

# PARTS & SERVICE NEWS

REF NO.	AA03063
DATE	Apr. 11, 2003

**SUBJECT:** BEARING CREEP OF TRANSMISSION

**PURPOSE:** To introduce newly developed parts kit to prevent creeping of the transmission bearings

**APPLICATION:** WA800-1 Wheel Loaders, S/N 10001 thru 10730  
 WA800-2L Wheel Loaders, S/N A20001 and up  
 WA800-2LC Wheel Loaders, S/N A20001 and up  
 WA800-3 Wheel Loaders, S/N 50001 thru 50034  
 WA900-1 Wheel Loaders, S/N 10001 thru 10009  
 WA900-1L Wheel Loaders, S/N A20001 and up  
 WA900-1LC Wheel Loaders, S/N A20001 and up  
 WA900-3 Wheel Loaders, S/N 50001 thru 50023  
 WA900-3LC Wheel Loaders, S/N A50001 thru A50030  
 WD900-3 Wheel Loaders, S/N 50001 thru 50006

**FAILURE CODE:** 1500CA and 1610CA

**DESCRIPTION:**

This **PARTS & SERVICE NEWS** will introduce a new parts kit to improve the wear resistance of the bearing of the transmission assembly by preventing the bearings from creeping.

<https://hespareparts.com/>

## 2. List of parts

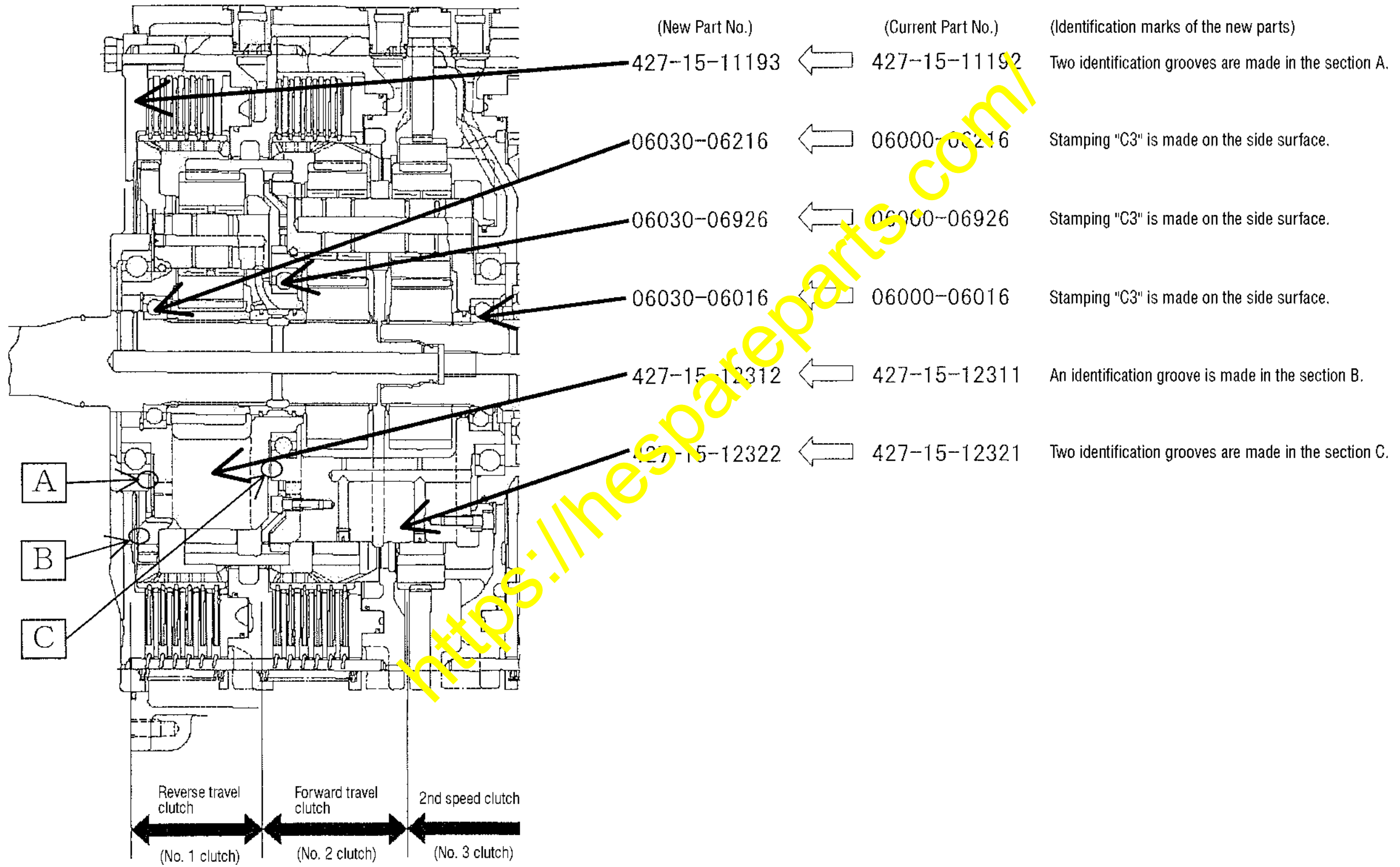
No.	Part No.	Part Name	Q'ty	Remarks
1	427-15-11004 (427-15-11003)	Transmission ass'y (Transmission ass'y)	1 (1)	Part No. of the transmission ass'y
Replace the parts, Item Nos. 2 thru 7 at the same time.				
2	427-15-11193 (427-15-11192)	Housing (Housing)	1 (1)	
3	427-15-12312 (427-15-12311)	Carrier (Carrier)	1 (1)	
4	06030-06216 (06000-06216)	Bearing (Bearing)	1 (1)	
5	06030-06926 (06000-06926)	Bearing (Bearing)	1 (1)	
6	427-15-12322 (427-15-12321)	Carrier (Carrier)	1 (1)	
7	06030-06016 (06000-06016)	Bearing (Bearing)	1 (1)	
Replace the parts, Item Nos. 8 thru 11 at the same time.				
8	427-15-12332 (427-15-12331)	Carrier (Carrier)	1 (1)	
9	06030-06020 (06000-06020)	Bearing (Bearing)	1 (1)	
10	06030-06926 (06000-06926)	Bearing (Bearing)	1 (1)	
11	427-15-12341 (427-15-12340)	Carrier (Carrier)	1 (1)	

