

# INSTALLATION MANUAL

REF NO.	BA02014
DATE	Sept. 24, 2002

(C)

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**SUBJECT:** INTRODUCTION OF IMPROVED SLACK ADJUSTER

**PURPOSE:** To introduce an improved slack adjuster

**APPLICATION:** HD785-3 Trucks, S/N 2001 thru 2999  
 HD785-5 Trucks, S/N 4001 thru 4319  
 HD785-5LC Trucks, S/N A10144, A10224, A10228 thru A10301, A10306 and A10307  
 HD985-3 Trucks, S/N 1001 thru 1020  
 HD985-5 Trucks, S/N 1021 thru 1054  
 330M Trucks, S/N BFP41-A to BFP-41-DA, A10190 thru A10223, A10225 thru A10227, A10230 and A10231

**FAILURE CODE:** 4567MA

**DESCRIPTION:**

Internal leakage may occur in the slack adjuster relief valve to operate the brake chamber stroke sensor and to turn on the rear brake caution lamp.

This **INSTALLATION MANUAL** will introduce an improved slack adjuster preventing the aforementioned internal leakage which have been newly developed.

The rear brake caution lamp will originally turn on when an abnormality occurs with the rear brake system. As the inspection procedure in the above case is attached, continue carrying out the inspection work as per its description.

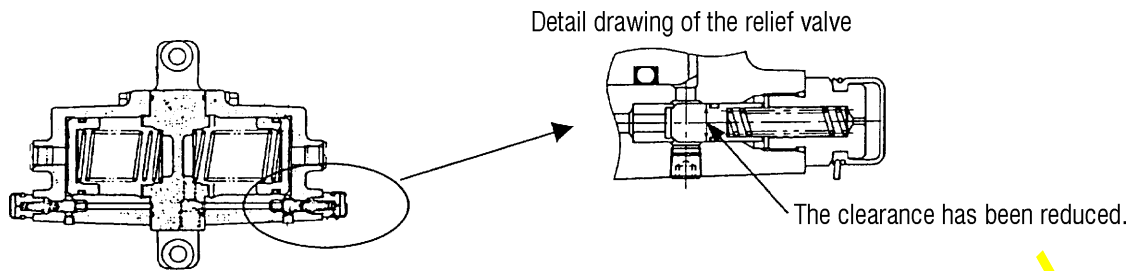
Also, the brake chamber stroke sensor is apt to operate when the brake cooling oil pressure rises abnormally by clogging, etc. occurring in the brake oil cooler. Therefore, inspect the brake cooling oil pressure also.

LISTS OF PARTS

PART NO.	PART NAME	QUANTITY	REMARKS
561-35-62102 (561-35-62101)	Slack Adjuster (Slack Adjuster)	1 (1)	

### 3. Details of the modification

The clearance of the relief valve section of the slack adjuster has been reduced to prevent occurrence of defective seating by inclination of the valve.



### 4. Installation procedure

Numbers being indicated after part names and numbers given in the drawing correspond to the numbers in the list of parts.

#### 4.1 Preparations

Park the vehicle on a flat place, raise the body and insert the safety pins. (Be sure to insert the safety pins on both sides.)

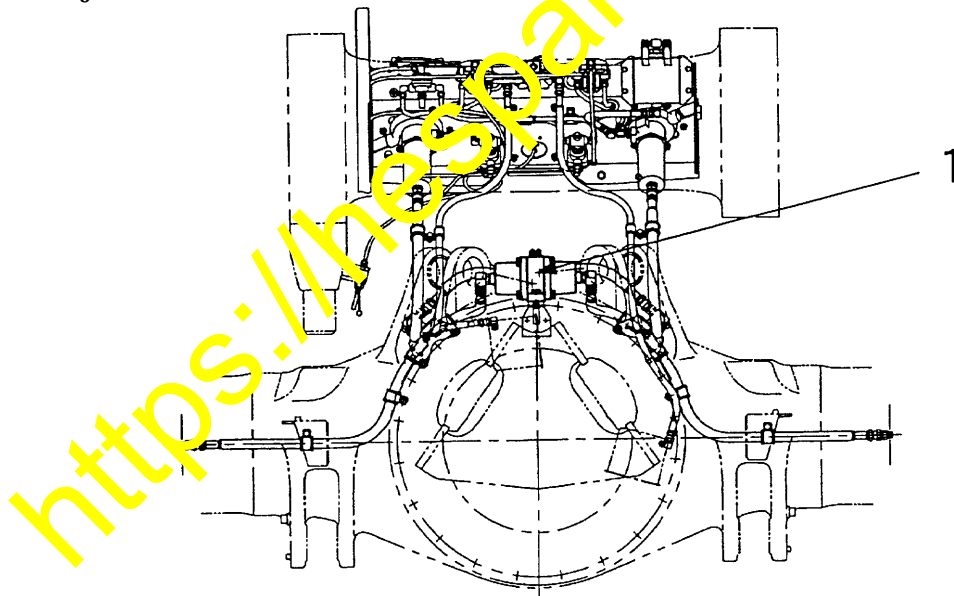
Lock the dump lever at the "HOLD" position.

