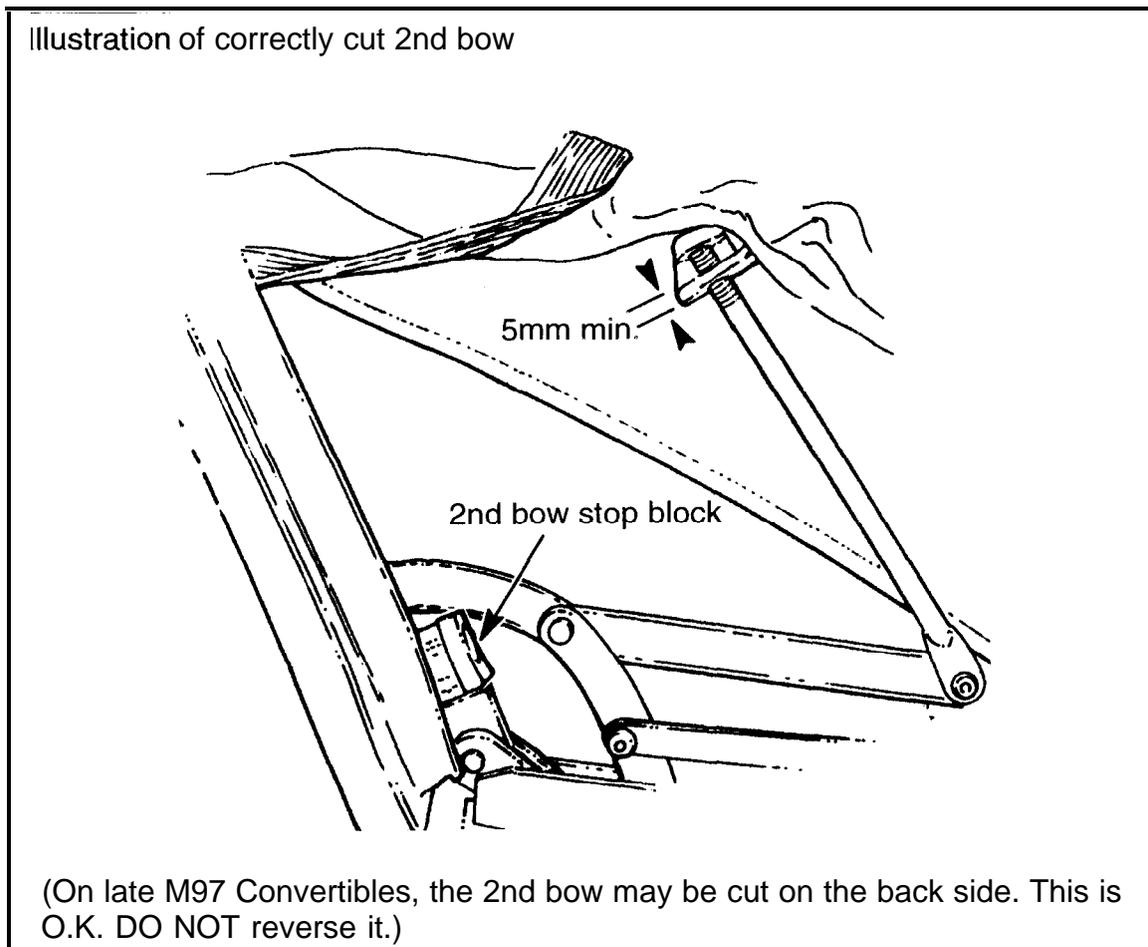


4. Rattle at 2nd bow (above driver's or passenger's head)

a. Incorrect cut at ends of 2nd bow?

The end of the 2nd bow must have a flat surface at least 5mm wide which rests on the stop block when the top is fully raised. If there is less than 5mm, replace 2nd bow.

NOTE: If 2nd bow is not cut, DO NOT cut it.



b. Round rubber plug not inserted in 2nd bow rest (square rubber stop) on the 1st rail?

Install rubber plug, P/N 46 96 175. See PSI 04/97-0753, Subject 4, figure C. Make sure all modifications outlined in this PSI have been performed.

c. 2nd bow drive link "flipper rod" rattling?

1. Remove flipper rod (count the number of threads)
2. Add lock nut
3. Replace flipper rod and tighten lock nut against 2nd bow.



SAAB

900 Convertible Top Troubleshooting Guide

5. Rattle from C-pillar area while driving

- Bolts beneath 2nd side rail loose?

Remove bolts, Loctite and retighten 2 bolts each side. Tighten bolts as per Customer Satisfaction Campaign item E, page 9.

6. Rattle in rear side trim area by rear speaker (only 1995 VIN up to S7003000)

- Seat belt pretensioner tube contacting sheet metal?

Wrap pretensioner in felt tape.

7. Creaking or rattling noise when raising front windows

- Have updated window rollers been installed? Are they adequately lubricated?

See Customer Satisfaction Campaign 428, Item G. Install updated rollers and make sure they are adequately lubed.

Note modified procedure: it is easier to install the modified rollers if you remove the “rear guide channel” for each front window. You can leave the window in place. Lower it slightly and install the modified rollers without removing the glass from the door. Also: with the guide channel removed, it is easier to properly lubricate the entire channel. Make sure that the entire INSIDE surface of the channel is lubricated, and be careful that you DO NOT get any lubricant on the OUTSIDE of the channel as it will transfer to the window glass.

8. Creaking or rattling noise while driving down the road

- Same as #7 above.

9. Squeaking noise from rear when driving with the top raised

- The most forward rib under access flaps may be rubbing on the gearbox of the 5th bow motor?

Recheck Tonneau cover latch adjustment. If adjusted properly, grind away plastic on the forward rib.

**Water Leaks**

(Note: Determine whether water comes in while driving only, or while Sitting still)

1. Leaks from header while driving

- a. Water coming in between header and front side rail seal?

Replace windshield header seal and side rail seals as per Water Leak PSI 04/97-0755.

- b. Water coming in under header seal (only while driving)?

Seal header seal as per Water leaks PSI 04/97-0755.

2. Water leaks at outside rear view mirror "bird beak" seal

- a. Seal deformed or damaged?

Replace seal as per PSI 04/97-0760. Do not try to repair if rolled over or damaged.

Install new style seal, P/N 46 97 769 LH, P/N 46 97 777 RH. Drill door to install rivet, P/N 43 45 872. Use a drill stop when drilling (hole size = 5/16").

- b. Sheet metal not straight (vertical "bird's beak" surface)?

Straighten sheet metal edge using tool, P/N J42661.

3. Leaks at A-pillar and B-pillar (side windows wet inside)

- Seals improperly adjusted/deformed?

See Water Leaks PSI 04/97-0755. Replace as needed.

**SID Messages**

Additional information regarding SID messages can be found in Service Manual 8:5 Cabriolet, page 40.

1. “Check Soft Top” while top is operating, top works O.K.**a. Check for DTC’s**

Follow appropriate fault tracing procedure in Service Manual 8:5 Cabriolet.

b. Tonneau latch microswitches not closing at the same time?

Monitor Tonneau latch microswitches with Tech 2.

NOTE: In Tech 2 software version 14.000, the Tonneau latch micro-switch positions are REVERSED.

Adjust striker and latch as per Service Manual 8:5 Cabriolet, pages 127 & 128.

2. “Check Latches”**a. Are the header latches closed?**

If the header latches are not properly closed, SID will display the “Check Latches” message as soon as TSAS receives a wheel speed signal.

Monitor the header switches with Tech 2. Make sure both switches are closed when the 1 st bow is latched, and open when the 1 st bow is unlatched.

b. Are the 5th bow latches closed?

If the 5th bow latches are not properly closed, SID will display the “Check Latches” message as soon as TSAS receives a wheel speed signal.

3. “Check Trunk”**– Is the hood stowage bag lowered?**

Monitor the trunk bag switches with Tech 2. Make sure both switches are open with the bag lowered.

4. “Close Trunk Lid”**– Is the trunk closed? Is the trunk light switch operating properly?**

Monitor the trunk light switch with Tech 2. Make sure that the trunk light switch is open with the trunk closed, and closed with the trunk open.

**Miscellaneous****1. DTC B1605, top works ok**

- Clear DTC's.

Operate top and recheck for DTC's. If DTC's do not reoccur, ignore this DTC.

(Note that this DTC is frequently a “phantom” code and can be ignored if no operation problems are experienced.)

2. ACC does not switch to manual mode when lowering top

- SID misprogrammed?

Reprogram SID to “hood”.

3. ACC does not switch to automatic mode when raising top

- Stuck/defective header switch?

Replace switch per PSI 04/97–0754. Replace housing if necessary.

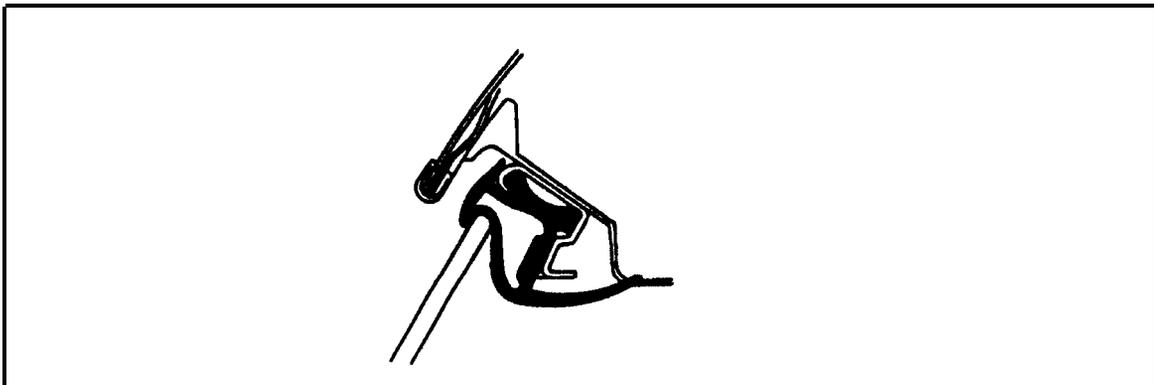
4. No Convertible SID messages

- SID misprogrammed?

Reprogram SID to “hood”.

5. Side rail seal drooping

- Side rail seal not secured?