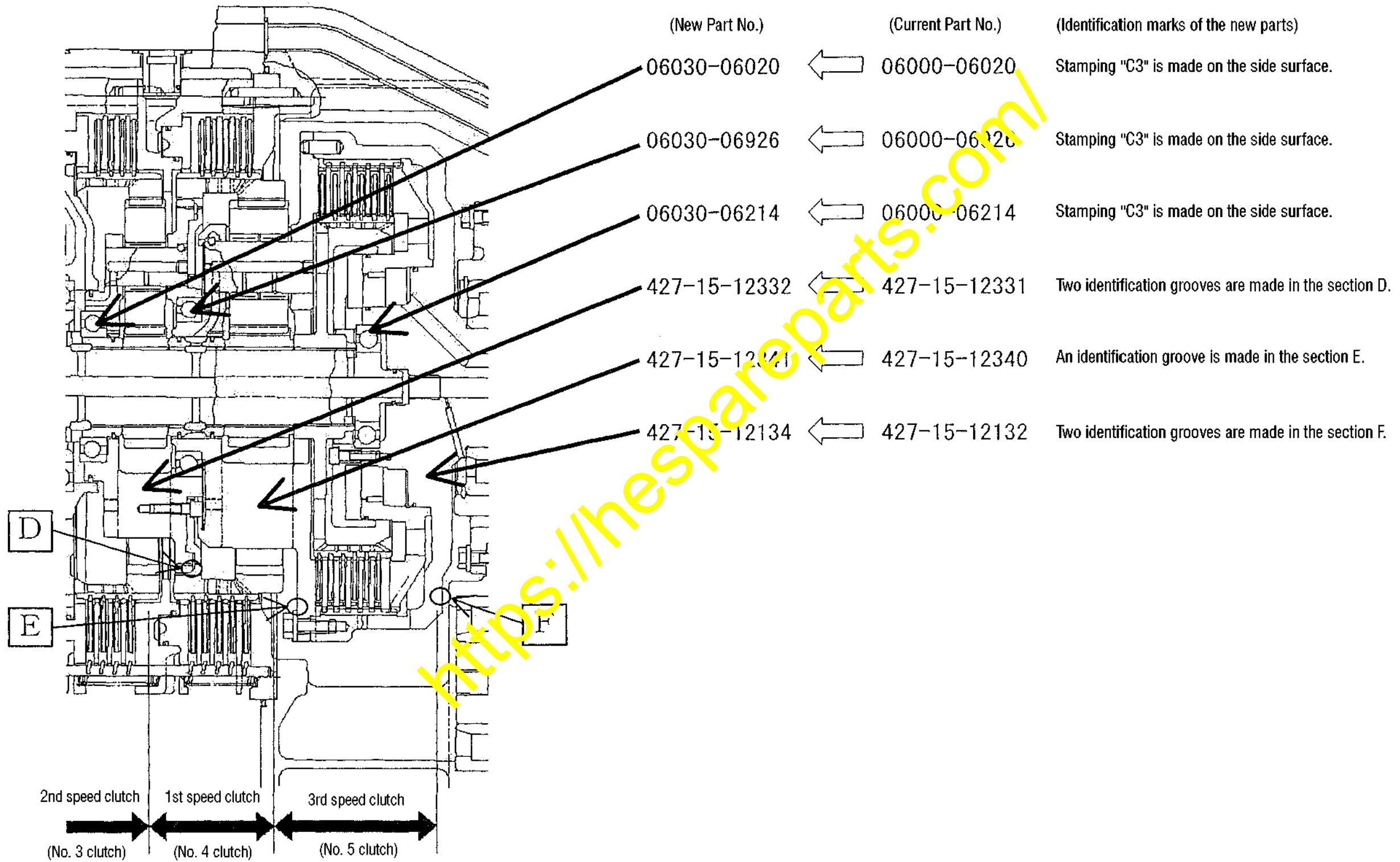
No.	Part No.	Part Name	Q'ty	Remarks
Replace the parts, Item Nos. 12 thru 25 at the same time.				
12	427-15-13112 (427-15-13111)	Case (Case)	1 (1)	}
13	(04071-00180)	(Snap ring)	(1)	
14	427-15-12134 (427-15-12132)	Shaft (Shaft)	1 (1)	}
15	234-15-12790 (234-15-12790)	Screw (Screw)	1 (1)	
16	04020-00616 (04020-00616)	Pin (Pin)	1 (1)	}
17	06030-06214 (06000-06214)	Bearing (Bearing)	1 (1)	
18	06341-00224 (06032-00224)	Bearing (Bearing)	1 (1)	}
19	427-15-13131 (427-15-13130)	Case (Case)	1 (1)	
20	01010-81240	Bolt	2	}
21	01643-31232	Washer	2	
22	427-15-19470	Cage	1	}
23	01010-81235	Bolt	11	
24	01643-31232	Washer	11	}
25	427-15-19461 (427-15-19460)	Bearing (Bearing)	1 (1)	

