
Humming/howling noise from ABC suspension up to approx. 2000 rpm

Topic number	LI32.50-P-048280
Version	3
Design group	32.50 Active body control (ABC)
Date	01-06-2015
Validity	MODEL 215, 216, 217, 220, 221, 222, 230, 231 with code 487 (ABC); all vehicles with Active Body Control (code 487)
Reason for change	Validity for new part number adjusted, old part number deleted
Reason for block	

Complaint:

Humming/howling noises can be heard from underfloor area.

Noise can be heard from idle up to approx. 2000 rpm. Above this, it is drowned out by the engine noise.

Note:

The noise is particularly noticeable at approx. 1400 rpm.

Cause:

As mileage increases, the gas pressure in the pulsation damper ("pressure reservoir" / "damper") of the ABC system can decline, meaning that the full damping effect may no longer be available.

Note:

Noises may also be caused by touching / stressed ABC lines. Please check this before replacing any parts, and correct if necessary.

Aids:

Use clamp kit for noise diagnosis (STEELMAN ChassisEAR) as per WIS document (AR32.00-P-2000A).

Remedy:

If ABC lines are not touching / stressed,

replace damper at pressure supply valve block (ABC I) or pulsation damper at tandem pump (ABC-PLUS).

Note:

Pulsation damper can be replaced separately, sealing ring is included.

Note:

Replacement of the entire pressure supply valve unit or ABC tandem pump is not required.

Note:

With the introduction of ABC-PLUS (as of model year 2006), the pulsation damper is located on the tandem pump.

Attachments	
File	Description
EPC Pulsationsdampfer 220_215.jpg	Pulsation damper: no. 410
EPC Pulsationsdampfer R230.jpg	Pulsation damper: no. 290 Valid up to model year 2006
EPC Pulsationsdaempfer 216_221.jpg	Pulsation damper: no. 15
Dämpfer ABC Tandempumpe.JPG	ABC damper at tandem pump no. 20

Symptoms
Chassis/suspension / Chassis, noises / Humming/droning/throbbing
Power generation / Engine noise / Humming/droning
Power generation / Engine noise / Howling
Power generation / Engine noise / Vibrating
Chassis/suspension / Chassis, noises / Vibrating
Chassis/suspension / Suspension/Dampening / Active body control / ABC Noise / Tandem pump
Chassis/suspension / Chassis, noises / Howling
Chassis/suspension / Chassis, noises / Howling/whistling/squeaking

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A2203270215			Pressure reservoir (ABC pul- sation damper) (on valve block)	1	Valid for model series 215, 220, 230 up to chassis no. 230.### - #F- 122820	X
A 000 466 03 10			Damper (at tandem pump)	1	Valid for model series 231, 222, 217, 216, 221, 230 as of chassis no. 230.# ## - #F- 122820	X

Work units				
Op. no.	Operation text	Time	Damage code	Note
32-7550	REPLACE PULSATION DAMPER FOR ACTIVE BODY CONTROL (ABC)	siehe AS-RA	32584 53	