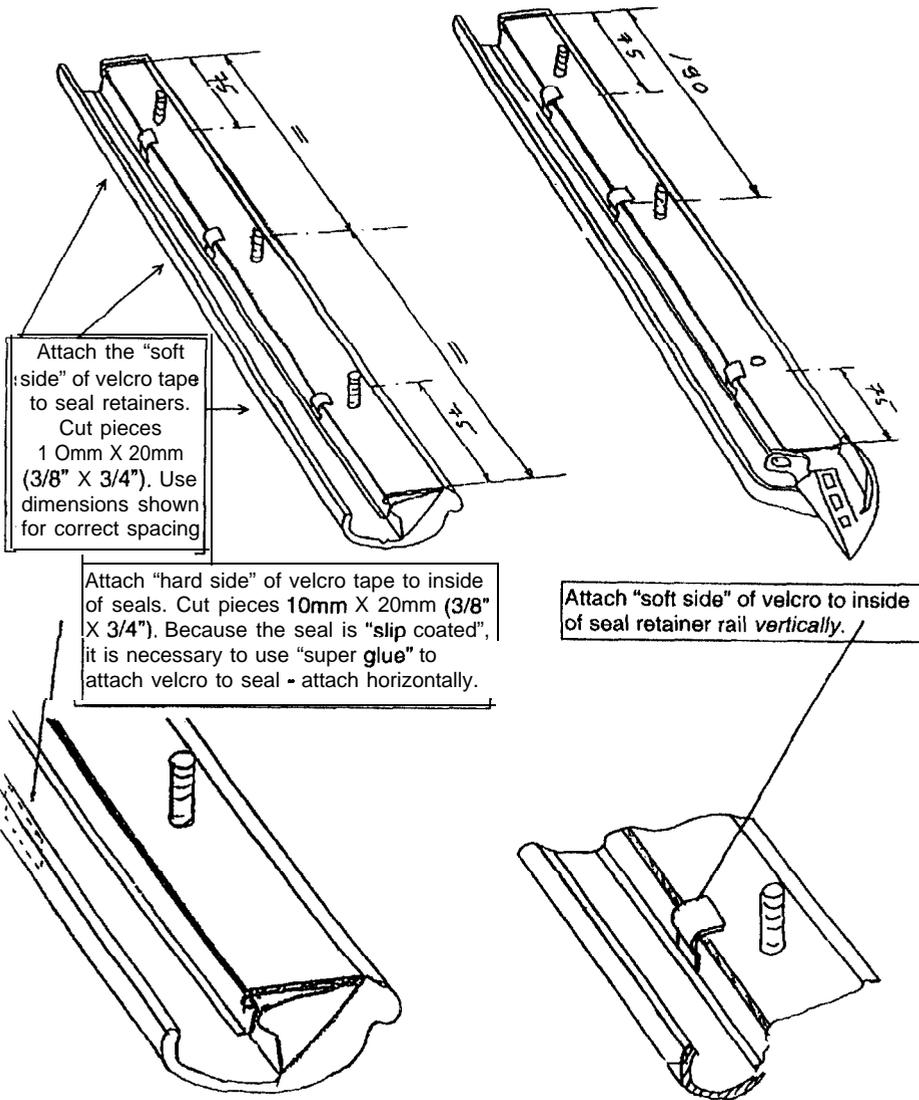


5. Side rail seal drooping continued

Secure seal to seal retainer with Velcro strips inside seal as shown.

CENTER SIDE RAIL SEAL

FRONT SIDE RAIL SEAL



**6. Trunk release button inoperative****a. Incorrect programming?**

If there is a programming problem, the TSAS ECM will not allow remote Operation of the trunk motor because it cannot determine if the trunk lid will collide with the Tonneau cover, The customer usually complains of some other top operation problem at the same time. Reprogramming can correct both problems.

Reprogram top.

b. Check fuse #25.**7. DTC 81309 Potentiometer Fault**

This code can set for a variety of reasons:

a. If a potentiometer cannot reach the programmed “high limit” or “low limit”

Reprogram system according to PSI 04/97–0758. Pay special attention to the high limits and the low limits for each motor/potentiometer.

b. If a microswitch signal does not agree with a potentiometer signal.

Monitor the switches and potentiometers with Tech 2.

c. The position of the potentiometer has reached a value outside of the programmed limit. When this fault occurs, the top operation may stop, but may continue when the switch is released and engaged again.

Use read values to check potentiometer values at the high and low limits of each potentiometer. Check against programmed values. This could be caused by a bad potentiometer or a component that is dimensionally incorrect.



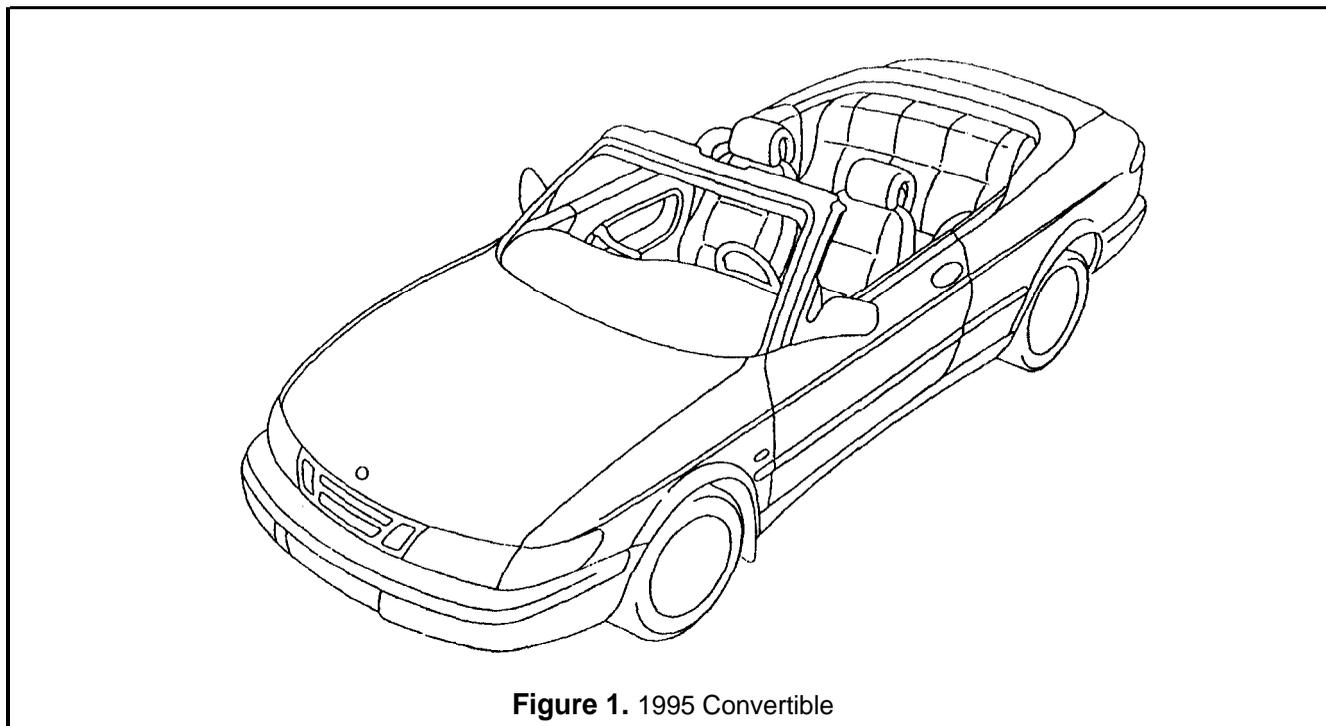
Subject: Improvement to Operation of Top Stack Mechanism

**Application: 1995 900 Convertibles
VIN Serial No. Range: S7000216–S7016595**

CATEGORY	
Body	
SECTION 8	PAGE 148
ISSUE 04/97–0753	CODE 812

Supersedes PSI 03/95–0554

This is a bulletin which outlines provisions to update certain portions of the top stack mechanism on 1995 900 Convertibles. The aim is to improve reliability, guard against water leakage and improve appearance. This bulletin covers 1995 900 Convertibles within VIN Serial No. Range S7000216–S7016595.



Cars Affected:

1995 900 Convertibles within the following VIN Serial No. Ranges: S7000216–S7016595

Parts:

■ See individual subjects and parts information on page 23.

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PSI 04/97-0753

Subject #1: Replacing Microswitch at Windshield Frame
Application: VIN Serial Nos. S7000216-S7016595

See Page 3 of PSI 04/97-0754: Customer Satisfaction Campaign 428 (Section 8, p.135).

Subject #2: Replacing Windshield Frame Weatherseal
Application: VIN Serial Nos. S7000236 - S7000689 and
S7000839 - S7000871

See Page 2 of PSI 04/97-0755: Addressing Customer Complaints of Water Leaks (Section 8, p. 136).

Subject #3: Replacing Side Trim Molding as Needed
Application: All 1995 900 Convertibles

If side trim molding is distorted, or a customer complaint is registered regarding these moldings, change the left- and right-hand side trim moldings as needed, following the directions below.

Parts:

LH side trim molding	45 58 219
RH side trim molding	45 58 227

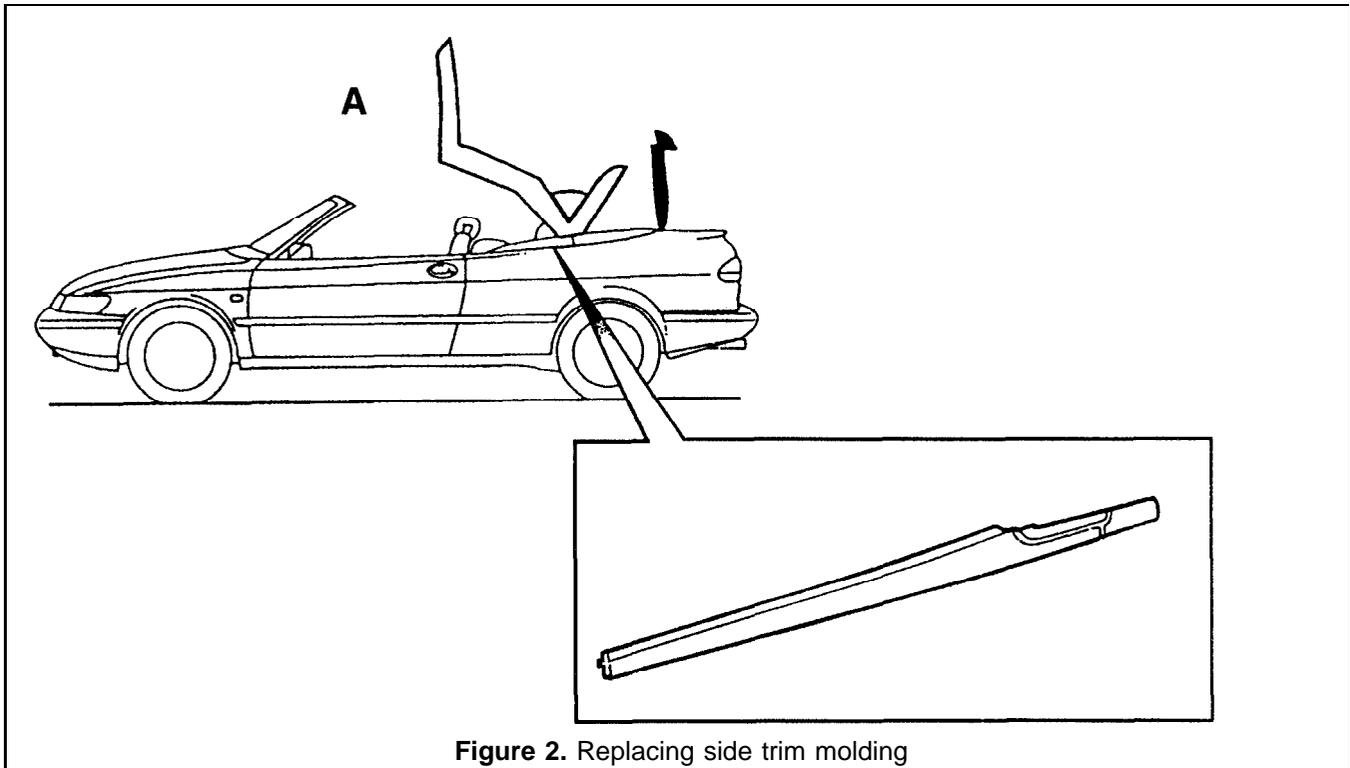


Figure 2. Replacing side trim molding

1. Operate the top using the "ROOF" switch until it is halfway raised and the Tonneau cover is fully upright. All windows should be lowered. See Figure 2.A.
2. Remove the existing side trim molding by pulling it upwards.
The clip at the trailing end should remain in place on the metal flange. If the metal extruded section is loose it should be scrapped.
NOTE: If protective tape/foam is not fitted on the vertical sheet metal edge under old molding, fit a 3/4" piece of duct tape to protect the sheet metal surfaces when fitting the new molding.
3. Pit the new trim molding in place with new clips. The locating guide at the trailing edge should be fitted in the Tonneau cover seal.

