

PARTS & SERVICE NEWS

REF NO. AT04244

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SUBJECT: STRENGTHENING PROCEDURE FOR FRONT AXLE SUPPORTING ARM ON HM300-1

PURPOSE: TO INFORM FIELD PERSONNEL

APPLICATION: HM300-1 TRUCK S/N1001 THRU 1193
HM300TN-1 TRUCK S/N 1001 THRU 1002

FAILURE CODE: 5A50EC

DESCRIPTION:

1. Introduction

WITH THE HM300-1 ARTICULATED DUMP TRUCKS, WHEN THE VEHICLE TRAVELS ON ROUGH ROADS WHERE THE VEHICLE RECEIVE MORE IMPACT FROM LOADS, THE ARM SUPPORT THE FRONT AXLE MAY BE DEFORMED. WHEN THE ABOVE FALIURE OCCURS, REPLACE THE ARM WITH THE IMPROVE TYPE BY FOLLOWING THE MODIFICATION PROCEDURE.

2. List of parts

Part No.	Part Name	Qty	Remarks
56D-50-11112 (56D-50-11111)	ARM (ARM)	1 (1)	
07000-F3032 (07000-F3032)	O-RING (O-RING)	16 (16)	CONSUMABLE PARTS

1. Details of the modification

To prevent occurrence of deformation of the arm, the material of the part has been changed to increase the material strength. (Refer to Fig. 1 and Table 1.)

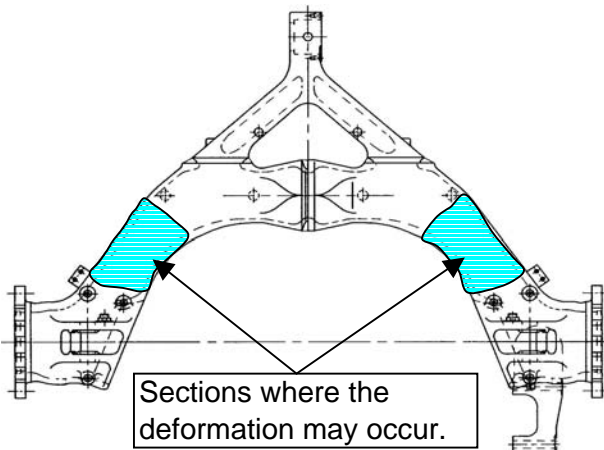


Fig. 1

Table 1

	Current arm	Modified arm
Material	SC450W	SCSiMn1H
Yield point strength:		
Index of increased strength	1	1.5
Tensile strength:		
Index of increased strength	1	1.3

2. Disassembly procedure

- 1) Park the vehicle on a flat place and apply chocks to the rear tires.
- 2) Jack up the front frame until the front tires are raised above the ground.
- 3) Remove the LH and RH tiers.
- 4) Disconnect the front brake cooling piping. (Refer to Fig. 2.) Parts marked ○

