

Diagnosis – Complaint Related Diagnostic Chart

⚠ CAUTION!

Injury hazard from pinching and crushing, in extreme cases extremities can even be severed when caught in the mechanism.

Do not allow any body parts to be in the general area of the moving components.

Preparation for Diagnosis:

1. Review entire 11.2 section.

Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 1 Hardtop does not lock or unlock.	RST/RB hydraulic unit (A7/5) does not run. Rear locks valve (Y56y2) Front locks valve (Y56y4) Insufficient system pressure (nominal value). Latch pins on the hardtop poorly adjusted.	23 ⇒ 1.0, 2.0, 3.0 23 ⇒ 40.0 23 ⇒ 41.0 23 ⇒ 44.0 23 ⇒ 45.0 33 ⇒ 1.0 Check adjustment, (SMS, Job No. 77-0420)
No. 2 Indicator lamp in the power soft top switch does not come on when the ignition is turned on.	Voltage supply, circuits 15, 31. Power soft top switch (S84). Power soft top control module (N52) defective.	23 ⇒ 2.0 23 ⇒ 23.0 23 ⇒ 37.0, See SMS, Job No. 77-0450
No. 3 Indicator lamp in the power soft top switch comes on with the soft top locked (no DTC display), (Gong sounds while driving).	Left bow "locked" switch (A22s2) Right bow "locked" switch (A23s2) Left front soft top "locked" switch (S84/1) Right front soft top "locked" switch (S84/2)	23 ⇒ 8.0 23 ⇒ 9.0 23 ⇒ 12.0 23 ⇒ 13.0

¹⁾ Observe Preparation for Test, see 22.

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 4 Indicator lamp in the power soft top switch comes on with the soft top open (no DTC display), (Gong sounds while driving).	Left cover "locked" switch (A24s2) Right cover "locked" switch (A25s2) Soft top "raised" switch (S84/4)	23 ⇒ 4.0 23 ⇒ 5.0 23 ⇒ 17.0
No. 5 Roll bar cannot be raised with RB switch (S83).	RST/RB hydraulic unit (A7/5) does not run. RB switch (S83) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, raising roll bar.	23 ⇒ 1.0 23 ⇒ 2.0 23 ⇒ 3.0 23 ⇒ 24.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 4.0
No. 6 Roll bar cannot be raised with power soft top switch (S84). (only possible during the soft top up or down sequence, roll bar must have been raised previously).	Piston side valve (Y57y11) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, raising roll bar.	23 ⇒ 58.0 23 ⇒ 59.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 4.0

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
<p>No. 7 Roll bar cannot be lowered using the RB switch (S83)</p>	<p>Roll bar was automatically deployed ("Crash deployment")</p> <p>RST/RB hydraulic unit (A7/5) does not run.</p> <p>RB switch (S83) Rod side valve (Y57y10)</p> <p>Piston side valve (Y57y11)</p> <p>Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, lower roll bar.</p>	<p>Raise RB using RB switch (S83) until a reengagement click is heard on passenger side.</p> <p>23 ⇒ 1.0 23 ⇒ 2.0 23 ⇒ 3.0 23 ⇒ 24.0 23 ⇒ 56.0 23 ⇒ 57.0 23 ⇒ 58.0 23 ⇒ 59.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 3.0</p>
<p>No. 8 Roll bar cannot be lowered using the power soft top switch (S84)</p>	<p>RST/RB hydraulic unit (A7/5) does not run.</p> <p>Power soft top switch (S84) Rod side valve (Y57y10)</p> <p>Piston side valve (Y57y11)</p> <p>Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, lower roll bar.</p>	<p>23 ⇒ 1.0 23 ⇒ 2.0 23 ⇒ 3.0 23 ⇒ 23.0 23 ⇒ 56.0 23 ⇒ 57.0 23 ⇒ 58.0 23 ⇒ 59.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 3.0</p>

¹⁾ Observe Preparation for Test, see 22.