Subject #4: Improving Operation of 2nd Bow.
Application: VIN Serial Nos. S7000216–S7016129

Improving the operation of 2nd Bow. Also see Step C of Customer Satisfaction Campaign 420.

Parts:

Rubber plug (2)

46 96 175

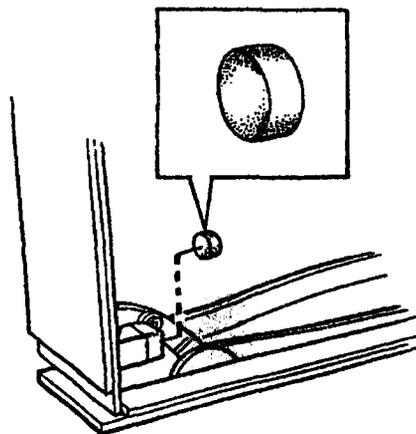


Figure 3. Gluing rubber plug

1. Glue the rubber plug, P/N 46 96 175, to the head of the pop rivet securing the second bow's stop. See Figure 3.C.

**Subject #5: Fitting Protective Plate by 5th Bow Motor,
RH side**

Application: VIN Serial Nos. S7000216-S7012964

Fit a protective plate by the 5th bow motor on the right hand side to eliminate the risk of the toothed segment damaging the wiring connected to the 5th bow's potentiometer.

Parts:

Protective plate	45 59 951
Loctite Thread-Locking Adhesive	
Screw (if necessary)	45 55 710

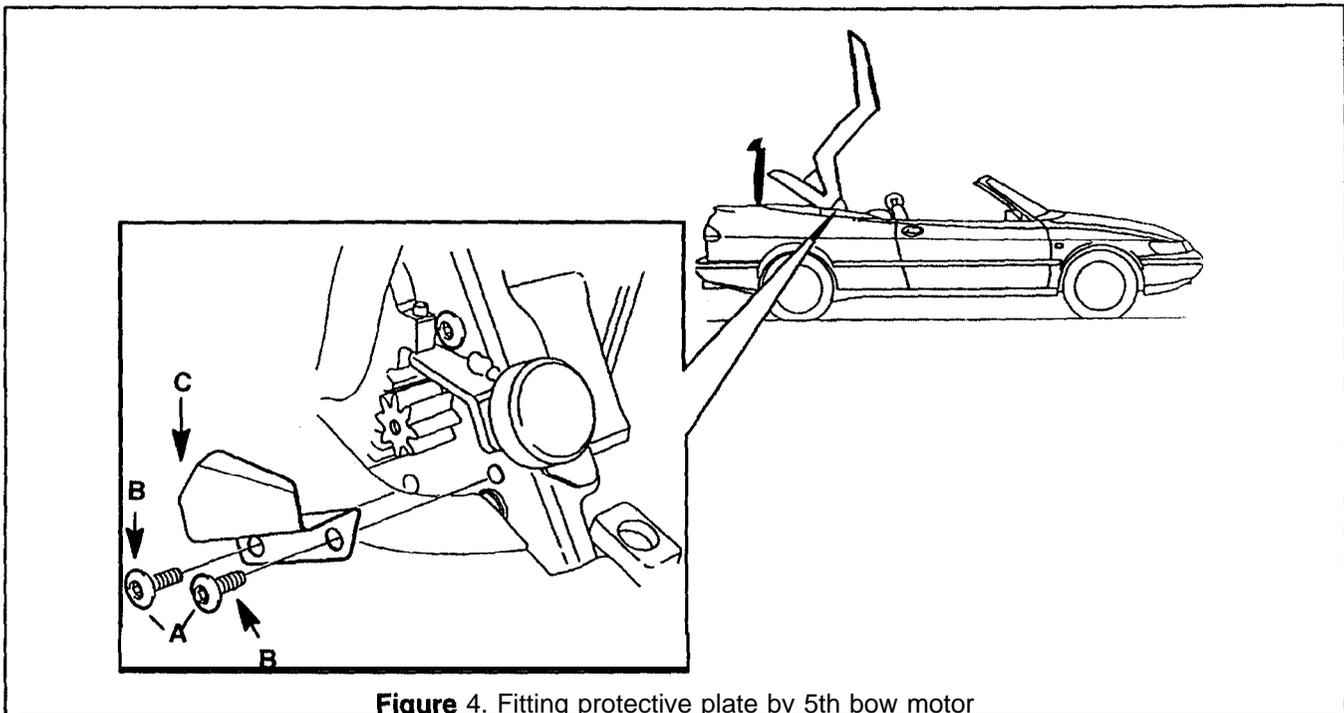


Figure 4. Fitting protective plate by 5th bow motor

1. Operate the top using the "ROOF" switch until it is halfway raised and the Tonneau cover is fully upright. All windows should be lowered.
2. Remove the two lower screws securing the 5th bow motor. See Figure 4.A.
3. Apply Loctite to the screw threads. See Figure 4.6.
4. Fit the protective plate in position and tighten the screws. See Figure 4.C.

Tightening torque: 10Nm (84-96in.lbs.).

Subject #6: Removing Loose Front Rail Cover

Application: VIN Serial Nos. S7000216-S7010000

Checking whether the cover on the front rail is secure

Parts:

Flat black paint

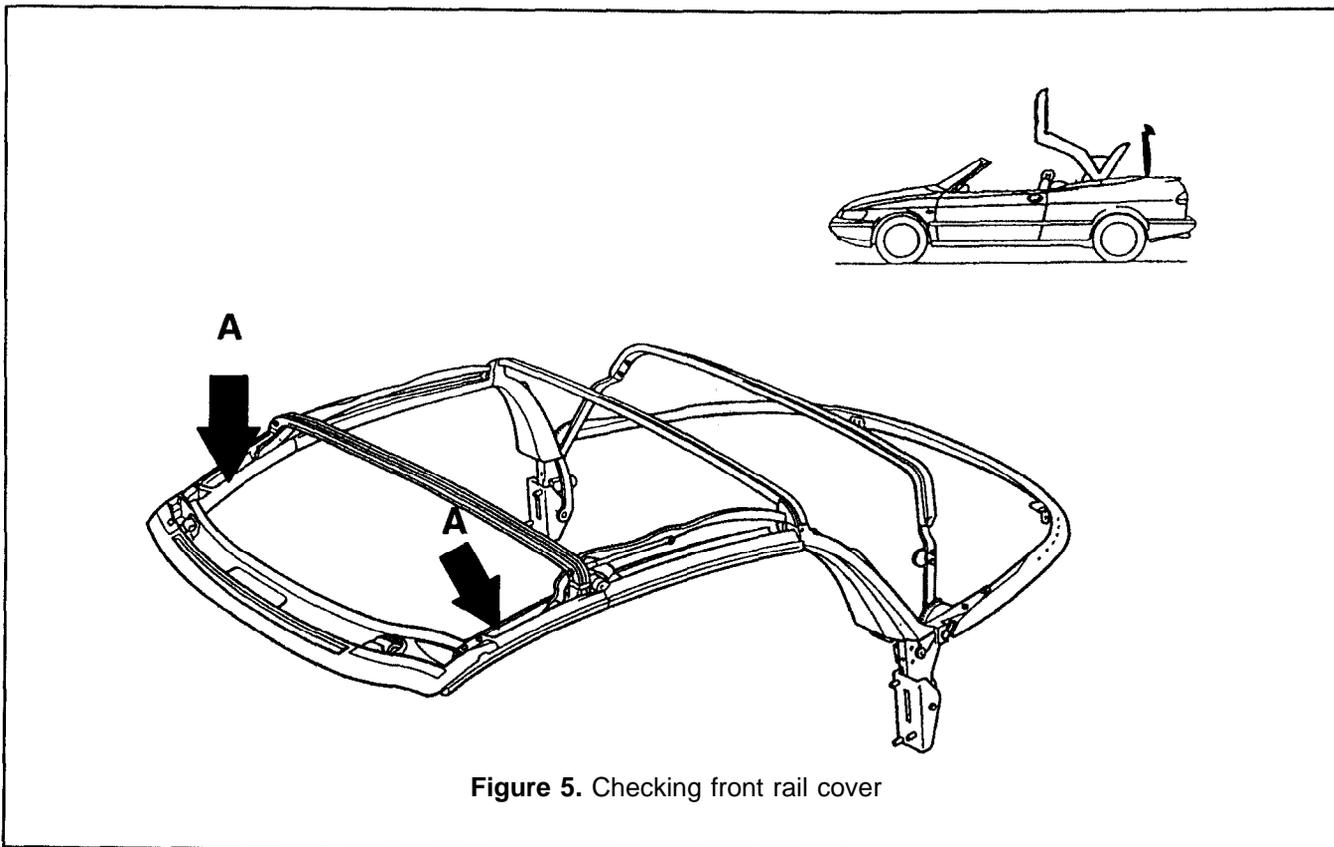


Figure 5. Checking front rail cover

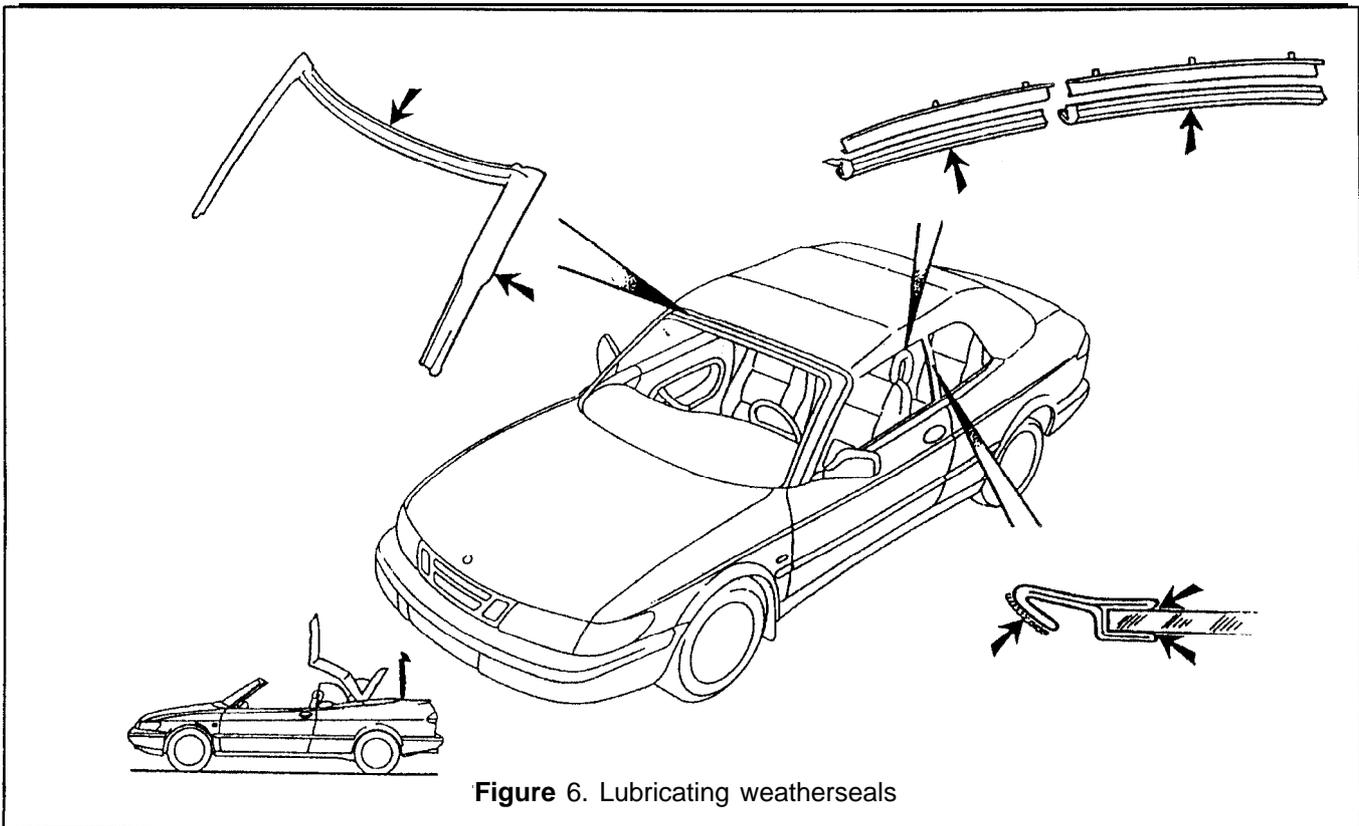
1. Remove any loose front rail covers and touch up with flat black paint as needed. The Factory has determined that these covers are not necessary.

Subject #7: Lubricating Weatherseals
Application: VIN Serial Nos. S7000216-S7002808

Lubricating the weatherseals with GM Lubricant, P/N 3634770 to minimize risk of squeaking and creaking complaints. Lubricate once and let it dry. Lubricate a second time before releasing vehicle to customer.

Parts:

GM Lubricant 3634770: obtain from GM Dealer
(Enough to lubricate approximately 10 cars)



1. Operate the top using the "ROOF" switch until it is halfway raised and the Tonneau cover is fully upright. The side windows should be raised and the door windows lowered.
2. Apply GM Lubricant to the surfaces of the weatherseals in contact with the glass as shown in Figure 6 above. Rub in the lubricant with a cloth and allow it to dry. Reapply the lubricant before releasing the vehicle to your customer.

Subject #8: Checking Wiring Connected to 5th Bow Potentiometer
Application: VIN Serial Nos. S7000216-S7012964

Check the wiring connected to the 5th bow's potentiometer to make certain it is not too taut or too slack. Adjust as necessary.

Parts:

Cable ties (as required)

79 71 880

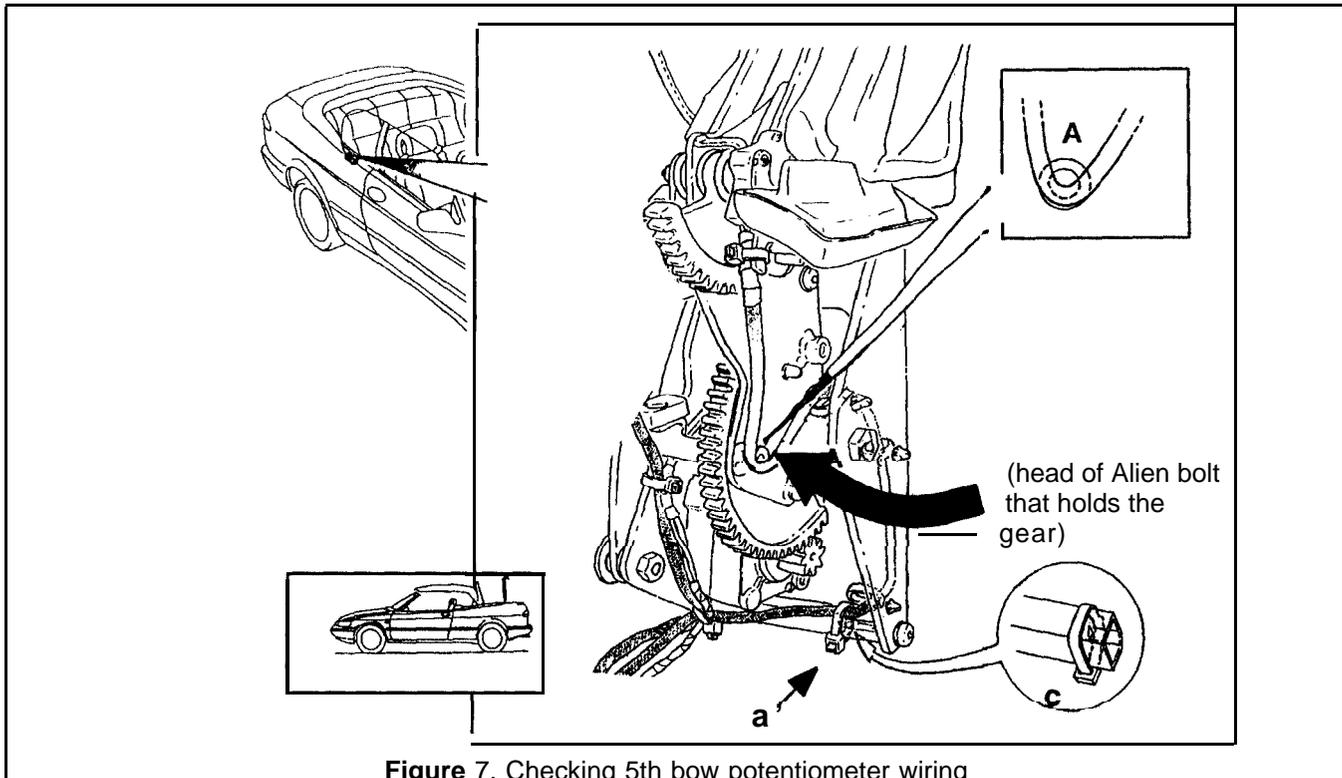


Figure 7. Checking 5th bow potentiometer wiring

1. Operate the top using the 'ROOF' switch until it is in the position shown in Figure 9 above. The top, 5th bow and the Tonneau cover should be fully raised.

IMPORTANT

The 5th bow must be fully raised for the wiring harness to have the correct amount of slack.

2. Hook your finger around the wiring and move it downwards. The wiring should be tensioned so that it is just possible to insert the tip of your finger into the hole (Figure 9.A) in the top mechanism.
3. If necessary, adjust as described below:
 - a. Cut the cable tie. See Figure 9.a.
 - b. Adjust the length of the wiring harness.
 - c. Fasten a new cable tie in place. It should be tightened around the chamfering on the cross-bar so that it cannot slide sideways. See Figure 9.c above.
 - d. Run top up and down to verify that wiring does not bind in gear.

Subject #9: Preventing Risk of Wear of Top Fabric

Application: VIN Serial Nos. S7000216-S7016595

Fit chafing guards over the 5th bow's latch fittings to minimize the risk of wear on the top fabric when the top is down.

Parts:

LH Chafing Guard	45 59 431
RH Chafing Guard	45 59 456

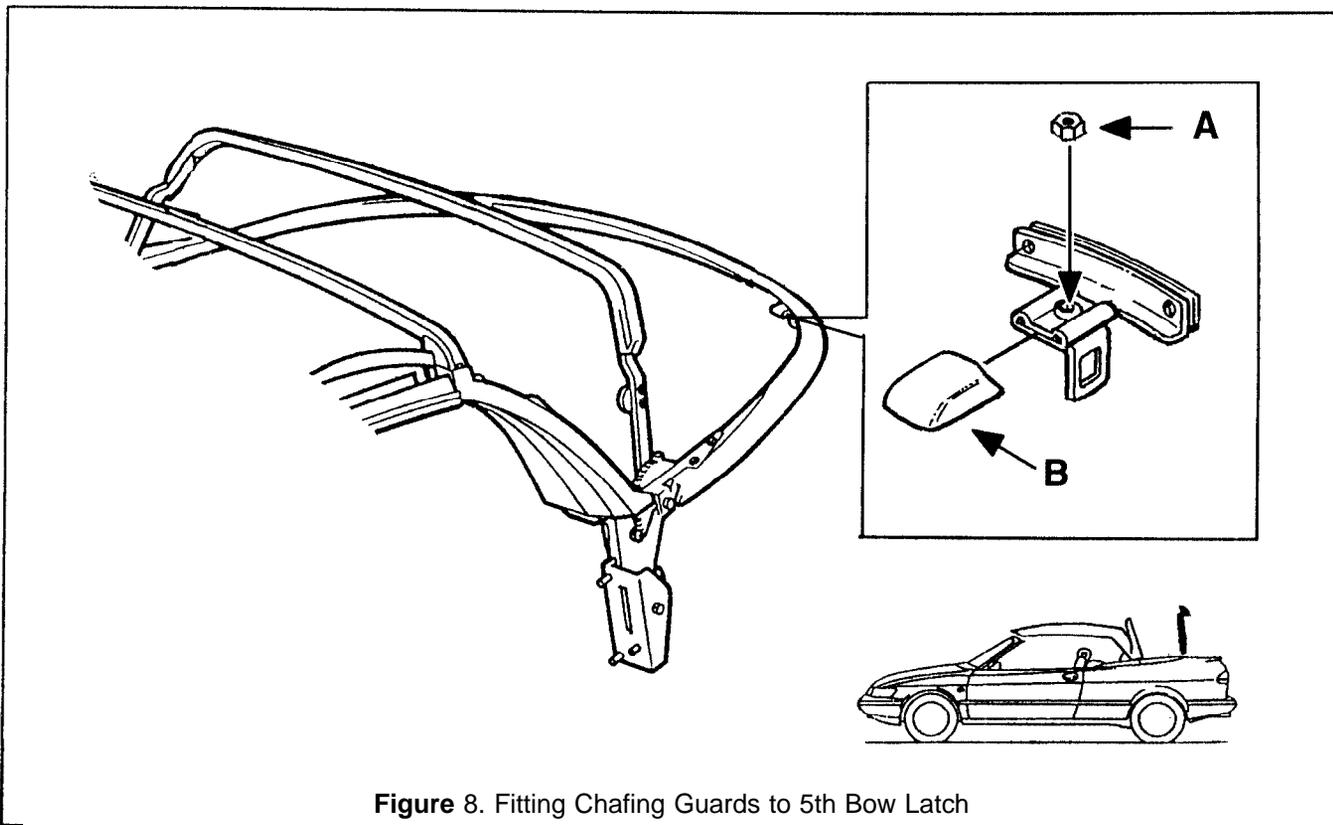


Figure 8. Fitting Chafing Guards to 5th Bow Latch

1. Operate the top using the "ROOF" switch until it is in the position shown above. The top, 5th bow and Tonneau cover should be fully raised.
2. A nut is welded to the top of the latch fitting. On a number of cars there is also an extra loose nut. Where fitted, this nut must be removed. See Figure 8.A..
3. Fit the chafing guard on the latch fitting. Make sure that the grooves in the guard fit on the edges of the latch bracket. See Figure 8.B.

