PARTS & SERVICE

REF NO.	AT01011
DATE	Feb. 16, 2001
•	Page 1 of 14

SUBJECT: REPAIR OF HYDRAULIC PIPING FLANGE PORTION CRACK ON

WA1200-3

PURPOSE: To introduce modification procedures to prevent occurrence of cracks in

the flanged sections of the hydraulic piping on WA1200-3 wheel loaders

WA1200-3 Wheel Loaders, Serial Nos. 50001 thru 50007 **APPLICATION:**

FAILURE CODE: 6A6137

DESCRIPTION:

1. Introduction

It has been found out that there is a fear of occurrence of cracks in the flanged sections of the hydraulic piping connecting to the boom cylinder and or the return piping to the hydraulic tank on the WA1200-3 wheel loaders by vibrations of the machine.

Implement the modification being introduced in this Service News to prevent occurrence of the aforesaid cracks.

2. List of parts

Part No.	Part Name	Luzpose of part	Q'ty	Remarks
42C-62-13494 (42C-62-13492) 42C-62-13514 (42C-62-13512) 42C-62-13484 (42C-62-13452)	Tube (Tube) Tube) Tube (Tube)	Replacement	1 (1) 1 (1) 1 (1)	Thickness of the flange has been increased. Tube bending radius has been enlarged.
42C-62-13475 (42C-72-134-2) 42C-62-13163 (12C-62-13162)	Tube (Tube) Tube (Tube)		1 (1) 1 (1)	Tube bending radius has been enlarged.
421-64-23140	Spacer	Additional	6	
07000-F3038 07000-F3048	O-ring O-ring	Replacement	7 3	Consumable part
01010-81250 (01010-81240)	Bolt (Bolt)		12 (12)	For installation of the tube flange
42C-46-11G90 42C-62-14551	Seat Bracket	Additional	2 2	

Part No.	Part Name	Purpose of part	Q'ty	Remarks
01010-81660	Bolt]	6	
421-70-11280	Washer		12	
421-64-23120	Cushion		12	
421-64-23130	Cushion		6	
07283-34354	Clip	Additional	2	
07283-54353	Seat	Auditional	2	
01597-01009	Nut		8	
01643-31032	Washer		8	
42C-62-15910	Bracket		1	
42C-62-15920	Bracket	J	1	Co
42C-62-15930 (42C-62-15412)	Bracket (Bracket)	Replacement	1 (1)	
42C-62-15940	Seat	Additional	1	
01010-81230	Bolt	Additional	4	
01010-81235 (01435-01225)	Bolt (Bolt)	Replatement	2 (2)	
01643-31232	Washer	入 O T T T T T T T T T T T T	6	
07283-37671	Clip	Additional	2	
42C-62-15491	Seat		2	