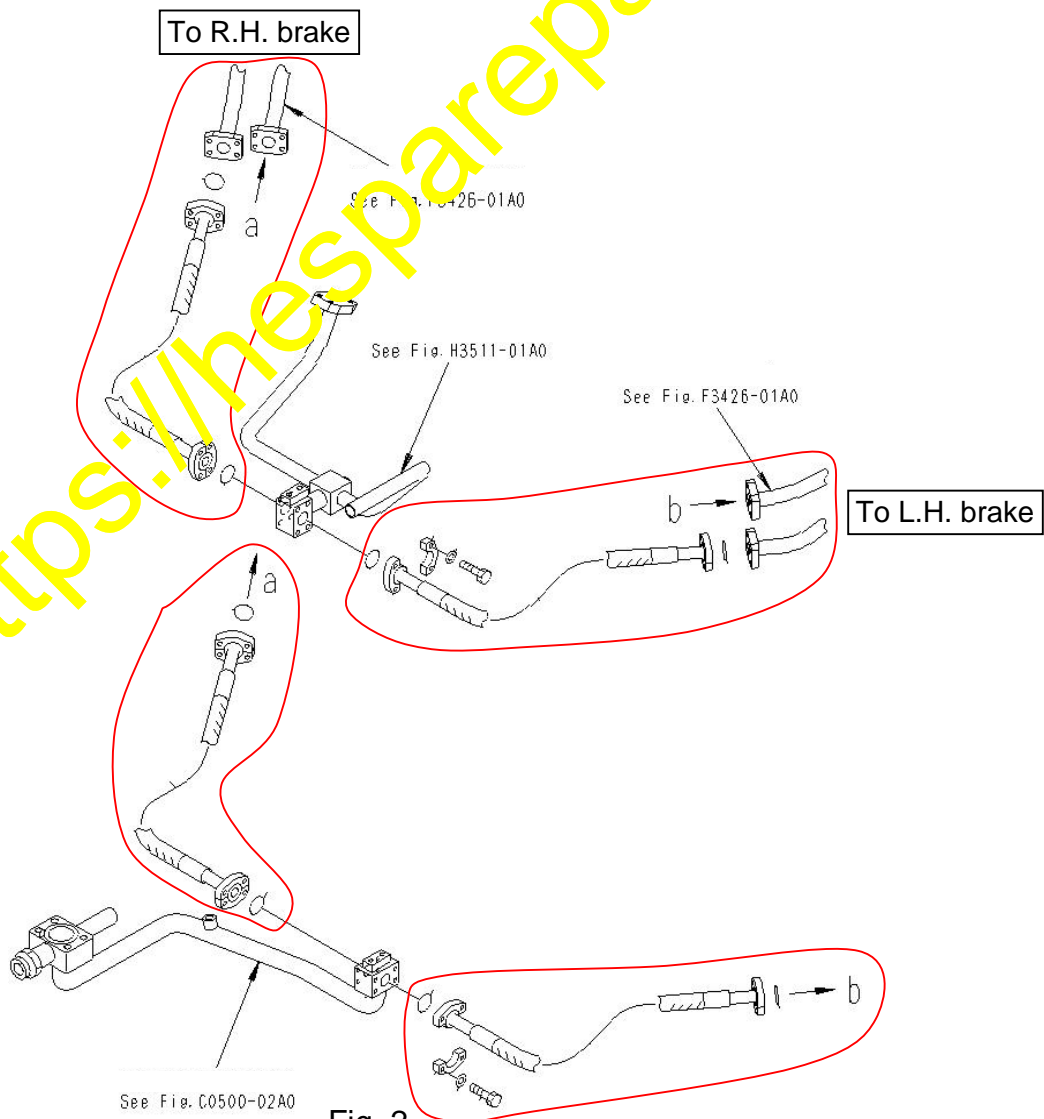


Fig. 2

- 5) Remove the LH and RH side drive shafts, and the LH and RH side final drive & brake assemblies. (Refer to Fig. 3.)
(Refer to the Shop Manual for the disassembly procedure.)

