SEAM000806

Operation & Maintenance Manual

KOMATSU®

HD325-6

DUMP TRUCK

SERIAL NUMBERS HD325-6 - 5680 and up

December 1997

Copyright 1997 Komatsu America International Company

MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publicat... Order the manual at mid-west-tech.com >

5. CONTENTS

1. **Foreword** 0- 1

2. **Safety information** 0- 2

3. **Introduction** 0- 3
   - 3.1 Features 0- 3
   - 3.2 Breaking in the machine 0- 3

4. **Location of plates, table to enter serial number and distributor** 0- 4
   - 4.1 Machine serial No. plate position 0- 4
   - 4.2 Engine serial No. plate position 0- 4
   - 4.3 Table to enter serial No. and distributor 0- 4

SAFETY

6. **General precautions** 1- 2

7. **Precautions during operation** 1- 7
   - 7.1 Before starting engine 1- 7
   - 7.2 After starting engine 1- 9
   - 7.3 Shipping 1-16
   - 7.4 Battery 1-17
   - 7.5 Towing 1-19

8. **Precautions for maintenance** 1-20
   - 8.1 Before carrying out maintenance 1-20
   - 8.2 During maintenance 1-25
   - 8.3 Tires 1-30

9. **Position for attaching safety labels** 1-31
   - 9.1 Position for attaching safety labels 1-31

OPERATION

10. **General view** 2- 2
   - 10.1 General view of machine 2- 2
   - 10.2 General view of controls and gauges 2- 3

11. **Explanation of components** 2- 4
   - 11.1 Machine monitor 2- 4
   - 11.2 Switches 2-18
   - 11.3 Control levers and pedals 2-25
   - 11.4 Mechatronics equipment controller 2-29
   - 11.5 Safety pin 2-29
   - 11.6 Dust indicator 2-30
   - 11.7 Fuses 2-30
   - 11.8 Location of manual box 2-31
   - 11.9 Car radio 2-32
   - 11.10 Car stereo 2-36
   - 11.11 Air conditioner 2-39
   - 11.12 Car heater 2-43

MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publication... Order the manual at mid-west-tech.com >

12. Operation 2- 44
12.1 Check before starting engine 2- 44
12.2 Starting engine 2- 61
12.3 Operations and checks after starting engine 2- 63
12.4 Moving machine off 2- 64
12.5 Shifting gear 2- 66
12.6 Traveling downhill 2- 67
12.7 Traveling in reverse 2- 73
12.8 Steering the machine 2- 74
12.9 Stopping the machine 2- 75
12.10 Operating dump body 2- 77
12.11 Precautions for operation 2- 79
12.12 Parking machine 2- 80
12.13 Checks after completion of work 2- 81
12.14 Stopping engine 2- 81
12.15 Checks after stopping engine 2- 81
12.16 Locking 2- 82
12.17 Handling tires 2- 83

13. Determining and maintaining travel road 2- 86
13.1 Determining travel road 2- 86
13.2 Maintaining travel road 2- 87

14. Cold weather operation 2- 88
14.1 Precautions for low temperature 2- 88
14.2 Precautions after completion of work 2- 90
14.3 After cold weather 2- 90

15. Long-term storage 2- 91
15.1 Before storage 2- 91
15.2 During storage 2- 91
15.3 After storage 2- 92
15.4 Precautions before traveling after long-term storage 2- 92

16. Troubleshooting 2- 93
16.1 After running out of fuel 2- 93
16.2 Towing machine 2- 94
16.3 If battery is discharged 2- 97
16.4 Other trouble 2-101

MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publication... Order the manual at mid-west-tech.com >

MAINTENANCE

17. Guides to maintenance 3- 2

18. Outline of service 3- 5
18.1 Outline of oil, fuel, coolant 3- 5
18.2 Outline of electric system 3- 8

19. Wear parts list 3- 9

20. Use of fuel, coolant, and lubricants according to ambient temperature 3-10

21. Standard tightening torques for bolts and nuts 3-14
21.1 Introduction of necessary tools 3-14
21.2 Torque list 3-15

22. Periodic replacement of safety critical parts 3-16

23. Maintenance schedule chart 3-18

24. Service procedure 3-23
24.1 Initial 250 hours service 3-23
24.2 When required 3-24
24.3 Check before starting 3-35
24.4 Every 50 hours service 3-45
24.5 Every 250 hours service 3-47
24.6 Every 500 hours service 3-55
24.7 Every 1000 hours service 3-62
24.8 Every 2000 hours service 3-68
24.9 Every 4000 hours service 3-72
24.10 Every 3 years service 3-73