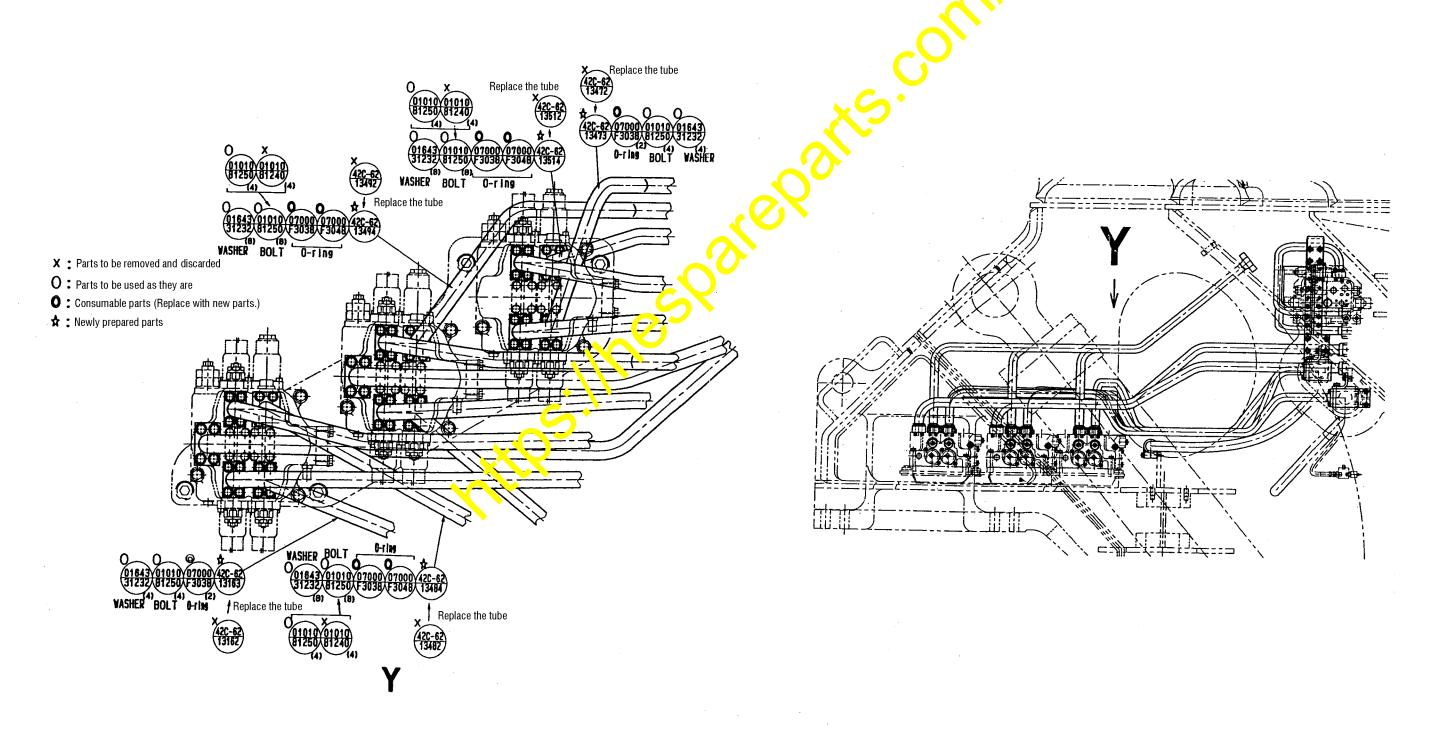
3. Contents of the modification

To suppress vibrations of the hydraulic tubes (the pipings connecting between the work equipment valve and the boom cylinders and of the return piping to the hydraulic tank located inside the front frame), vibration preventive brackets are to be supplemented.

Preparations before starting the modification work

- (1) Prepare a container with a capacity of 20 liters or more to receive drained oil.
- (2) Prepare 20 liters of the hydraulic oil to refill after finishing this modification.
- (3) Park the machine on a level surface.
- (4) Lower the bucket to touch the ground, apply the parking brake and stop the engine.
- (5) Move the work equipment control levers to release the oil pressure in the piping connecting to the boom cylinder.

- 4. Modification procedures
- 4.1. Modifying the pipings connecting between the work equipment valve and the boom cylinders located inside the front frame
 - 1.1 Removing the hydraulic tubes
 Remove the five hydraulic tubes marked "×". (Discard the removed tubes.)
 The tube mounting bolts (01010-81250) and washers (01643-31232) are being reused.



1.2 Installing the hydraulic tubes

Install the five newly prepared tubes marked \Rightarrow .

Tightening torque: 98 - 123 Nm (10 - 12.5 kgm)

