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## Cracking/grunting noises from area of front axle when driving over large road undulations

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Topic number	LI32.35-P-047253
Version	1
Design group	32.35 Stabilizer
Date	07-07-2009
Validity	Model series 221 with SA code 489 (Air suspension)
Reason for change	Supersedes DTB P-B-32.20/47c
Reason for block	

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### Complaint:

Cracking/grunting noises from the area of the front axle when driving over speed humps or large road undulations.

### Cause:

Relative movement of torsion bar mount in bracket.

### Remedy:

Check: Detach torsion bar from torsion bar linkage and drive the vehicle.

If the complaint no longer occurs, bond the torsion bar mount in its mounting/bracket. Otherwise look for another cause.

Please prepare the individual steps thoroughly as the repair must proceed without incident.

The adhesive must be mixed and applied, and the torsion bar bolted, within 5 min otherwise a successful repair cannot be guaranteed.

Two persons are necessary to carry out the repair.

Note: Only use adhesive A005 989 0971 (Figure 1)

1. Detach torsion bar from torsion bar linkage and remove torsion bar mounting clamps.
2. Roughen up torsion bar mount using emery paper (Figure 2)
3. Roughen up torsion bar mount shell using emery paper (Figure 3)

4. Roughen up counterpart of torsion bar mount in frame-type integral support using emery paper (Figure 4)
5. Clean roughened surfaces with nitro thinner, brake cleaner or similar (Figure 5)
6. Squeeze all the component adhesive out of the tubes and mix thoroughly. Use up all the adhesive (Figure 6)
7. Apply adhesive evenly to torsion bar mount, torsion bar mount shell and recesses in frame-type integral support. (Figure 7, Figure 8, Figure 9)
8. Within 5 min bolt the torsion bar onto frame-type integral support (tightening torque 70 Nm) and remove excess adhesive (Figure 10)
9. Remove vehicle from vehicle lift and allow adhesive to cure for 1h.

The torsion bar must not be bolted to the torsion bar linkage.

10. The adhesive is cured after 1h. Now bolt the torsion bar linkage to the torsion bar.

Attachments	
File	Designation
Devcon Klebstoff.JPG	(Figure 1) 2-component adhesive
Schmirgeln Drehstablager.JPG	(Figure 2) Roughen up torsion bar mount
Schmirgeln Drehstablagerschale.JPG	(Figure 3) Roughen up torsion bar mount shell
Schmirgeln Integralträger.JPG	(Figure 4) Roughen up frame-type integral support
Reinigungsmittel.jpg	(Figure 5) Clean the components
Kleber mischen.JPG	(Figure 6) Mix adhesive thoroughly
Keber auf Drehstablager.JPG	(Figure 7) Apply adhesive evenly to torsion bar mount
Keber auf Drehstablagerschale.JPG	(Figure 8) Apply adhesive evenly to torsion bar mount shell
Keber auf Integralträger.JPG	(Figure 9) Apply adhesive evenly to frame-type integral support
Kleber abkratzen.JPG	(Figure 10) Scrape off excess adhesive

Symptoms
Chassis / suspension / Chassis, noises / Cracking
Chassis / suspension / Chassis, noises / Knocking
Chassis / suspension / Chassis, noises / Thumping
Chassis / suspension / Suspension / Dampening / Suspension system noises / Thumping noise
Chassis / suspension / Suspension / Dampening / Suspension system noises / Metallic noise
Chassis / suspension / Suspension / Dampening / AIRMATIC / AIRMATIC noise / Thumping/rumbling
Chassis / suspension / Axles / Stabilizer bar / Stabilizer bar noise / Knocks

Chassis / suspension / Axles / Front axle / Front axle, noise / Knocking
Chassis / suspension / Axles / Front axle / Front axle, noise / Thumping
Chassis / suspension / Axles / Front axle / Front axle, noise / Cracking

Parts					
Part number	Designation	Quantity	Note	EPC net	Non-EPC
A0059890971	Component adhesive	1	Important: Not documented in EPC, but can be ordered from GLC under the part number listed.		X

Work units				
Op. no.	Operation text	Time	Damage code	Note
			33003 36	Please encode as front axle frame-type integral support.

Validity					
Vehicle	Engine	Transmission	Major assembly 1	Major assembly 2	Major assembly 3
S-Class 221	*	*	*	*	*







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