

INSTALLATION MANUAL

REF NO. BA00008

DATE July 17, 2000

(C)

Page 1 of 10

SUBJECT: PART SETS FOR ORDERING THE FORMER REAR BRAKE INNER GEARS AND HUBS

PURPOSE: To introduce the part sets for ordering the inner gears and hubs of the former rear brakes

APPLICATION: HD785-3 Dump Trucks, S/N 2001 thru 2094
330M Dump Trucks, All Serial Numbers

FAILURE CODE: 2E0099

DESCRIPTION:

The rear brakes have been partially modified. Consequently, when ordering the former types of inner gears and hubs, such part sets or combinations as introduced herein should be indicated according to this **INSTALLATION MANUAL**.

<https://hespareparts.com/>

2. Detail of the part sets for ordering the former parts (Refer to pages 4, 5 & 6.)

		Current part sets		Former part type A		Former part type B	
Modification		One-body type dust seal provided around the external surface of floating seal		Two-split type dust seal provided around the external surface of floating seal		No dust seal provided around the external surface of floating seal	
	Applicable Truck Serial No.	#2095~		The Truck Serial Nos. 2051, 2052, 2059, 2060, 2067 thru 2094 and such trucks as modified according to the PARTS & SERVICE NEWS NO. A890332A		The Truck Serial Nos. 2001 thru 2050, 2053 thru 2058, 2061 thru 2066 and such trucks as unmodified according to the PARTS & SERVICE NEWS NO. A890332A	
No.	Part Name	Part No.	Qty/Truck	Part No.	Qty/Truck	Part No.	Qty/Truck
1	Gear, inner	561-33-62312	2	☆561-33-62980 (561-99-78210)	2 I	☆561-33-62311	2
2	Hub	561-33-62221	I 2	☆561-33-62220		☆561-33-62220	2
3	Retainer	568-33-11933	I 2			—	
4	Seal	568-33-11511	2	561-33-62960 (561-99-78162)	2	—	
5	O-ring	566-09-31110	2			—	
6	Pin	04020-01024	4			—	
7	Elbow (joint)	285-35-11820	2	※07206-31014	2	※07206-31014	
8	Gasket	—		※07005-01412	4	※07005-01412	
9	Bracket	561-33-62690	2	—		—	
10	Tube	—		※561-33-62410	2	※561-33-62410	
11	Sleeve	—		※07831-00612	2	※07831-00612	
12	Nut, sleeve	I —		※07832-00614	2	※07832-00614	
13	Connector	—		※07836-00617	2	※07836-00617	
14	Tube	◆ 285-35-12150	2	※07822-00607	2	※07822-00607	
15	Yip	08036-01814	4	※04434-01208	2	※04434-01208	
16	Bolt	01010-51016	2	—		—	
17	Washer	01643-51032	2	—		—	
18	Bracket	—		※561-33-62970 (561-99-78181)	4	—	
19	Bracket	—		※561-33-62960 (561-99-78170)	4	—	
	Service, kit	561-33-05032	2	561-33-05031	2	561-33-05030	2

References:

- Note 1) Parts marked ★ are those parts whose supply is stopped.
- Note 2) Parts marked ※ are those to be disused when the current part set(s) are supplied.
- Note 3) Part Nos. in parentheses are those of parts previously prepared before the regular production.
The Part Nos. just above the parentheses are those of the same parts obtained in the regular production.

