## AD77.30-P-5000A

## Roadster soft top (RST) diagnosis troubleshooting

16.4.97

MODEL 129 as of 1.1.94

⚠ Danger!	Risk of injury by trapping or crushing, in extreme cases with loss of limbs when working with the mechanism	When moving components, no body parts or limbs should be within the movement range of the mechanism.	<u>AS00.00-Z-0009-01A</u>
Roadster soft top (RST) diagnosis, previous knowledge			AD77.30-P-2000A
Troubleshooting			
Complaint with troubleshooting step number	Possible cause	Note	Remedy / test step
1	Hydraulic unit not running		AD77.30-P-6000-01A
Coupe roof does not unlock and/or does not lock	Power soft top switch (S84) Soft top "open" / front lock "open" valve (Y56/1y3) Soft top solenoid "closed", fabric bow lock valve "open" (Y55/1y1) Pump temperature signal System pressure (specified value) not reached Locking pins on coupe roof incorrectly adjusted		AD77.30-P-6000-02AAD77.30-P-6000-03AAD77.30-P-6000-18AAD77.30-P-6000-30AAD77.30-P-6000-31AAD77.30-P-6000-36AAD77.30-P-7000-01AAD77.30-P-7000-02Ara77001290420xRA77-0420

<b>2</b> Indicator lamp in power soft top switch not illuminated when ignition switched on	Voltage supply, terminal 15, 31 Power soft top switch (S84) Power soft top control module (N52) defective	AD77.30-P-6000-02A AD77.30-P-6000-18A AD77.30-P-6000-28A ra77001290450x RA77-0450
<b>3</b> Indicator lamp in power soft top switch illuminated with soft top locked (no impulse display) (Chime sounds when driving)	Fabric bow limit switch locked, left (A22s2) Fabric bow limit switch locked, right (A23s2) Soft top limit switch locked, left (S84/1) Soft top limit switch locked, right (S84/2)	AD77.30-P-6000-05A AD77.30-P-6000-06A AD77.30-P-6000-08A AD77.30-P-6000-09A
<b>4</b> Indicator lamp in power soft top switch illuminated with soft top opened (no impulse display) (Chime sounds when driving)	Soft top compartment cover locked, right	<u>AD77.30-P-6000-04A</u>
5 Rollover bar cannot be raised with rollover bar switch	Hydraulic unit not running RB actuator switch (S83) Pump temperature signal System pressure (specified value) not reached Check hydraulic circuit for raising rollover bar	AD77.30-P-6000-01A AD77.30-P-6000-02A AD77.30-P-6000-03A AD77.30-P-6000-19A AD77.30-P-6000-36A AD77.30-P-7000-01A AD77.30-P-7000-01A AD77.30-P-7000-02A
6 Rollover bar cannot be raised with	RB "raise" valve (Y56/1y3) Check hydraulic circuit for raising rollover bar	<u>AD77.30-P-6000-35A</u> <u>AD77.30-P-7000-17A</u>

power soft top switch (Possible only during covering process, rollover bar must be raised first)		
7	Rollover bar "crash actuation"	Capture rollover bar with switch
Rollover bar cannot be retracted with rollover bar switch	Hydraulic unit not running	<u>AD77.30-P-6000-01A</u>
		AD77.30-P-6000-02A
	RB switch (manual operation) (S83) RB "lower" valve (Y56/1y2)	AD77.30-P-6000-03A
	RB "raise" valve (Y56/1y3) Pump temperature signal System pressure (specified value) not	<u>AD77.30-P-6000-19A</u>
	reached	AD77.30-P-6000-34A
	Check hydraulic circuit for retracting rollover bar	AD77.30-P-6000-35A
	rollover bar	AD77.30-P-6000-36A
		AD77.30-P-7000-01A
		<u>AD77.30-P-7000-02A</u>
		AD77.30-P-7000-18A
8	Hydraulic unit not running	AD77.30-P-6000-01A
Rollover bar cannot be raised with		AD77.30-P-6000-02A
power soft top switch	Power soft top switch (S84) RB "lower" valve (Y56/1y2)	AD77.30-P-6000-03A
	RB "raise" valve (Y56/1y3) Pump temperature signal System pressure (specified value) not	AD77.30-P-6000-18A
	reached	AD77.30-P-6000-34A
	Check hydraulic circuit for lowering rollover bar	AD77.30-P-6000-35A
		AD77.30-P-6000-36A
		AD77.30-P-7000-01A
		AD77.30-P-7000-02A

