

# PARTS & SERVICE NEWS

REF NO.	AT03188
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(C) Page 1 of 4	

**SUBJECT:** REPLACEMENT OF STEERING VALVE MOUNTING BRACKET ON WA320-5

**PURPOSE:** To introduce modification procedure to replace the steering valve mounting bracket on WA320-5 wheel loaders

**APPLICATION:** WA320-5 Wheel Loaders, Serial Nos. 60004 thru 60038

**FAILURE CODE:** 4A35CA

## DESCRIPTION:

### 1. Introduction

On the WA320-5 wheel loaders, since the spline engagement depth between the steering valve and the steering column shaft is insufficient, replace the steering valve mounting bracket to the improved bracket.

Carry out the modification work following the modification procedure being outlined in this service News.

### 2. List of parts

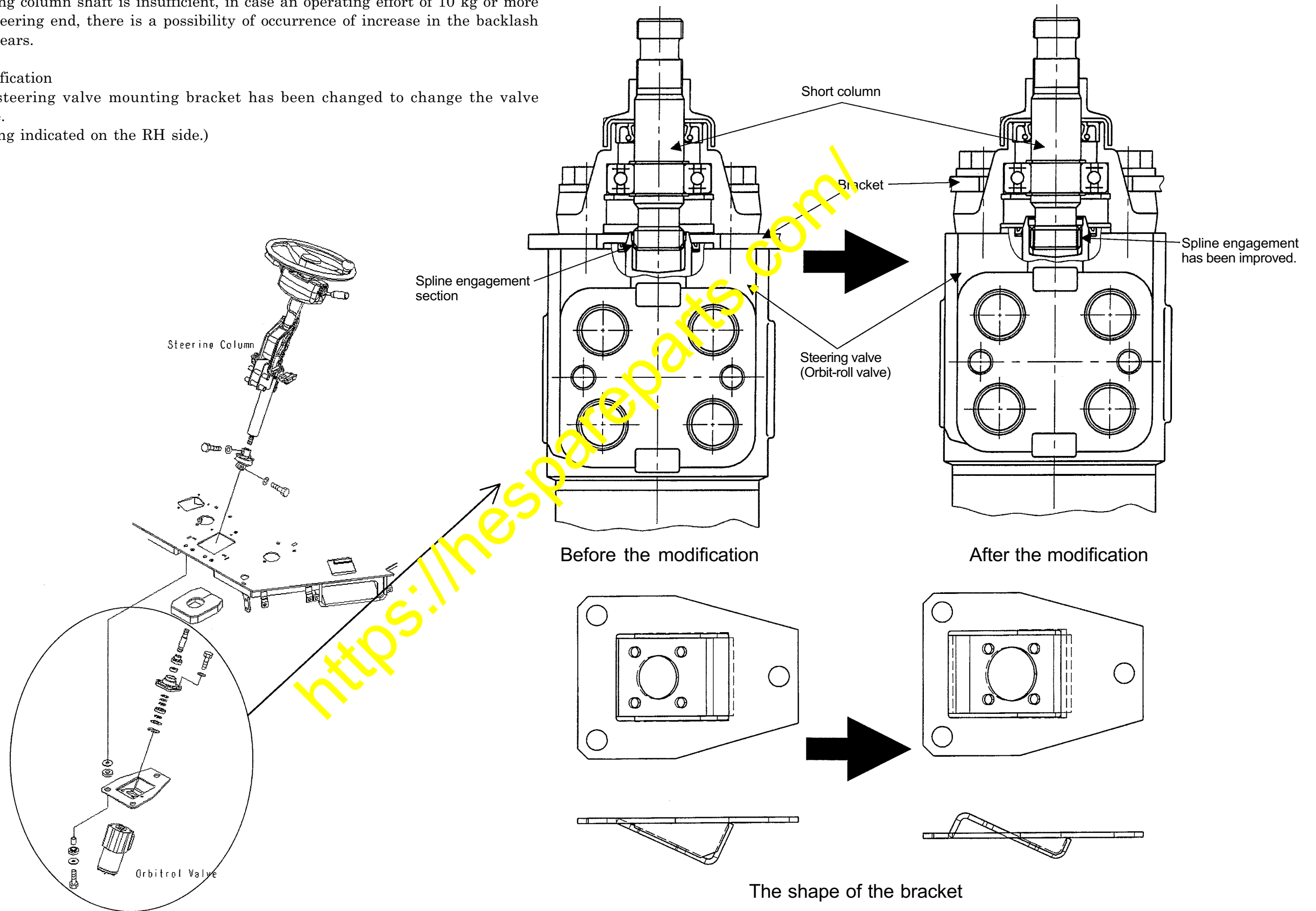
Part No.	Part Name	Purpose of part	Q'ty	Remarks
419-40-32160 (418-40-32131)	Bracket (Bracket)	} Replacement	1 (1)	Usable after making reworking per the reworking drawing indicated on page 4.
419-40-32141 (419-40-32140)	Seal (Seal)		1 (1)	

3. Failure content

Since the spline engagement depth between the steering valve being positioned under the floor and the steering column shaft is insufficient, in case an operating effort of 10 kg or more is applied at the steering end, there is a possibility of occurrence of increase in the backlash because of spline wears.

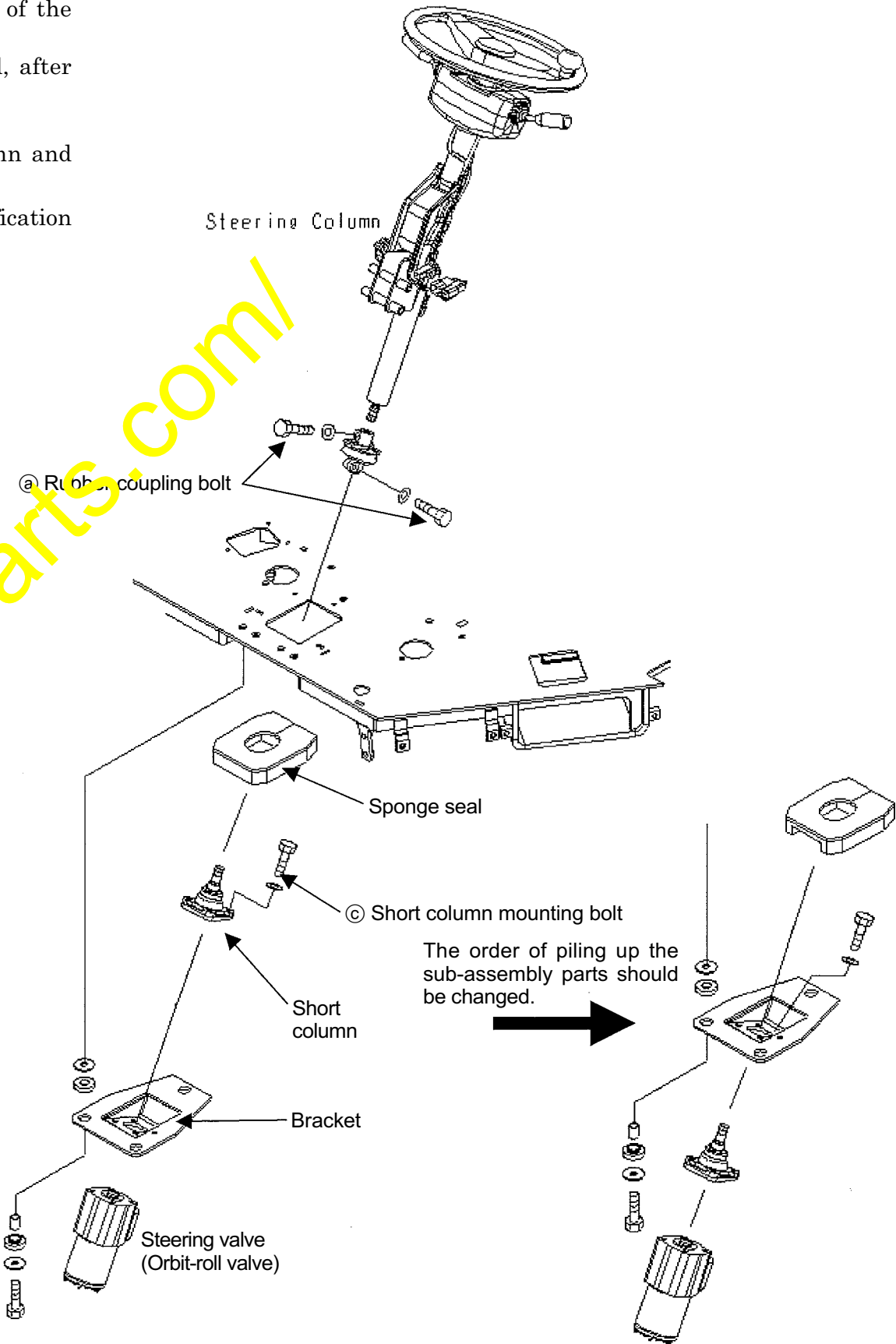
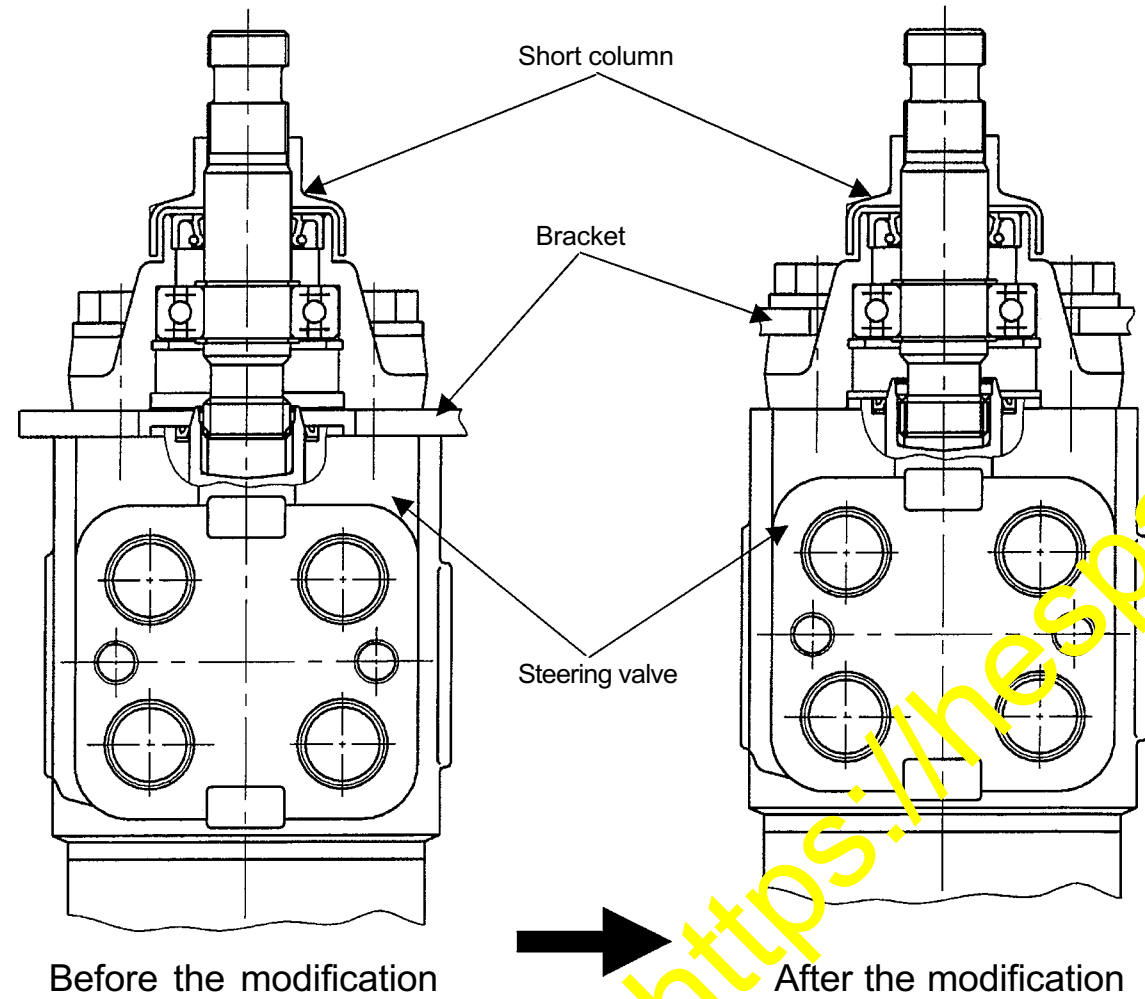
4. Details of the modification