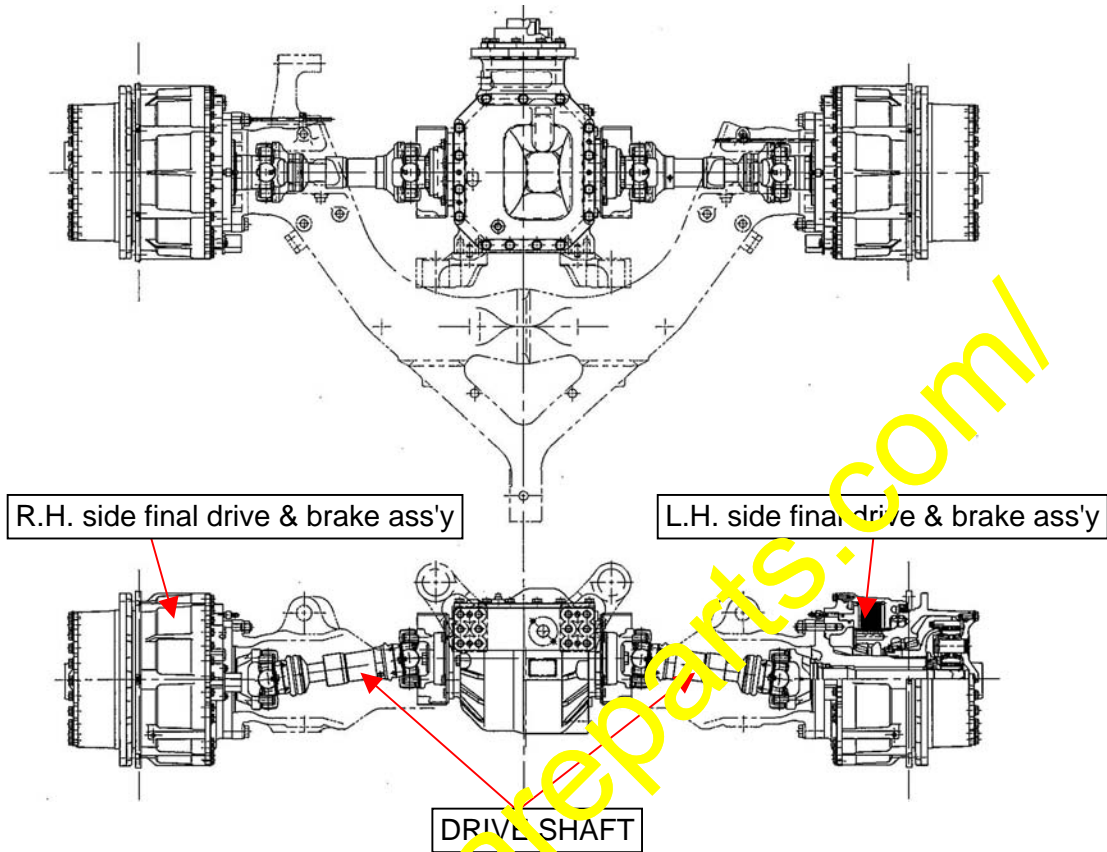


Fig. 3

- 6) Remove the LH and RH side suspension cylinders. (Refer to Fig. 4 and Fig. 5.)
(Discharge the suspension gas before removing the above suspension cylinders.)

