DaimlerChrysler India Price India Private Limited Pune, August 17, 2004 All Workshop Incharge DC India dealerships / ASC

Customer Satisfaction Campaign - Repair both Hydropneumatic Spring Legs -Model W 220.

Please refer our earlier Service Information IND 32/002 dated 21st October 2003 regan repair solution for top end leakage from Hydropneumatic Spring Legs.

In a view to avoid further Customer Complaints regarding Airmatic Suspension, we need to carryout the repairs of both hydropneumatic spring legs of all the vehicles mentioned in the attached list.

Please note that the repair solution should not be repeated for the hydropneumatic spring legs which are already repaired.

The related working procedure for checking leakage and strut repairs is enclosed herewith for your ready reference.

Parts:

The details of parts needed for repairs and the related special tool are given below:

1. A 013 997 70 45

- Replacement O-ring

2. A 220 320 25 38

- Suspension strut repair kit

A 220 589 00 61 00 - Removal / installation tool

Operation text and flat rates:

Operation text: Seal front air suspension strut (01 No.) at upper cover

Operation No. – 32940001

Flat rates – 1.7 Hrs.

Cont.....2

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Company of the DaimierChrysler Group

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(X Operation text: Seal front air suspension strut (02 Nos.) at upper cover

Operation No. - 32940101

Flat rates - 2.7 Hrs.

Damage code - 032505047

Cost Settlement:

A warranty / goodwill claim for the cost of labour and material can be submitted through the usual warranty process channel quoting accounting no. 3250501.

Completion Deadline:

The activity is to be completed during next visit of the vehicle to your workshop. The target completion date for this campaign is 28th February 2005. Please note that the locations mentioned in the list are only indicative and any vehicle mentioned in the list visiting your workshop has to be attended for this Campaign.

Please advise your concerned staff accordingly and ensure availability of the above spare parts and special tool in your stock.

Please acknowledge receipt of this letter and in case of any queries, please feel free to contact us.

Thanking you,

With best regards, DaimlerChrysler India Private Limited

General Manager

Aftersales

D. Chandavarkar Divisional Manager Field Service

Copies to – DCIPL Service Representatives } for close follow up with the workshops.

Encl. - As above

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L) DHAHAAT KAMDAR

2) HARDIK SHAH

3) KAUSHIK PANCHAL

4) SUNISH HAMBIAR

D JASMINE PATEL.

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Troubleshooting

Valid until WIS update 09/03



Group 32

AF32,22-P-4040AU 07,08,2003

AF32.22-P-4040AU	Leakage from air suspension strut around the sealing compound	17.7.03
1		

MODEL 220.### ## up to 360985 except CODE (487a) Active body control (ABC)

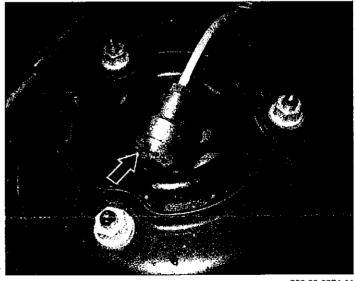
Operation no. of operation texts or standard texts and flat rates

Category	Op. no.	Operation text	Time	Acc. no.	Code
P	023961	Check for leakage at top of air suspension strut	004 WU		
Р	329400	Seal front air suspension strut (1) at upper cover (after check)	017 WU		
,	329401	Seal front air suspension strut (2) at upper cover (after check)	027 WU		***

30

Damage code	Cause	Remedy	
₹2 480 04	Encapsulated bearing of suspension strut leaking.	Spray soapy water around the line connection and the sealing compound.	
		2 Rock front end of vehicle. 1 If bubbles from (see picture) from around the black sealing compound:	
	Leakage at the encapsulated bearing usually only occurs when the vehicle is on a lifting platform with no load on the wheels and the weight of the wheels pulls the encapsulated bearing downwards.	3 Seal encapsulated bearing.	Page 3
	This results in a settling effect in the encapsulated bearing (rubber) that occurs primarily at hot temperatures.	Use repair kit specified in parts ordering notes. It is recommended to seal the both suspension struts (one kit per strut required). Use the O-ring specified in the parts ordering notes only if the existing O-ring	
	The instrument cluster display may show the message "STOP CAR TOO LOW" and/or fault code 1517-001 (front axle at critical level) may be recorded in fault memory of the AlRmatic control unit (N51).	was damaged during installation!	

