

# INSTALLATION MANUAL

REF NO.	BA03007
DATE	Feb. 18, 2003

**SUBJECT:** INTRODUCTION OF HYDRAULIC PIPING CLAMP

**PURPOSE:** To introduce modification procedure to improve the hydraulic piping clamping clips

**APPLICATION:** 330M Dump Trucks, S/N A10231 and A10232  
 330M Dump Trucks, S/N A10190 thru A10227  
 HD785-3 Dump Trucks, S/N 2001 thru 2574  
 HD785-5 Dump Trucks, S/N 4001 thru 4296  
 HD785-5LC Dump Trucks, S/N A10144 thru A10294  
 HD985-3 Dump Trucks, S/N 2001 thru 1020  
 HD985-5 Dump Trucks, S/N 1021 thru 1054

**FAILURE CODE:** 614137

**DESCRIPTION:**

With the already shipped dump trucks the hydraulic piping clamping clips may become loose because of hydraulic vibrations of the steering line tube and the hoist oil line tube, resulting in possible cracking of the tubes.

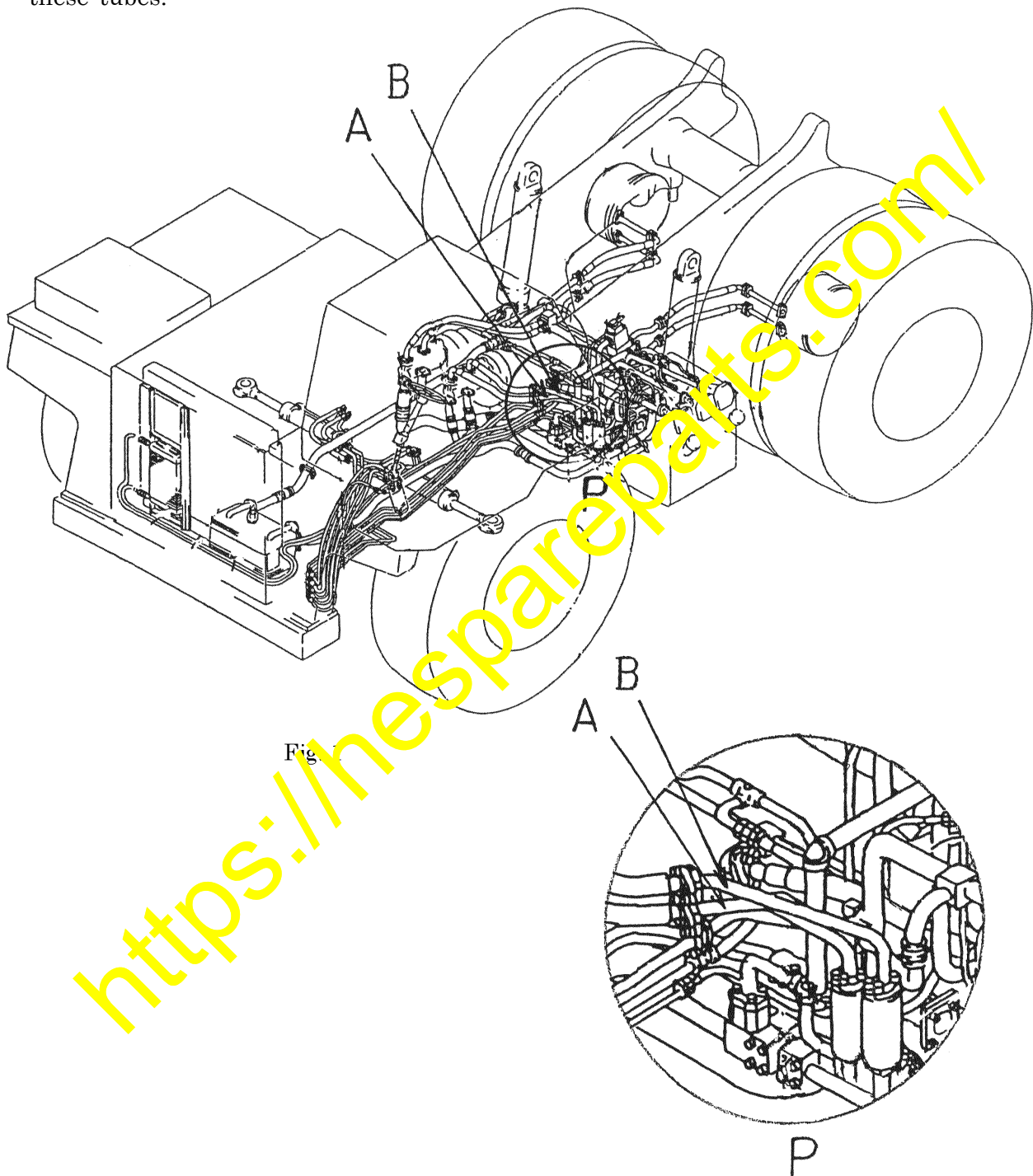
Since it is possible to keep the hydraulic piping clamping clips from becoming loose by changing the hydraulic piping clamping clips to the type to use the seat, this **INSTALLATION MANUAL** will introduce the modification procedure to make the change