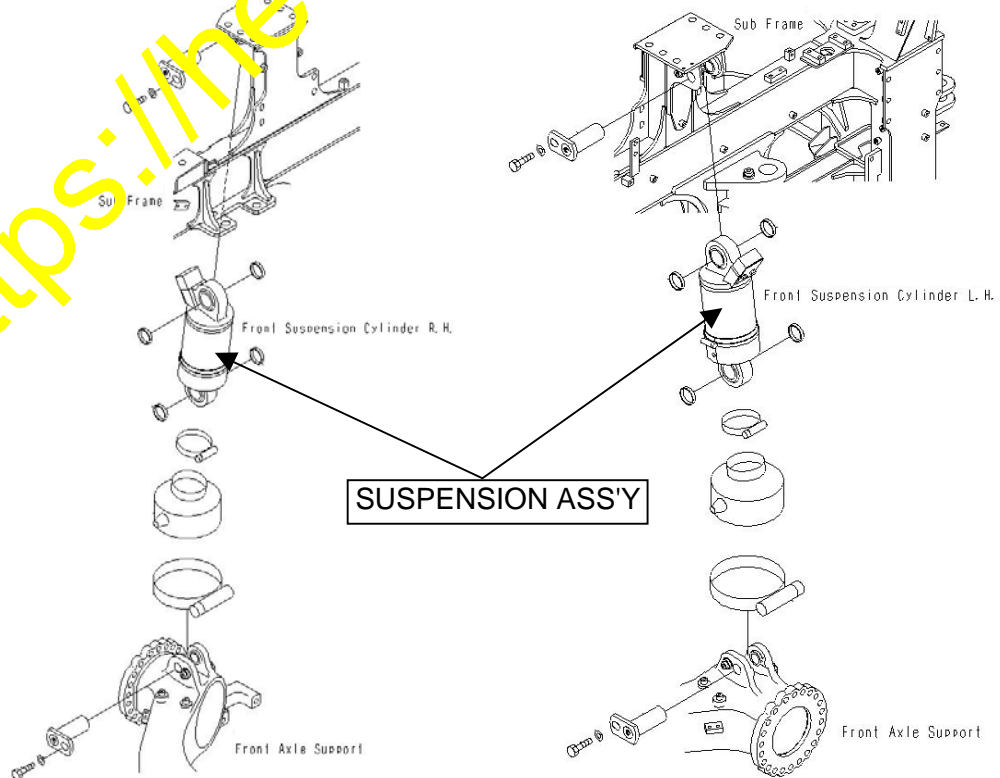


Fig. 4

Fig. 5

- 7) Remove the lateral rod. (Refer to Fig. 6.)
- 8) Remove the holder. (Refer to Fig. 6.)
- 9) Remove the arm (56D-50-1111). (Refer to Fig. 6.)
- 10) Remove the center bushing. (Refer to Fig. 6.)

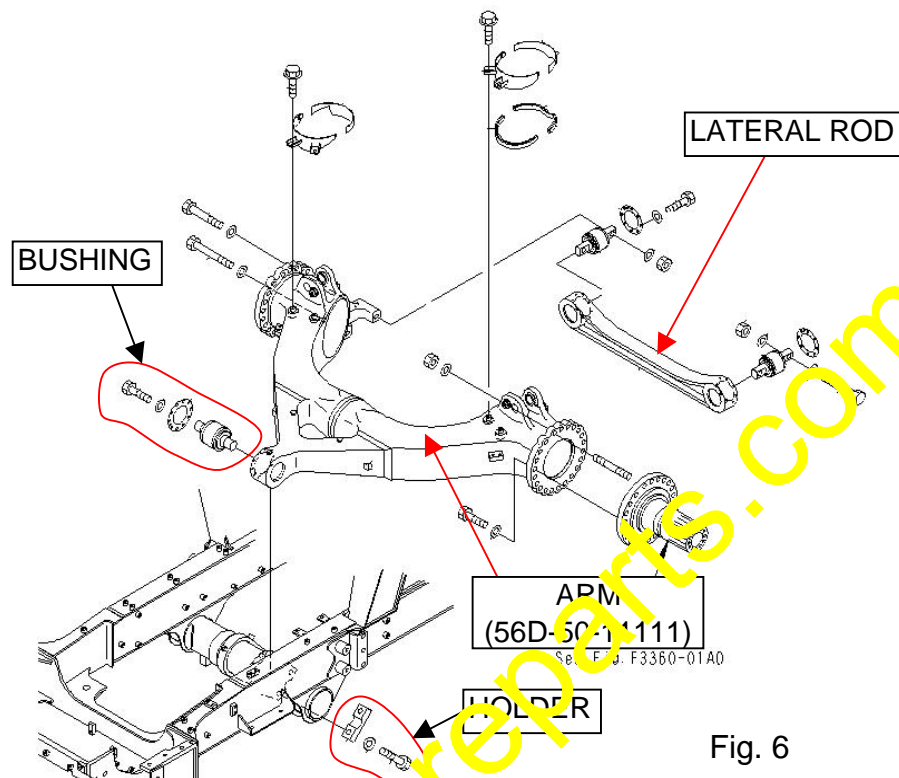


Fig. 6

3. Installation procedure

- 1) Install the center bushing to the improved arm (56D-50-1112). (Refer to Fig. 7.)
- 2) Tighten the holder maintaining the arm (56D-50-1112) at the horizontal position (Dimension "A"). (Refer to Fig. 7.)

