

PARTS & SERVICE NEWS

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SUBJECT: Repair of main relief valve of control valve

PURPOSE: To introduce modification procedure to eliminate pressure setting drops with the main relief valve of the control valve assembly

APPLICATION: WA700-1 Wheel Loaders, S/N 10001 thru 10135
 WA700-1L Wheel Loaders, S/N A20001 thru A20007
 WA800-1 and WA800-2 Wheel Loaders, S/N 10001 thru 10065, 10501 thru 10729, 10731 thru 10733, 10735 and 10736
 WA800-2L Wheel Loaders, S/N A20001 thru A20016
 WA900-1 Wheel Loaders, S/N 10001 thru 10006, 10003, 10009, 10700 and 10703
 WA900-1L Wheel Loaders, S/N A20001 thru A20008 and up

FAILURE CODE: P14050

DESCRIPTION:

Introduction:

Owing to use of imperfect internal part for production of the main relief valve of the control valve assembly, the pressure setting may drop to cause functional failures. When the work equipment speed slows down, or when the relieving pressure drops as the hydraulic oil temperature rises, eliminate the failure by implementing the modification introduced in the **PARTS & SERVICE NEWS**.

2. List of parts

Part No.	Part Name	Purpose of part	Q'ty	Remarks
709-10-52903	Relief valve	} Replacement	2	Replace both F. and R. relief valves. WA800/900 Standard
709-10-53103	Relief valve		1	WA700 Standard
709-10-57303	Relief valve		2	WA800 Extreme cold weather spec. vehicles
709-10-57602	Relief valve		1	WA700 Extreme cold weather spec. vehicles
709-12-11804	Valve ass'y		2	WA800 Standard, after the minor change. WA900 Standard.
709-12-12901	Valve ass'y		2	WA800 Extreme cold weather spec., after the minor change.
709-12-11407	Valve ass'y		2	WA800 Standard, before the minor change.
709-12-11505	Valve ass'y		2	WA800 Extreme cold weather spec., before the minor change.
709-12-12402	Valve ass'y		1	WA700 Standard
709-12-12801	Valve ass'y		1	WA700 Extreme cold weather spec.

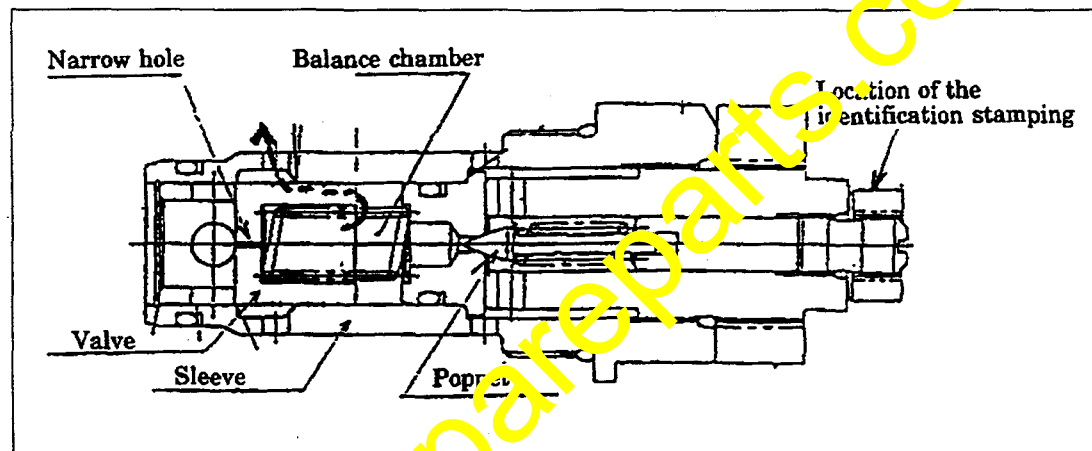
3. Contents of the modification

- 1) Replace the relief valve assemblies with the non-defective new assemblies.

With the WA800 and WA900, replace two relief valve assemblies at the same time.

- 2) Stamping on non-defective relief valves

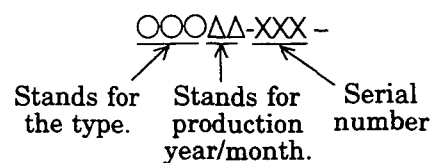
Vehicle models	Specifications	Part numbers	Stamping on the current valve	Stamping on the new valve
WA800-WA900	Standard	709-10-52903	V3	V4
WA800	Extreme cold weather	709-10-57303	W3	W4
WA700	Standard	709-10-53103	AA3	AA4
WA700	Extreme cold weather	709-10-57602	AJ2	AJ3



- 3) Modified valve numbers

Vehicle models	Specifications	Part numbers	No.
WA800, after the minor change & WA900	Standard	709-12-11804	CMN7Z-001 -
WA800, after the minor change	Extreme cold weather	709-12-12901	CMN81-001Y -
WA800, before the minor change	Standard	709-12-11407	CMG81-001 -
WA800, before the minor change	Extreme cold weather	709-12-11505	CMN81-001Y -
WA700	Standard	709-12-12402	CMU7Y-002 -
WA700	Extreme cold weather	709-12-12801	CMP81-001 -

Definition of the valve numbers

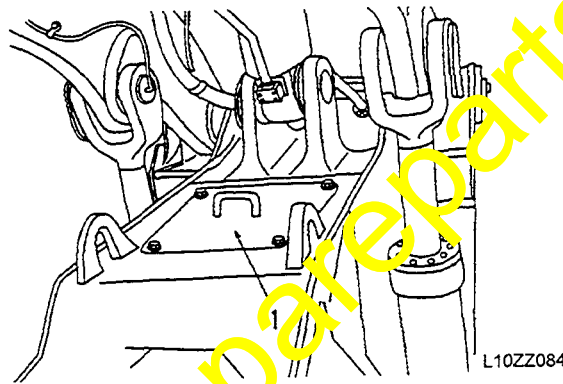


4) Modification procedures

(1) Before starting the modification work

- ⚠ Park the vehicle on a level surface, set the safety bar to the frame, land the bucket, stop the engine and pull up the parking brake before inserting tire blocks underneath the tires.
- ⚠ Loosen the oil filler port cap to release the internal pressure from inside the hydraulic tank and operate the steering wheel and the work equipment control levers for 2 to 3 times each to release residual pressure inside respective piping.

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



(3) Replace the relief valves with the new non-defective valves.

↺ Main relief valve assembly: $33 \pm 4.5\text{kgm}$

(4) Refill hydraulic oil.

- 1) Refill hydraulic oil through the oil filler port of the hydraulic tank up to the prescribed level.
- 2) Before starting the engine, bleed air from the steering pump, switch pump and work equipment pump.
 - ★ Refer to the Chapter "Inspection and Adjustment" in the Shop Manual when bleeding air from the above pumps.
 - ★ Start the engine to circulate hydraulic oil through the circuits and re-check the oil level.

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