SPECIFICATIONS

25. Specifications 4- 2

OPTIONS, ATTACHMENTS

26. Handling payload meter 5- 2
26.1 Name of parts 5- 2
26.2 External display lamps 5- 2
26.3 Operating payload meter 5- 4

27. Selecting dump body 5-13

28. Options and attachments 5-14

29. Tachograph (TCO15-6) 5-15
29.1 Explanation of components 5-15
29.2 Method of using key 5-17
29.3 Method of use 5-18

30. Revo tachograph (TCO15-7) 5-20
30.1 Explanation of components 5-20
30.2 Method of use 5-23

MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publication... Order the manual at mid-west-tech.com >

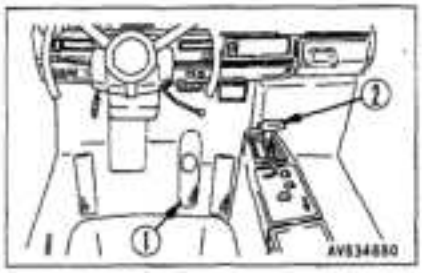
CHECK FOR NORMAL ACTUATION OF FOOT BRAKE

Check when starting operations, and if the braking effect is poor, check and adjust. For details, see "24.6.3 CHECK WEAR OF FRONT BRAKE PADS".

CHECK BRAKING CAPACITY OF FOOT BRAKE

Check the braking capacity of the foot brake as follows.

1. Set the air pressure to the maximum with the machine on flat ground, and depress foot brake ①.
2. Set shift lever ② to the D position, gradually raise the engine speed, and check that the machine does not move even when the engine speed reaches 1550 rpm.



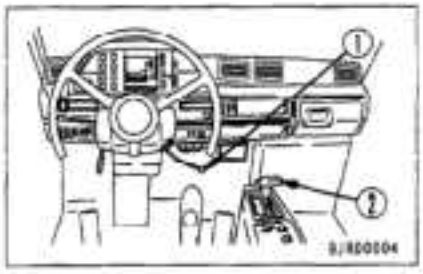
CHECK FOR NORMAL ACTUATION OF RETARDER BRAKE

Check when starting operations, and if the braking effect is poor, check and adjust. For details, see "24.7.5 CHECK WEAR OF REAR BRAKE DISC".

CHECK BRAKING CAPACITY OF RETARDER BRAKE

Check the braking capacity of the retarder brake as follows.

1. Set the air pressure to the maximum with the machine on flat ground, and pull retarder lever ① fully.
2. Set shift lever ② to the D position, gradually raise the engine speed, and check that the machine does not move even when the engine speed reaches 1200 rpm.



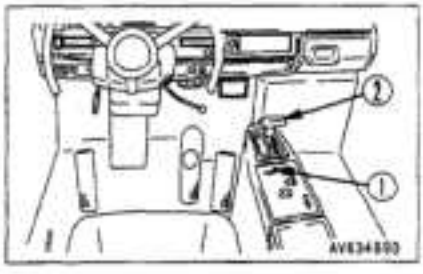
CHECK FOR NORMAL ACTUATION OF PARKING BRAKE

Check when starting operations, and if the braking effect is poor, adjust the parking brake. For details, see "24.2.11 ADJUST PARKING BRAKE".

CHECK BRAKING CAPACITY OF PARKING BRAKE

Check the braking capacity of the parking brake as follows.

1. Set the air pressure to the maximum with the machine on flat ground, and set parking brake lever ① to the PARKING position.
2. Set shift lever ② to the D position, gradually raise the engine speed, and check that the machine does not move even when the engine speed reaches 1600 rpm.



MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publication... Order the manual at mid-west-tech.com >

24.7 EVERY 1000 HOURS SERVICE

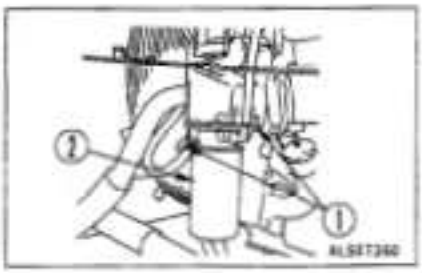
Carry out maintenance for EVERY 50 HOURS, EVERY 250 HOURS, and EVERY 500 HOURS SERVICE at the same time.

