



# PARTS & SERVICE NEWS

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Page 1 of 2

**SUBJECT:** NEW DIFFERENTIAL SPIDER SHAFTS ON WA300-1 AND WA320-1

**PURPOSE:** To introduce a new reinforced spider shaft in the differential.

**APPLICATION:** WA300-1 Wheel Loaders, Serial Nos. 10001 thru 20649  
WA320-1 Wheel Loaders, Serial Nos. 10001 thru 20339, A25001 thru A25021

**DESCRIPTION:**

1. Introduction

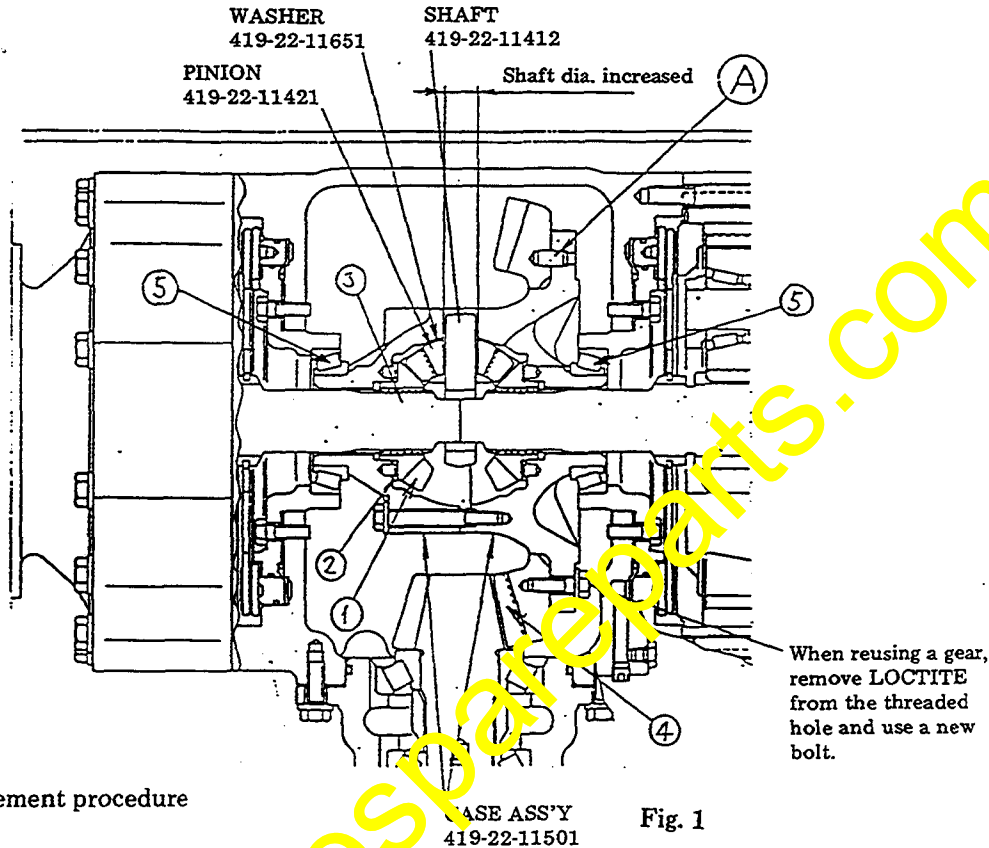
If the existing spider shaft is cracked or broken on a WA300 or WA320 machine, replace the shaft with the new reinforced one together with 4 items of other parts according to this PARTS & SERVICE NEWS.

2. New and replacement parts

Part No.	Part Name	Qty	Purpose of part	Remarks
419-22-10005 (419-22-10004)	AXLE (F) ASS'Y (AXLE (F) ASS'Y)	(1)	Reworking	
419-22-11024 (419-22-11023)	F. DIFF ASS'Y (F. DIFF ASS'Y)	1 (1)		
419-23-10006	AXLE (R) ASS'Y	1		
419-23-11025	R. DIFF ASS'Y	1	Replacement	
419-22-11412 (419-22-11411)	SHAFT (SHAFT)	2 (2)		
419-22-11501 (419-22-11500)	CASE ASS'Y (CASE ASS'Y)	2 (2)		
419-22-11421 (419-22-11420)	PINION (PINION)	8 (8)		
419-22-11651 (419-22-11650)	WASHER (WASHER)	8 (8)		
419-22-11432	GEAR	4		When damaged badly, replace.
419-22-11631	WASHER	4		
175-21-12180	PIN	8		

3. Shaft reinforcement

New spider shaft has been reinforced by increasing its shaft dia. and the fillet R. In consequence of the reinforced spider shaft, 3 items of parts (washer, pinion and case ass'y) should also be replaced with those of new part nos., as shown in Fig. 1 below.



4. Replacement procedure

(1) Disassembly

- Disassemble the differential, referring to the applicable Shop Manual (Par. concerning the "Disassemble of the differential").

(2) Then, be sure to check parts to be reused for any abnormalities. (If a part is found abnormal, replace it with a new one)

See if there are any secondary failures due to the spider shaft damage.

- ① Side gear: The splined portion for cracks (by a color check), damage on the tooth surfaces (by visual check)
- ② Washer (side gear): For damage due to the foreign matter trapped therein (by visual check)
- ③ Sun gear: The splined portion for cracks (by a color check)
- ④ Spiral bevel gear: The tooth surfaces for damages (by visual check)
- ⑤ Bearings: Rollers as well as the inner and outer race track surfaces for damages (by visual check)

(3) Reassembly

- Reassemble the differential, referring to the Shop Manual (Par. concerning the assembly of the differential)

Note) At present, dowel pin (Ⓐ in Fig. 1) is not used in the bevel gear. Therefore, no dowel pin hole is provided in the new case ass'y (419-22-11501). (In case of the bevel gear with dowel pin, dowel pin Ⓐ need not be reinstalled any longer)