

# PARTS & SERVICE NEWS

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(C)

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**SUBJECT:** MODIFICATION PROCEDURE TO PREVENT ABNORMAL WEAR OF SPLINE SECTION OF ADDITIONAL COOLER FAN DRIVE MOTOR SHAFT

**PURPOSE:** To inform Field Personnel

**APPLICATION:** WA900-3 Wheel Loaders, S/N 50001 thru 50041  
WD900-3 Wheel Dozer, S/N 50001 thru 50014

**FAILURE CODE:** L932CC

## DESCRIPTION:

### 1. Introduction:

Since abnormal wear may occur on the spline section of the additional cooler fan drive motor shaft, it becomes necessary to modify the shaft structure and make the modification as outlined in this **PARTS & SERVICE NEWS**.

### 2. List of Parts:

Part No.	Part Name	Purpose of Part	Qty.	Remarks
427-S05-5330 (209-03-12171)	Shaft (Shaft)	Replacement	1 (1)	
07000-F2105	O-Ring	Addition	1	When reassembling, need to use <i>new parts</i>
06041-06211	Bearing		2	
07000-E2125	O-Ring		1	
07011-10070	Oil Seal		1	

1. Details of the modification

Improvement of the fan drive motor shaft

Current state

- <1> The grease to lubricate the spline section escapes to the outer circumferential section through the bearing where the immersion resistance is low and the grease is not supplied into the hollow section of the shaft.
- <2> The grease is dispersed to the outer circumferential section by the centrifugal force and grease film interruption occurs on the spline section.

Improved state

- <1> The greasing holes were added to change the structure so that the grease may enter into the hollow section of the shaft.
- <2> The grease dispersion preventive wall was added to prevent the grease film from being interrupted on the spline section.

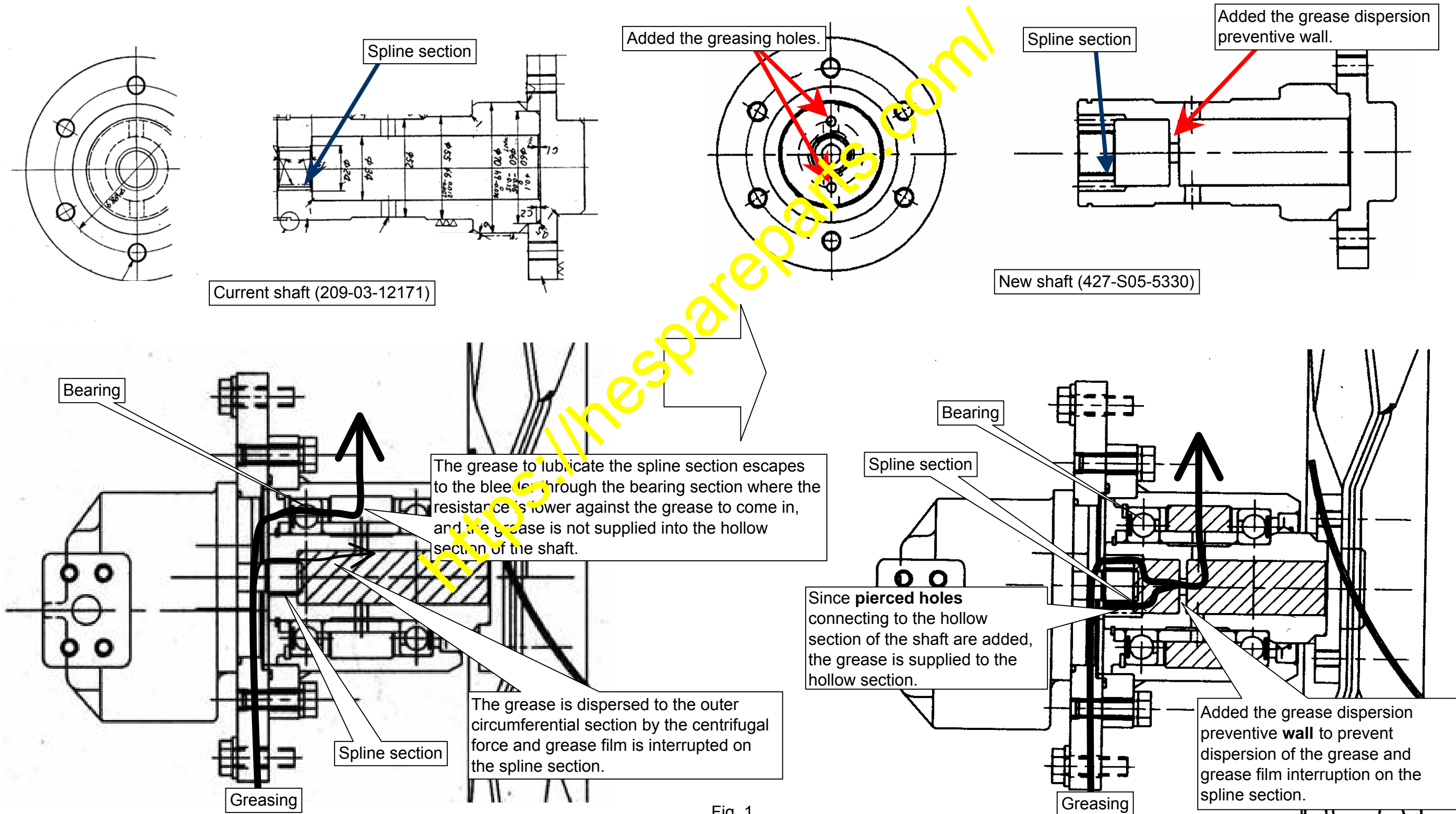
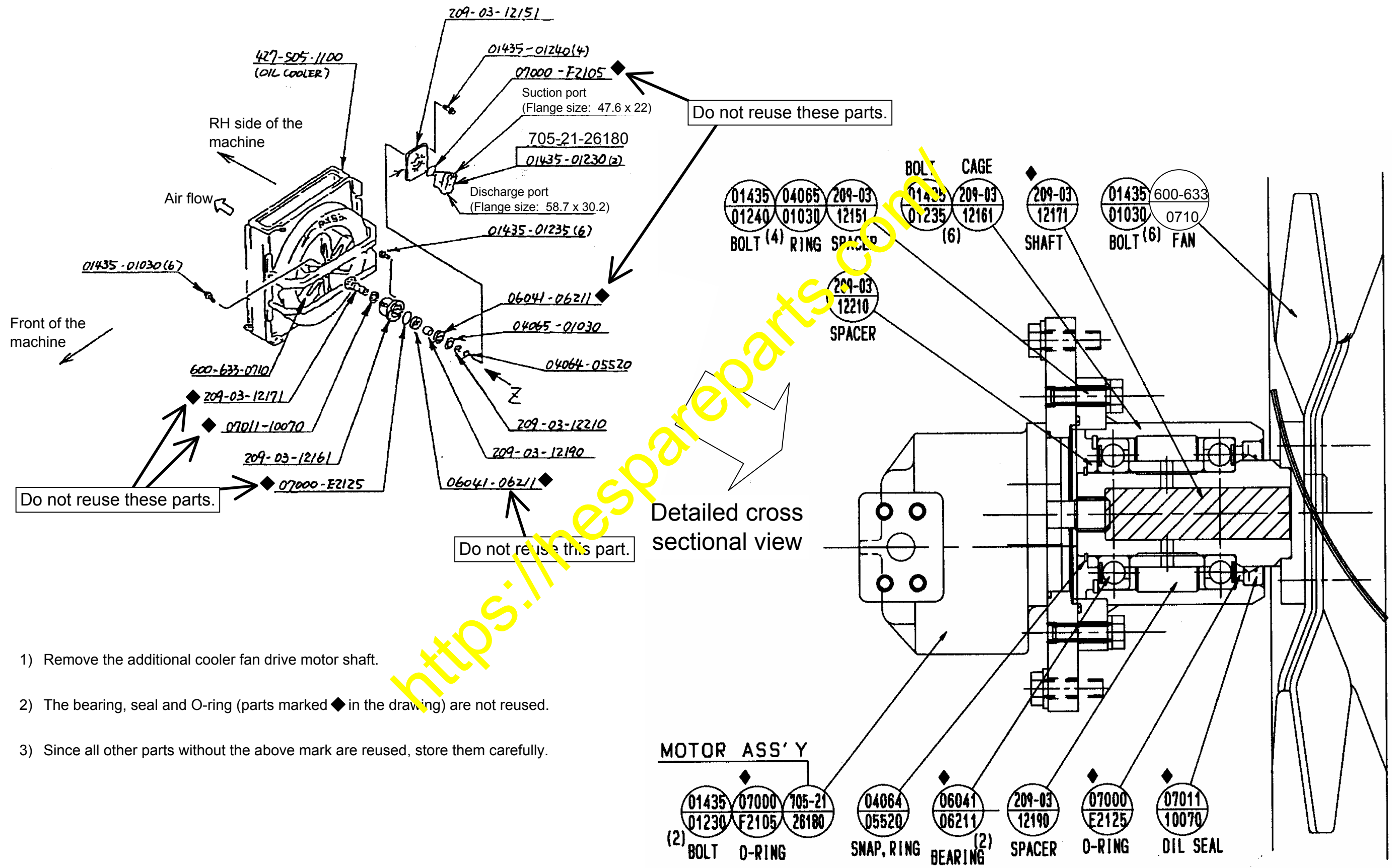


Fig. 1

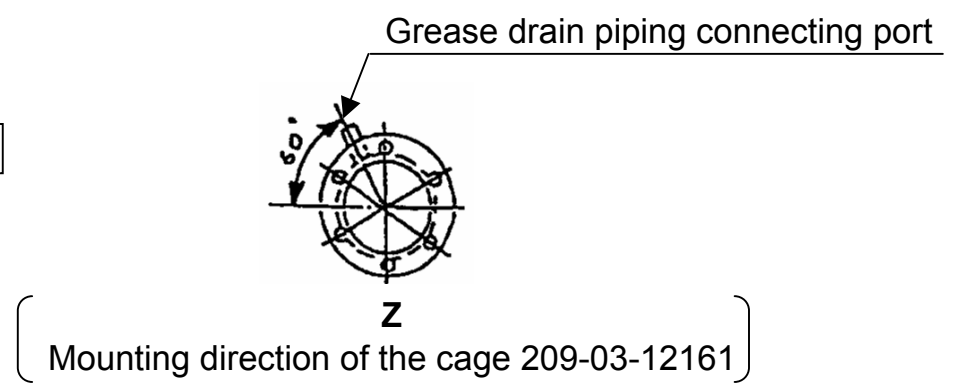
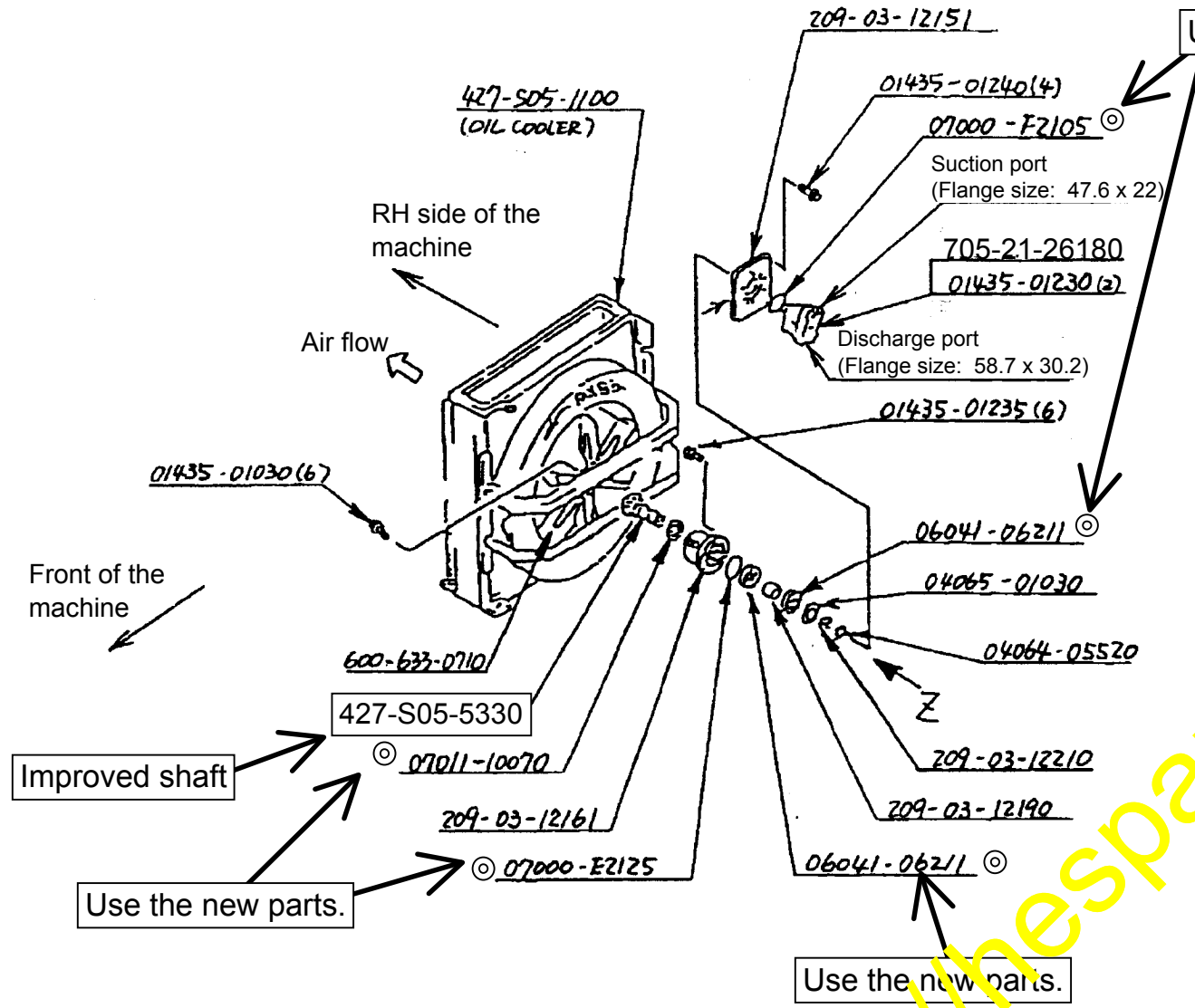
2. Removal procedure



- 1) Remove the additional cooler fan drive motor shaft.
- 2) The bearing, seal and O-ring (parts marked ◆ in the drawing) are not reused.
- 3) Since all other parts without the above mark are reused, store them carefully.

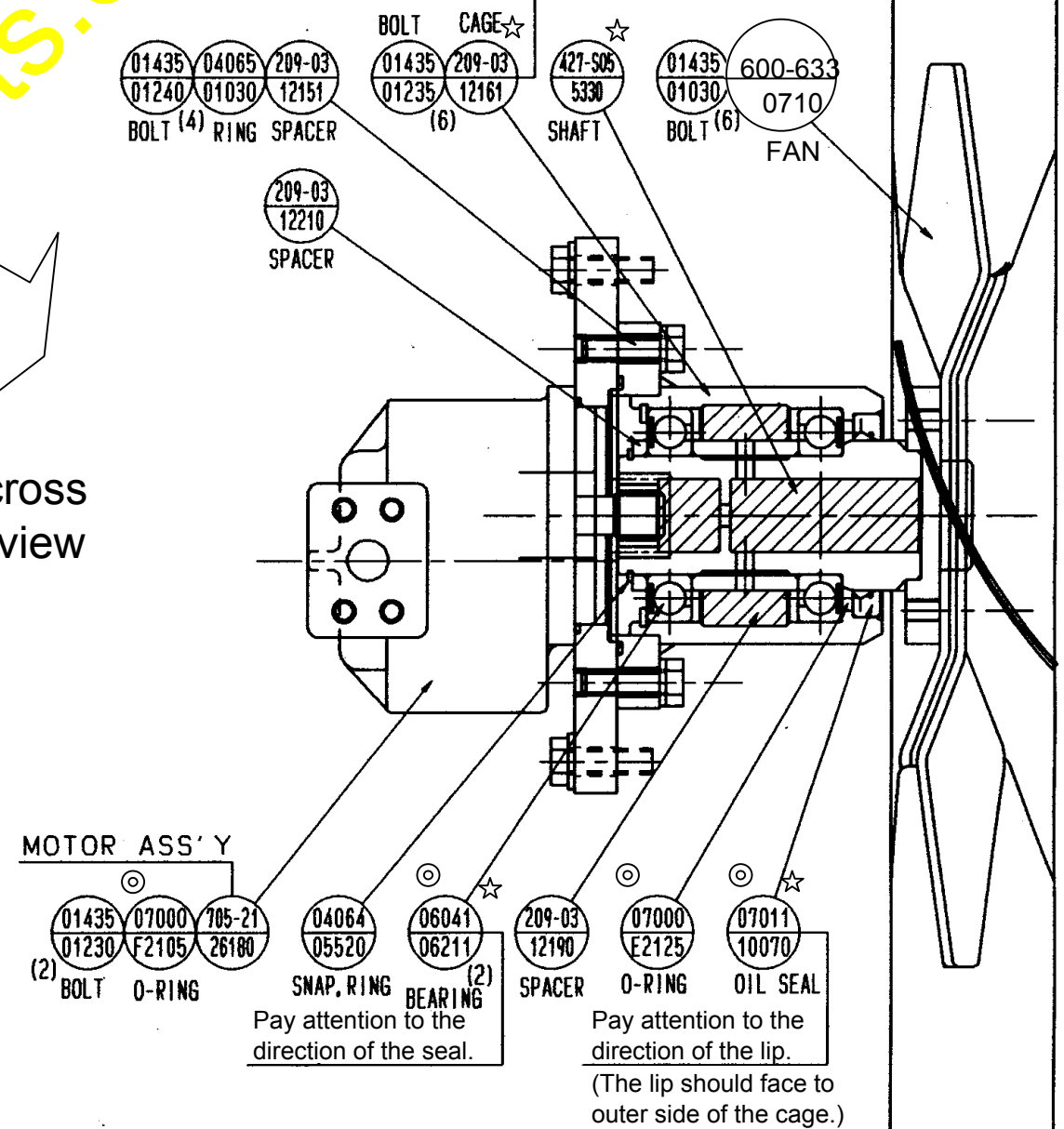
Fig. 2

3. Installation procedure



After filled up with G2-LI (lithium grease) in hatched area of cage, assemble parts.

Detailed cross sectional view



- 1) Install the improved shaft 427-S05-5330.
- 2) Use new parts as the bearing, seal and O-ring. (Parts marked © in the drawing).

**Greasing procedure**

When installing the bearing, shaft, etc. to the cage following the instructions on the next page, charge the grease to the hatched section.

After finishing the installation, grease up by remote greasing and check that the grease comes out from the bleeder.

After starting the operation of the machine, lubricate every 250 H.

Refer to the next page for the installation procedure of the parts marked ☆.

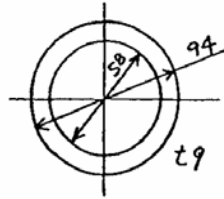
Fig. 3



### 4. Installation procedure for the bearing

When installing the bearing, since interference fit is employed for both of the inner and outer ring, be sure to prepare the patch jigs and press fit them by hydraulic pressure. (Use of a hammer is prohibited.)

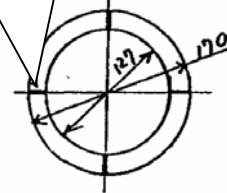
The dimensions of the jigs are as shown in Fig. 4 thru Fig. 6.



SS400P Q'ty: 1 pc.  
Part No.: 427-S05-2980

Fig. 4

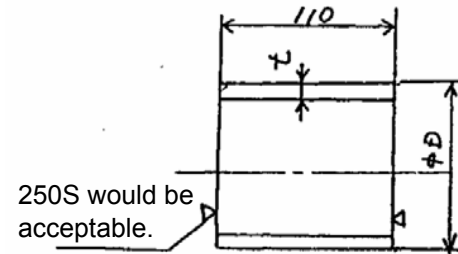
Cut it to 4 equal parts.



Material: SK5M  
t0.2

Cut 7 pcs. of shims (Part No. 426-70-11270) into 4 equal parts using scissors to use for this purpose.

Fig. 6



The dimensions can be either 1 or 2 below.

	ΦD	t	Material
1	82.6	3.2 - 3.8	STKM or
2	88.9	3.2 - 5.3	S45C

Q'ty: 1 pc.  
Part No.: 427-S05-2990

Fig. 5

- 1) Install the bearing and dust seal to the housing.  
After finishing installation, charge G2-LI into the bearing through the section marked \*.