Turn off the engine, apply the parking brake and insert chocks underneath the tires.

★ Since the braking circuit is being disconnected, insert the chocks securely with special care.

#### 4.2 Replacing the slack adjuster

Disconnect the hoses from the inlet port side and the outlet port side and replace the slack adjuster (1).



#### 4.3 Oil leakage inspection and air bleeding from the braking circuit

- 1) Start the engine and, after the air gauge goes into the green range, operate the brake pedal and the retarder lever to inspect if oil leakage is not occurring.
- 2) Carry out air bleeding from the circuit.  
Refer to the Shop Manual regarding the details.

#### 4.4 Inspecting the braking performance

Inspect if the service brake and the retarder brake performances satisfy the standard values.

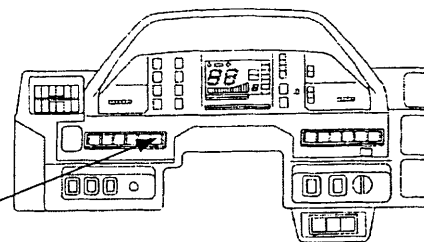
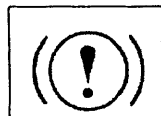
Refer to the Shop Manual for details.

## &lt;Reference&gt;

## 5. Inspections of the rear brake system

## 5.1 Lighting the rear brake caution lamp

The rear brake caution lamp turns on to alarm when an abnormality occurs in the brake oil pressure circuit and when the brake chamber piston strokes to an abnormal range.



## 5.2 Inspections

5.2.1 Inspect if air is not mixed in the brake oil circuit. (Carry out air bleeding.)

5.2.2 Inspect if oil leakage is not occurring to the outside in the piping between the brake chamber and the brake.

5.2.3 Inspect if clogging is not occurring in the brake oil circuit.

Inspect if clogging is not occurring in the line strainer being installed to the inlet port of the make-up tank and in the line filter being installed to the inlet port of the chamber.

Also, inspect if the hoses are not being flattened.

In the meantime, change the strainer (Plug 568-35-14121) at every 2,000 hours of operation or every one year whichever comes first. (Since the strainer is with a fine mesh, it is difficult to reuse it after washing.)

5.2.4 Raise the air pressure to the specified pressure level and operate the brake pedal or the retarder lever to measure the following hydraulic pressure levels.

① Measure the outlet pressure of the brake chamber master cylinder. (Carry out the measurement work after disconnecting the outlet port hose.)

Specified pressure: 4.41 MPa {45 kg/cm<sup>2</sup>}

(At the time when the air pressure is at 0.814MPa {8.3 kg/cm<sup>2</sup>})

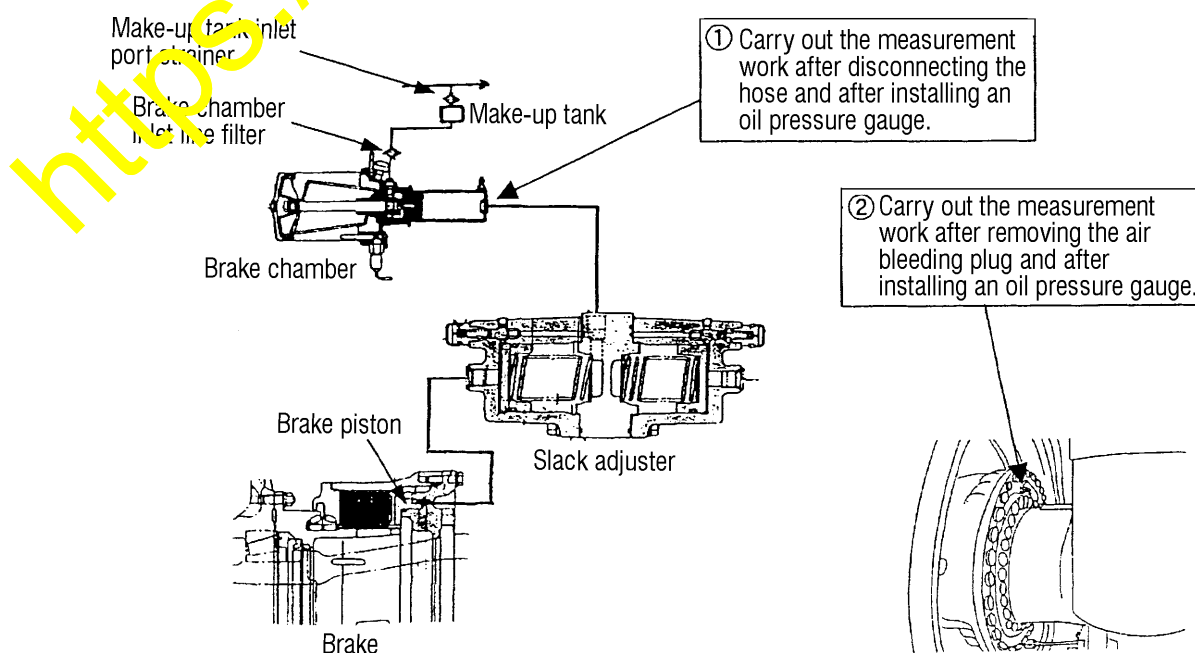
When the measured pressure is lower than the above specified pressure the brake chamber master cylinder packing or the check valve may be defective.