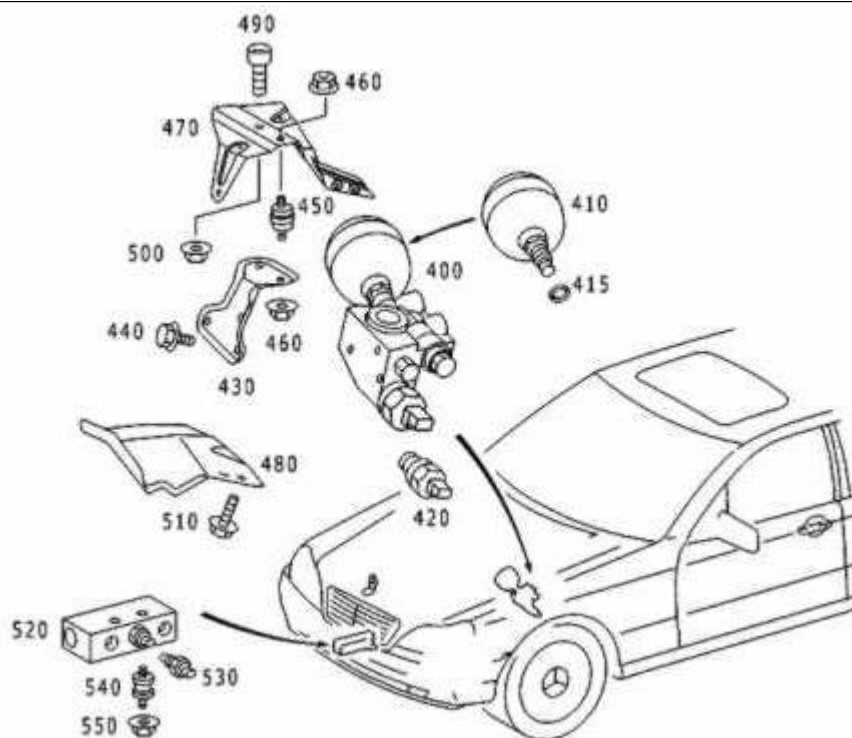
WIS-References			
Document number	Title	Note	Allocation
AR32.00-P-2000A	Localize noises on suspension	Adapt procedure for ABC components	Remedy
AR32.50-P-0013N	Remove/install pulsation damper	MODEL 215, 220	Remedy
AR32.50-P-0013R	Remove/install pulsation damper	MODEL 230 up to 806 (model year 2006)	Remedy
AR32.50-P-0013RX	Remove/install pulsation damper	MODEL 230 as of 806 (model year 2006)	Remedy
AR32.50-P-0013SX	Remove/install pulsation damper	MODEL 216, 221	Remedy
AR32.50-P-0013RK	Remove/install pulsation damper	Valid for model 231 with engine 157, 278	Remedy
AR32.50-P-0013RZ	Remove/install pulsation damper	Valid for model 231 with engine 279 Valid for model 222 with engine 279, 277	Remedy

AR32.50-P-0013RY	Remove/install pulsation damper	Valid for model 231 with engine 276	Remedy
AR32.50-P-0013LF	Remove/install pulsation damper	Valid for model 217 with engine 157, 278 Valid for model 222 with engine 157, 278	Remedy

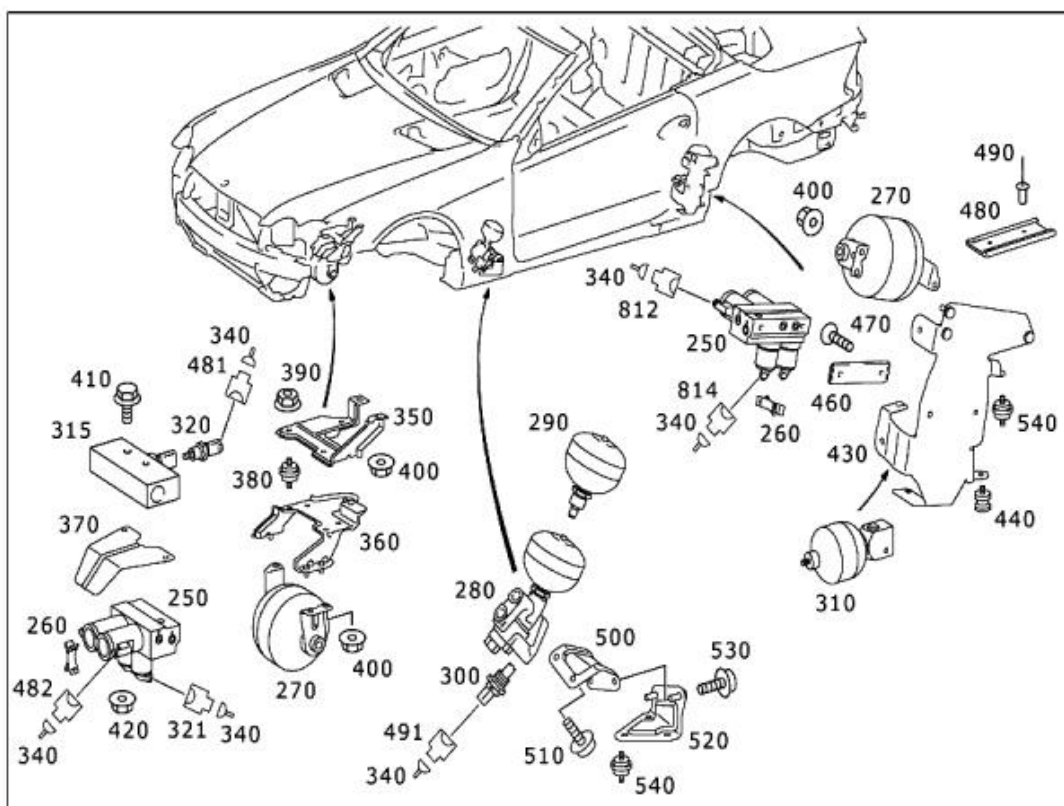
Validity			
Vehicle	Engine	Transmission	
222.004	*	*	
222.032	*	*	
222.033	*	*	
222.057	*	*	
222.067	*	*	
222.077	*	*	
222.082	*	*	
222.085	*	*	
222.104	*	*	
222.123	*	*	
222.132	*	*	
222.133	*	*	
222.157	*	*	
222.162	*	*	
222.163	*	*	
222.165	*	*	
222.167	*	*	
222.176	*	*	
222.177	*	*	
222.178	*	*	
222.179	*	*	
222.182	*	*	
222.184	*	*	
222.185	*	*	
222.967	*	*	
222.976	*	*	
222.982	*	*	
CL (215)	*	*	
CL (216)	*	*	
S (217)	*	*	
S (220)	*	*	
S (221)	*	*	
SL (230)	*	*	
SL (231)	*	*	