Dimension "A": 135 ± 10 mm (from the lower surface of the frame to the upper surface of the arm)

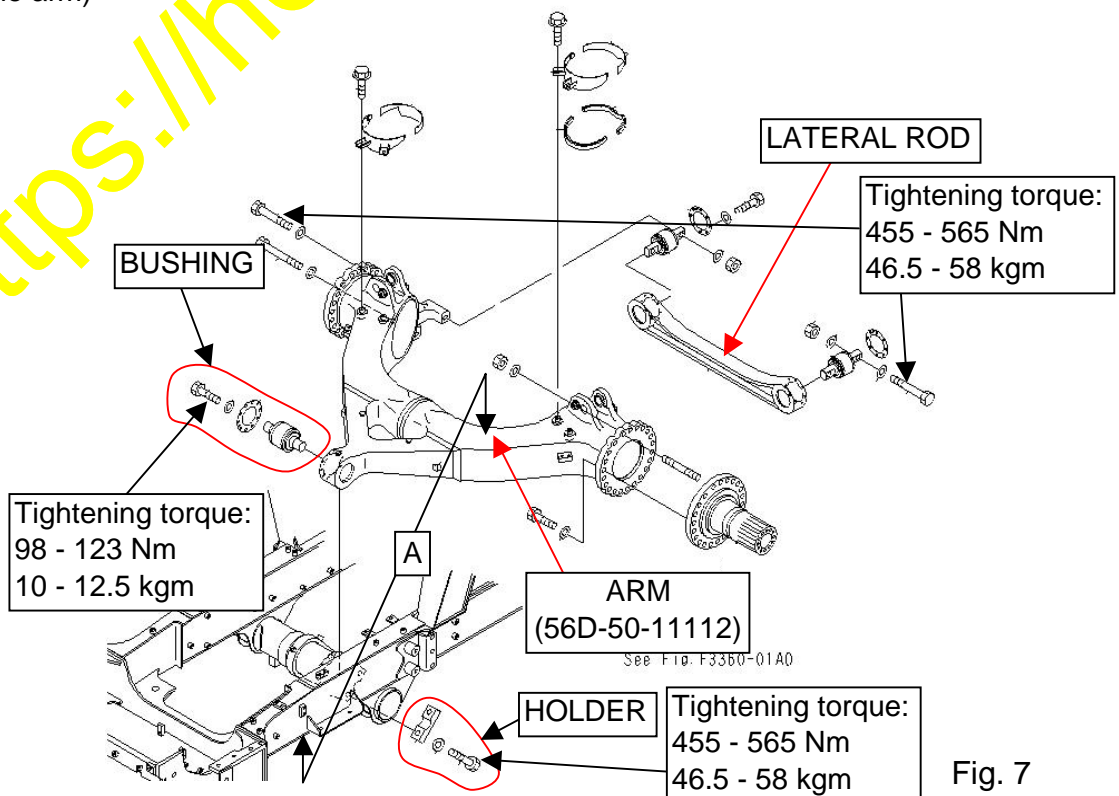
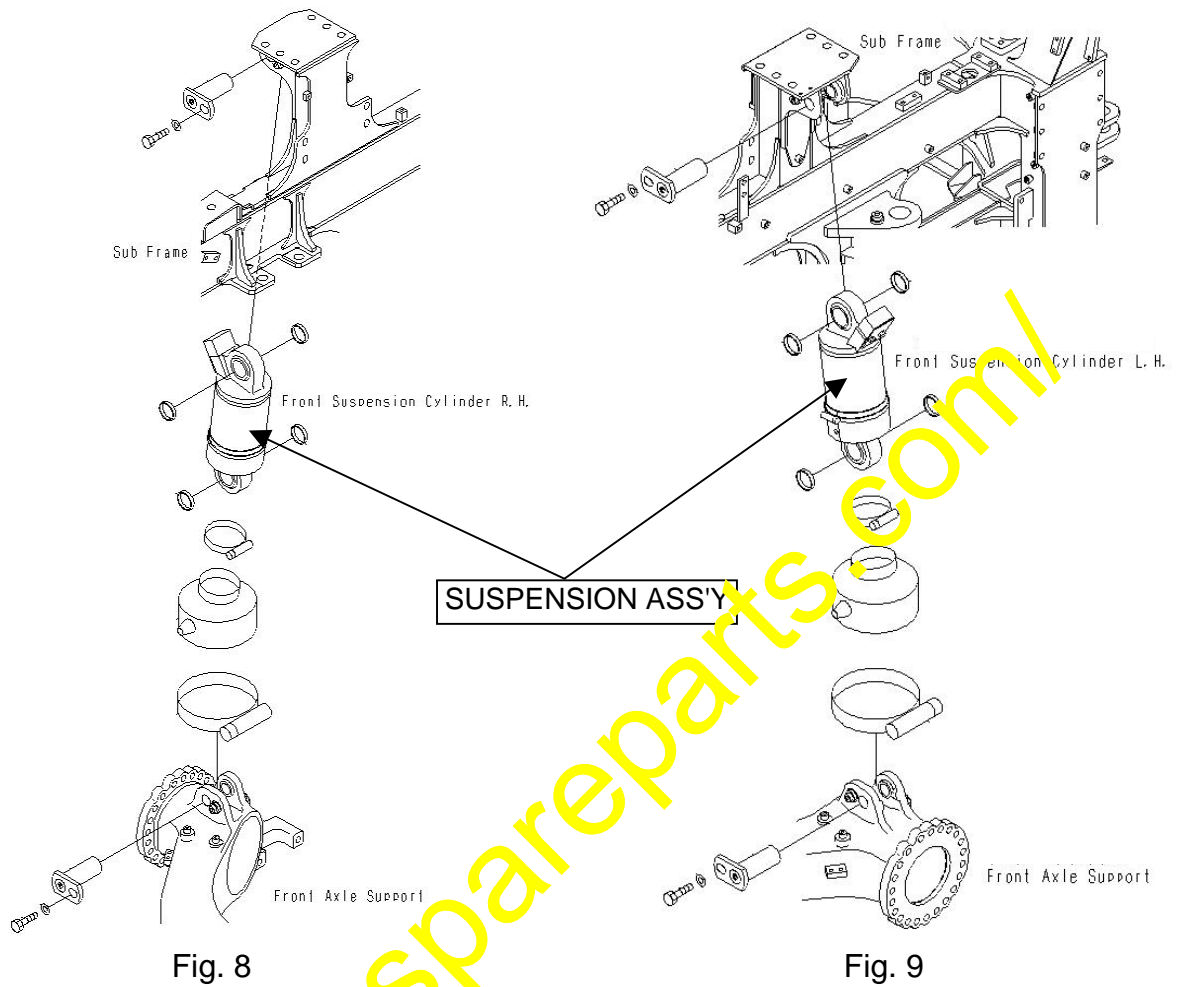


