

# PARTS & SERVICE NEWS

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(C)

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**SUBJECT:** REPAIR PROCEDURE FOR ENGINE IDLER SHAFT

**PURPOSE:** To introduce a modification procedure to repair the rear idler shaft

**APPLICATION:** SA(A)6D170E-3 Engine, All S/N's  
WA600-3LK Wheel Loader, S/N A53001 thru A53043, A53045, A53046 and A53049  
Balance of model affected see Page 3.

**FAILURE CODE:** A381FF

**DESCRIPTION:**

1. Introduction: When the idler shaft of the rear gear train breaks on the engine, repair the failure following the modification procedure described in this **PARTS & SERVICE NEWS**.

2. List of Parts:

Part No.	Part Name	Qty	Remarks
6240-31-6101 (6240-31-6100)	Gear (Gear)	1 (1)	Replace if needed
(6240-31-6330)	(Gear)	(1)	
(6240-21-2460)	(Shaft)	(1)	
6240-21-2470)	(Plate)	(1)	
(6240-21-2430)	(Bolt)	(1)	
(6162-25-4251)	(Seal)	(1)	Consumable parts to replace when carrying out this modification (Single lip)
(6240-21-4252)	(Seal)	(1)	Consumable parts to replace when carrying out this modification (Double lips)

3. When the rear idler shaft breaks, carry out the inspections and modification following the procedure described below.

- 1) Referring to the Shop Manual, remove the flywheel and flywheel housing.
- 2) Remove the idler gears (① and ③) of the rear gear train.

In case the idler shaft bolt (⑧) is broken, completely remove the tip end of the bolt remaining in the cylinder block.

- 3) Check the contact surface of the idler shaft and the hole for the shaft on the cylinder block.

In case the contact surface has become coarse or in case there is a level difference, polish the surface using an oil stone, etc. until the surface becomes smooth enough.

In case a deep damage or deformation which cannot be repaired is made, replace the cylinder block.

- 4) In case the idler gears are broken, since the valve timing will become deviated, secondary failures like the interference between the piston and the valve or bending of the push rod may occur.

Therefore, remove the cylinder head and inspect the moving valve parts and the piston, and replace the malfunctioning parts.

- 5) After the inspection and repair works, install the improved idler gear to restore the cylinder block.

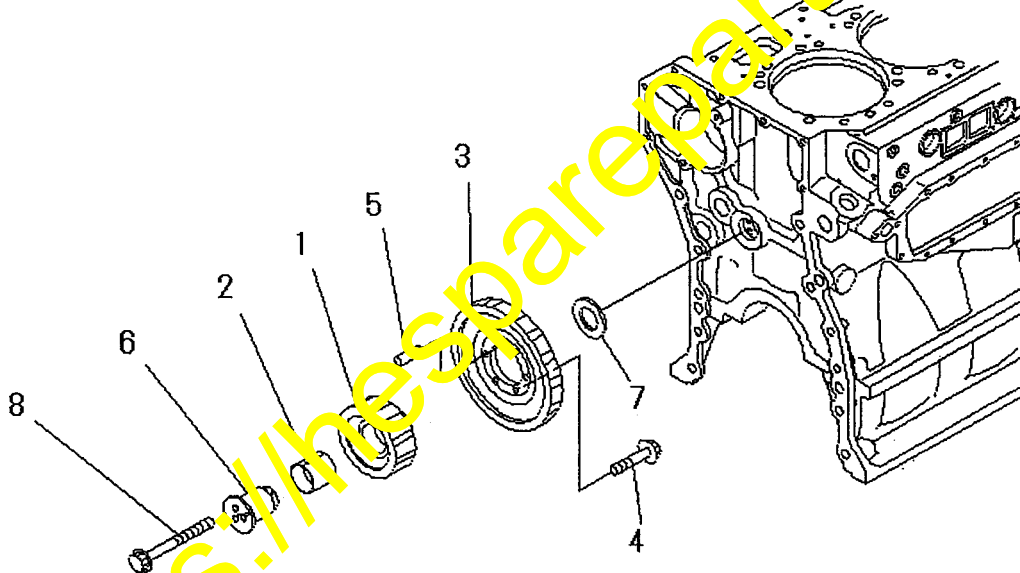
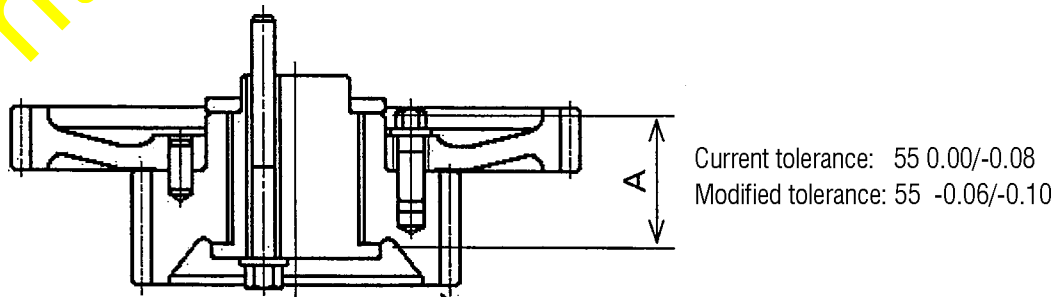


Fig. 1

Dimensions of the improved gear - To improve the lubricity, the tolerance of the dimension "A" has been modified as follows:



The part number is stamped here.

Current part: 6240-31-6110

Modified part: 6240-31-6111

Fig. 2

Check table for the serial numbers of the applicable machines of the main machine models

The serial number starts from the first shipment machine on all the machine models (Sept. '02 and after)

No.	Applicable machine model	Serial No. of the engine		Serial No. of the machine	
		Engines in the field	Engines shipped with the modification completed	Machines in the field	Machines shipped with the modification completed
1	WA600-3A	~ #310472	#310513 ~	~ #52058	#52059 ~
2	WA600-3D	~ #310472	#310513 ~	~ #53008	#53009 ~
3	WA600-AC-3	~ #310425	#310510 ~	-	-
4	WD600-3	-	#310535 ~	-	#50001 ~
5	WA700-3	~ #310471	#310651 ~	~ #51003	#51004 ~
6	HD465-7	~ #310490	#310491 ~	~ #7059	#7060 ~
7	HD605-7	~ #310490	#310509 ~	~ #7026	#7027 ~
8	D375A-5	~ #310480	#310492 ~	~ #18109	#18110 ~
9	PC1250-7	~ #310486	#310506 ~	~ #20033	#20034 ~
10	A6D170E-G1-3	~ #310485	#310497 ~		
11	A6D170E-KC	~ #310157	#310746 ~		
12	170CUM-PG3	~ #310430	#310576 ~		
13	170CUM-IND	~ #310447	#310500 ~		
14					
15					
16					
17					
18					
19					
20					