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 9 Roll bar raises by itself (not a crash deployment).	Roll bar activator (right) defective	See SMS, Job No. 91-920
No. 10 During a soft top closing operation: Soft top compartment cover does not unlock.	RST/RB hydraulic unit (A7/5) does not run. RB "retracted" switch (S83/1). Soft top "open" switch (soft top in storage compartment) (S84/3). Power soft top switch (S84). Center locks valve (Y56y3). Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, opening the center locks.	23 ⇒ 1.0 23 ⇒ 2.0 23 ⇒ 3.0 23 ⇒ 18.0 23 ⇒ 16.0 23 ⇒ 23.0 23 ⇒ 42.0 23 ⇒ 43.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 8.0
No. 11 Soft top compartment cover does not open or raises only slowly.	Left cover "locked" switch (A24s2) Right cover "locked" switch (A25s2) Soft top compartment cover valve (Y56y5) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, raising the soft top compartment cover	23 ⇒ 4.0 23 ⇒ 5.0 23 ⇒ 46.0 23 ⇒ 47.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 9.0
No. 12 Soft top compartment cover opens and closes.	Left cover "closed" switch (A24s1) Right cover "closed" switch (A25s1)	23 ⇒ 6.0 23 ⇒ 7.0

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 13 Soft top does not come out of compartment or closes very slowly..	Soft top compartment "open" switch (S84/5) Soft top fabric bow "raised" switch (S84/6) Soft top "close" valve (Y55y7) Fabric bow "raise" valve (Y55y8) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, soft top closing.	23 ⇒ 14.0 23 ⇒ 15.0 23 ⇒ 50.0 23 ⇒ 51.0 23 ⇒ 53.0 33 ⇒ 1.0 33 ⇒ 5.0 34 ⇒ 3.0
No. 14 Soft top remains in 90° position.	Left front door "window down" limit switch (S21/9). Right front door "window down" limit switch (S21/8).	23 ⇒ 19.0 23 ⇒ 20.0
No. 15 Front latches of soft top do not lock.	Soft top "raised" switch (S84/4) Left front soft top "locked" switch (S84/1) Right front soft top "locked" switch (S84/2) Front locks valve (Y56y4) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Check hydraulic circuit, locking front latches. Latch pins poorly adjusted at the soft top front latches.	23 ⇒ 17.0 23 ⇒ 12.0 23 ⇒ 13.0 23 ⇒ 44.0 23 ⇒ 45.0 33 ⇒ 1.0 33 ⇒ 5.0 34 ⇒ 4.0 See SMS, Job No. 77-0303
No. 16 Soft top compartment does not close or closes slowly or does not lock.	Left front soft top "locked" switch (S84/1) Right front soft top "locked" switch (S84/2) Soft top fabric bow "raised" switch (S84/6) Soft top compartment cover valve (Y56y5) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, soft top compartment cover closing.	23 ⇒ 12.0 23 ⇒ 13.0 23 ⇒ 15.0 23 ⇒ 46.0 33 ⇒ 47.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 12.0

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 17 soft top compartmentcover does not lock.	Left cover "closed" switch (A24s1) Right cover "closed" switch (A25s1) Soft top compartment cover valve (Y56y5) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, soft top compartment cover closing.	23 ⇒ 6.0 23 ⇒ 7.0 23 ⇒ 46.0 33 ⇒ 47.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 12.0
No. 18 Fabric bow does not move or moves down only slowly.	Left cover "locked" switch (A24s2) Right cover "locked" switch (A25s2) Fabric bow "raise" valve (Y55y8) Fabric bow "lower" valve (Y55y9) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, lowering fabric bow.	23 ⇒ 4.0 23 ⇒ 5.0 23 ⇒ 52.0 23 ⇒ 53.0 23 ⇒ 54.0 23 ⇒ 55.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 6.0
No. 19 Rear locks do not lock.	Left bow "closed" switch (A22s1) Right bow "closed" switch (A23s1) Soft top "close" valve (Y55y7) Rear locks valve (Y56y2) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, locking rear locks.	23 ⇒ 10.0 23 ⇒ 11.0 23 ⇒ 50.0 23 ⇒ 51.0 23 ⇒ 40.0 23 ⇒ 41.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 7.0