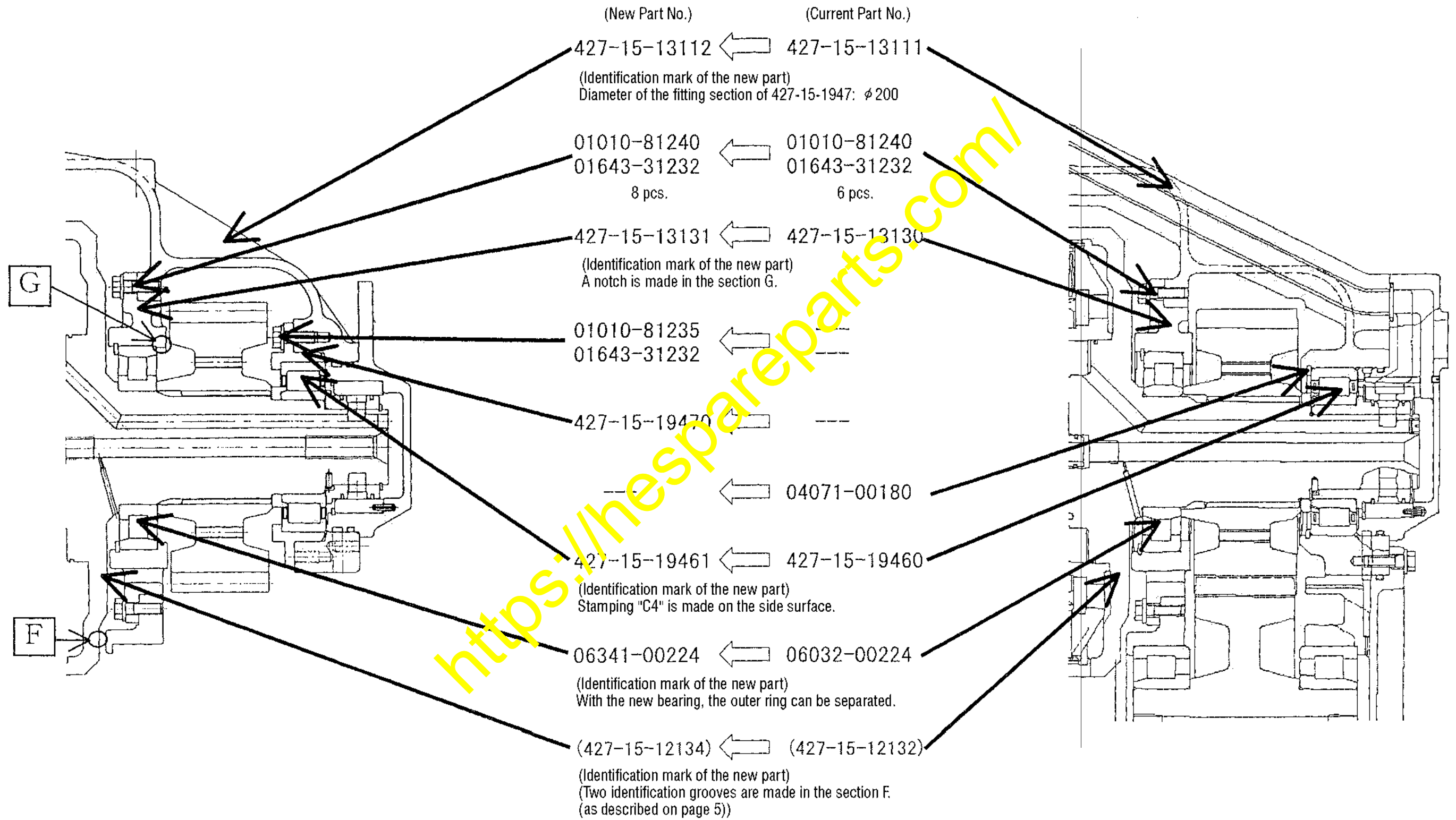
<https://mespareparts.com/>

3. Details of the replacing parts

To prevent occurrence of creeping of the bearings, the interference, etc. of the following parts is to be changed.







## 4. Replacement procedure

- [1] Disassemble the transfer ass'y and the transmission ass'y referring to the Chapter "Disassembly and Assembly" in the Shop Manual.
- [2] Replace the changing parts referring to Section 3 "Details of the replacing parts".
- [3] Reassemble the transfer ass'y and the transmission ass'y referring to the Chapter "Disassembly and Assembly" in the Shop Manual.  
However, refer to the "Note 1" described below when reassembling the bearings of the transmission ass'y and refer to the "Note 2" described below when reassembling the No. 1 gear and its neighboring parts of the transfer ass'y.

## (Note 1)

The press-fitting force for the bearing has increased by this modification.

Therefore, change the installation method for the bearing from the current method of "press-fitting by use of jigs" which is described in the Shop Manual to the following installation method.