Fig. 7

- 3) Install the lateral rod. (Refer to Fig. 7.)
- 4) Install the LH and RH side suspension cylinders. (Refer to Fig. 8 and Fig. 9.)



- 5) Install the final drive & brake assemblies. (Refer to Fig. 10.)

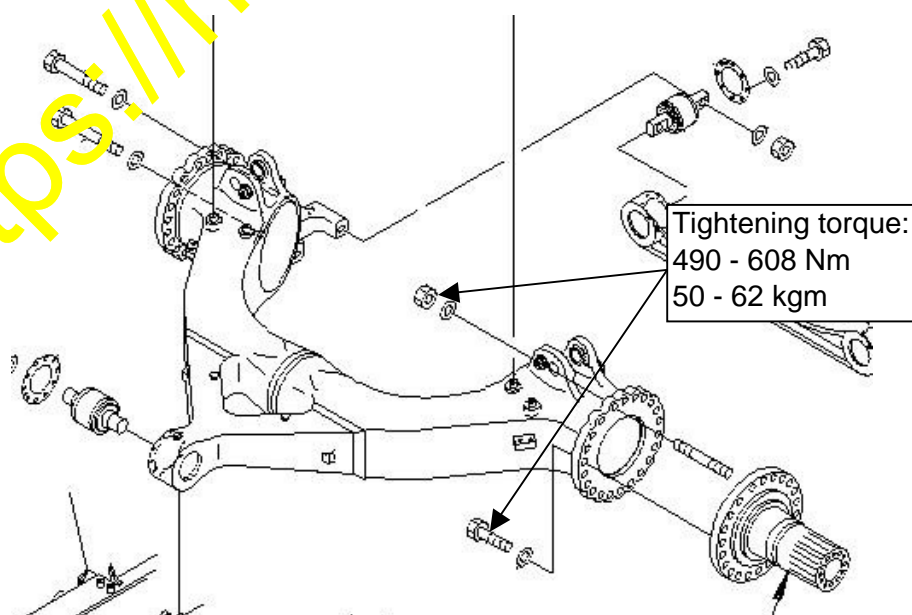


Fig. 10

6) Install the drive shaft. (Refer to Fig. 11.)