Subject #10: Rewiring 5th Bow Microswitch Circuit

Application: VIN Serial Nos. S7000216–S7013088

To prevent false messages from appearing on SID, connector H10-15 for the 5th bow microswitch must be rewired.

Parts:

Female connecting sleeve	91 20 957
Male connecting pin	41 15077
Cable tie	79 71 880
Connecting pin removal tool	85 80 110*

*Issued as M94 Essential tool. Order from Kent-Moore directly at 1-800-345-2233 if necessary.

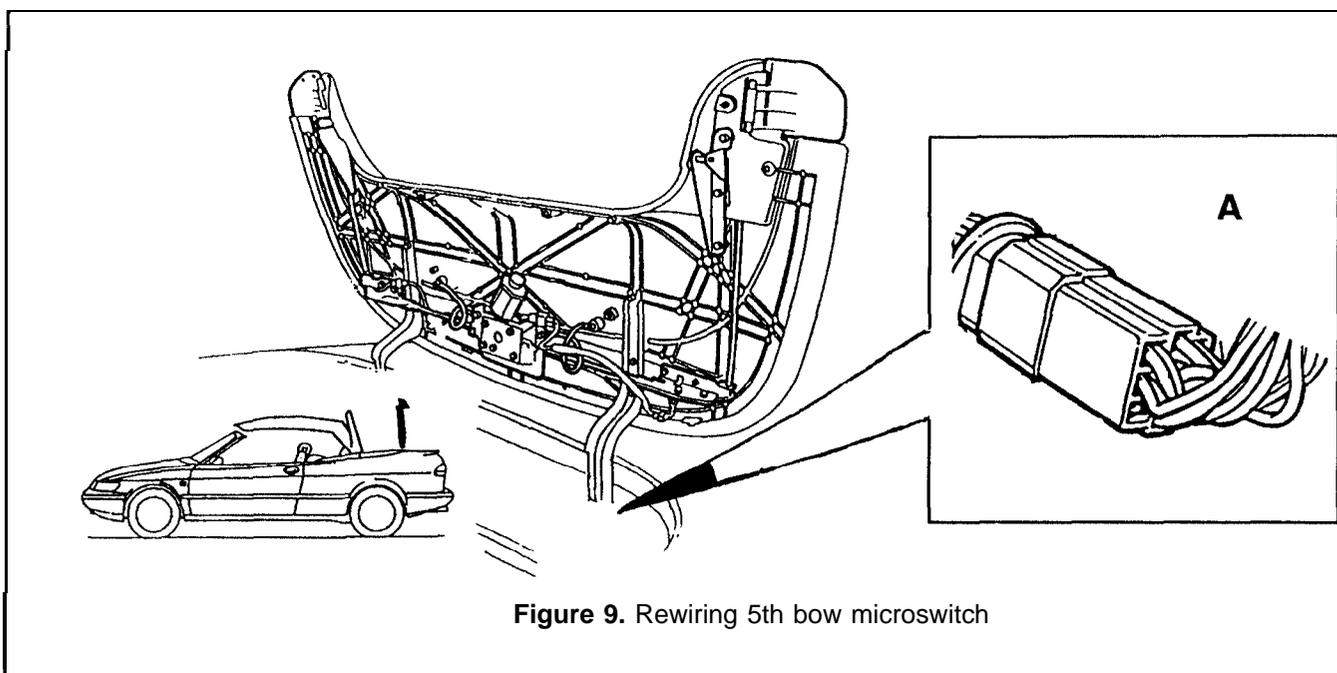


Figure 9. Rewiring 5th bow microswitch

NOTE: Some cars have had the wiring modified per instructions included herein but have not had the microswitch removed. If upon inspection you can determine that the wiring is correct, remove the microswitch and tape and secure the connector.

1. Operate the top using the "ROOF" switch until it is in the position shown above. The top, 5th bow and Tonneau cover should be fully raised.
2. Working from the left-hand side, detach the Tonneau cover's weatherseal/storage bag as far as the hinge and move it out of the way.
3. Extract connector H10-15 and unplug it. See Figure 9.A. Reconnect the pins as described below and on the following page.

Tonneau cover wiring harness:

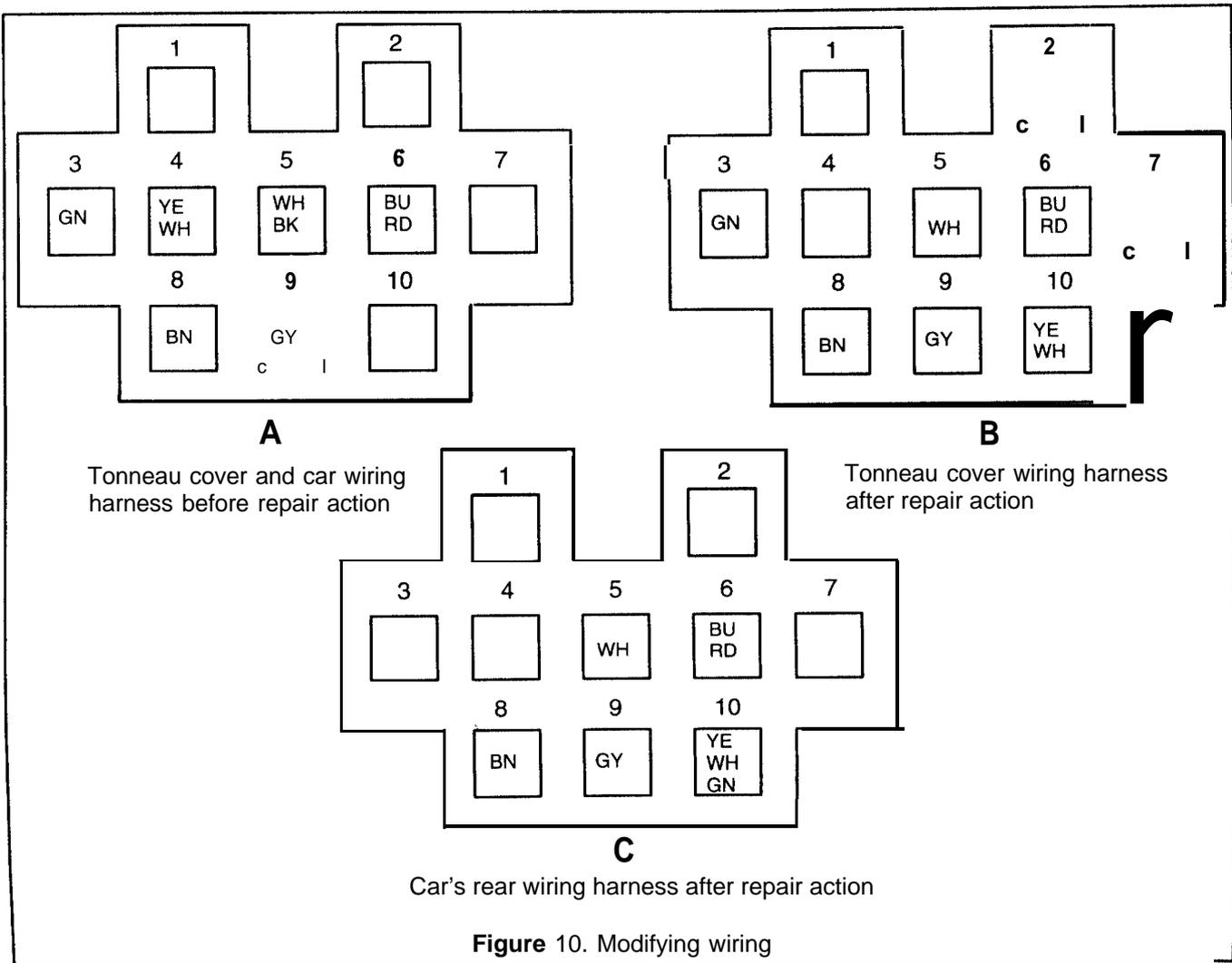
4. Withdraw the yellow/white lead with male pin from position 4 in the female part of connector H10-15.
5. Cut off the pin, strip the lead and crimp on a new male pin, P/N 41 15 077.
6. Press the yellow/white lead into position 10.

Car's rear wiring harness:

7. Withdraw the green lead with female pin from position 3 in the male part of connector H10-15.
8. Withdraw the yellow/white lead with female pin from position 4 in the male part of connector H10-15.
9. Cut Off the pins from both leads and strip them (leave wire as long as possible to avoid strain on harness after repair).
10. Place both leads together and crimp a new female sleeve, P/N 91 20 957 onto them.
11. Press the leads into position 10.
12. Plug in connector H10-I 5.
13. Fit the top storage bag in place and refit the Tonneau cover weatherseal.

NOTE

Make certain top storage bag and Tonneau cover weatherseal are refitted completely to allow for full downward movement of top on left side. Otherwise, top movement restriction will not allow proper programming to take place.



14. Remove the covering shell as indicated in Figure 11 .A.
15. Remove the screws securing the right-hand microswitch as indicated in Figure 11 .B.
16. Snip the cable tie holding the connector in position
17. Unplug the connector. See Figure 11 .C.
18. Remove and scrap the existing microswitch.
19. Cover open end of connector with a piece of tape to protect end of pins.
20. Fasten the wiring into place using a cable tie. See Figure 11 .D.
21. Refit the covering shell and tighten the bolts.