List of Parts:

Part No.	Part Name	Qty	Remarks
07283-34957 (07283-24949)	Clip (Clip)	2 (2)	
07283-54259	Seat	2	
01599-01009 (01599-01011)	Nut (Nut)	4 (4)	

### 3. Contents of the modification

Change the clips which are clamping the tubes connecting between the pump and the line filter of the steering line and of the hoisting line onto the bracket to the clips of the type to use the seat which are less apt to become loose even when substantial hydraulic vibrations are applied to the tubes, in order to prevent occurrence of cracks in these tubes.



Fig

#### 4-1. Preparations before starting the modification work

- Park the vehicle on a flat place, apply the parking brake and insert the chock underneath each tire.
- Raise the body to its stroke end, stop the engine and set the body stopper pin.
- Loosen the hydraulic oil tank cap to release the residue pressure from inside of the hydraulic circuits.

## 4-2. Modification procedure

In case of HD785, refer to Fig. 2 and in case of HD985, refer to Fig. 3.

- (1) Remove the clip (1), washer (D) and nut (3) which are clamping the tube connecting between the pump and the line filter to the bracket. Abolish the removed clip (1) and the nut (3).
- (2) Inserting the seat (2) between the bracket (E) and the tube (A or B), clamp the tube using the newly prepared clip (1) and nut (3) and the removed washer (D).
- (3) If the tube (A or B) is cracked, replace the tube (A or B) together with the O-ring (C) to new parts.
- (4) If the tube is pressed forcefully while being clamped by the thickness of the additional seat (2), remove the bracket (E) and make the additional working (to change the round hole to a slotted hole) as per Fig. 4.

After that, reinstall the bracket back to its original position.

In the meantime, when reinstalling the bracket (E), adjust the positioning of the bracket (E) so as not to make gaps between the contact surfaces of the seat (2) for the tube (A or B) and the bracket (E).