24.7.1 REPLACE CORROSION RESISTOR CARTRIDGE

⚠WARNING

The oil is at high temperature after the engine has been operated, so never replace the cartridge immediately after finishing operations.
Wait for the oil to cool down before replacing the cartridge.

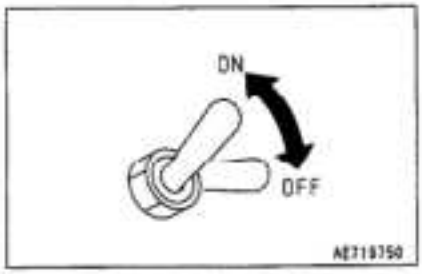
- Prepare a filter wrench and a container to catch the water.



1. Screw in valve ① at the top of the corrosion resistor.
2. Set the container to catch the water under the cartridge.
3. Using a filter wrench, remove cartridge ②.
4. Clean the filter holder, coat the seal surface of the new cartridge thinly with engine oil, then install the cartridge.
5. When installing, tighten until the gasket contacts the seal surface of the filter holder, then tighten a further 2/3 turns.
   If the filter cartridge is tightened too far, the gasket will be damaged and this will lead to leakage of water. If the filter is too loose, water will also leak from the gap at the gasket, so always tighten the correct amount.
6. Open valve ①.
7. After replacing the cartridge, start the engine and check that there is no leakage of water from the filter seal surface. If there is any leakage of water, check the tightening of the filter cartridge.

MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >

4. TROUBLESHOOTING SWITCH
Used for troubleshooting.

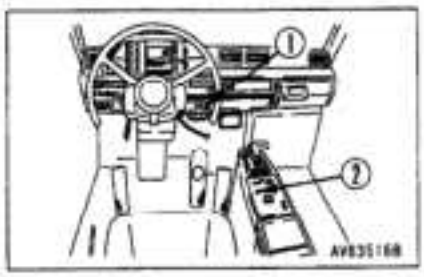


32.2 OPERATION METHOD

32.2.1 ABS OPERATION

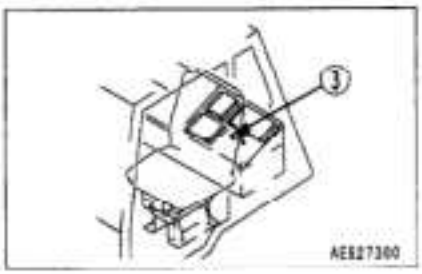
⚠WARNING

Always stop the truck before turning on the ABS/ASR main switch ③. If it is turned on while the truck is running, the ABS/ASR may not function normally.



1. Turn on the truck starting switch ①. At this time, warning lamp ② will light up.

2. Turn on the ABS/ASR main switch ③. Start the truck. When the speed rises to about 10 km/h (6.2 MPH), the warning lamp ② will go off.



If the truck starting switch ① is turned on/off while the ABS/ASR main switch ③ is turned on, the electric power for the ABS/ASR system will also be turned on/off.

Accordingly, keep the ABS/ASR main switch turned on for normal operation.

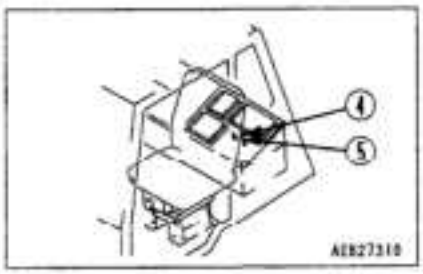
32.2.2 ASR OPERATION

⚠WARNING

Turn on the troubleshooting switch ⑤ only when performing troubleshooting on the truck. The ABS/ASR system will not function while the troubleshooting switch is turned on.

1. Since the ASR and ABS are interlocked, if the ABS is turned on, the ASR is also turned on automatically.

2. The ASR information lamp ④ lights up when the system detects slippage of the rear wheels, and the ASR starts functioning.



MidWestTech | Komatsu HD325-6 Dump Truck Operation & Maintenance Manual | Publicati... Order the manual at mid-west-tech.com >