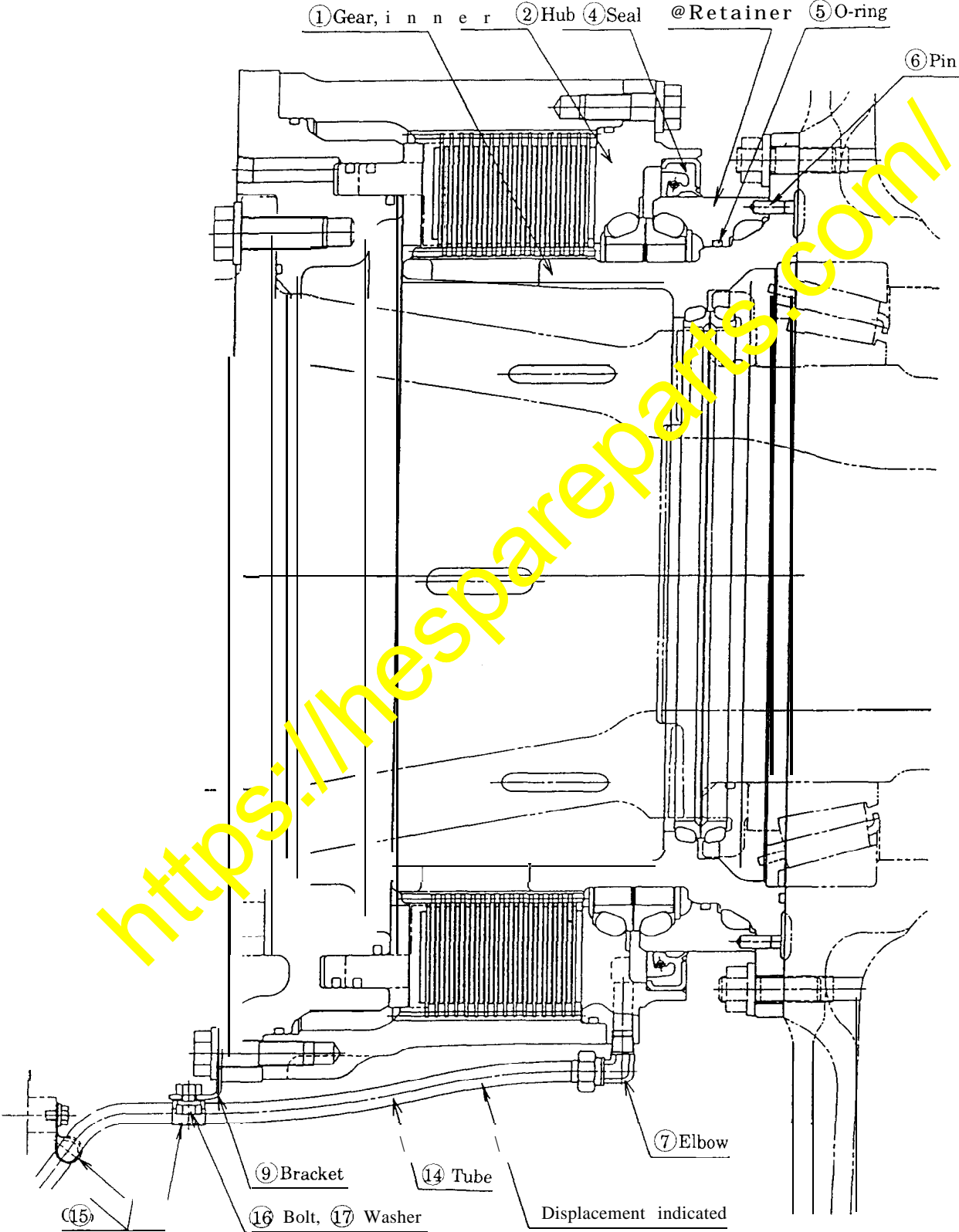
Note 4) The following cases must conform to this INSTALLATION MANUAL.
(In these cases, such parts whose supply is stopped as described above are to be replaced.)

- ① Where the former type (A) inner gears (561-33-62980) are to be replaced.
- ② Where the former type (A) hubs (561-33-62220) are to be replaced.
- ③ Where the former type (B) hubs (561-33-62220) are to be replaced.
- ④ Where the former type (B) inner gears (561-33-62311) are to be replaced.

- In the above cases, they should be replaced as the current part sets. (Part Nos.1 thru 7, 9, 14 thru 17, and the service kit should be ordered.)
- When only parts other than those described above are to be replaced, such parts should be ordered by stating their Part Nos.

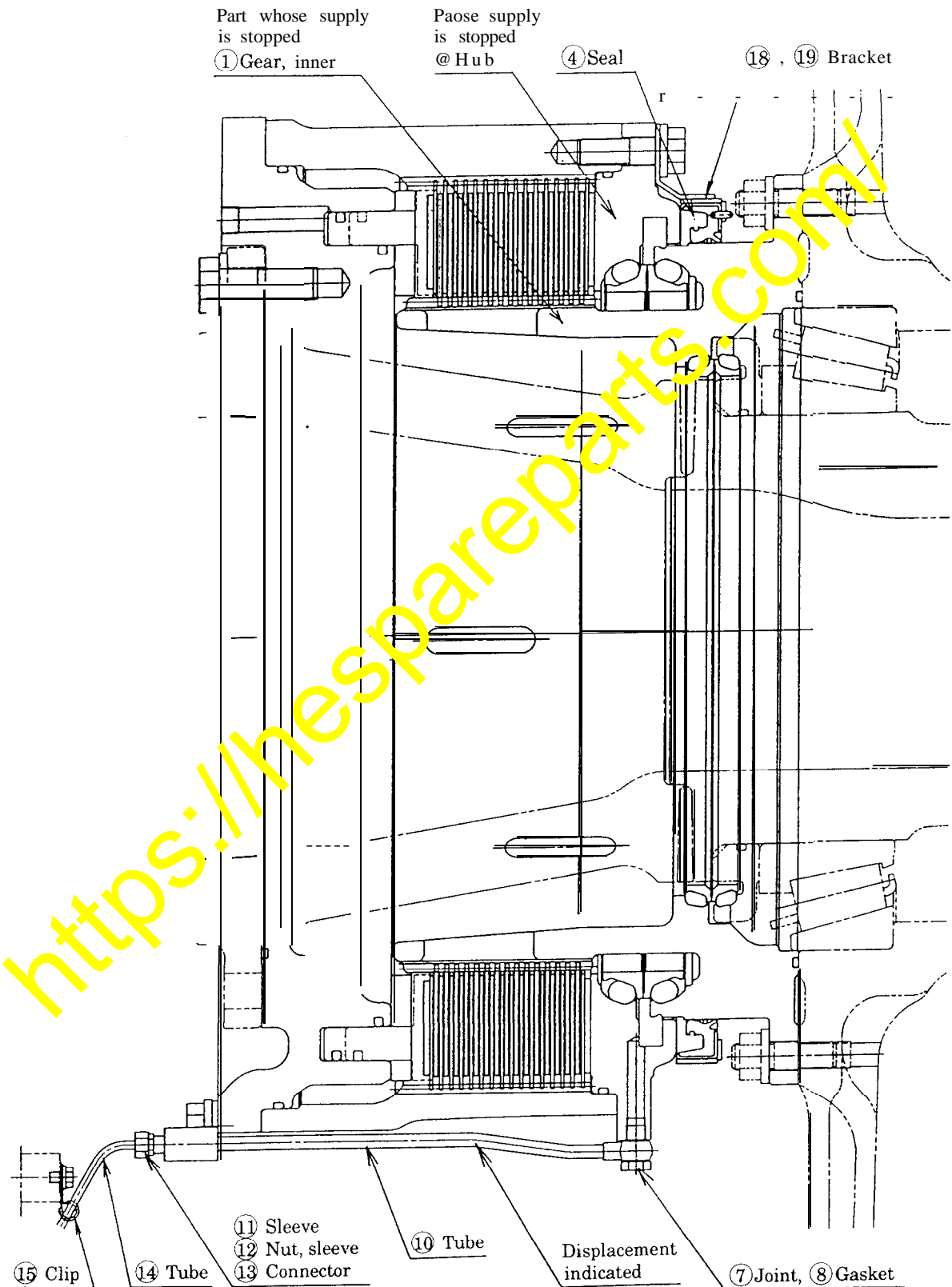
<https://hespareparts.com/>

Current
(The One-body type dust seal provided around the floating seal external surface)