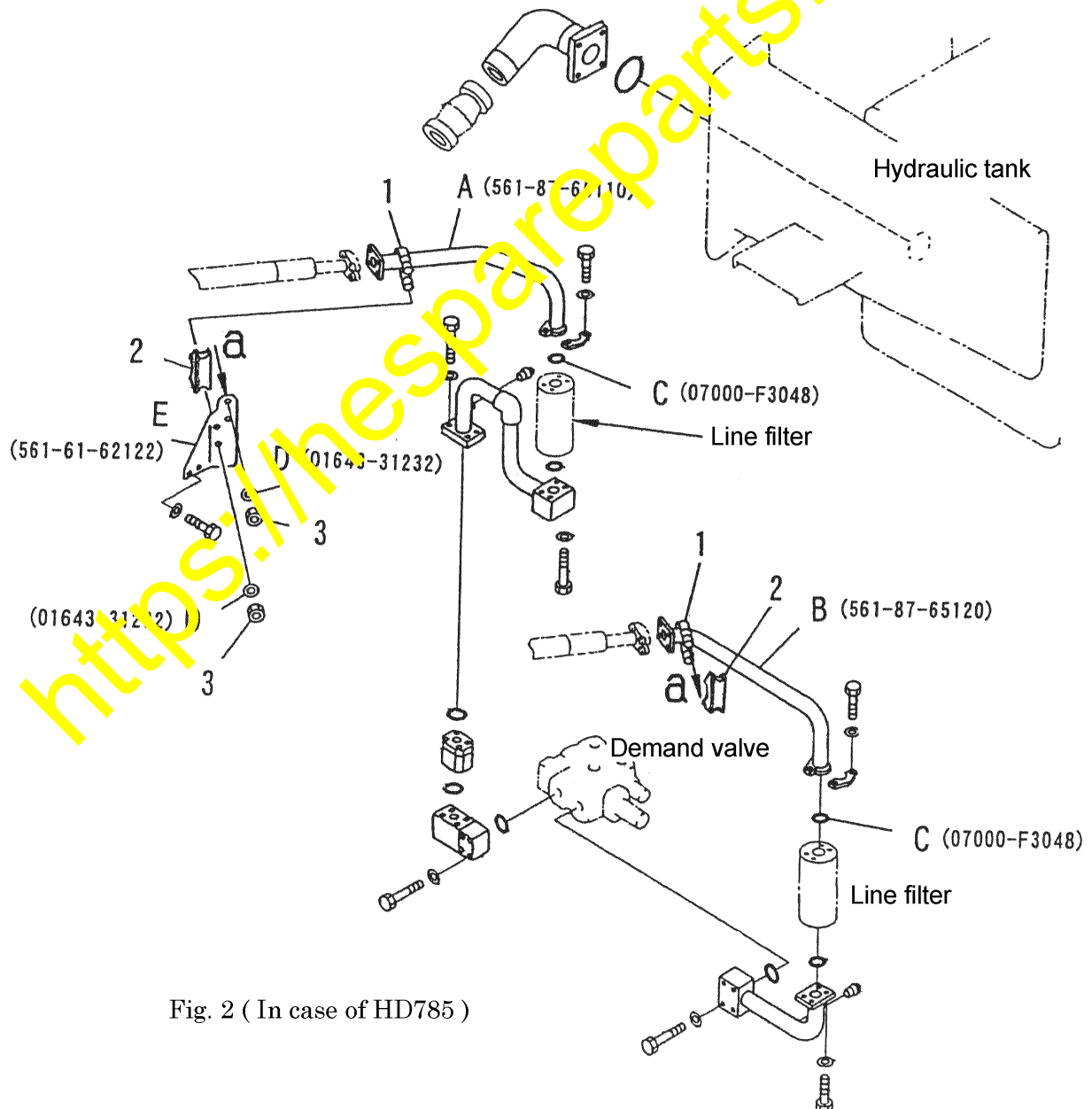


Fig. 2 ( In case of HD785 )