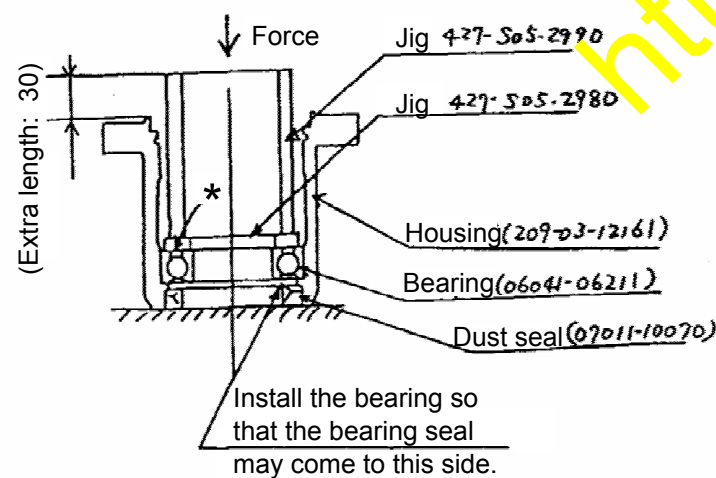


Fig. 7

- 2) Press fit the shaft.  
When installing the shaft, be careful not to catch the dust seal lip inside.

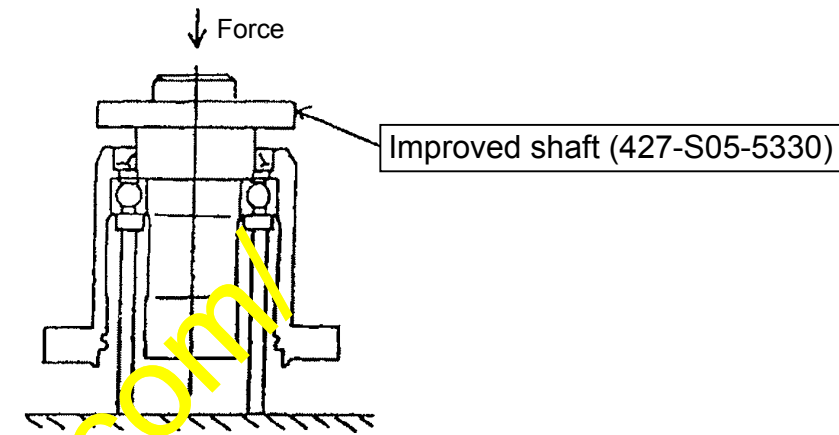


Fig. 8

- 3) Insert the shims to the section "A" in the drawing below.

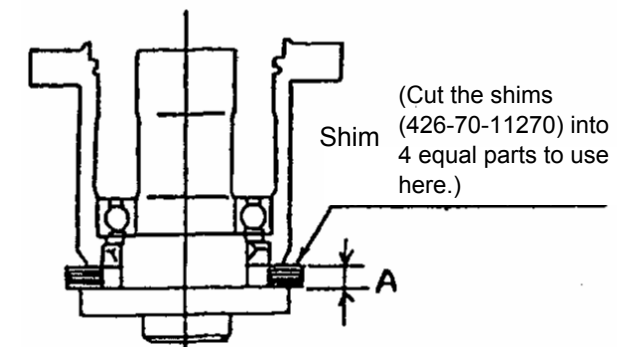


Fig. 9

- 4) After inserting the collar, press-fit the flange side bearing.
  - Charge the grease G2-LI into the bearing through the section marked \*.
  - Charge the grease G2-LI into the hatched sections before installing the bearing.
  - Install the bearing so that the seal may be directed outward.

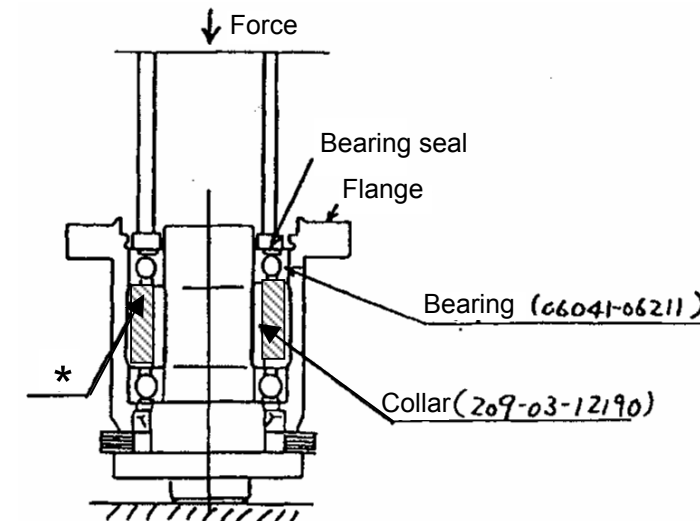


Fig. 10