Attachments

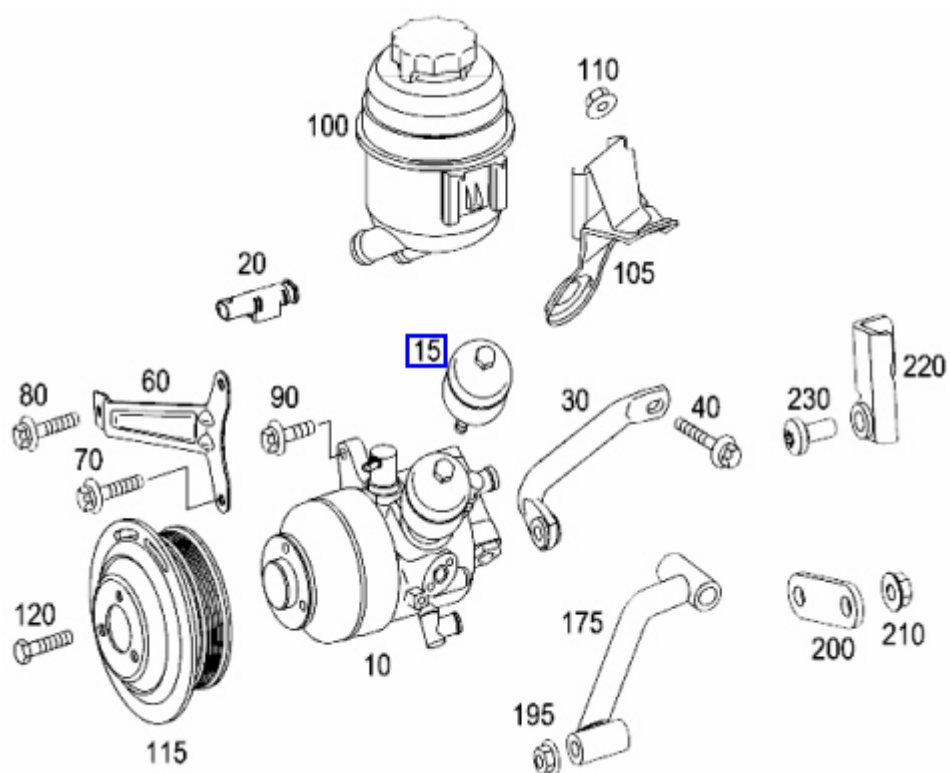
EPC Pulsationsdampfer
220_215.jpg:



EPC Pulsationsdampfer
R230.jpg:



EPC Pulsationsdaempfer
216_221.jpg:



Dämpfer ABC Tandem-
pumpe.JPG:

