

PARTS & SERVICE NEWS

REF NO.	AT04024
DATE	Feb. 5, 2004
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SUBJECT: IMPROVED DURABILITY PARTS OF FRONT AND REAR SUSPENSIONS ON HD465-5/-7 AND HD605-5/-7

PURPOSE: To introduce modification procedure of improved durability parts of the front and rear suspensions of HD465-5/-7 and HD605-5/-7 dump trucks

APPLICATION: HD465-5 Dump Trucks, Serial Nos. 4407 and up (All vehicles)
 HD465-7 Dump Trucks, Serial Nos. 7001 thru 7119, 7126
 7141 thru 7178
 HD605-5 Dump Trucks, Serial Nos. 1001 and up (All vehicles)
 HD605-7 Dump Trucks, Serial Nos. 7001 thru 7083

FAILURE CODE: 5A00AA

DESCRIPTION:

1. Introduction

This Service News will introduce the parts and modification procedure to improve durability of the front and rear suspensions on the HD465 and HD605 dump trucks when they are being used in severe operating conditions (like overloaded operations, traveling on bumpy surface roads, high speed traveling, operating in high outside air temperature, etc.) to cause oil leakage from the seal in a short period of time .

2. List of parts

No.	Part No.	Part Name	Q'ty	Remarks
Front suspension ass'y				
0	569-50-6T400 (569-50-61006)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Standard suspension for HD465-5
	569-88-6T700 (569-88-62002)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Standard suspension with ABS for HD465-5
	569-50-6T100 (569-50-63007)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Automatic suspension with PLM for HD465-5
	569-88-6T600 (569-88-63003)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Automatic suspension with PLM and ABS for HD465-5
	569-50-8T400 (569-50-81001)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Standard suspension with PLM for HD465-7
	569-50-8T100 (569-50-83001)	Front suspension ass'y (Front suspension ass'y)	2 (2)	Automatic suspension with PLM for HD465-7
Front suspension parts				
2	707-51-16640	Ring, buffer	2 (2)	} Consumable parts
3	569-50-6A180 (566-50-11180)	Bushing (Bushing)	2 (2)	
4	569-50-65140 (569-50-61141)	Flange (Flange)	2 (2)	
7	07000-15190 (07000-15190)	O-ring (O ring)	2 (2)	
8	07001-05190 (07001-05190)	Ring, backup (Ring, backup)	2 (2)	
Rear suspension ass'y				
10	569-50-6T901 (569-50-6B101)	Rear suspension ass'y (Rear suspension ass'y)	2 (2)	Without PLM for the HD465-5
	569-50-6T201 (569-50-6B201)	Rear suspension ass'y (Rear suspension ass'y)	2 (2)	With PLM for the HD465-5
	569-50-8T901 (569-50-82000)	Rear suspension ass'y (Rear suspension ass'y)	2 (2)	Without PLM for the HD465-7
	569-50-8T201 (569-50-84000)	Rear suspension ass'y (Rear suspension ass'y)	2 (2)	With PLM for the HD465-7

No.	Part No.	Part Name	Q'ty	Remarks
Rear suspension parts				
12	707-51-18640	Ring, buffer	2	
13	569-50-6B220 (569-50-11221)	Bushing (Bushing)	2 (2)	
14	569-50-65190 (569-50-6B250)	Flange (Flange)	2 (2)	
16	01011-61205 (01010-61290)	Bolt (Bolt)	16 (16)	
17	07000-15210 (07000-15210)	O-ring (O-ring)	2 (2)	} Consumable parts
18	07001-05210 (07001-05210)	Ring, backup (Ring, backup)	2 (2)	
19	569-50-6T131 (569-50-6B130)	Rod (Rod)	2 (2)	To be additionally worked locally (HD465-5)
	569-50-8T131 (569-50-82130)	Rod (Rod)	2 (2)	To be additionally worked locally (HD465-7)
20	569-93-73960 (561-93-63960)	Plate, decal (Plate, decal)	2 (2)	English version
	569-93-78960 (561-93-68961)	Plate, decal (Plate, decal)	2 (2)	Indonesian version

3. Details of the modification

(1) Front suspension

	Improved suspension	Current suspension																		
Contents of the modification	<ul style="list-style-type: none"> The material of the bushing has been changed.(DD ← DU) A buffer ring has been added. The flange has been changed. 																			
Structure																				
Part No.	<table border="0"> <tr> <td>2. Buffer ring</td> <td>707-51-16640</td> </tr> <tr> <td>3. Bushing</td> <td>569-50-6A180</td> </tr> <tr> <td>4. Flange</td> <td>569-50-65140</td> </tr> <tr> <td>7. O-ring</td> <td>07000-15190</td> </tr> <tr> <td>8. Backup ring</td> <td>07001-05190</td> </tr> </table>	2. Buffer ring	707-51-16640	3. Bushing	569-50-6A180	4. Flange	569-50-65140	7. O-ring	07000-15190	8. Backup ring	07001-05190	<table border="0"> <tr> <td>3. Bushing</td> <td>566-50-11180</td> </tr> <tr> <td>4. Flange</td> <td>569-50-61141</td> </tr> <tr> <td>7. O-ring</td> <td>07000-15190</td> </tr> <tr> <td>8. Backup ring</td> <td>07001-05190</td> </tr> </table>	3. Bushing	566-50-11180	4. Flange	569-50-61141	7. O-ring	07000-15190	8. Backup ring	07001-05190
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* No. 7, 8 parts are consumable parts.

(2) Rear suspension

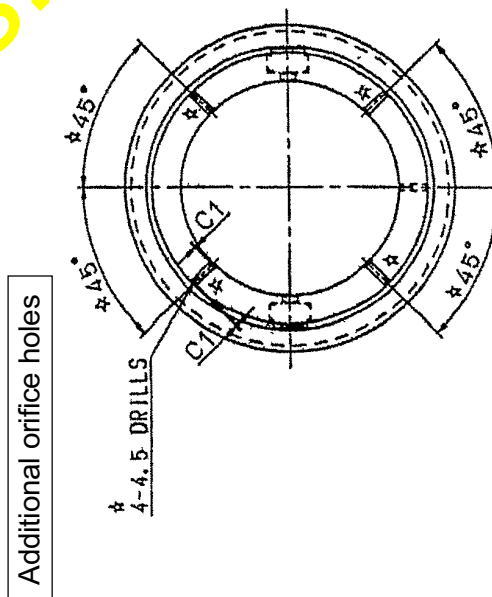
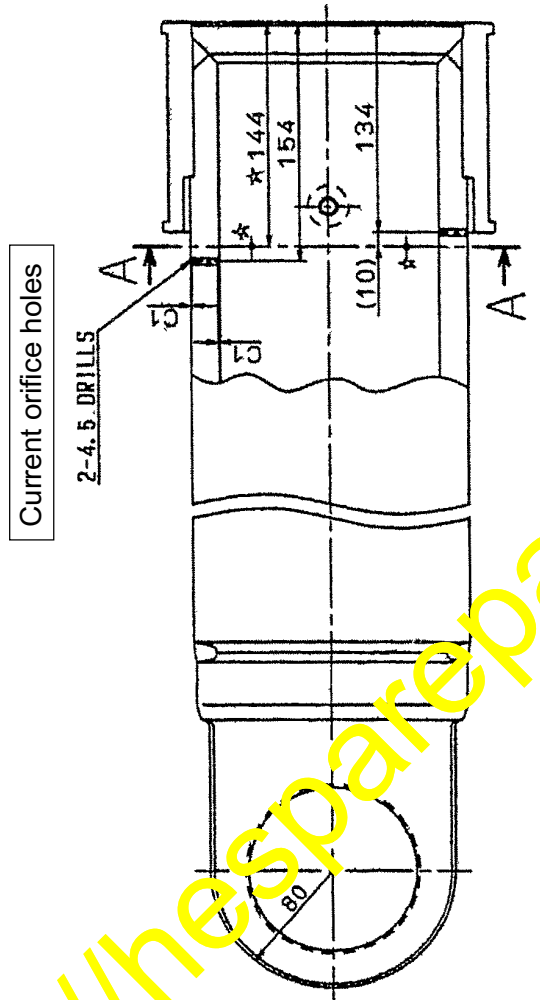
	Improved suspension	Current suspension																														
Contents of the modification	<ul style="list-style-type: none"> The material of the bushing has been changed.(DD ← DU) A buffer ring has been added. The flange has been changed. The length of the flange mounting bolt has been changed. Number of orifice holes in the rod are increased by additional working. (2 places → 6 places) The decal plate has been changed. 																															
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Part No.	<table border="0"> <tr> <td>12. Buffer ring</td> <td>707-51-18640</td> </tr> <tr> <td>13. Bushing</td> <td>569-50-6B220</td> </tr> <tr> <td>14. Flange</td> <td>569-50-65190</td> </tr> <tr> <td>16. Bolt</td> <td>01011-61205</td> </tr> <tr> <td>17. O-ring</td> <td>07000-15210</td> </tr> <tr> <td>18. Backup ring</td> <td>07001-05210</td> </tr> <tr> <td>19. Rod (For HD465-5)</td> <td>569-50-6T131</td> </tr> <tr> <td>(For HD465-7)</td> <td>569-50-8T131</td> </tr> </table>	12. Buffer ring	707-51-18640	13. Bushing	569-50-6B220	14. Flange	569-50-65190	16. Bolt	01011-61205	17. O-ring	07000-15210	18. Backup ring	07001-05210	19. Rod (For HD465-5)	569-50-6T131	(For HD465-7)	569-50-8T131	<table border="0"> <tr> <td>13. Bushing</td> <td>569-50-11221</td> </tr> <tr> <td>14. Flange</td> <td>569-50-6B250</td> </tr> <tr> <td>16. Bolt</td> <td>01010-61290</td> </tr> <tr> <td>17. O-ring</td> <td>07000-15210</td> </tr> <tr> <td>18. Backup ring</td> <td>07001-05210</td> </tr> <tr> <td>19. Rod (For HD465-5)</td> <td>569-50-6B130</td> </tr> <tr> <td>(For HD465-7)</td> <td>569-50-82130</td> </tr> </table>	13. Bushing	569-50-11221	14. Flange	569-50-6B250	16. Bolt	01010-61290	17. O-ring	07000-15210	18. Backup ring	07001-05210	19. Rod (For HD465-5)	569-50-6B130	(For HD465-7)	569-50-82130
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* No. 17 and 18 parts are consumable parts.

