

# Komatsu Wheel Loaders WA600-1 Service Repair Workshop Manual



# SHOP MANUAL

## **KOMATSU** **WA600-1**

MACHINE MODEL    SERIAL NO.

**WA600-1**                      **10001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.
- WA600-1 mount the S6D170-1 engine.  
For details of the engine, see the 6D170-1 Series Engine Shop Manual.

# CONTENTS

	No. of page
<b>10 ENGINE</b>	
12 TESTING AND ADJUSTING .....	12-1
13 DISASSEMBLY AND ASSEMBLY .....	13-1
<b>20 POWER TRAIN</b>	
21 STRUCTURE AND FUNCTION .....	21-1
22 TESTING AND ADJUSTING .....	22-1
23 DISASSEMBLY AND ASSEMBLY .....	23-1
24 MAINTENANCE STANDARD .....	24-1
<b>40 STEERING SYSTEM</b>	
41 STRUCTURE AND FUNCTION .....	41-1
42 TESTING AND ADJUSTING .....	42-1
43 DISASSEMBLY AND ASSEMBLY .....	43-1
44 MAINTENANCE STANDARD .....	44-1
<b>50 BRAKE AND AIR SYSTEM</b>	
51 STRUCTURE AND FUNCTION .....	51-1
52 TESTING AND ADJUSTING .....	52-1
53 DISASSEMBLY AND ASSEMBLY .....	53-1
54 MAINTENANCE STANDARD .....	54-1
<b>60 WORK EQUIPMENT SYSTEM</b>	
61 STRUCTURE AND FUNCTION .....	61-1
62 TESTING AND ADJUSTING .....	62-1
63 DISASSEMBLY AND ASSEMBLY .....	63-1
64 MAINTENANCE STANDARD .....	64-1
<b>80 ELECTRIC AND ELECTRONIC SYSTEM</b>	
81 STRUCTURE AND FUNCTION .....	81-1
82 TESTING AND ADJUSTING .....	82-1
83 DISASSEMBLY AND ASSEMBLY .....	83-1
<b>90 OTHERS</b>	
91 OTHERS .....	91-1
93 DISASSEMBLY AND ASSEMBLY .....	93-1
97 GEAR PUMP .....	97-1

## ADJUSTING VALVE CLEARANCE

- ★ Condition: Engine is cold.
- ★ Adjust clearance between crosshead and rocker lever as follows.

Unit: mm

	Intake valve	Exhaust valve
Cold	0.4	1.0

### Special tool

	Part No.	Part Name	Qty
A	795-125-1340	Feeler gauge	1

1. Remove cylinder head cover.
2. Rotate the crankshaft in the normal direction to align pointer (1) with the 1.6 TOP mark on crankshaft pulley. When rotating, check the movement of the valves. When the pointer is in line with the 1.6 TOP mark, No.1 cylinder should be at compression top dead center.

- ★ The barring method is as follows.

Screw bolts (01010-31240) into the tap holes (4-M12 × 1.75) on the front face of the alternator drive pulley as shown in the figure, then use a bar to rotate.

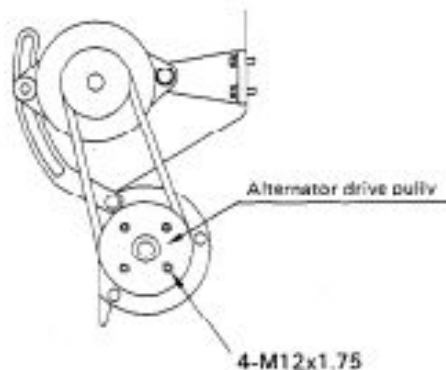
3. When No.1 cylinder is at compression top dead center, adjust the valve marked ●.
- When No.6 cylinder is at compression top dead center, adjust the valves marked ○.

Cylinder No.	1	2	3	4	5	6
Intake valve	●	●	○	●	○	○
Exhaust valve	●	○	●	○	●	○

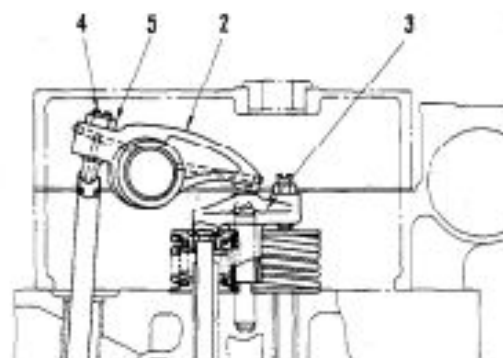
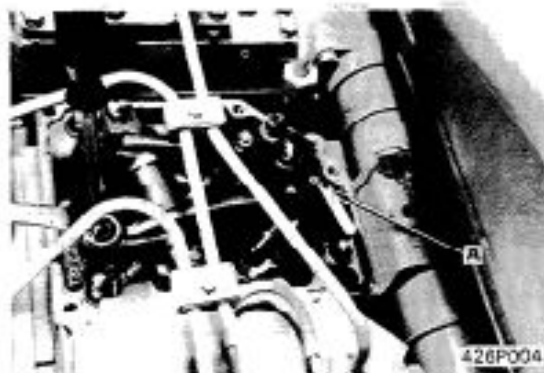
4. To adjust, insert tool A between rocker lever (2) and crosshead (3) and turn adjustment screw (4) until clearance is a sliding fit. Then tighten lock nut (5) to hold adjustment screw in position.

 Lock nut: 6.0 ± 1.0 kgm

- ★ After tightening the lock nut, check the clearance again.
5. Next, rotate crankshaft one turn in the normal direction and adjust the valve clearance of the remaining valves marked ○.
- ★ After adjusting No.1 cylinder at compression top dead center, it is also possible to turn crankshaft 120° each time and adjust the valve clearance of each cylinder according to the firing order.
  - Firing order: 1-5-3-6-2-4



F41E01112



F42601011-K



Thank you very much  
for your reading.  
Please click here  
to get more information.