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 20 During soft top opening: Rear locks do not unlock.	RB “retracted” switch (S83/1). Soft top “open” switch (soft top in storage compartment) (S84/3). RB switch (S83) Rear locks valve (Y56y2) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, open rear locks.	Readout impulse counter (DTC) 23 ⇒ 18.0 23 ⇒ 16.0 23 ⇒ 23.0 23 ⇒ 40.0 23 ⇒ 41.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 6.0
No. 21 Fabric bow does not move or moves only slowly up.	Left bow “locked” switch (A22s2). Right bow “locked” switch (A23s2). Fabric bow “raise” valve(Y55y8). Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, raise fabric bow.	23 ⇒ 8.0 23 ⇒ 9.0 23 ⇒ 52.0 23 ⇒ 53.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 7.0
No. 22 Fabric bow goes up and down.	Left bow “closed” switch (A22s1) Right bow “closed” switch (A23s1)	23 ⇒ 10.0 23 ⇒ 11.0
No. 23 Center locks do not unlock.	Soft top fabric bow “raised” switch (S84/6). Center locks valve (Y56y3). Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, open center locks.	23 ⇒ 15.0 23 ⇒ 42.0 23 ⇒ 43.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 8.0

1) Observe Preparation for Test, see 22.

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Complaint/Problem	Possible cause	Test step/Remedy ¹⁾
No. 24 Soft top compartment cover does not open or opens only slowly.	Left cover "locked" switch (A24s2) Right soft top compartment cover "locked" switch (A25s2) Soft top compartment cover valve (Y56y5) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, raise soft top compartment cover.	23 ⇒ 4.0 23 ⇒ 5.0 23 ⇒ 46.0 23 ⇒ 47.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 9.0
No. 25 Soft top compartment cover opens and closes.	Left cover "closed" switch (A24s1) Right cover "closed" switch (A25s1)	23 ⇒ 6.0 23 ⇒ 7.0
No. 26 Front locks do not unlock.	Soft top compartment "open" switch (S84/5) Left front door "window down" limit switch (S21/9) Right front door "window down" limit switch (S21/8) Front locks valve (Y56y4) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, open front locks.	23 ⇒ 14.0 23 ⇒ 19.0 23 ⇒ 20.0 23 ⇒ 44.0 23 ⇒ 45.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 10.0
No. 27 Soft top does not open or opens only slowly.	Left front soft top "locked" switch (S84/1) Right front soft top "locked" switch (S84/2) Soft top "open" valve (Y55y6) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, open soft top.	23 ⇒ 12.0 23 ⇒ 13.0 23 ⇒ 48.0 23 ⇒ 49.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 11.0

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No. 28 Soft top compartment cover does not close or closes only slowly.	Soft top "open" switch (soft top in storage compartment) (S84/3) Soft top compartment cover valve (Y56y5) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, close soft top compartment cover.	23 ⇒ 16.0 23 ⇒ 46.0 23 ⇒ 47.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 12.0
No. 29 Center locks do not lock.	Left cover "closed" switch (A24s1) Right cover "closed" switch (A25s1) Center locks valve (Y56y3) Insufficient system pressure (nominal value). Check all hydraulic connections for leaks. Test hydraulic circuit, open center locks.	23 ⇒ 6.0 23 ⇒ 7.0 23 ⇒ 42.0 23 ⇒ 43.0 33 ⇒ 1.0 33 ⇒ 5.0 33 ⇒ 8.0
No. 30 Side windows do not open using the power soft top switch, but do open with the power window switches.	Power soft top control module (N52) Left front door "window down" limit switch (S21/9) Right front door "window down" limit switch (S21/8)	See SMS, Job No. RA77-0450 23 ⇒ 19.0 23 ⇒ 20.0
No. 31 Side windows do not close or open using the power window switches (first detent only). or if using one touch opening (second detent).	Left front power window switches (S21/1). Right front power window switches (S21/2). Left front power window motor (M10/3). Right front power window motor (M10/4). Power soft top control module (N52). Left front door "window down" limit switch (S21/9) Right front door "window down" limit switch (S21/8)	23 ⇒ 33.0 23 ⇒ 34.0 23 ⇒ 35.0 23 ⇒ 36.0 SMS, Job No. 77-0450 23 ⇒ 19.0 23 ⇒ 20.0

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No. 32 Side window closing convenience feature (at driver/passenger door lock or at trunk lock) does not work.	Left door ATA/CF microswitch (S86) Right door ATA/CF microswitch (S87s1) Trunk lid ATA/CF microswitch (S88s1) Left door actuator (S47) Right door actuator (S48) Trunk lid lock actuator (S49) Power soft top control module (N52)	23 ⇒ 60.0 23 ⇒ 60.0 23 ⇒ 60.0 23 ⇒ 61.0 23 ⇒ 61.0 23 ⇒ 61.0 See SMS, Job No. 77-450

1) Observe Preparation for Test, see 22.