		AD77.30-P-7000-18A
9	Rollover bar operation element (right)	<u>ra91001290920x</u>
Rollover bar raises itself independently (no crash actuation)	defective	RA91-920
10	Hydraulic unit not running	AD77.30-P-6000-01A
During soft top closing movement process: Soft top compartment cover does not unlock	Soft top "open" switch (soft top in storage compartment) (S84/3) RB "retracted" switch (S83/1) Power soft top switch (S84)	<u>AD77.30-P-6000-02A</u> <u>AD77.30-P-6000-03A</u> AD77.30-P-6000-12A
	Soft top compartment cover "open" / soft top compartment cover lock "open" valve (Y55/1y4) Pump temperature signal System pressure (specified value) not reached	<u>AD77.30-P-6000-14A</u> <u>AD77.30-P-6000-18A</u>
	Check hydraulic circuit for opening middle lock	<u>AD77.30-P-6000-29A</u>
		AD77.30-P-6000-36A
		AD77.30-P-7000-01A
		AD77.30-P-7000-02A
		AD77.30-P-7000-07B
11	Cover "locked" switch, right (A25s2) Soft top compartment cover "open" / soft	<u>AD77.30-P-6000-04A</u>
Soft top compartment cover does not open or rises only slowly	top compartment cover open / solt valve (Y55/1y4) Check hydraulic circuit for raising soft top compartment cover	<u>AD77.30-P-6000-29A</u>
		AD77.30-P-7000-10B
12	Soft top compartment "open" switch (S84/5)	<u>AD77.30-P-6000-10A</u>

Soft top does not come out of soft top compartment, or only closes slowly	Soft top fabric bow "raised" switch (S84/6) Soft top "closed" / fabric bow lock valve "open" (Y55/1y1) Fabric bow "open" / soft top compartment cover "closed" valve (Y55/1y3) Check hydraulic circuit for closing soft top Check delivery volumes of hydraulic unit		AD77.30-P-6000-11A AD77.30-P-6000-31A AD77.30-P-6000-32A AD77.30-P-7000-12A AD77.30-P-7000-03A
13	Left front door "window down" limit	Up to 12/94	AD77.30-P-6000-15A
Soft top remains in 90 ° position	switch (S21/9) Right front door "window down" limit switch (S21/8)	Up to 12/94	AD77.30-P-6000-16A
	Left front power window motor (M10/3) not normalized	As of 12/94	<u>ADT1.30-1-0000-10A</u>
	Right front power window motor (M10/4) not normalized	As of 12/94	⇒ 33.0
			⇒ 34.0
14	Left front soft top "locked" switch (S84/1)		AD77.30-P-6000-08A
Front locks do not lock	Right front soft top "locked" switch (S84/2)		AD77.30-P-6000-09A
	Power soft top switch (top) (S84/4) Fabric bow "open" / soft top		AD77.30-P-6000-13A
	compartment cover "closed" valve (Y55/1y3)		AD77.30-P-6000-32A
	Check hydraulic circuit for locking front locks Locking pins on soft top incorrectly adjusted		AD77.30-P-7000-13A
			<u>ra77001290303x</u>
			RA77-0303
15	Left front soft top "locked" switch (S84/1)		AD77.30-P-6000-08A
Soft top compartment cover does not close, or closes only slowly, or does not	Right front soft top "locked" switch (S84/2)		AD77.30-P-6000-09A
lock	Soft top "closed" switch (reed contact as of 01/94) (S84/4)		AD77.30-P-6000-13A

	Fabric bow "open" / soft top compartment cover "closed" valve (Y55/1y3) Check hydraulic circuit for lowering soft top compartment cover		AD77.30-P-6000-32A AD77.30-P-7000-10A
<b>16</b> Fabric bow does not lower or lowers only slowly	Cover "locked" switch, right (A25s2) Fabric bow "open" / soft top compartment cover "closed" valve (Y55/1y3) Fabric bow "closed" valve (Y55/1y2) Check hydraulic circuit for lowering fabric bow		AD77.30-P-6000-04A AD77.30-P-6000-32A AD77.30-P-6000-33A AD77.30-P-7000-15A
<b>17</b> Rear locks do not lock	Fabric bow "closed" switch, left Soft top "closed" /fabric bow lock "closed" valve (Y55/1y1) Check hydraulic circuit for locking rear locks		AD77.30-P-6000-07A AD77.30-P-6000-31A AD77.30-P-7000-16A
18 During soft top opening movement process: Rear locks do not unlock	Hydraulic unit not running Left front power window motor (M10/3) not normalized Right front power window motor (M10/4) not normalized Soft top "open" switch (soft top in storage compartment) (S84/3) RB "retracted" switch (S83/1) Power soft top switch (S84) Soft top "closed" switch /fabric bow lock "open" valve (Y55/1y1) Pump temperature signal System pressure (specified value) not reached Check hydraulic circuit for unlocking rear locks	As of 12/94 As of 12/94	AD77.30-P-6000-01A AD77.30-P-6000-02A AD77.30-P-6000-03A ⇒33 ⇒34 AD77.30-P-6000-12A AD77.30-P-6000-14A AD77.30-P-6000-31A AD77.30-P-6000-31A