② Measure the brake operating oil pressure. (Carry out the measurement work after removing the air bleeding plug and after installing an oil pressure gauge.)

Specified pressure: 4.41 MPa {45 kg/cm<sup>2</sup>}

(At the time when the air pressure is at 0.814MPa {8.3 kg/cm<sup>2</sup>})

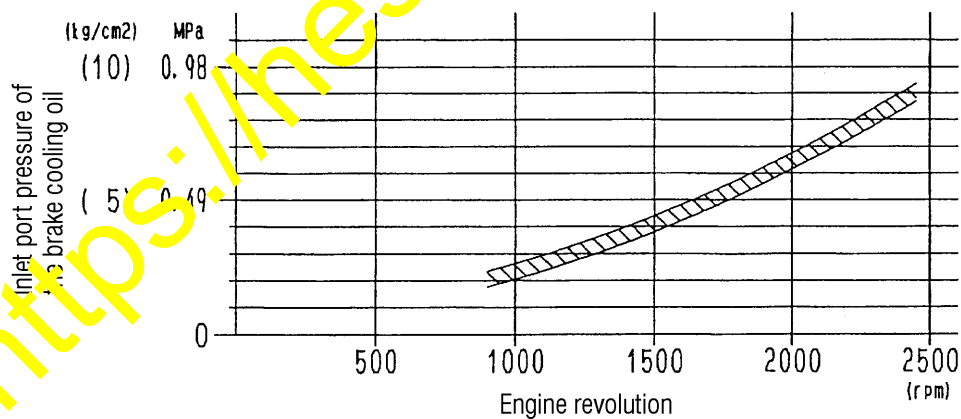
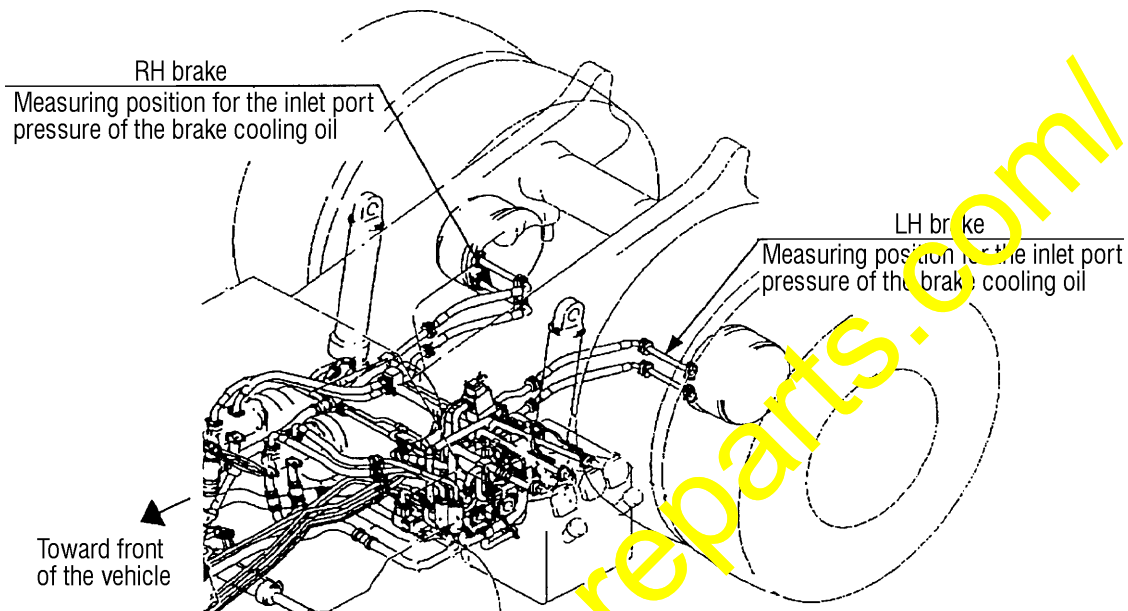
When the measured pressure is lower than the above specified pressure or when the necessary oil pressure cannot be maintained the brake piston seal may be defective.



6. Inspecting the inlet port pressure of the brake cooling oil

Carry out the measurement work after applying the retarder and while the oil temperature is within the range of 70 to 80°C.

In case the measured pressure is greatly out of the hatched range in the graph shown below, the oil cooler may be clogged and inspect if the cooler element is not clogged.



Inlet port pressure of the rear brake cooling oil