Arrow - Bubble formation at the sealing compound



P32.22-2274-11

Parts ordering notes

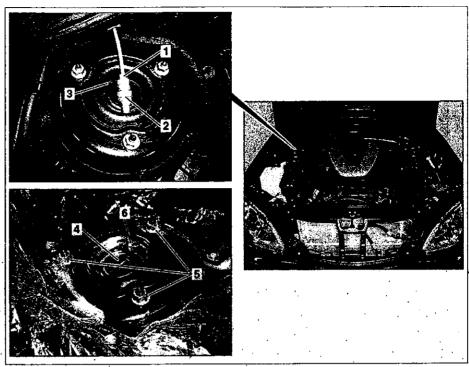
Part no.	Designation	Quantity
A 05 3 997 70 45	Replacement O-ring	as required
A 220 320 25 38	Suspension strut repair kit	1

22.5.03

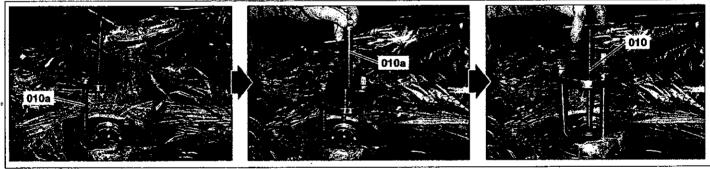
MODEL 220 except CODE (487a) Active body control (ABC)

Shown on right air suspension strut

- 1 Pressure line connection
- 2 Residual pressure retention valve
- 3 Circlip
- 4 Cover
- 5 Nuts
- 6 Bolt M8



P32.22-2273-06



P32.22-2272-07

~010 Removal and installation tool

010a Bolt



P32.22-2271-07

Air suspension strut bellows

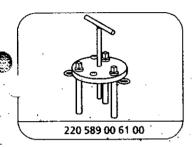
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⚠ Danger!	Risk of death. Death may result if vehicle slips or topples from the lifting platform.	Align vehicle between the columns of the lifting platform and position the four support plates at the lifting platform support points specified by the vehicle manufacturer.	A500.00-Z-0010-01A
9	Notes on self-locking nuts and bolts		AH00.00-N-0001-01A
l	Open engine hood and raise to vertical position		AR88.40-P-1000M
2	Discharge air suspension struts using STAR DIAGNOSIS	Diagnosis system STAR DIAGNOSIS	WE58.40-Z-1013-06A
9	Special information on AlRmatic		AH32.22-P-1000-02i
3	Unscrew pressure line connection (1) and put pressure line to one side		
	Cover engine compartment	(3) When loosening the sealing compound, parts flying around can enter the engine openings.	
5	Warm up sealing compound with a hot air blower	i Heat up sealing compound until it softens.	
		Check the hardness of the sealing compound with a screwdriver.	
		Hot air blower	WH58.30-Z-1014-20A
	Loosen the sealing compound with a screwdriver	Thoroughly remove parts of the sealing compound which have separated using a dust extractor.	
d	Unscrew residual pressure retention valve (2)	(b) Seal the opening in the residual pressure retention valve (2) using boltM8 (6) so that no dirt enters the air suspension strut.	
3	Thoroughly remove remaining sealing compound with a screwdriver	There must not be any burrs or dirt particles remaining.	
9	Screw in bolt (010a) of the removal and installation tool (010) in stages corresponding to the pictorial sequence and secure with cotter pins	(5) Only one nut (5) must always be released and be replaced by a bolt (010a) of the removal and installation tool (010). When several nuts (5) are loosened (5) the air suspension strut can slip down and be damaged. i Installation: Replace nuts (5)	220 589 00 61 00
10	Press down the cover (4) using the removal and installation tool (010)	Press down the cover (4) using the removal and installation tool (010) until the circlip (3) is free from stress.	
11	Remove circlip (3) using a screwdriver	Do not make any scratches of burrs as otherwise the sealing ring of the new cover (4) will be damaged during installation.	
12 }	Release the load on the removal and installation tool (010) and remove the cover (4) using a bar-type magnet	Check the surfaces on the air suspension strut and the groove in the circlip (3) for sharp edges and remove if necessary.	
H	Install		
13 -	Insert new cover (4)	(4) with soapsuds	

