

PARTS & SERVICE NEWS

REF NO. AT96176A

DATE Apr. 25, 2004

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This **Parts & Service News** supercedes AT96176 dated Nov. 14, 1996 and should be discarded

SUBJECT: REPAIR OF AIR COMPRESSOR INLET VALVE (Engine S6D140)

PURPOSE: To introduce repair procedures for the inlet valve of the air compressor

APPLICATION: WA500-1 Wheel Loaders, S/N up to 23267
WA500-1L Wheel Loaders, S/N A20131 and up
GD825-2 Motor Grader, S/N up to 23351

FAILURE CODE: AJ00ZC

DESCRIPTION:

1. Introduction:

When the inlet valve of the air compressor malfunctions, repair it referring to this **PARTS & SERVICE NEWS**.

2. List of Parts:

Part No.	Part Name	Purpose of Part	Qty.	Remarks
6210-81-3113 (6210-81-3112)	Air compressor (Air compressor)	Replacement	1 (1)	
DK487019-5222 (DK487018-5221)	Head Assembly (Head Assembly)		1 (1)	
DK487018-5321 (DK487018-4320)	Head (Head)		1 (1)	
DK487026-2800 (DK487026-1501)	Valve (Valve)		1 (1)	
DK487028-2700 (DK487018-1700)	Guide (Guide)		1 (1)	

3. Contents of the modification

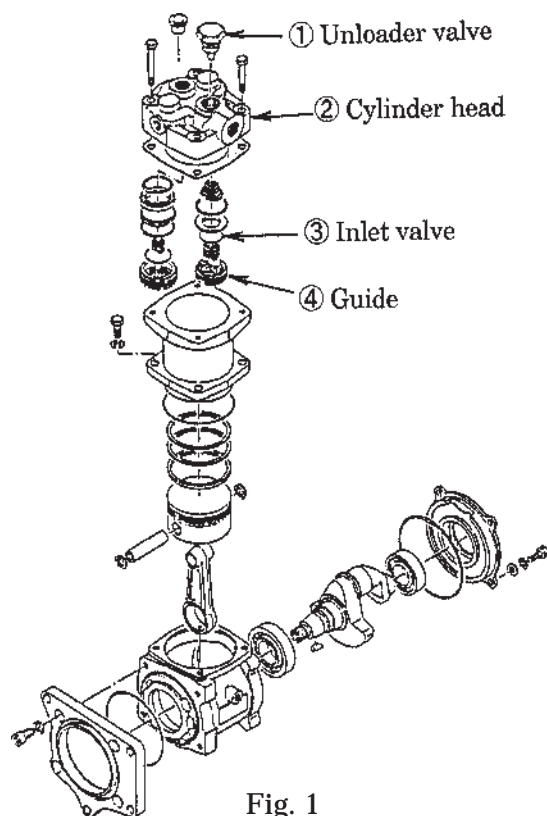


Fig. 1

The material and the sheet thickness of the inlet valve ③ according to Fig. 1 have been improved to enhance the durability.

- Material : 15N2C ⇨ SUS420J2 + Mo.
(Swedish steel)
- Sheet thickness : 1.2mm ⇨ 1.5mm

4. Repair procedures

4-1. Preparations

- (1) Open the drain cock of the air tank to release air totally.
- (2) Drain the cooling water through the drain cock of the radiator to a level where the engine side cooling water goes out.
- (3) Prepare the consumable parts necessary when making the replacement work.
 - Gasket 6164-91-5220: 5 units
 - Gasket 7003-01419: 2 units
 - Gasket 0705-01412: 4 units
 - Head gasket DK487020-2200: 1 unit

4-2. Replacement procedures

- (1) Disconnect the water and air pipes from the air compressor.
- (2) Replace the head assembly (DK487018-5222) of the air compressor with the improved part.
Meanwhile, when the unloader valve ① according to Fig. 1 is found normal, replace the sub-assembly (DK487018-5321) of the head only.

Tightening torque for the head bolt: $49.0 \pm 5.0\text{Nm}$ ($5.0 \pm 0.5\text{kgm}$)

4-3. Inspections after finishing the repair

- (1) Start the engine and check if cooling water and oil are leaking.
- (2) Make sure the air tank pressure reaches the specified value.

(Note) Although replacement of the inlet valve ③ and the guide ④ will do the repair, since the guide can only be removed using a special jig, replace the whole head assembly instead.

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