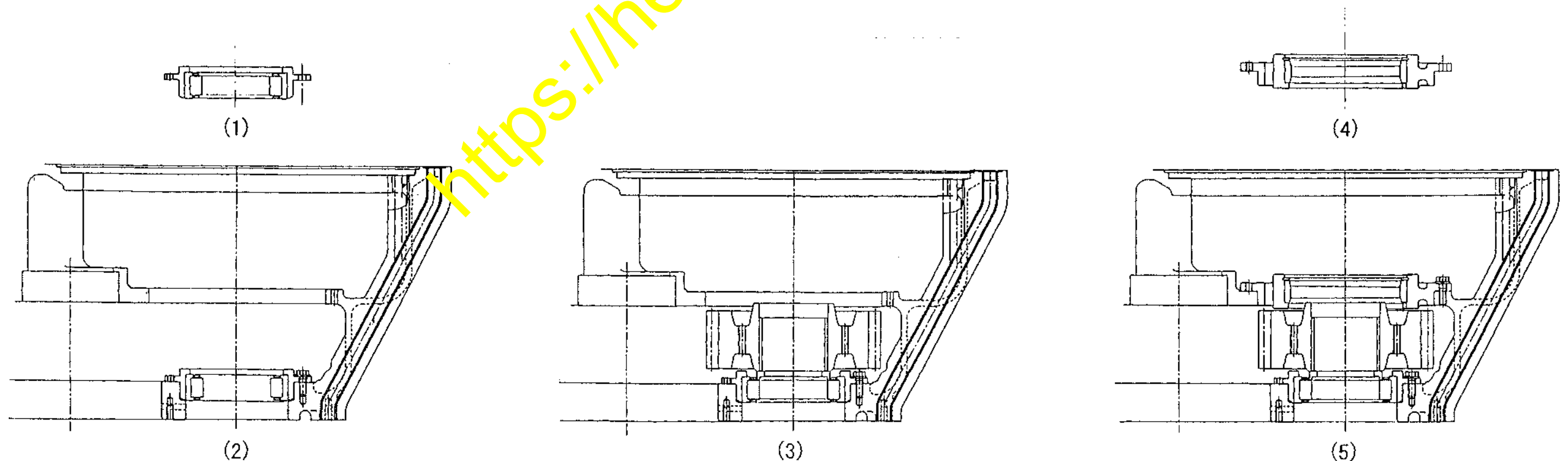
- (1) When installing the bearing onto a shaft:  
Warm up the bearing (but do not heat the bearing to a temperature exceeding 120 °C) and install the bearing by warm fitting.
  - (2) When installing the bearing into a hole:  
Cool down the bearing and install the bearing by cold fitting.
  - (3) When installing the bearing which has already been installed onto a shaft into a hole in a sub-assembly state:  
Cool down the outer race of the bearing which has already been installed onto a shaft, and install the bearing and the shaft in the sub-assembly state into the hole by cold fitting.
- ★ When cooling down the bearing, in order to prevent occurrence of rusting, drop or spray 6 cc or more of oil (EO10-CD or EC30-CD or a mineral type rust preventive lubrication oil) and turn the bearing by 10 turns or more.
  - ★ When installing the inner race of the 427-15-19461 in the transfer ass'y section, in order to secure necessary clearance, install the inner race by press-fitting under ordinary temperature as per the instructions given in the Shop Manual.

## (Note 2)

The installation procedure for the No. 1 gear and the neighboring parts has been changed by this modification and refer to the following instructions when performing the installation work.

– Installation procedure for the No. 1 gear and the neighboring parts –

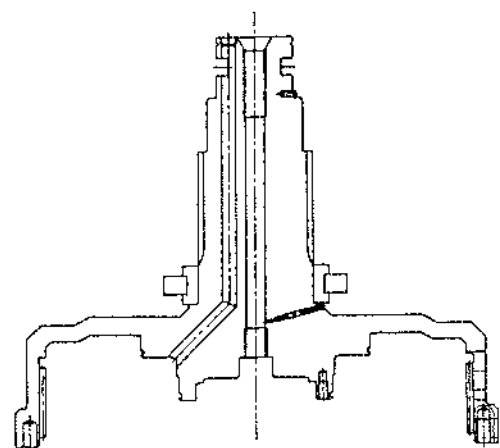
- (1) Install the 427-15-19461 (bearing) to the 427-15-19470 (cage).  
(When installing the bearing, cool it down, then install it into the cage by cold fitting.)
- (2) Mounting the sub-assembly as per the above Item (1) into the hole of the No. 1 gear of the transfer ass'y, fasten them with 11 pcs. each of the bolts and washers (01010-81235 and 01643-31232).
- (3) Install the flange of the bearing (427-15-19461) to the No. 1 gear (427-15-13211).
- (4) Install the outer race of the 06341-00224 (bearing) to the 427-15-13131 (case) before putting in the 130-09-1550 (snap ring).  
(When installing the outer race of the bearing, cool it down and install it to the case by cold fitting.)
- (5) Mounting the sub-assembly as per the above Item (4) to the transfer ass'y, fasten them with 11 pcs. each of the bolts and washers (01010-81235 and 01643-31232).



