

# PARTS & SERVICE NEWS

REF NO.	AT00205A
DATE	Sep. 6, 2001

This PARTS & SERVICE NEWS supersedes the previous issue No. AT00205 dated Oct. 5, 2000 which should be discarded.

**SUBJECT:** REPAIR OF T/C STATOR BUSH ON HD465/605/785/985-5

**PURPOSE:** To introduce modification procedures to repair the torque converter stator bushings on HD465-5, HD605-5, HD785-5 and HD985-5 dump trucks

**APPLICATION:** HD465-5 Dump Trucks, Serial Nos. 4626 thru 4833 (T/C 3679 thru 3987)  
 HD605-5 Dump Trucks, Serial Nos. 1014 thru 1116 (T/C 3679 thru 3987)  
 HD785-5 Dump Trucks, Serial Nos. 4003 thru 4151 (T/C 4421 thru 1711)  
 HD985-5 Dump Trucks, Serial Nos. 1021 thru 1049 (T/C 1421 thru 1711)

**FAILURE CODE:** 1324CA

**DESCRIPTION:**

1-1. Introduction

- (1) Torque converter stator bushings with insufficient chamfering for the side edges of the oil groove were used when some of the aforementioned dump trucks were manufactured and these vehicles have been shipped out already.  
(Refer to page 2 for details.)
- (2) When these vehicles are in operation, the end face of the bushings may wear abnormally by run out of the oil film.  
Although performance of the vehicle will stay normal during initial stage of wears (within 1,000 hours), as the wear progresses, horse power shortage or similar abnormality will occur.
- (3) When the vehicle is deemed to have lost some horse power and if substantial quantity of gold colored foreign substance is found to have been caught by the transmission strainer, the bushings have been worn considerably and implement the modification introduced in this Service News to repair the failure.  
(Refer to page 2 regarding the determination criterion if or not to make this modification.)

1-2. Revised places:

Replaces 	Sep. 6, 2001	A review of the criterion to make a judgement of the modification to be made
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## 1-(4) Modifying section

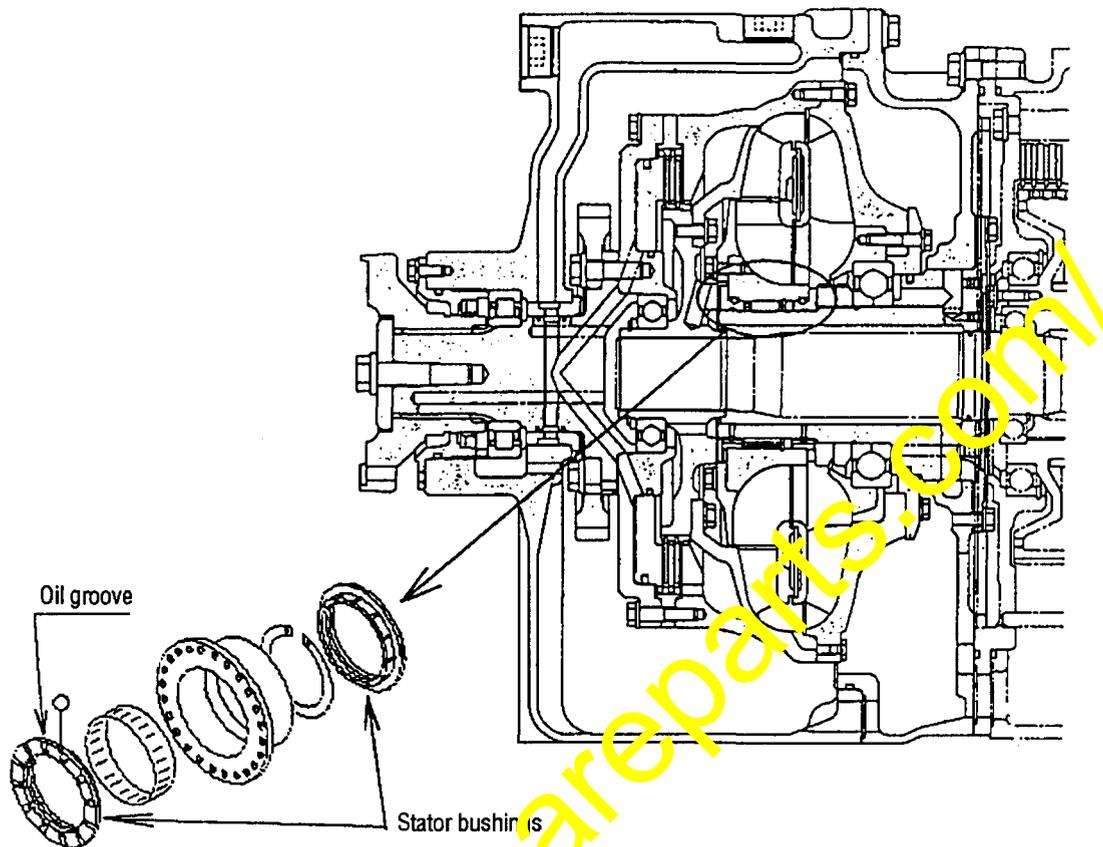


Fig. 1 Cross-sectional view of the torque converter

## 1-(5) Determination criterion if or not to make this modification

Monitoring the vehicle state and determination criterion if or not to make this modification

- Monitoring the vehicle state: If the oil clinic diagnosis has resulted in a Cu (copper) content of more than 50 and less than 500 ppm, undergo oil clinic diagnosis at 250h intervals to monitor the vehicle state.  $\Delta$  300
- Implementation of the modification: When the vehicle is deemed to have lost some horse power, if substantial quantity of gold colored foreign substance is found to have been caught by the transmission strainer and if the oil clinic diagnosis has resulted in a Cu (copper) content of 500 ppm or more, implement the modification of the torque converter stator bushings.  $\Delta$  300

1-(5) Contents of the improvement

The side edges of the oil groove of the torque converter stator bushings are now properly chamfered to facilitate oil entry, thus preventing occurrences of running out of film lubrication and eliminating the cases of early stage wears of the bushings.

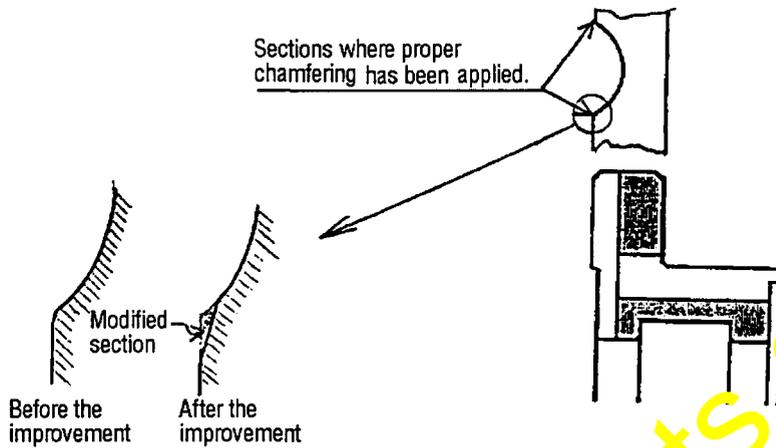


Fig. 2 Torque converter bushing

2. List of parts

Status of modification of the independent spare part (bushing)

- Spare parts stocked in overseas affiliates ..... Not modified yet

Part No.	Part Name	Purpose of part	Q'ty	Remarks
569-13-01100 (569-13-01100)	T/C ass'y (T/C ass'y)	Reworked	1 (1)	HD465-5, HD605-5
569-13-41001 (569-13-41001)	T/C ass'y (T/C ass'y)		1 (1)	HD465-5, HD605-5
561-13-41021 (561-13-41021)	T/C ass'y (T/C ass'y)		1 (1)	HD785-5, HD985-5
561-13-00110 (561-13-00110)	T/C ass'y (T/C ass'y)		1 (1)	330M (KMS)
569-13-42140 (569-13-42140)	Bushing (Bushing)		1 (1)	HD465-5, HD605-5
711-35-22141 (711-35-22141)	Bushing (Bushing)		1 (1)	HD465-5, HD605-5
568-13-12141 (568-13-12141)	Bushing (Bushing)		1 (1)	HD785-5, HD985-5 330M (KMS)
711-28-22141 (711-28-22141)	Bushing (Bushing)		1 (1)	HD785-5, HD985-5 330M (KMS)

### 3. Modification procedures

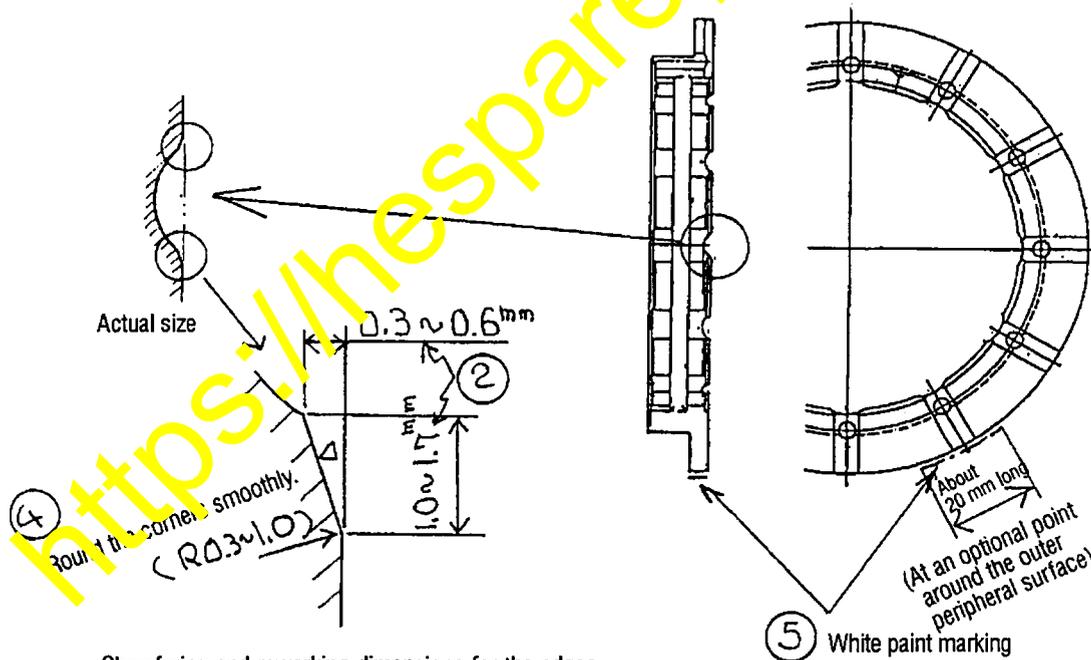
#### 3-(1) Modification of the torque converter assembly

- 1 Replace the stator bushings referring to the Shop Manual.  
While making this modification work, check if the peripheral parts of the stator bushings are not damaged. If any of them are found to be discolored (by seizure) or damaged, replace them with new parts.
- 2 Before installing the new bushings, check and make sure if their oil groove edges are chamfered before actually installing them.
- 3 After installing the unit back to the chassis, apply sufficient flushing.  
(This is because foreign substance may be remaining inside the pipings and in the hydraulic circuits of the oil cooler, etc.)

#### 3-(2) Modification procedures for independent spare bushings:

Modification procedures to repair the spare parts stocked in overseas affiliates

- 1 Necessary tools and devices
  - a. Files    b. Emery paper (#200) (Necessary man-hour for this modification: 0.5 hours)
- 2 Grind the edges of the oil groove to the following dimensions using a file.
- 3 Remove burrs and flashes from the corners using a file.
- 4 Finish the corners to smooth surfaces using emery paper.
- 5 After finishing this modification, apply white paint marking of about 20 mm long on the outer peripheral surface of the bushing.



Chamfering and reworking dimensions for the edges of the oil groove (Make the modification using the above dimensions as the reference dimensions.)