<b>19</b> Fabric bow does not rise or rises only slowly	Bow "locked" switch (A22s2), left Bow "locked" switch (A23s2), right Fabric bow "open" / soft top compartment cover "closed" valve (Y55/1y3) Fabric bow "closed" valve (Y55/1y2) Check hydraulic circuit for raising fabric bow		AD77.30-P-7000-01A AD77.30-P-7000-02A AD77.30-P-7000-05A AD77.30-P-6000-05A AD77.30-P-6000-06A AD77.30-P-6000-32A AD77.30-P-6000-33A
20	Bow "closed" switch (A22s1), left		AD77.30-P-6000-07A
Fabric bow rises then lowers			
21 Middle locks do not unlock	Soft top fabric bow "raised" switch (S84/6) Soft top compartment cover "open" / soft top compartment cover lock "open" valve (Y55/1y4) Check hydraulic circuit for unlocking middle locks		<u>AD77.30-P-6000-11A</u> <u>AD77.30-P-6000-29A</u> <u>AD77.30-P-7000-07A</u>
22 Soft top compartment cover does not open or rises only slowly	Cover "locked" switch, right (A25s2) Soft top compartment cover "open" / soft top compartment cover lock "open" valve" (Y55/1y4) Check hydraulic circuit for raising soft top compartment cover		AD77.30-P-6000-04A AD77.30-P-6000-29A AD77.30-P-7000-07A
23 Front locks do not unlock	Left front soft top "locked" switch (S84/1) Left front door "window down" limit switch (S21/9) Right front door "window down" limit switch (S21/8) RB "raise" valve (Y56/1y3)	Up to 12/94 Up to 12/94	AD77.30-P-6000-10A AD77.30-P-6000-15A AD77.30-P-6000-16A

	Check hydraulic circuit for unlocking front locks		AD77.30-P-6000-30A
			AD77.30-P-7000-08A
24	Left front soft top "locked" switch (S84/1)		AD77.30-P-6000-08A
Soft top does not open or opens only slowly	Right front soft top "locked" switch (S84/2)		AD77.30-P-6000-09A
	RB "raise" valve (Y56/1y3)		AD77.30-P-6000-30A
	Soft top "closed" switch / fabric bow lock "open" valve (Y55/1y1) Check hydraulic circuit for opening soft		<u>AD77.30-P-6000-31A</u>
	top Check delivery volumes of hydraulic unit		AD77.30-P-7000-09A
			AD77.30-P-7000-03A
25 Soft top compartment cover does not	Soft top "open" switch (soft top in storage compartment) (S84/3) Soft top compartment cover "open" / soft		AD77.30-P-6000-12A
close or closes only slowly or does not lock	top compartment cover lock "open" valve (Y55/1y4) Fabric bow "open" / soft top		<u>AD77.30-P-6000-29A</u>
	compartment cover "closed" valve (Y55/1y3) Check hydraulic circuit for lowering soft		AD77.30-P-6000-32A
	top compartment cover		AD77.30-P-7000-10A
26	Left front door "window down" limit switch (S21/9)	Up to 12/94	AD77.30-P-6000-15A
Side windows do not open with power soft top switch, but do open with power	Right front door "window down" limit switch (S21/8)	Up to 12/94	AD77.30-P-6000-16A
window switch	Left front power window motor (M10/3) not normalized	As of 12/94	<u>ADTT.301-0000-10A</u>
	Right front power window motor (M10/4) not normalized	As of 12/94	⇒ 33
	Power soft top control module (N52)		⇒ 34
			<u>ra77001290450x</u>
			RA77-0450
27	Left front power window motor (M10/3)	As of 12/94	⇒ 33