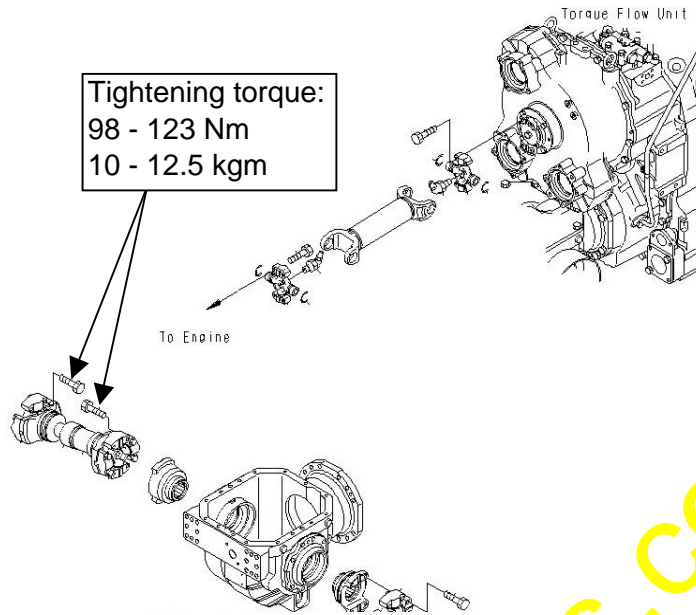


Fig. 11

7) Install the cooling piping. (Refer to Fig. 12.) Parts marked Replace the consumable parts (07000-F3032: O-ring) with new ones.