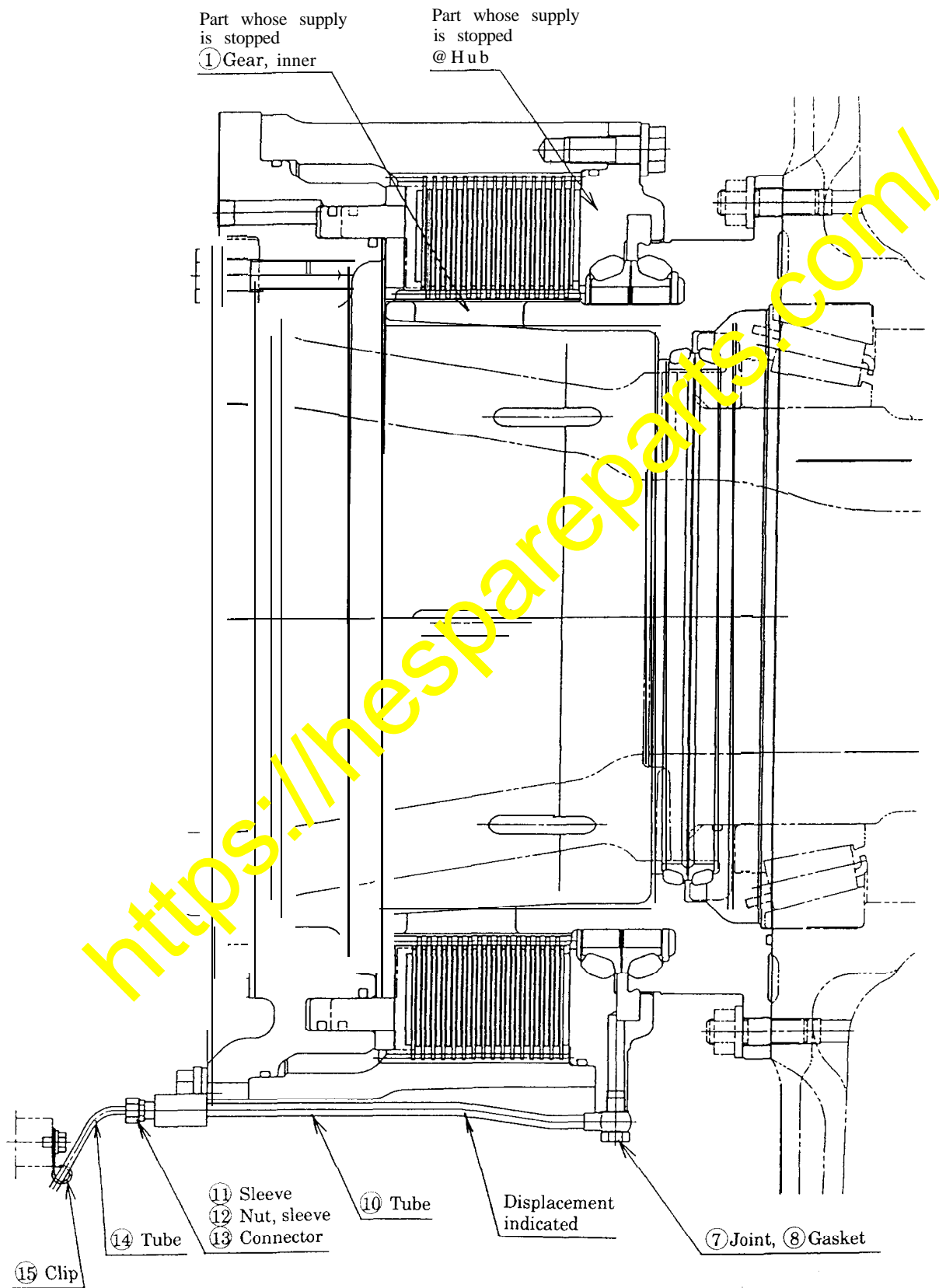
Former type A

(The two-split type dust seal provided around the floating seal external surface)



Former type B

(No dust seal provided around the floating seal external surface.)



3. Disassembling and assembling procedures

3.1 Tools required

- 1) Hydraulic jack 50-t capacity, 2 jacks
- 2) Forklift truck (5-t) for removing wheels
- 3) Brake securing fixture (790-438-1150) 3 pcs./one wheel
- 4) Installer (791-585-1510) for setting the floating seal 1 tool
- 5) Push tool (792-530-1700) for setting the floating seal 1 set
- 6) Oil (EO30-CD) to be changed in the final drive 6.5 lit/wheel
- 7) Oil (EO10-CD) for cooling the brake 270 lit/when the whole unit is changed

3.2 Working steps

- (1) Park the truck on the flat ground and chock the front wheels.
- (2) Jack up at the axle housing underside to raise the wheels from the ground. Remove the wheels by operating a forklift truck.
- (3) Disassemble the final drive ass'y, referring to the applicable SHOP MANUAL (Page 30-114).
- (4) Disassemble the rear brake ass'y, referring to the SHOP MANUAL (Page 30-118).

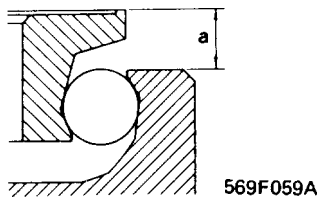
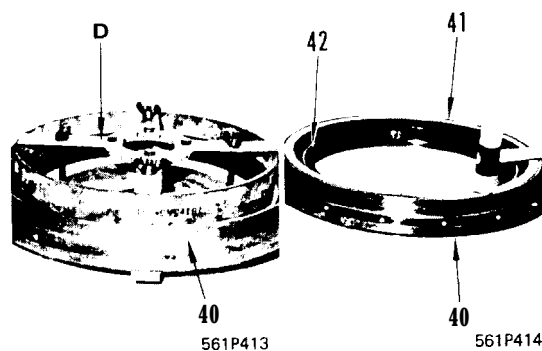
3.3 Assembly of rear brake assembly

(1) Hub

- 1) Using tool D install floating seal (42) on hub (40).


★ Completely wipe off white powder (blooming) from surface of O-ring with alcohol before installing.

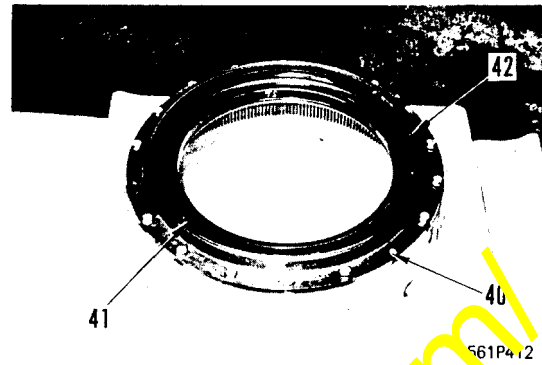
★ After installing, measure distance "a" between hub and floating seal at four points, and check that difference is within 1 mm.



2) Install oil seal (41) on hub (40).

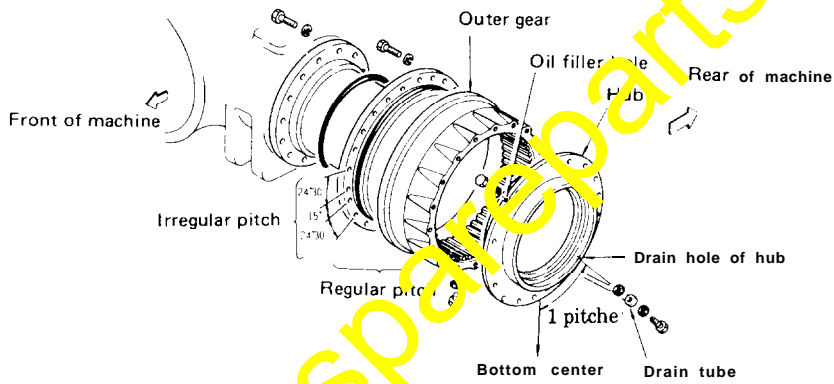
★ Completely remove grease and dry contact surface, then coat completely with adhesive compound.

 Oil seal: Adhesive compound
Loctite: 648
(P/No.79A-129-9110)

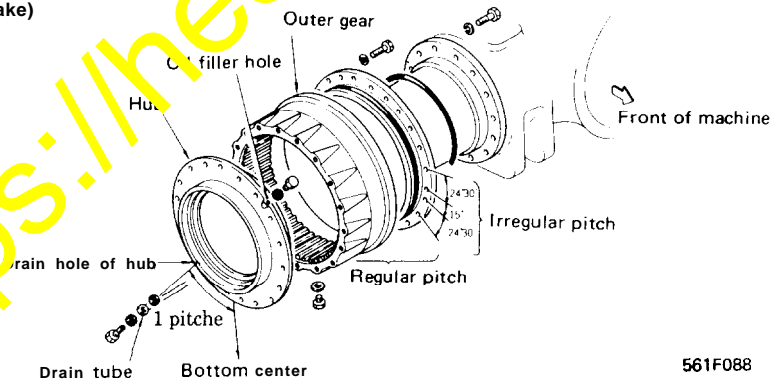


3) Install hub (40) on outer gear (20).
When installing hub on outer gear, set hub drain hole one bolt hole pitch to machine rear from bottom center.

(Left brake)

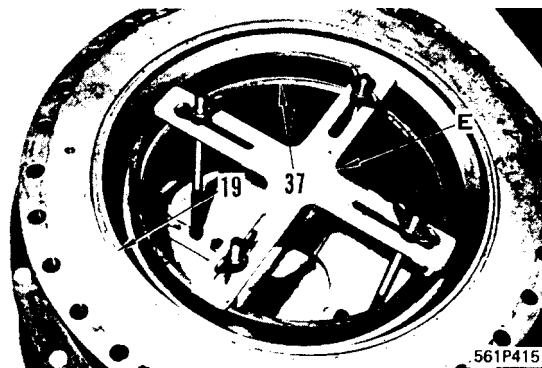


(Right brake)



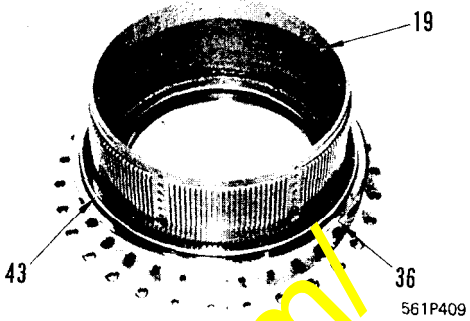
(2) Floating seal

Using installer E install floating seal (37) in inner gear (19).




(3) Retainer

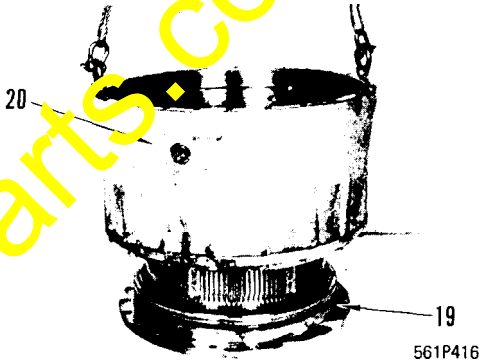
- 1) Install floating seal (43) on retainer (36).
- 2) Fit dowel pin and install retainer (36) on inner gear (19).



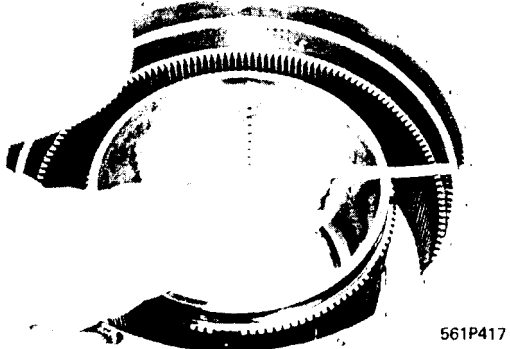
(4) Outer gear

- 1) Coat lip surface of oil seal with grease.
- 2) Using three eyebolts (thread dia. = 20 mm, pitch = 2.5 mm), install outer gear (20) on inner gear (19).
- ★ When installing be careful not to let lip of oil seal bend to inside.

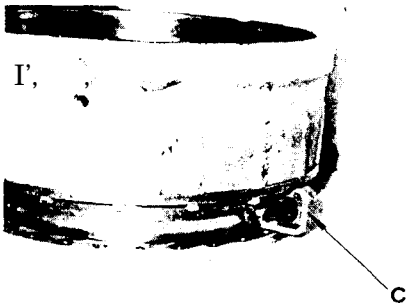
 Seal surface of floating seal:
Engine oil



- 3) Carry out centering of outer gear and inner gear.

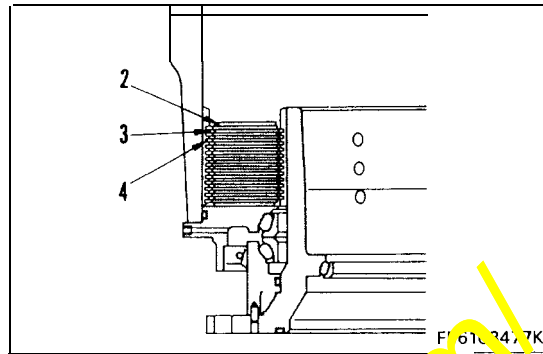


- 4) Install fixture C at three places to lock outer gear and inner gear.



<https://thespareparts.com/>

- (5) Damper, disc, plate
Assemble damper (2), disc (3), and plate (4) to inner gear and outer gear assembly.



3.4 Installation of the rear brake assembly

- (1) Install the rear brake ass'y and final drive ass'y, referring to PARS.30-118 and 30-116 in the SHOP MANUAL.
- (2) Connect the drain tube to the rear brake.
- (3) Set the wheels in place and remove jacks.
- (4) Add oil into the final drive.

3.5 Air-bleeding the rear brake circuit

Perform the air-bleeding of the rear brake circuit, referring to PAR.20-23 in the SHOP MANUAL.

<https://hespareparts.com/>