The shape of the steering valve mounting bracket has been changed to change the valve mounting structure.  
(Refer to the drawing indicated on the RH side.)



5. Modification procedure

- (1) After removing the column cover being positioned in the inside of the operator's cab, remove 2 pieces of the rubber coupling bolt ①.
  - Then, remove 3 pieces of steering valve bracket mounting bolt ② being positioned under the floor and, after that, remove the sub-assembly of the short column, bracket, and valve.
  - (2) Remove the short column mounting bolt ③ and remove the bracket.
  - (3) Replace the removed bracket to the improved bracket and pile up in the order of the valve, short column and the bracket, from down to upward, to assemble the sub-assembly. (Refer to the drawing indicated below.)
- ▲ Be careful since the order of piling up the sub-assembly is different between the status before the modification and the status after the modification.



- (4) Replacing the sponge seal to the improved seal, install the bracket from under the floor. In the meantime, the current sponge seal may also be used after reworking. Refer to page 4 regarding the reworking procedure.

- (5) To adjust the steering wheel operating effort, loosen the mounting bolt ④ of the lock plate for the lower section of the steering column and tighten the rubber coupling bolt and lock plate mounting bolt so that the shaft center of the steering column and the shaft center of the short column may match.

After finishing the above adjustment, start the engine and turn the steering wheel to confirm that the operating effort is equal and, at the same time, the steering effort is 1.5 kg or less. (Engine Lo-Idling speed)

In case the operating effort is not equal or in case the operating effort exceeds 1.5 kg, repeat the adjustment work as per the above Section (5) once again.

6. Reworking procedure for the sponge seal