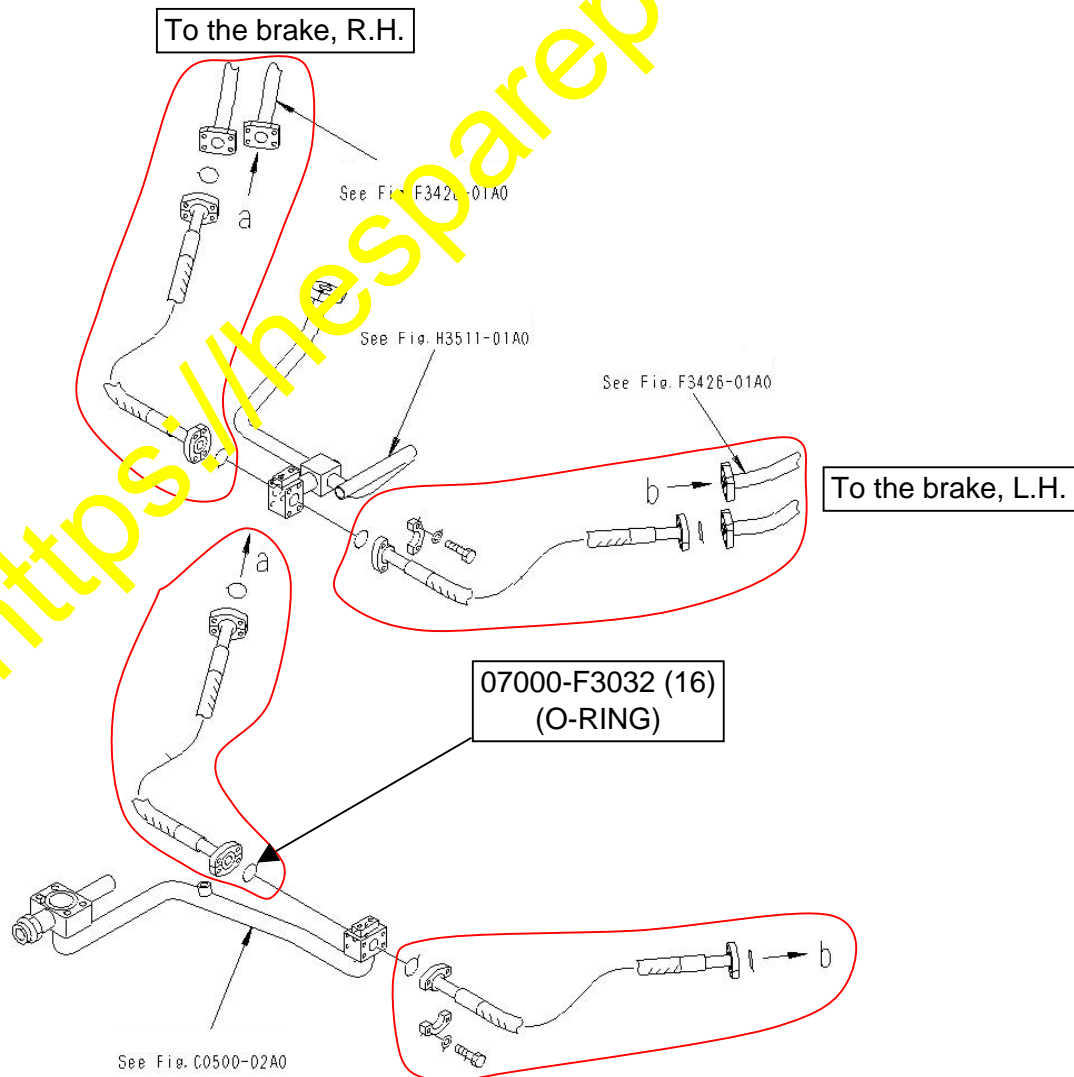


Fig. 12

8) Install the tires.

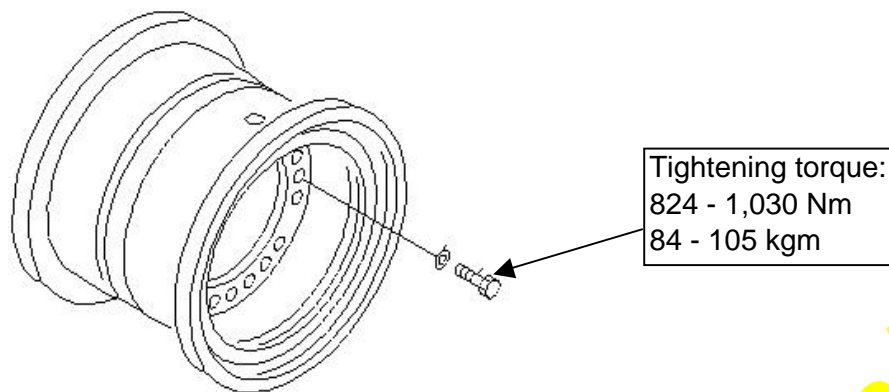
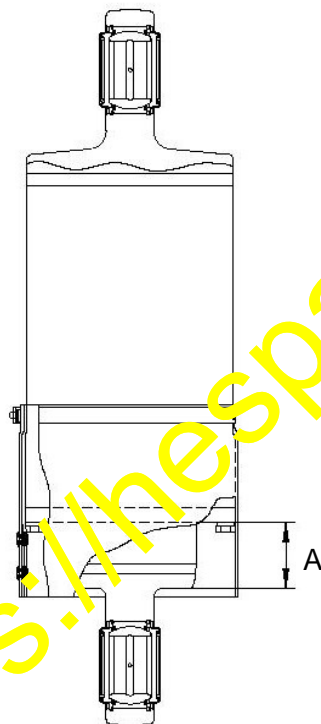


Fig. 13

9) Remove the jack and carry out suspension gas adjustment. (Refer to Fig. 14.)



Adjust the suspension gas so that the dimension "A" may become 163 ± 10 mm.
Refer to the Shop Manual for the details.

Fig. 14

10) Adjust the transmission oil level.