Humming/droning noises or vibrations from the drivetrain

Topic number	LI22.10-P-056910
Version	1
Design group	22.10 Engine mounts, engine brackets
Date	07-30-2013
Validity	Models 202, 203, 208, 209, 210, 211, 215, 219, 220, 221, 230, 240, 251, 170, 171, 164
Reason for change	Damage code invalid
Reason for block	

Complaint:

Humming/droning noises or vibrations from the drivetrain.

Cause:

The entire engine/transmission suspension is under stress.

Remedy:

Relieve the stress in the engine suspension as follows.

Unstressing front engine mounts:

1. Visual inspection of positioning lug for front engine mount. It must be correctly seated in the notch in the engine support.
2. Unscrew bolt. The thread in the engine mount socket must line up with the hole in the frame-type integral support.
3. If this is not the case, lift the engine/transmission assembly approx. 10 mm out of the engine mount sockets in the frame-type integral support and lower it again.

Note:

The engine mounts must slot straight into the engine mount sockets without tilting.

5. If the bolt is crooked, slacken the upper bolt on the engine support and position both engine mounts so that the thread in the engine mount socket lines up with the hole in the frame-type integral support.
6. Tighten the lower mounting bolts to the specified torque, lower the engine onto the engine mounts and tighten the bolts to the specified torque.

Unstressing rear engine mounts:

1. Unscrew bolted connection between rear engine mount and engine support
2. Detach exhaust system transmission bracket at exhaust system pipe and in the area of the engine support, and look for stresses! (e.g. exhaust system slipping upwards).
3. Lift the engine/transmission assembly in the area of the transmission so that the rear engine mount lifts off the engine support, and then lower the rear engine mount onto the rear engine support. The thread in the rear engine mount must line up with the holes in the rear engine support (in the same way as the front engine mount). If this is not the case, continue with step 4
4. Unscrew the rear engine support mounting bolts on the body and align the rear engine support in the longitudinal and transverse directions so that the holes in the rear engine support line up.

Then tighten the bolts to the specified torque in the following sequence:

a) Engine support to body

b) Engine mount to engine support

c) Exhaust system transmission bracket in area of rear engine mount and on exhaust system pipe

(the transmission bracket in the area of the exhaust system pipe fastening bolt must not be tilted and must not rub).

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Note: Tightening torques: See WIS Group 22, information unit BA22.00

Attachments	
File	Designation
Motorlager vorne.jpg	1= Lug for engine support 2= Bolt on engine support 3= Bolt on frame-type integral support
Intergraltrager.jpg	1= Bolts M10, engine support to body 2= Bolts M8, rear engine mount to rear engine support (2 or 3 depending on model series) 3= Bolts, exhaust system to transmission/bracket

Symptoms
Power transmission / Power transmission, function / Vibrations
Power transmission / Power transmission, noise / Humming/droning

Work units				
Op. no.	Operation text	Time	Damage code	Note
			24103 36	

Validity		
Vehicle	Engine	Transmission
164.120	*	*
164.122	*	*
164.175	*	*
164.186	*	*
171.442	*	*
171.454	*	*
171.456	*	*
171.473	*	*
203.004	*	*
203.006	*	*
203.007	*	*
203.008	*	*
203.016	*	*
203.018	*	*
203.020	*	*
203.035	*	*
203.040	*	*
203.042	*	*
203.043	*	*
203.045	*	*

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203.046	*	*
203.052	*	*
203.054	*	*
203.056	*	*
203.061	*	*
203.064	*	*
203.065	*	*
203.076	*	*
203.081	*	*
203.084	*	*
203.087	*	*
203.092	*	*
203.204	*	*
203.206	*	*
203.207	*	*
203.208	*	*
203.216	*	*
203.218	*	*
203.220	*	*
203.235	*	*
203.240	*	*
203.242	*	*
203.243	*	*
203.245	*	*
203.246	*	*
203.252	*	*
203.254	*	*
203.256	*	*
203.261	*	*
203.264	*	*
203.265	*	*
203.276	*	*
203.281	*	*
203.284	*	*
203.287	*	*
203.292	*	*
203.706	*	*
203.707	*	*
203.708	*	*
203.718	*	*
203.735	*	*
203.740	*	*
203.742	*	*

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203.743	*	*
203.745	*	*
203.746	*	*
203.747	*	*
203.752	*	*
203.756	*	*
203.764	*	*
209.308	*	*
209.316	*	*
209.320	*	*
209.342	*	*
209.343	*	*
209.354	*	*
209.356	*	*
209.361	*	*
209.365	*	*
209.375	*	*
209.376	*	*
209.420	*	*
209.442	*	*
209.454	*	*
209.456	*	*
209.461	*	*
209.465	*	*
209.475	*	*
209.476	*	*
211.004	*	*
211.006	*	*
211.016	*	*
211.020	*	*
211.022	*	*
211.023	*	*
211.026	*	*
211.028	*	*
211.029	*	*
211.042	*	*
211.054	*	*
211.056	*	*
211.061	*	*
211.065	*	*
211.070	*	*
211.076	*	*
211.080	*	*

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211.082	*	*
211.083	*	*
211.084	*	*
211.087	*	*
211.089	*	*
211.092	*	*
211.206	*	*
211.216	*	*
211.220	*	*
211.222	*	*
211.223	*	*
211.226	*	*
211.242	*	*
211.254	*	*
211.256	*	*
211.261	*	*
211.265	*	*
211.270	*	*
211.276	*	*
211.280	*	*
211.282	*	*
211.283	*	*
211.284	*	*
211.287	*	*
211.289	*	*
211.292	*	*
211.606	*	*
211.616	*	*
211.620	*	*
219.322	*	*
219.356	*	*
219.375	*	*
219.376	*	*
221.022	*	*
221.056	*	*
221.070	*	*
221.071	*	*
221.122	*	*
221.156	*	*
221.170	*	*
221.171	*	*
221.176	*	*
230.467	*	*

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230.474	*	*
230.475	*	*
230.476	*	*
230.479	*	*
251.020	*	*
251.022	*	*
251.065	*	*
251.075	*	*
251.122	*	*
251.165	*	*
251.175	*	*
C (202)	*	*
CL (215)	*	*
CLK (208)	*	*
E (210)	*	*
S (220)	*	*
SLK (170)	*	*

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