Side windows do not close with power soft top switch, but do close with power window switch	not normalized Right front power window motor (M10/4) not normalized Power soft top control module (N52)	As of 12/94	⇒ 34 <u>ra77001290450x</u>
			RA77-0450
28 Side windows do not open and/or do not close with power window switch (step 1)	Left front power window switch (front center console) (S21/1) Right front power window switch (front center console) (S21/2)		AD77.30-P-6000-24A AD77.30-P-6000-25A
close with power window switch (step 1)	Left front power window motor (M10/3)		<u>AD77.30-F-6000-23A</u>
	Right front power window motor (M10/4)		AD77.30-P-6000-20A
	Power soft top control module (N52)		AD77.30-P-6000-37A
			AD77.30-P-6000-21A
			AD77.30-P-6000-38A ra77001290450x
			RA77-0450
29	Left front door "window down" limit switch (S21/9)	Up to 12/94	AD77.30-P-6000-15A
Side windows do not open automatically with power window switch (step 2)	Right front door "window down" limit switch (S21/8)	Up to 12/94	AD77.30-P-6000-16A
	Left front power window motor (M10/3) not normalized	As of 12/94	
	Right front power window motor (M10/4) not normalized	As of 12/94	⇒ 33
	Left front power window switch (front center console) (S21/1)		⇒ 34
	Right front power window switch (front center console) (S21/2) Power soft top control module (N52)		AD77.30-P-6000-24A
			AD77.30-P-6000-25A
			<u>ra77001290450x</u>
			RA77-0450
30	Left front door actuator (S47), right front		AD77.30-P-6000-37A

Side windows convenience locking via driver / passenger side door or trunk lid lock, inoperative	door actuator (S48), trunk lid lock actuator (S49) ATA/CF microswitch (S86), ATA/CF microswitch (S87s1), ATA/CF microswitch (S88s1) Power soft top control module	AD77.30-P-6000-38A ra77001290450x RA77-0450
<b>31</b> Left side window cannot be normalized (electrical basic setting) As of 12/94	Left front power window motor (M10/3) Power soft top control module (N52)	 AD77.30-P-6000-26A ra77001290450x RA77-0450
<b>32</b> Right side window cannot be normalized (electrical basic setting) As of 12/94	Right front power window motor (M10/4) Power soft top control module (N52)	AD77.30-P-6000-27A ra77001290450x RA77-0450
<b>33</b> Left side window does not open (4mm) with opening of left front door As of 12/94	Window not normalized (electrical basic setting) Rotary tumbler microswitch (S86s2) Power soft top control module (N52)	Normalize power window motor. Close door, close side window with power window switch and allow to run for 1-2 s on lock. <u>AD77.30-P-6000-40A</u> ra77001290450x RA77-0450
<ul><li>34</li><li>Right side window does not open (4mm) with opening of right front door</li><li>As of 12/94</li></ul>	Window not normalized (electrical basic setting) Rotary tumbler microswitch (S87s2) Power soft top control module (N52)	Normalize power window motor. Close door, close side window with window lifter switch and allow to run for 1-2 s on lock. AD77.30-P-6000-41A

		ra77001290450x
		RA77-0450
<b>35</b> Left side window does not close (4mm) with closing of left front door	Window not normalized (electrical basic setting)	Normalize power window motor. Close door, close side window with window
As of 12/94	Rotary tumbler microswitch (S86s2) Power soft top control module (N52)	lifter switch and allow to run for 1-2 s on lock. <u>AD77.30-P-6000-40A</u> ra77001290450x
		RA77-0450
36	Window not normalized (electrical basic	Normalize power
Right side window does not close (4mm) with closing of right front door	setting)	window motor. Close door, close side window with window lifter switch and allow
As of 12/94	Rotary tumbler microswitch (S87s2) Power soft top control module (N52)	to run for 1-2 s on lock. <u>AD77.30-P-6000-41A</u> ra77001290450x
		RA77-0450
37	Voltage supply, power soft top control	AD77.30-P-6000-01A
Either or both side windows lose basic electrical setting	module (N52) coupling X1 pin1, pin 5, pin 8 (undervoltage) Left front power window motor (M10/3)	<u>AD77.30-P-6000-02A</u>
As of 12/94	switching circuit Right front power window motor (M10/4) switching circuit Power soft top control module (N52)	<u>AD77.30-P-6000-26A</u>
	Power solt top control module (NSZ)	<u>AD77.30-P-6000-27A</u>
		ra77001290450x
		RA77-0450
38	Left front door actuator (S47), right front door actuator (S48), trunk lid lock	AD77.30-P-6000-37A

Convenience opening of side windows inoperative As of 06/97	actuator (S49) ATA/CF microswitch (S86), ATA/CF microswitch (S87s1), ATA/CF microswitch (S88s1) Power soft top control module	<u>AD77.30-P-6000-38A</u>
		<u>ra77001290450x</u>
		RA77-0450