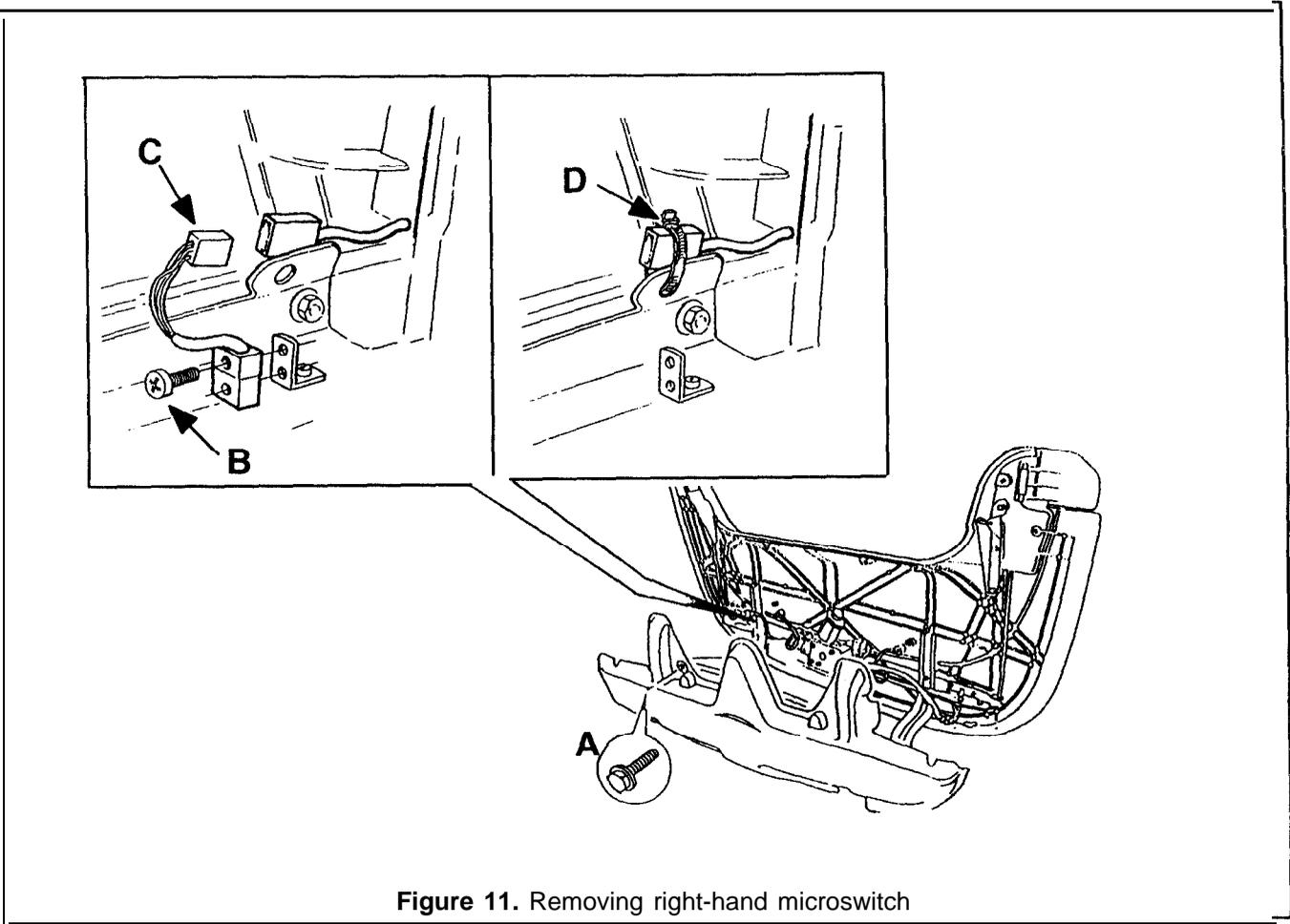


Figure 11. Removing right-hand microswitch

Subject #11: Checking Lock Washers for Brittleness

Application: VIN Serial Nos. S7000216-S7002732

Check the lock washers located at the main potentiometer for brittleness.

Parts:

Lock washer (as necessary)

45 56 098

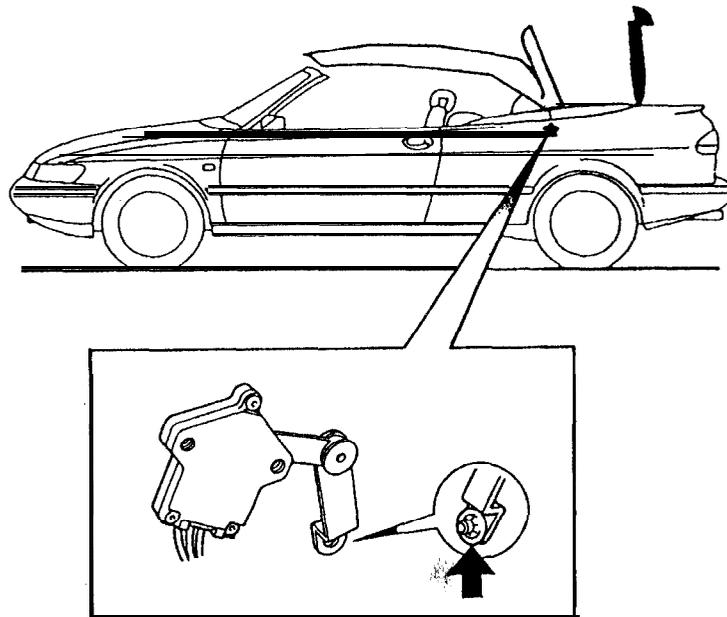
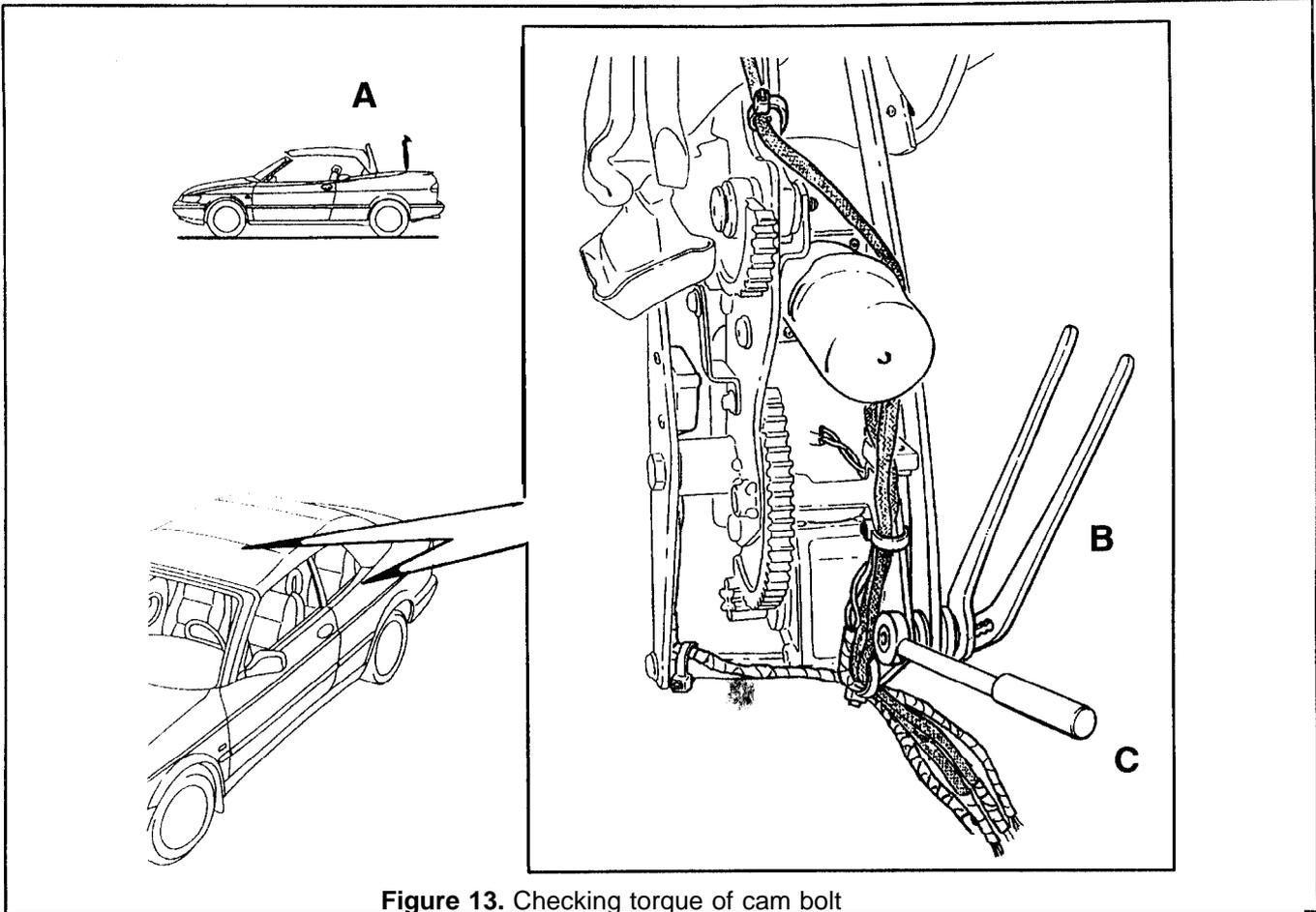


Figure 12. Checking lock washers

1. Operate the top using the "ROOF" switch until it is in the position shown above. The top, 5th bow and Tonneau cover should be fully raised.
2. Verify that a lock washer is located by the main potentiometer. If not, install one.
3. Lightly tap existing lock washer with a screwdriver to check for brittleness.
4. Change any lock washers that show signs of cracking.

Subject #12: Controlling the movement of the balance link arm by checking torque of cam bolt
Application: VIN Serial Nos. S7000216-S7013982

See Service Manual 8:5 Cabriolet, page 215.



Tighten cam bolts to 23Nm.

Subject #13: Checking the Top's Mechanical Stop Position When Raised
Application: VIN Serial Nos. S7000216–S7015157

See Customer Satisfaction Campaign 428, PSI 04/97–0754, Step B. Replace pins, adjust top stops per Service Manual 8:5 Cabriolet, page 130 and reprogram.

Subject #14: Fitting Chafing Guard to Antenna Bracket
Application: VIN Serial Nos. S7000216–S7010684

NOTE: On later cars the wiring has been routed behind the antenna bracket.

Fit a chafing guard on the antenna bracket to reduce the risk of damage to the wiring.

NOTE

Subjects #14, 15 and 16 should be done at the same time in the trunk.

Parts:

Chafing guard
Duct tape

82 78 558

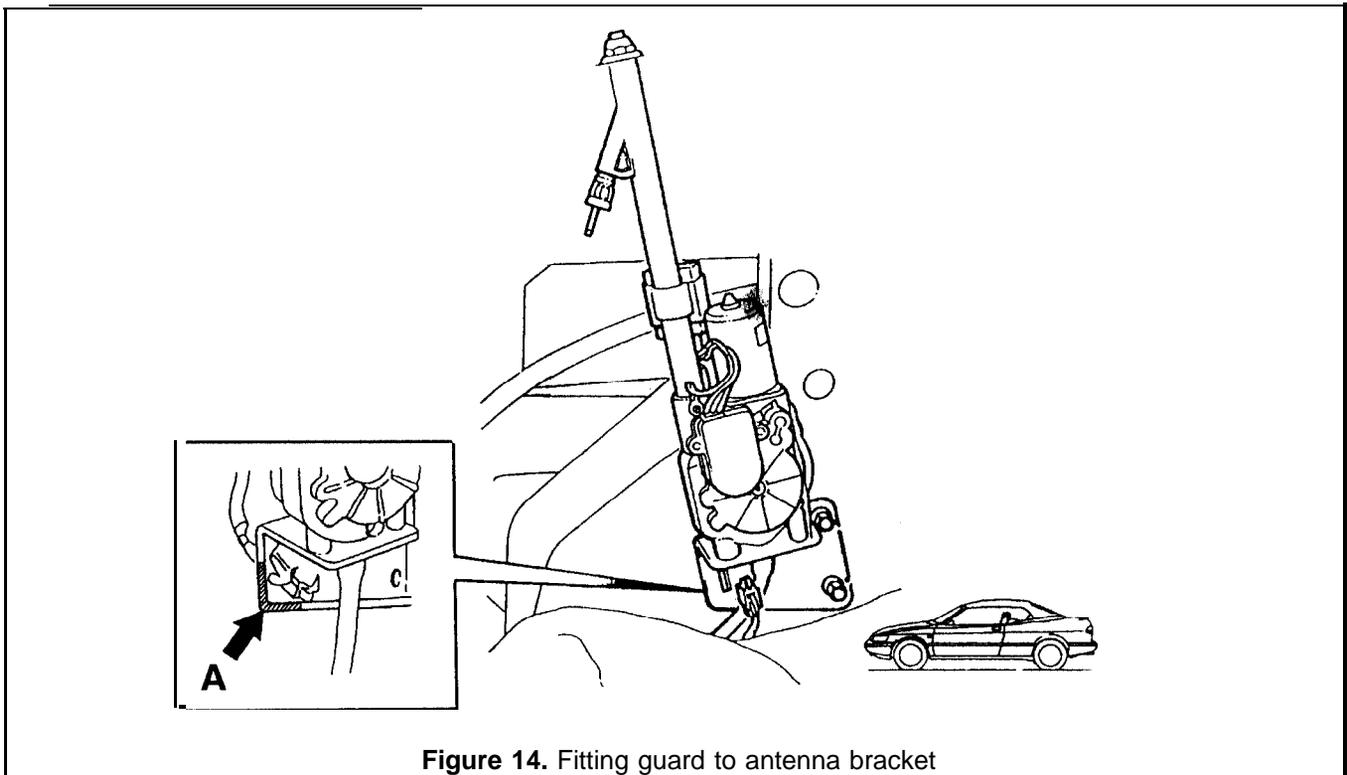


Figure 14. Fitting guard to antenna bracket

1. Operate the top using the "ROOF" switch until it is in the position shown above. The top should be fully raised, the first and 5th bows should be locked.
2. Remove the scuff plate from the luggage compartment.
3. Remove the clips securing the luggage compartment trim on the LH side.
4. Detach the luggage compartment weatherseal on the LH side.

5. Unplug the luggage compartment lighting connectors and fold down the trim.
6. Press the chafing guard in place on the antenna bracket as shown in Figure 14.A above.
7. Wrap duct tape around the tube of the antenna mast to prevent the trunk light from shorting against it.
8. Do not refit the trim and scuff plate until repair steps 14, 15 and 16 have been completed.

Subject #15: Changing the Tonneau Cover Potentiometer

Application: VIN Serial Nos. S7000216–S7013202

Change the Tonneau cover potentiometer.

Parts:

Potentiometer kit 45 58 771

Consists of:

- Potentiometer
- // Bracket
- // Adapter
- Screw (2)

Cable tie 79 71 880

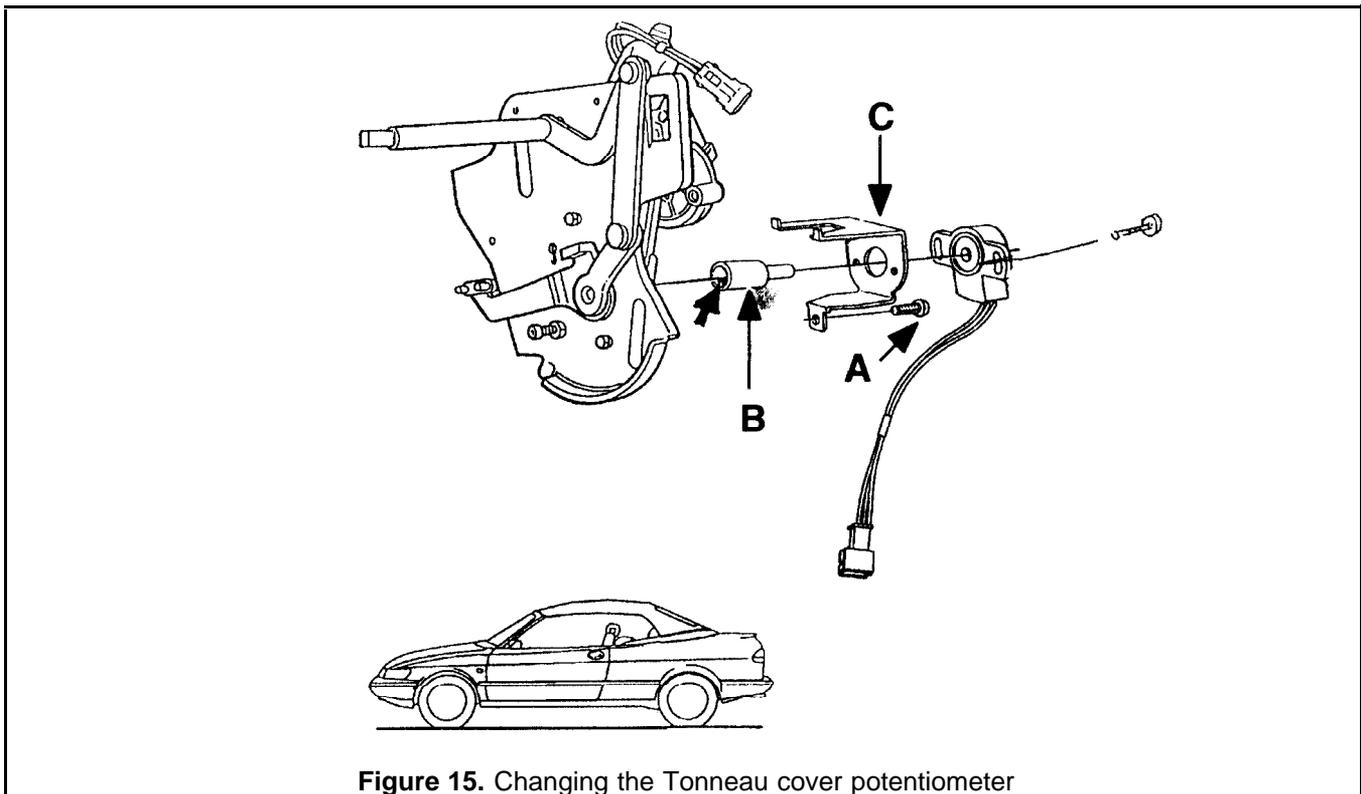


Figure 15. Changing the Tonneau cover potentiometer

IMPORTANT

When this repair has been carried out, it will not be possible to operate the top by means of the ROOF switch until the potentiometer resistance readings have been programmed into the ECM. See Step 17.

1. The top should be fully raised, the first and 5th bows should be locked from the previous step.

2. Remove the clips securing the luggage compartment trim on the RH side.
3. Detach the luggage compartment weatherseal on the RH side and fold down the trim.
4. Remove the right-hand rear light cluster. This will enable the Tonneau cover drive mechanism to be seen while in operation.
5. Remove the existing bracket, potentiometer and white plastic adapter by the Tonneau cover motor. Scrap them but retain the bracket retaining screw. See Figure 15.A on previous page. Pry off white plastic Piece with screwdriver.
6. Remove new potentiometer from new bracket.
7. Fit the new bracket in place without potentiometer installed and secure it by means of the old bracket's screw. See Figure 15.8 on previous page.
8. Press the new black plastic adapter onto the shaft of the Tonneau cover motor. Fit the key on the inside of the adapter in the groove on the shaft. See Figure 15.C.
9. Fit the new potentiometer in place with the electrical leads pointing downwards. See Figure 16.A below. Be sure to index "D" shaped slot in potentiometer with adapter.

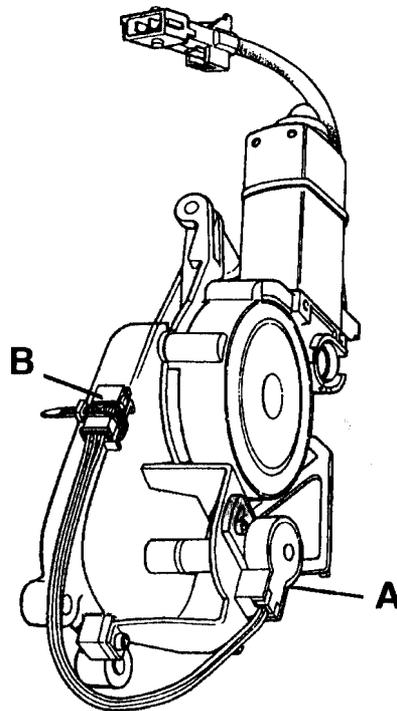


Figure 16. Fitting new potentiometer

IMPORTANT

Unless the electrical leads point downwards, the ECM will receive incorrect potentiometer readings and the potentiometer could be damaged beyond repair.

10. Secure the connector by means of a cable tie.
Position the connector as shown in Figure 16.B above.

1. The top should be fully raised, the first and 5th bows should be locked from previous step.
2. Remove the clip securing the luggage compartment weatherseal on the LH side. See Figure 18.B below.
3. Detach the luggage compartment weatherseal on the LH side. See Figure 18.C below.
4. Unplug the luggage compartment lighting connectors and fold down the trim. See Figure 18.D below.
5. Unplug the three ECM connectors. See Figure 18.E below.
6. Remove the nuts securing the ECM and lift it out. See Figure 18.F below.
7. Fit the new ECM in place and tighten the nuts.
8. Connect the cables to the ECM.
9. Plug in the luggage compartment lighting connectors.
10. Fold the luggage compartment trim back up and refit the luggage compartment weather-seal
11. Press on the clip securing the luggage compartment trim.
12. Refit the scuff plate.

