





an accident (vehicle rollover) from severe injuries.

Essentially the roll bar system comprises of the following components/assemblies:

- Roll bar (RB)/soft top operation control module (N52))
- RB switch (manual operation, S83) with integrated malfunction indicator lamp
- Roll bar (RB) lowered limit switch (S83/5)
- Roll bar (RB) raised limit switch (S83/6)
- Roll bar (RB) deployment solenoid (Y57/1)
- Roll bar (RB) and soft top operation hydraulic unit (A7/5)
- Roll bar (RB) valve block (Y57)
 - a) rod side valve (Y57y10)
 - b) piston side valve (Y57y11)
- Hydraulic cylinder for lowering/raising roll bar at support and control element

The roll bar is:

- automatically raised where there is a risk of an accident (crash deployment).
- is raised and lowered when S83 is manually actuated (manual actuation),
- automatically raised and lowered when operating the soft top.

lamp is integrated for system function check and state display purposes in the \$83.

In manual actuation a hydraulic cylinder on the support and control element generates (2) the force required to raise and lower the roll bar. The motor (A7/5m1) of the hydraulic unit (A7/5) generates the necessary system pressure.

In the event of a crash deployment a pre-tensioned spiralcoiled spring will supply the required raising force. In this case, the roll bar's hydraulic system acts passively, in order to ensure that maximum operating safety is given.

In order to prevent any tilting over of the roll bar during lowering/raising operations, a synchronizer shaft (30) has been fitted, which runs on both sides in a gearing via a pinion gear.

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Crash deployment has priority over manual actuation, i.e. a crash deployment can take place even during manual actuation.





@ clk 430 c...



1.59-P-0001KA	Koll bar (KB), function	Normal view Validity OFF Page: 4/
⊯ GF	Roll bar manual actuation, function	GF91.59-P-2000KA
₽ GF	Roll bar crash deployment, function	GF91.59-P-2001KA
₽ GF	Roll bar hydraulics, function	GF91.53-P-3000KA
GF GF	Roll bar system malfunction indicator lamp control, function	GF91.59-P-3000KA
₽ GF	Locking of roll bar actuating element, function	GF91.50-P-3000KA
₽ GF	Roll bar/soft top operation control module, location/task/design/function	GF77.39-P-3100KA
₽ GF	Roll bar actuation (manual operation) switch, location/task/design/function	GF91.59-P-2100KA
₽ GF	Roll bar/soft top operation hydraulic unit, location/task/design/function	GF77.30-P-3100KA
₽ GF	Roll bar valve block, location/task/design/function	GF91.53-P-2200KA
≆ GF	Roll bar deployment solenoid, location/task/design/function	GF91.59-P-2104KA
≆ GF	Roll bar raised limit switch, location/task/design/function	GF91.59-P-2101KA
æGF	Roll bar lowered limit switch, location/task/design/function	GF91.59-P-2102KA