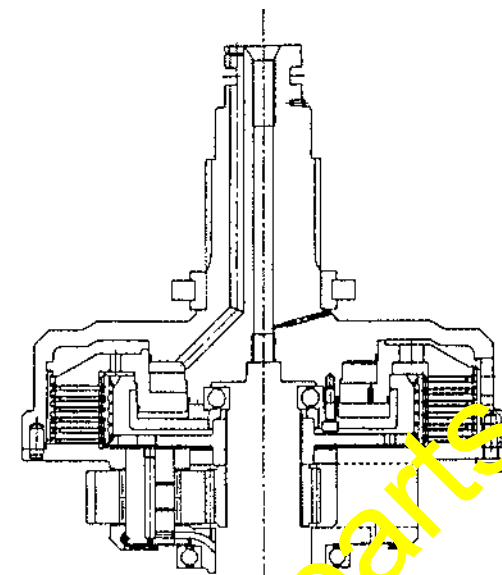


- Installation of the rotary clutch section of the transmission ass'y -

- (6) Install the 06341-00224 (bearing) to the 427-15-12134 (shaft).  
(When installing the bearing, warm it up (but do not heat the bearing to a temperature exceeding 120 °C) and install the bearing by warm fitting.)
- (7) Perform the remaining installation work for the rotary clutch section referring to the Shop Manual.

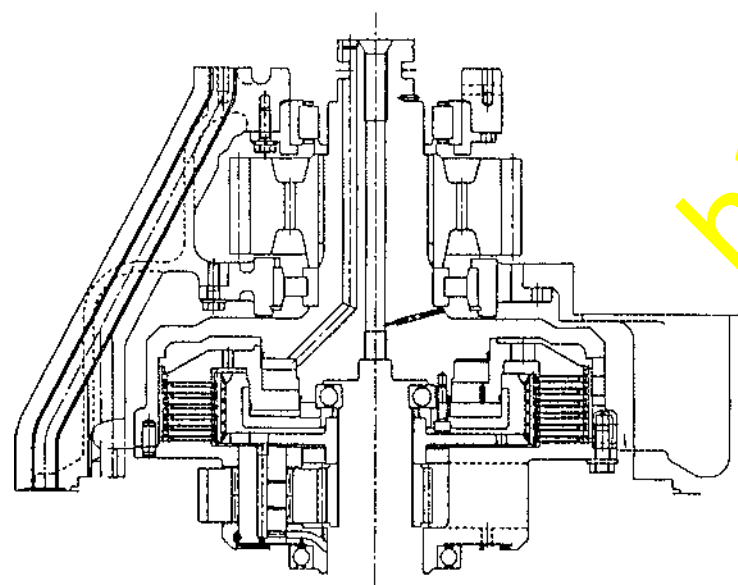


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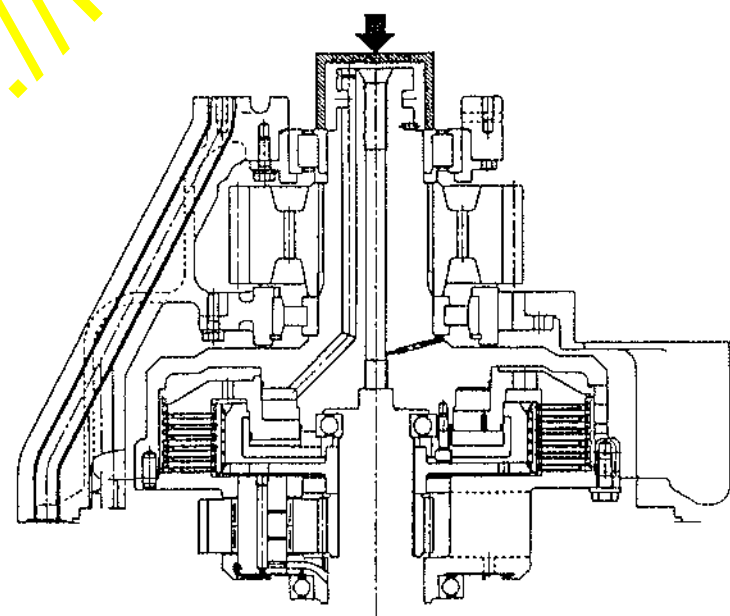


- Connection of the rotary clutch ass'y and the transfer ass'y (as per the instructions given in the Shop Manual) -

- (6) Hoist the transfer ass'y to connect it to the rotary clutch ass'y.
- (9) Press-fit the inner race of the 427-15-19461 (bearing) to the rotary clutch ass'y using the press tool as per the instructions given in the Shop Manual.  
(Press-fit the inner race at the ordinary temperature. Also, pay sufficient attention to the rollers of the bearing so that they do not fall down.)



(8)



(9)