# PARTS & SERVICE

REF NO.	AT02187
DATE	Jan. 16, 2003
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SUBJECT: REPAIR PROCEDURE OF BRACKET FOR FRONT SUSPENSION ON

HD785-3, -5, HD985-3, -5

**PURPOSE:** To introduce modification procedure to repair cracks occurring in the up-

per mounting bracket for the front suspension of the main frame on

HD785-3, HD785-5, HD985-3 and HD985-5 dump trucks

**APPLICATION:** HD785-3 Dump Trucks, Serial Nos. 2001 thru 2574

> HD785-5 Dump Trucks, Serial Nos. 4001 and up HD985-3 Dump Trucks, Serial Nos. 1001 thru 1020 HD985-5 Dump Trucks, Serial Nos. 1021 and up

**FAILURE CODE:** 4711HA

#### **DESCRIPTION:**

#### 1. Introduction

There is a possibility of occurrence of cracks in the upper mounting bracket for the front suspension of the main frame on the HD785-3, HD785-5, HD985-3 and HD985-5 dump trucks while these vehicles are being used in er high load operating conditions (excessive loading, traveling on bumpy road, etc.

This Service News will introduce mochica ion procedure to repair the aforementioned cracks.

## 2. Sections to inspect

Being shown below are the sections to inspect on the HD785-3, HD785-5, HD985-3 or



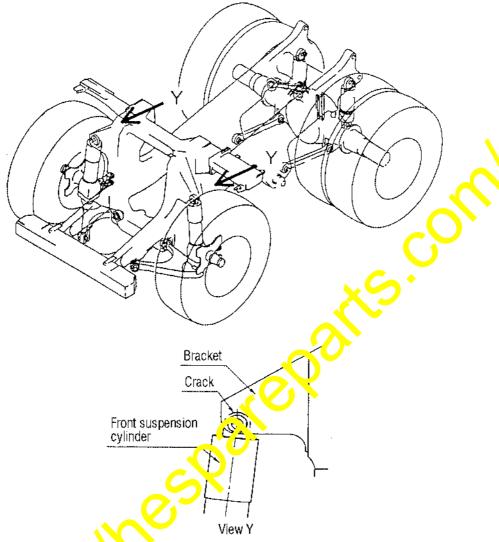


Fig. 1 Sections where cracks may occur.

## 3. Details of the modification

## 3-1. Preparation of the necessary parts

Make out thereinforcement plates as per the instructions given in Fig. 2 below.

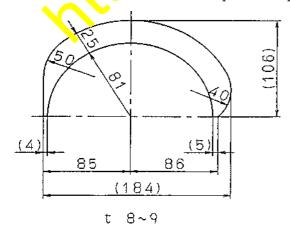


Fig. 2 Reinforcement plate

Part No.: 561-46-61G80

Material: SHT490 or an equivalent material

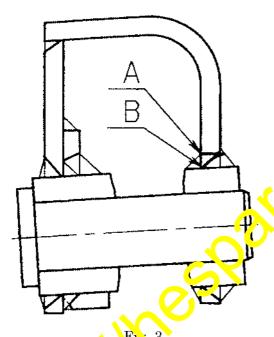
Sheet thickness: 8 or 9

Necessary quantity: 2 pcs./unit

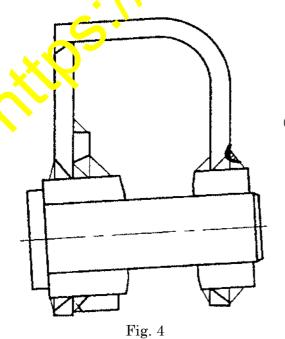
- 3-2. Preparations before starting the modification work
  - (1) Park the vehicle on a flat and horizontal place, apply chocks underneath each tire and jack up the front section of the frame.
  - (2) Taking necessary measures for the front suspension not to come down, remove the supporting pin of the repairing section to separate the upper section of the suspension from the bracket. Temporarily install the pin only back to the bracket once again. (Refer to the Shop Manual for the above removal works.)
  - (3) Before starting the gouging work and welding work, cover the pins, bushings of the front suspension, wire harnesses, etc. to keep them from adhesion of spatters.

#### 3-3. Modification procedure

Carry out gouging work and welding work to repair the cracked sections as per the instructions given in Fig. 3 thru Fig. 7.



(1) Regarding the crack occurred on the surface of the wolded sections, it is necessary to check if the crack has started and procressed from the neighborhood of the internal section A or from the neighborhood of the section B.



② Remove the weld beads of the cracked section just by a little by gouging and confirm the direction of the crack appeared on the bottom of the gouged section to assume the direction of the starting point.

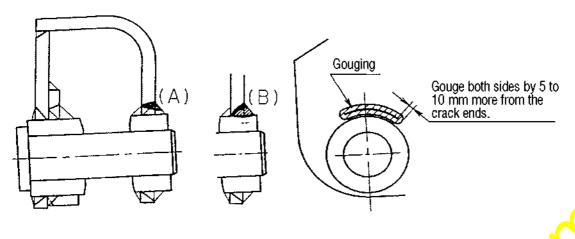


Fig. 5

(3) Make gouging in a shape of (A) or (B) depending on the direction of the starting point.

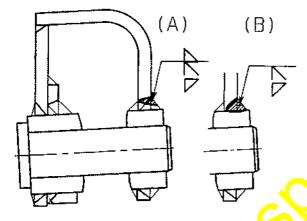


Fig. 6

4 Weld to pra the gouged section.

Reference 1) Welding rod: Welding rods for mild steel corresponding to JIS D4301.

Reference 2) Welding conditions (targets)
Welding rod diameter: \$\phi 2.6\$
Welding current: 100 A

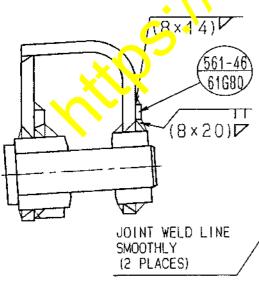
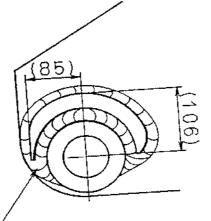


Fig. 7



(5) Furthermore, apply the reinforcement plate on the repaired section and weld the reinforcement plate to the section.

- 3-4. Measures to take after finishing the welding work.
  - (1) After finishing the welding work, remove welding slags from the weld beads and apply paint over the welded section
  - (2) Restore the front suspension to the original state.

REFER TO THE SHOP MANUAL REGARDING THE DETAILS OF THE INSTALLATION WORK.

REFER TO PARTS & SERVICE NEWS AA00046C FOR DETAILED INSTRUCTIONS