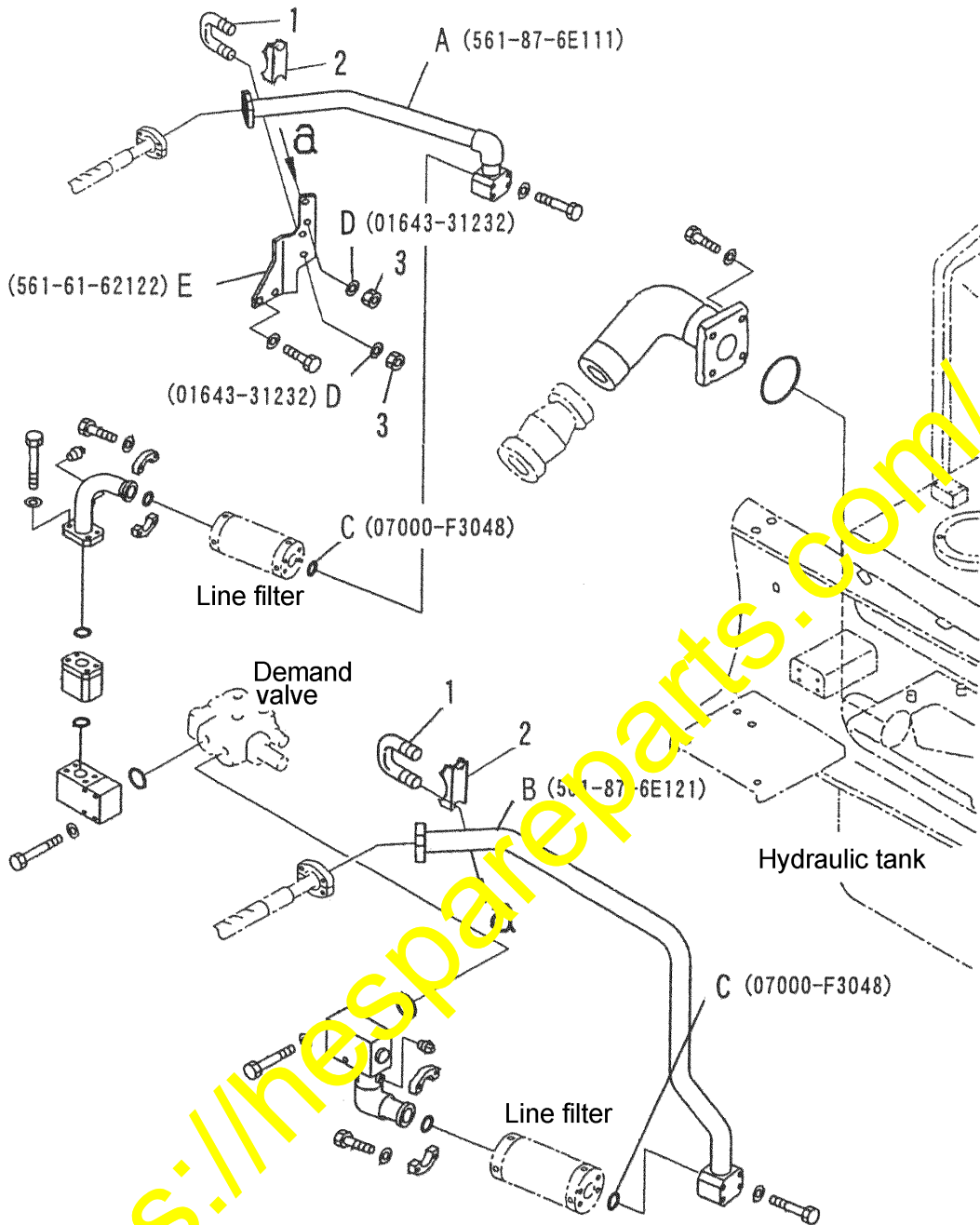


Fig. 3 ( In case of HD 985 )

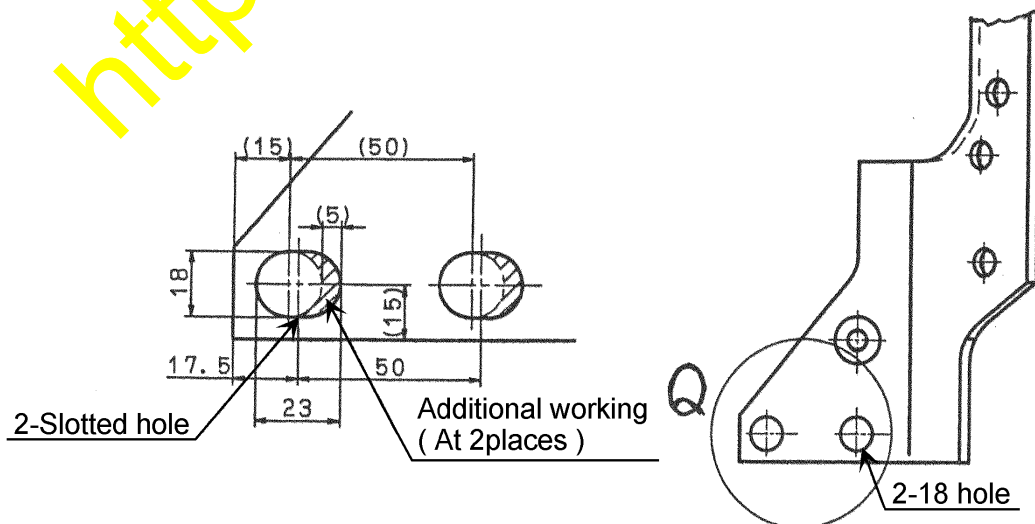


Fig. 4 ( Additional working for the bracket 561-61-62122 )