) ~		Do not use any oils and greases (mineral oil products), these damage the sealing ring and lead to leaks from the air suspension strut.	
14	Press in the cover (4) using the removal and installation tool (010)	(1) When pressing in ensure that the new cover (4) is pressed in evenly and is not tilted over. Otherwise the sealing ring of the cover (4) will be damaged and result in leaks from the air suspension strut.	
15	Fit circlip (3)	i Replace locking ring (3).	
16	Pull out cotter pin of the bolts (010a) of the removal and installation tool (010) and pull out the bolts (010a) in stages in the reverse installation sequence	Fit the nuts (5) and tighten after filling the air suspension strut in the curb condition.	
		(9) Only one bolt (010a) of the removal and installation tool (010) must be released and replaced by a nut(5). If several bolts (010a) are released the air suspension strut can slide downwards.	BA32.25-P-1001-04B
17	Tape dome on air suspension strut	Prior to painting the surfaces must be free from grease:	
18	Paint damaged surfaces on the upper part of the air suspension strut black	i Allow painted surfaces to dry.	
19	Unscrew bolt M8 (6) from the opening in the residual pressure retention valve (2) and screw in new residual pressure retention valve (2)	i Fit residual pressure retention valve (2) by hand and tighten using a suitable tool.	
20	Screw on pressure line connection (1)	i Check pressure line Q-ring for damage and replace if necessary	BA32.25-P-1003-04B
21	Raise the vehicle and align the bellows (7) of the air suspension strut	To align, press the bellows (7) upwards and pull downwards in a position free from stress	
2י.	Fill air suspension struts using STAR DIAGNOSIS	(9) The wheels must not contact the ground during filling When filling in the jounce condition the air spring bellows on the inside of the air suspension strut will be destroyed.	
		When filling the lower support bearing must be pulled downwards so that the air cannot escape there.	
		Diagnosis system STAR DIAGNOSIS	WE58.40-Z-1013-06A
23	Checking top of air suspension strut for leaks	I Spray repaired point with soapsuds. Pay attention to bubble formation whilst the front end is being rocked.	AR32.22-P-81001

Mm Suspension struts

Number	Designation		Model	Model
1 >=			220.025/026/028/	220.083/
ri di di			063/065/067 /	084/087/
			070/073/074/	183/184/
			075/125/126 /	187
			128/165/167 /	1
			170/173/174 /	
			175/176/178 /	
			874/875/876/878	
BA32.25-P-1001-04B	Nut, front suspension strut to front end	NM	20	20
BA32.25-P-1003-048	Air suspension pressure line to front suspension strut	NM	5	5



Removal/installation tool

Commercially available tools (see Workshop Equipment Manual)

Number	Designation	Make (e. g.)	Order number
W#58.30-Z-1014-20A	Hot-air gun - 3000 W	Firma Zinser	Model K-25-R
-		Schweißtechnik	
		GmbH	
		Postfach 14 40	
		73061 Ebersbach/Fil	s
		Tel.: 07163/16710	

Workshop equipment/MB testers (see Workshop Equipment, Manual)

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VE58.40-Z-1013-06A	Diagnostic system STAR DIAGNOSIS, compact passenger vehicle, order number 6511 1801 00