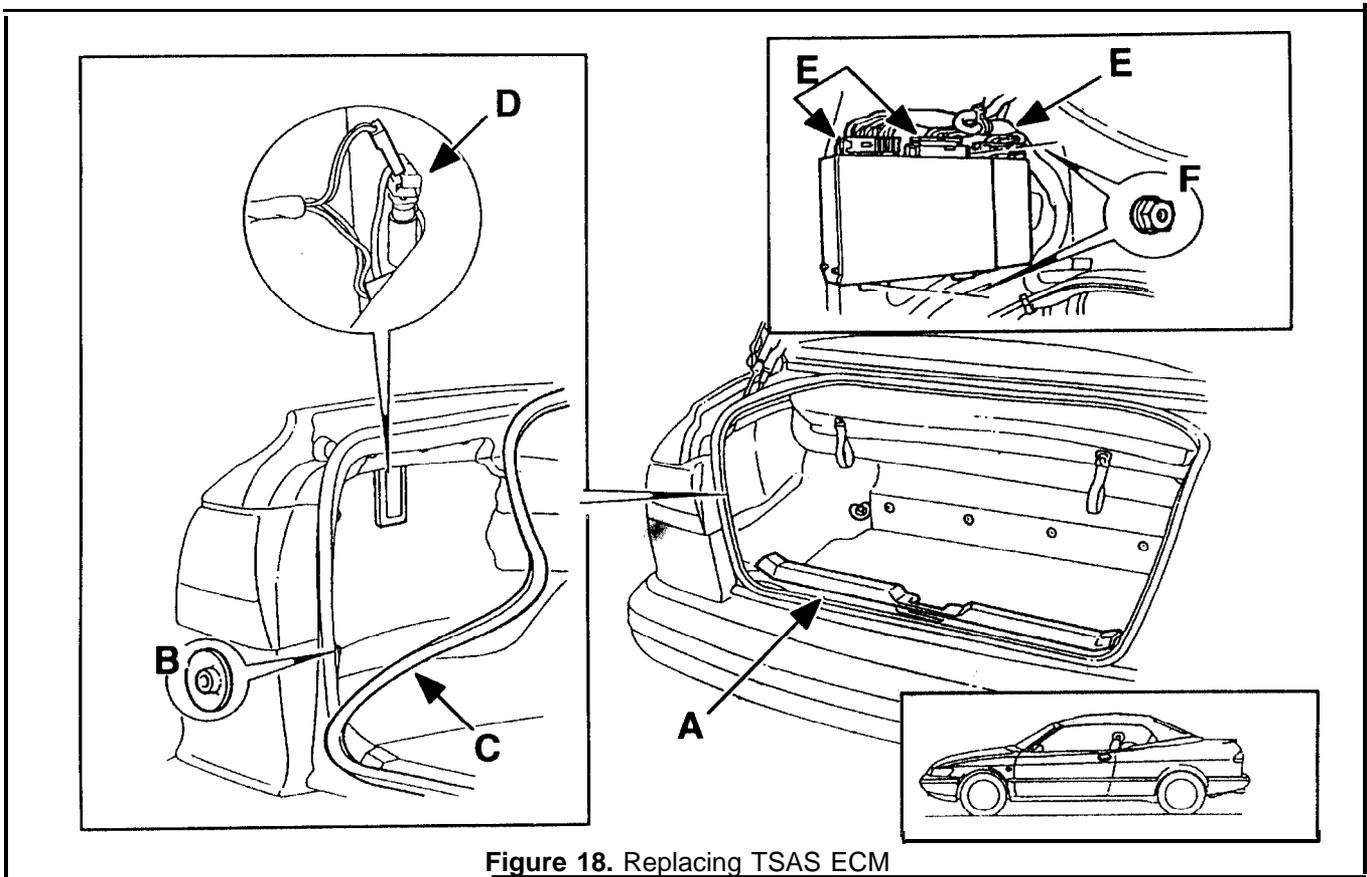


Figure 18. Replacing TSAS ECM

Programming the SID:

Connect ISAT and program SID as described below. When completed, affix new label to page 72 of 1995 900 Owner's Manual or Page 7 in 1995 900 Convertible Owner's Manual.

ISAT DISPLAY 1

SAAB INFO DISPLAY
ADJUSTMENT
=>PROGRAMMING
READ SYSTEM INFO

1. Select PROGRAMMING in ISAT's SAAB INFO DISPLAY menu.

ISAT DISPLAY 2

PROGRAMMING A
NEW SID UNIT
F1 = CONTINUE
ESC = END

2. Proceed to the programming phase or end.

ISAT DISPLAY 3

SELECT TYPE OF
SID UNIT.
SID 2/3 SELECT

3. Enter SID type -SID 2/3 .
(All U.S. models select SID 2/3.)

ISAT DISPLAY 4

~~SELECT EQUIPMENT~~
HOOD
 SELECT

4. Specify equipment: HOOD.

ISAT DISPLAY 5

PROGRAMMING WILL
NOW OCCUR
F1 = OK
ESC = END

5. Program the instrument with the entered data.
Press F1.



ISAT DISPLAY 6

PROGRAMMING
CARRIED OUT

6. This menu confirms that programming is completed.

ISAT DISPLAY 7

PROGRAMMING
INTERRUPTED

7. This menu is displayed if programming is interrupted with ESC.
8. End communications with SID.
9. Close latches. Attempt to lower top with ROOF switch. Check that SID displays "CHECK LATCHES" messages.

Subject #17: Programming the TSAS ECM and Modifying the 5th Bow's Potentiometer
Application: VIN Serial Nos. S7000216-S7015157

See PSI 04/97-0758 for latest programming instructions.

Bracket	45 59 407 (S7000215-S7014535)
Pop Rivet (5mm)	79 72 516 (S7000215-S7014535)

NOTE: Make sure the top bag is not pinned up prior to starting programming.

IMPORTANT

During the programming procedure, the top mechanism must be operated by means of ISAT or Tech 2. Keep pressing the relevant button (F3 = UP, F4 = DOWN) for at least five seconds after the movements have stopped to be sure that the mechanism has reached the end positions.

The battery must be in good condition when programming is carried out.
The top should be fully raised, the first and 5th bows should be locked from the previous step.

IMPORTANT

If the backrest is not folded down, the rear window could be damaged by the head restraint while programming is in progress.

1. Cars having a VIN Serial No. from S7000216 to S7014535 (inclusive):

These cars must have the 5th bow's potentiometer modified as follows:

- a. Select "5TH BOW LATCH MOTOR, UP" in the "ACTIVATE" menu to open the fifth bow's latches.
- b. Select "5TH BOW MOTOR, UP" in the "ACTIVATE" menu and run the 5th bow to the fully raised position.
- c. Select "TONNEAU MOTOR, UP" in the "ACTIVATE" menu and run the Tonneau cover to the fully raised position.
- d. Hold the 5th bow's potentiometer arm steady and carefully cut it off as shown in Figure 19 below. Use a sharp pair of side cutters. See Figure 19.A.
- e. Apply primer to the cut surface as corrosion protection.
- f. Program Convertible top per PSI 04/97-0758.

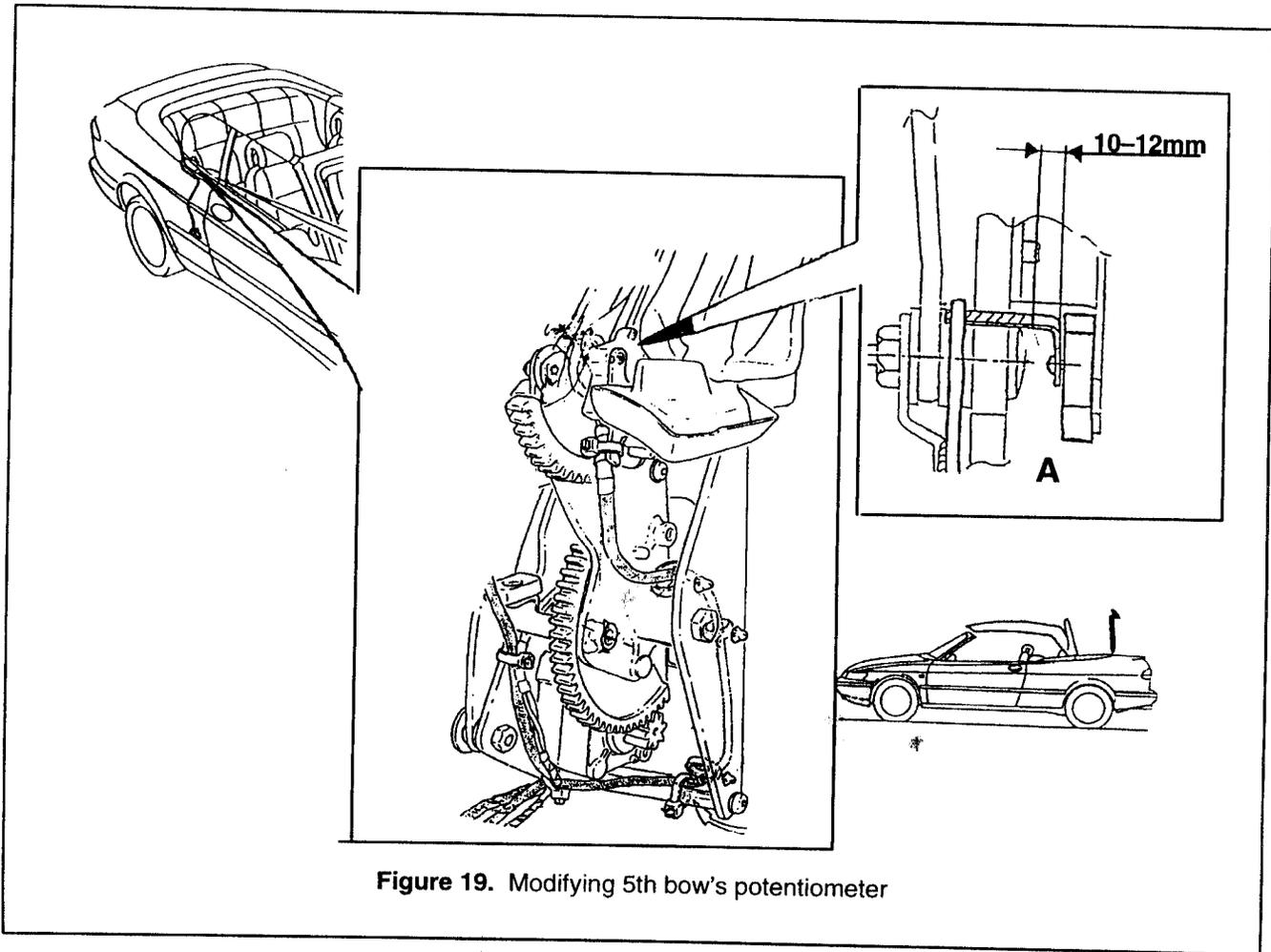


Figure 19. Modifying 5th bow's potentiometer

On claims submitted prior to September 30, 1997 use the following information:

PARTS INFORMATION:

Kit P/N 02 49 813 has been discontinued: order individual parts as needed:

Microswitches (2)	46 95 979
Bracket	45 59 407
Rivet	79 72 516
Owner's manual label	04 08 948
Chafing guard	45 59 431
Chafing guard	45 59 456
Elec. connector (female pin)	91 20 957
Elec. connector (male pin)	41 15 077
Cable ties (3)	79 71 880
Chafing guard (for antenna)	82 78 558
Lock washer	45 56 098
Protective plate	45 59 951
Screw (2)	45 55 710
Rubber dampener	46 96 175
Side trim molding	45 58 219
Side trim molding	45 58 227

Claims for these repairs **only** use failure coding:

10452-71-0-02-01

Labor operation: 10452 2.1 hrs. Improvement to top stack

Labor operation: 81107 0.5 hrs. Program Top

And for vehicles within VIN Serial No. S7000215-S7013202:

Tonneau cover potentiometer kit 45 58 771

Claims needing this repair in addition to above **add**:

Labor operation: 36462 0.6 hrs.

And for vehicles within VIN Serial No. S7000215-S7015157:

TSAS ECM 46 10 812

Claims needing this repair in addition to the above **add**:

Labor operation: 81108 0.9 hrs. (includes 81107-programming top)

*Do not add Labor Operation 81107

And for vehicles within VIN Serial No. S7000236-S7000689, S7000839-S7000871:

Windshield Weatherseal 45 51 107

Butyl Tape 30 17 795 or 30 18 165 or use 3M Ribbon Seal 51135/08610
(enough to do 10 cars)

Put a \$5.00 amount in sublet for amount to do 1 car.

Claims needing this repair in addition to the above **add**:

Labor operation: 84472 0.6 hrs.

The following will need to be added to your DCS Tables:

Failed Part Code: 10452
Description: Improvement to top stack
Models: D

Operation Number: 10452
Description: Improvement to top stack
Trans. type: B
Engine type: 9
Diagnostic code: 0
M94- 900 Only
Begin yr: 95
End yr: 98
2.1 hrs.