

# PARTS & SERVICE NEWS

REF NO.	AT03132
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**SUBJECT:** REPAIR PROCEDURE OF HYDRAULIC PUMP DAMAGE ON WA350-3 AND WA380-3

**PURPOSE:** To introduce modification procedure to prevent occurrence of work equipment pump damage on WA350-3 and WA380-3 wheel loaders

**APPLICATION:** WA350-3 Wheel Loaders, Serial Nos. 50001 thru 55376  
WA380-3 Wheel Loaders, Serial Nos. 50001 thru 54198

**FAILURE CODE:** J151FA

## DESCRIPTION:

### 1. Introduction

With the WA350-3 and WA380-3 wheel loaders, when these machines are used for severe operations (continuous lapping out, bucket swings, etc.) the inner wall of the pump may crumble because of the frequent occurrence of excessive peak pressure against the pump, leading to decrease of the oil quantity being fed to lubrication of the shaft and, finally, resulting in seizure of the shaft.

As a new relief valve has been developed which can suppress occurrence of excessive peak pressure to the pump, the new relief valve is introduced in this Service News.

### 2. List of parts

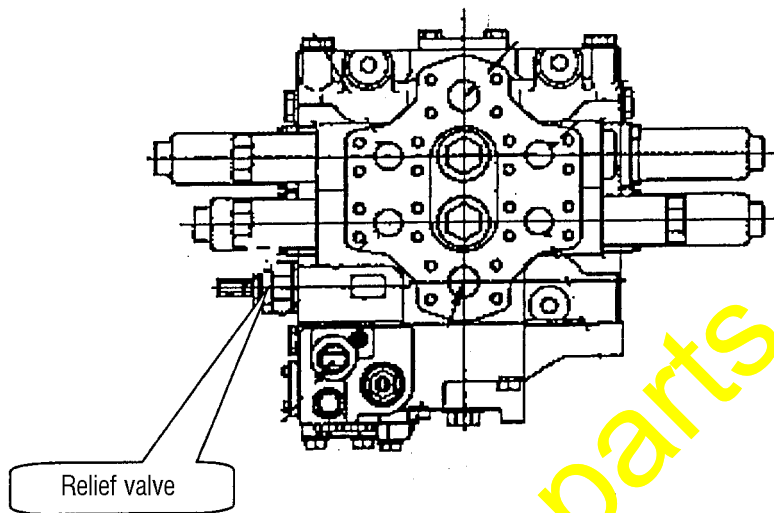
Part No.	Part Name	Purpose of part	Q'ty	Remarks
709-90-54700 (709-90-53200)	Relief valve (Relief valve)	} Replacement	1 (1)	

3. Details of the modification

- The relief valve ass'y is to be replaced by the modified relief valve ass'y.

To prevent occurrence of excessive peak pressure to the work equipment pump, the cracking pressure of the relief valve has been lowered and the override characteristics have been reviewed so that the relief pressure may not drop.

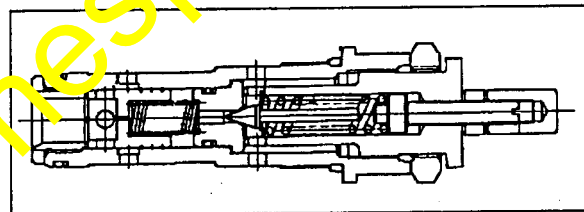
Work equipment control valve



Part No. of the relief valve:

**709-90-53200**

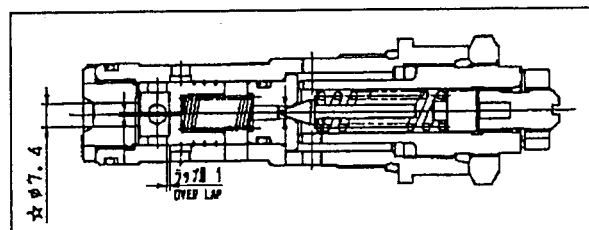
(Current relief valve)



Part No. of the relief valve:

**709-90-54700**

(Modified relief valve)



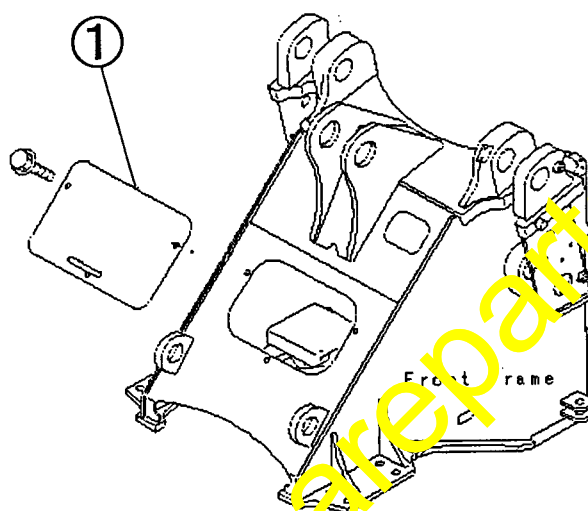
#### 4. Modification procedure

##### (1) Before starting the modification work

Park the machine on a horizontal place, set the safety bar to the frame, lower the bucket to touch the ground, stop the engine, apply the parking brake and insert chocks to each tire.

Loosen the oil filler cap to release the internal pressure of the hydraulic tank and operate the steering wheel and work equipment control lever for 2 to 3 times to release the remaining pressure in the pipings.

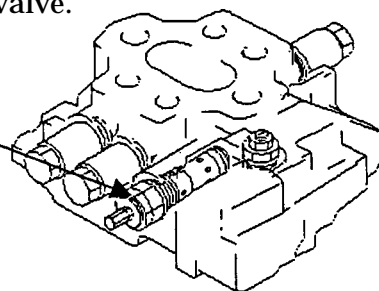
##### (2) Remove the inspection cover ① on the front frame.



##### (3) Replace the relief valve with the modified relief valve.

Replace the relief valve with the modified relief valve (709-90-54700).

Tightening torque:  $27 - 77 \text{ N}\cdot\text{m}$   
{ $15 - 18 \text{ kg}\cdot\text{m}$ }



##### (4) Refilling the tank with oil

1) Supply the hydraulic oil upto the specified level through the oil filler port of the hydraulic tank.

2) Before starting the engine, bleed the air from the steering pump, switch pump and work equipment pump.

★ Refer to the Chapter "Testing and Adjusting" in the Shop Manual.

★ Start the engine to circulate the hydraulic oil and, after that, re-check the hydraulic oil level.

##### (5) Install the inspection cover ① back to its original position on the front frame.