* Regarding the No. 19 part, current part can be reused after carrying out additional working.

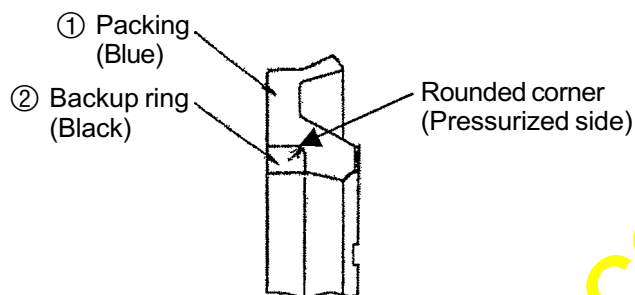
4. Modification procedure

- (1) Carry out the disassembly and reassembly work referring to the Shop Manual when replacing the parts with the improved ones.
- (2) Add the orifice holes with a ϕ 4.5 drill at the four places marked ☆ in the drawing below of the disassembled rod (561-50-6B130).



Cross section A-A

- (3) After the additional working to add the orifice holes on the rod, remove burrs completely from the inside and outside surfaces. Also, before reassembling the rod, remove cutting chips which have entered into the piston section of the rod completely by air blow.
- (4) Since the buffer ring which is to be added newly is made of two sections of ① packing section (being colored blue) and ② backup ring section (being colored black), install the rounded corner side of the ② backup ring section into the ① packing section.

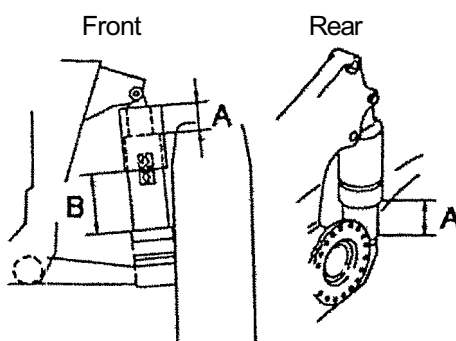


- (5) When adjusting the mounted length of the suspension cylinder after this modification work, carry out the adjustment work referring to the "Modified value" of the adjustment standard indicated in the Table below.

(Unit: mm)

Item			Vehicle model	HD465	HD605		
Mounted length	Front	A	Current value	249 ± 10	249 ± 10	Remain the same.	
			Modified value	249 ± 10	249 ± 10		
		B	Current value	516 ± 10	516 ± 10		Remain the same.
			Modified value	516 ± 10	516 ± 10		
	Rear	A	Current value	220 ± 10	220 ± 10		
			Modified value	204 ± 10	204 ± 10		

- On horizontal road surfaces
- Unloaded state



- (Note) When charging the nitrogen (N₂) gas, since the gas will be dissolved into the new oil and the dimension "A" will be shortened, charge it somewhat in excess (by 20 - 30 mm).

After operating the vehicle for 24 to 48 hours, inspect the cylinders for gas leakage, oil leakage and check the dimension "A". When necessary, carry out re-adjustment of the dimension "A".

- (6) Remove the decal with the current part number and the current dimension "A" of the rear suspension and attach the decal with the new part number and the modified new dimension "A".
(1 plate each on each of the LH side and the RH side)