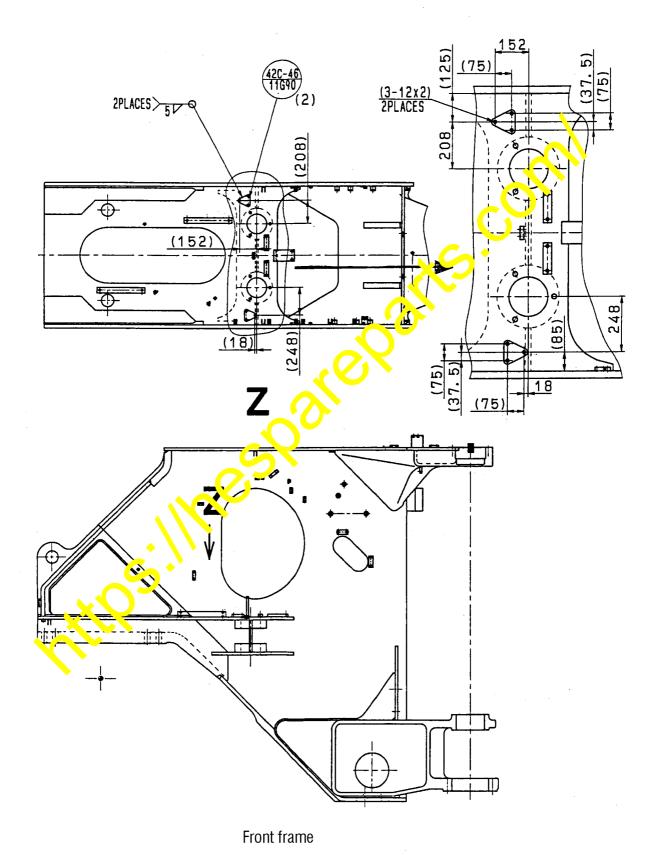
All the mounting bolts are to carry the part no. 01010-81250.

Note: Replace the O-rings with new parts.

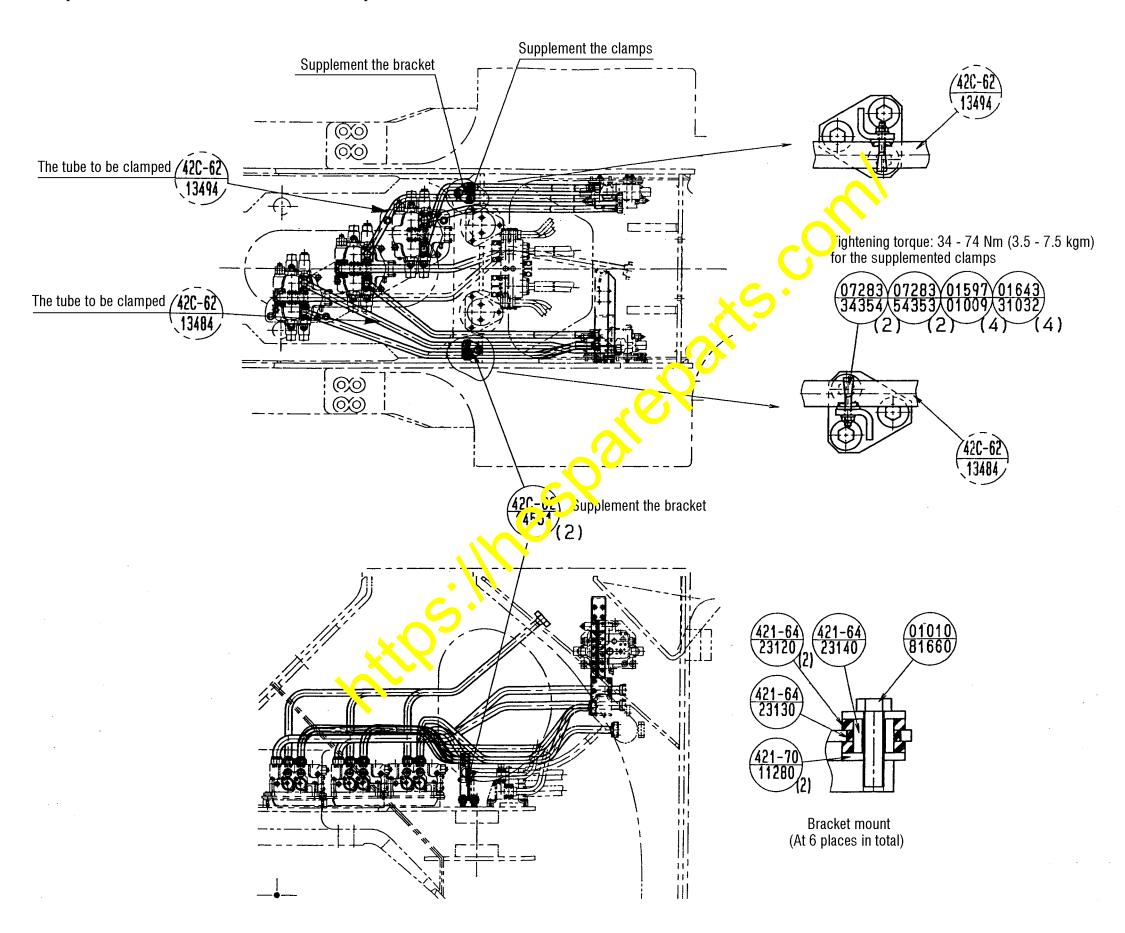
1.3 Supplementing the seats to the front frame

Weld the two seats (42C-46-11G90) to the positions designated in the drawing indicated below.

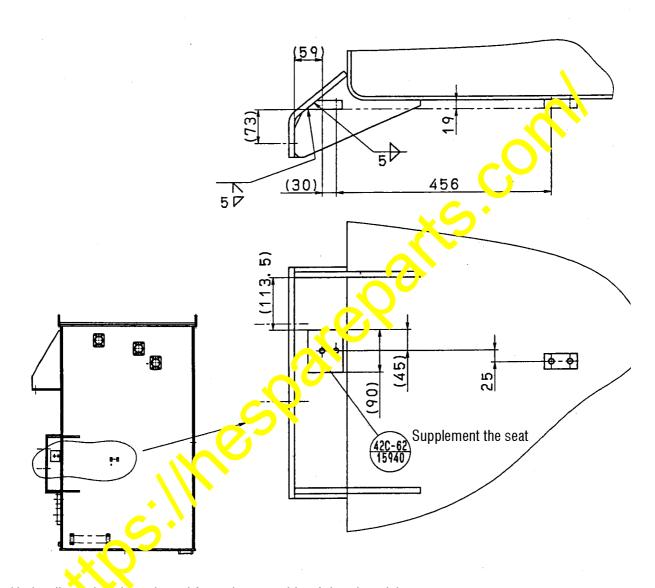
(Apply corrective painting to the welded surfaces.)



1.4 Supplementing the vibration preventive brackets
Install the vibration preventive brackets (42C-62-14551) to clamp the tubes.



- 4-2 Modifying the return piping connecting to the hydraulic tank
 - 2.1 Welding the seat to the hydraulic tank
 Weld the seat to which the bracket is to be installed, to the hydraulic tank.
 After finishing welding, apply corrective painting to the welded surfaces.

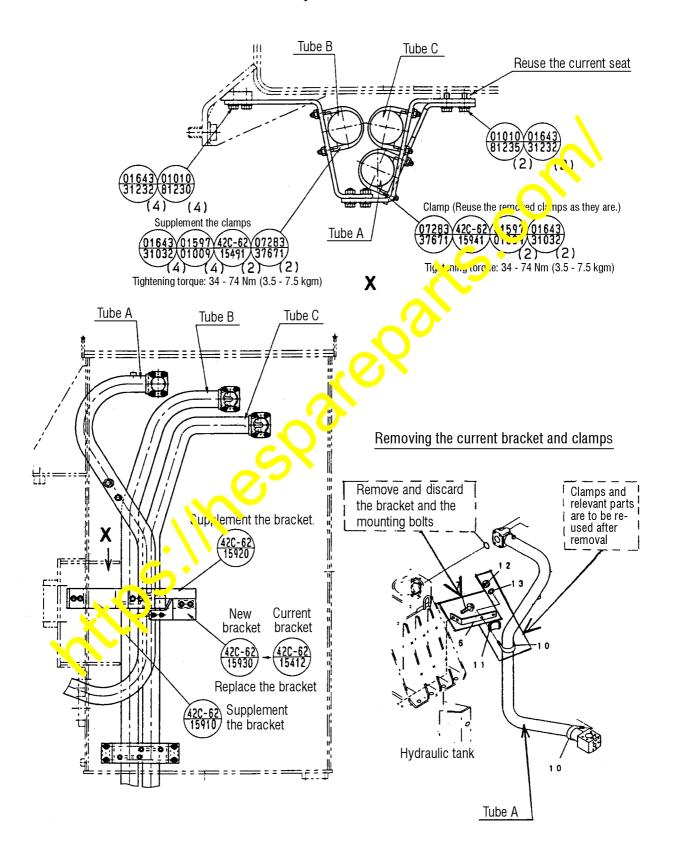


Hydraulia tank (when viewed from the rear side of the chassis)

2.2 Supplementing the vibration preventive brackets

Remove the current bracket and clamps clamping the tube "A". (The clamp is being reused.)

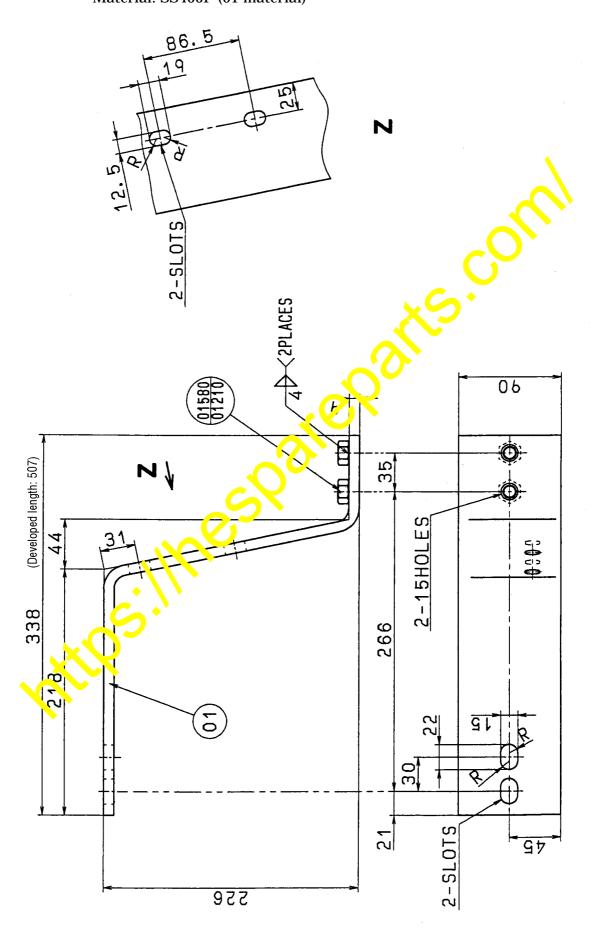
Install the new brackets and clamp the tubes A thru C.



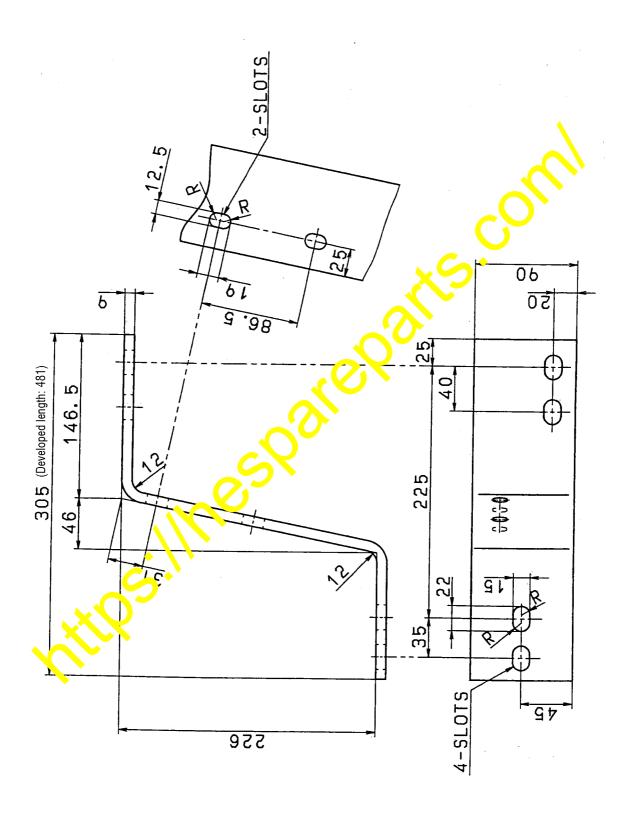
- 5. After finishing the modification work
 - (1) Refill the hydraulic oil and release air from the hydraulic circuits referring to the Section "Air bleeding procedures from the hydraulic oil circuits" in the Chapter "Inspection and Maintenance" in the Operation and Maintenance Manual.
 - (2) After finishing the air bleeding work, inspect the oil level in the hydraulic tank and refill oil to the prescribed level when found in short.



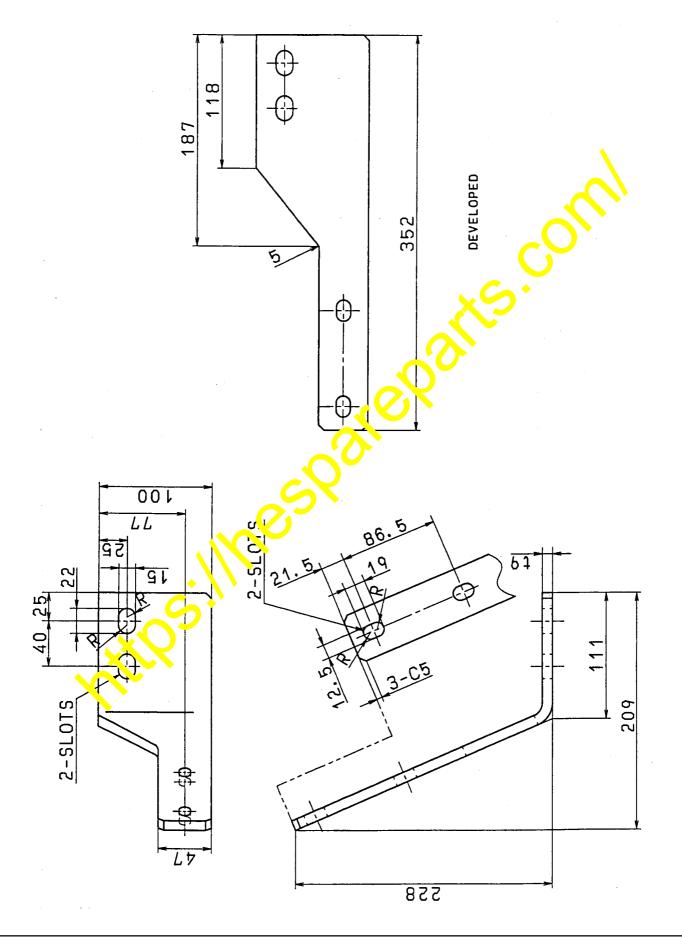
Reference: The shape of the part 42C-62-15910 Material: SS400F (01 material)



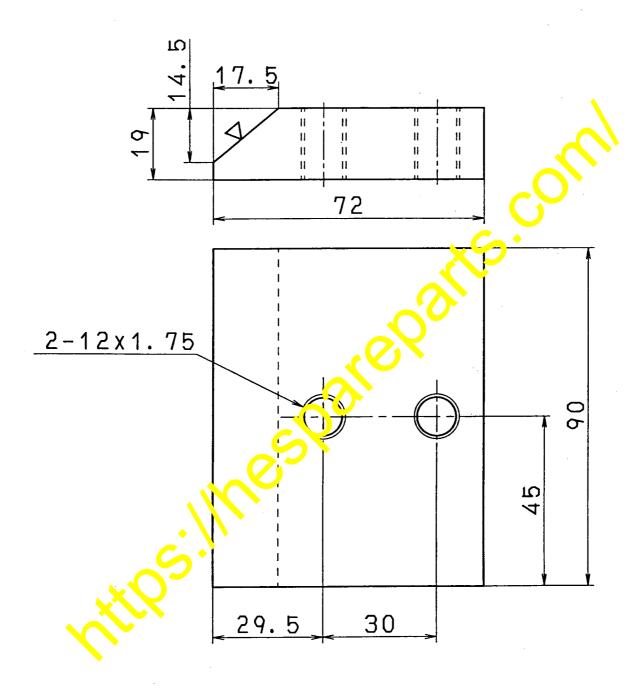
The shape of the part 42C-62-15920 Material: SS400F Reference:



The shape of the part 42C-62-15930 Material: SS400P Reference:



The shape of the part 42C-62-15940 Material: SS400F Reference:



The shape of the part 42C-46-11G90 Material: SS400P Reference:

