VEAM940200

Operation & Maintenance Manual

WA65-3

WHEEL LOADER

SERIAL NUMBER

HA940051 and up

WARNING

Unsafe use of this machine may cause serious injury or death. Operators and maintenance personnel must read this manual before operating or maintaining this machine. This manual should be kept near the machine for reference and periodically reviewed by all personnel who will come into contact with it.

NOTICE

Komatsu has Operation & Maintenance Manuals written in some other languages. If a foreign language manual is necessary, contact your local distributor for availability.

KOMATSU®

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | Public... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

INTRODUCTION

1.	**FORWORD**	**2**
2.	**SAFETY INFORMATION**	**3**
3.	**INTRODUCTION**	**4**
3.1	• FEATURES	4
3.2	• BREAKING IN A NEW MACHINE	4
4.	**LOCATION OF PLATES, TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR**	**5**
4.1	• MACHINE SERIAL NO. PLATE POSITION	5
4.2	• ENGINE SERIAL NO. PLATE POSITION	5
4.3	• TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR	5
5.	**WHY YOU SHOULD READ THESE OPERATING INSTRUCTIONS**	**6**
6.	**NOTES ON SAFETY REGULATIONS**	**7**
6.1	• CORRECT USE	7
6.2	• SAFETY NOTES IN THE OPERATING INSTRUCTIONS	7
7.	**EQUIPMENT**	**8**

LOADING AND TRANSPORTING THE MACHINE

8.	**LOADING AND TRANSPORTING THE MACHINE**	**12**
8.1	• SECURING THE ARTICULATED STEERING	12
8.2	• LIFTING THE MACHINE	12
8.3	• DRIVING MACHINE ONTO LOADING AREA OF TRANSPORT VEHICLE	14
8.4	• SECURING THE MACHINE DURING TRANSPORT	15
8.5	• AFTER TRANSPORT	15

SAFETY

9.	**GENERAL SAFETY MEASURES**	**19**
9.1	• SAFETY INSTRUCTIONS	19
9.2	• SAFETY DEVICES	19
9.3	• EMERGENCY EXIT	19
9.4	• CLOTHING AND PERSONAL PROTECTION	20
9.5	• MACHINE MODIFICATIONS	20
9.6	• BEFORE YOU LEAVE THE DRIVER'S SEAT	20
9.7	• MOUNTING AND DISMOUNTING	20
9.8	• FIRE PREVENTION AND FIRE FIGHTING	21
9.8.1	•• FIRE EXTINGUISHER AND FIRST-AID KIT	22
9.9	• PROTECTION AGAINST ASBESTOS DUST	22
9.10	• PROTECTION AGAINST INJURIES	23
9.11	• WORKING AT HIGH TEMPERATURES	23
9.12	• ROLL-OVER PROTECTION SYSTEM (ROPS)	24
9.13	• ATTACHMENT FOR PROTECTION AGAINST FALLING OBJECTS (FOPS)	24
9.14	• ATTACHMENTS	24
9.15	• BATTERY	25
10.	**SAFETY MEASURES DURING OPERATION**	**26**
10.1	• BEFORE YOU START THE ENGINE	26
10.1.1	•• WORKPLACE SAFETY	26
10.1.2	•• IN THE DRIVER'S CAB	26
10.1.3	•• IN-DOOR OPERATION	27
10.1.4	•• GAS, DUST, AND INFLAMMABLE VAPOURS	27

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

10.1.5 •• MIRRORS, WINDOWS, AND LIGHTING 27
10.2 • MACHINE OPERATION 28
10.2.1 •• BEFORE YOU START THE ENGINE 28
10.2.2 •• REVERSING 28
10.2.3 •• DRIVING 29
10.2.4 •• DRIVING ON SLOPES 29
10.2.5 •• EMERGENCY LOWERING SYSTEM 30
10.2.6 •• WORKING CLOSE TO OVERHEAD POWER TRANSMISSION LINES 30
10.2.7 •• LOADING 31
10.2.8 •• GOOD VISION 31
10.2.9 •• WORKING ON SNOW 31
10.2.10 •• HEIGHT LIMITATION 31
10.2.11 •• BRAKES 32
10.2.12 •• WORKING ON LOOSE SOIL 32
10.2.13 •• WORKING WITH THE FORKLIFT TRUCK ATTACHMENT 33
10.2.14 •• PARKING THE MACHINE 34
10.3 • TRANSPORT 35
10.3.1 •• LOADING AND UNLOADING THE MACHINE 35
10.3.2 •• TRANSPORT 35
11. SAFETY MEASURES DURING MAINTENANCE 36
11.1 • PERSONNEL 36
11.2 • PRIOR TO START OF MAINTENANCE MEASURES 36
11.2.1 •• WARNING SIGN 36
11.2.2 •• TOOLS 36
11.2.3 •• SAFETY-RELATED PARTS 36
11.2.4 •• PRIOR TO START OF INSPECTION AND MAINTENANCE 37
11.2.5 •• SECURING THE ARTICULATED STEERING 37
11.2.6 •• SUPPORTING THE WORK UNIT 37
11.3 • DURING MAINTENANCE 38
11.3.1 •• ATTACHMENTS 38
11.3.2 •• WORKING UNDER THE MACHINE 38
11.3.3 •• KEEPING THE MACHINE CLEAN 38
11.3.4 •• SPECIFIC MEASURES 38
11.3.5 •• REFUELING AND TOPPING OFF OIL 39
11.3.6 •• COOLANT 39
11.3.7 •• USE OF LIGHTING 40
11.3.8 •• HIGH-PRESSURE HOSES 40
11.3.9 •• HANDLING HIGH-PRESSURE OIL 40
11.3.10 •• FAN AND BELTS 41
11.3.11 •• WASTE MATERIAL 41
11.4 • TIRES 42
11.4.1 •• STORING TIRES 42
12. LABELING 43
12.1 • POSITION OF SAFETY LABELS 43
12.2 • POSITION OF STANDARD LABELS 45

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

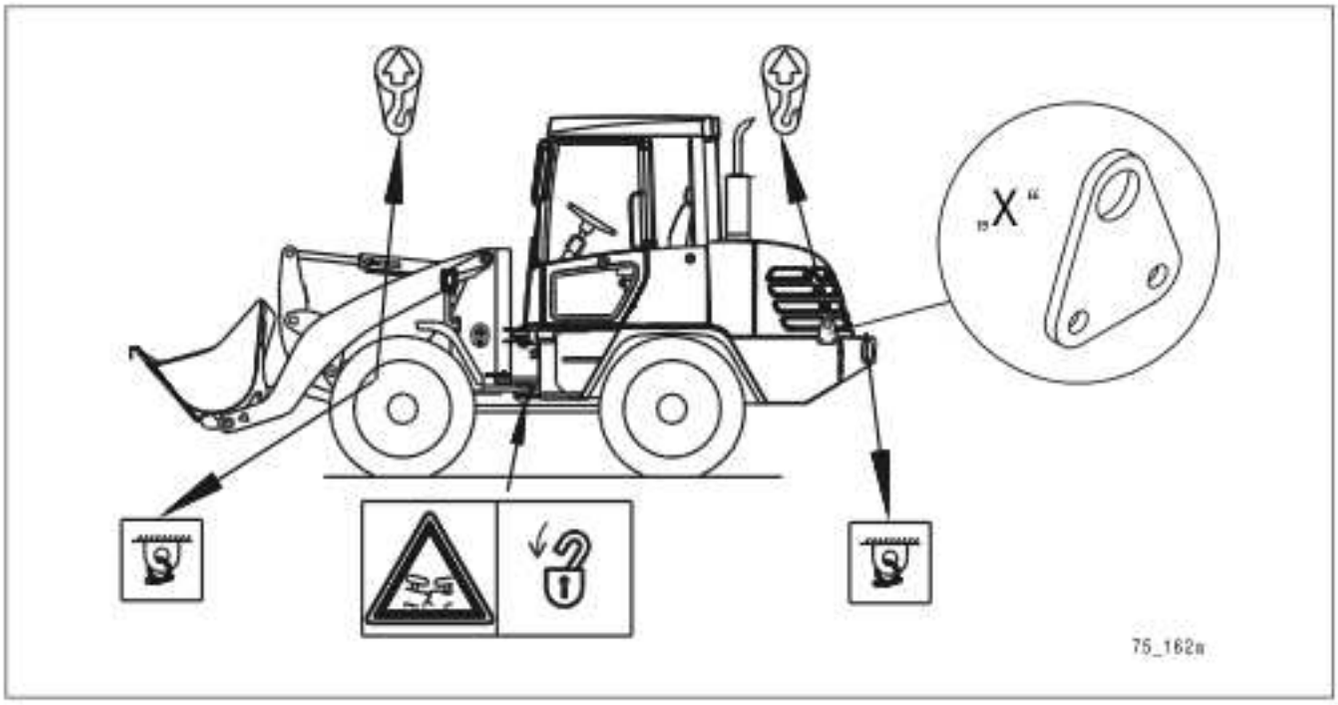
CONTROLS AND INDICATORS

13. GENERAL VIEW OF THE MACHINE 48
14. CONTROLS AND INDICATORS 49
14.1 • GENERAL VIEW 49
14.1.1 •• SWITCHES AND CONTROLS 50
14.2 • INSTRUMENT PANEL 51
14.3 • WARNING LIGHTS 52
14.4 • CONTROL LAMPS 55
14.5 • MEASURING INDICATORS 58
14.6 • SWITCHES 60
14.7 • CONTROL LEVERS, PEDALS 66
14.8 • ARTICULATED STEERING CATCH 71
14.9 • TRACTION DEVICE 71
14.10 • SOCKET 71
14.11 • DOOR UNLOCKING SYSTEM 72
14.12 • ALARM HORN FOR REVERSE DRIVING 72

OPERATION

15. RUNNING IN THE MACHINE 74
16. PREPARING THE MACHINE START 75
16.1 • VISUAL CHECKS 75
16.1.1 •• BEFORE YOU START THE ENGINE 75
16.1.2 •• BEFORE STARTING WORKING WITH THE MACHINE 75
17. ADJUSTMENTS PRIOR TO MACHINE START 77
17.1 • ADJUSTING THE DRIVER'S SEAT 77
17.2 • ADJUSTING THE STEERING COLUMN 78
17.3 • ADJUSTING THE ARMREST 78
17.4 • ADJUSTING THE REAR-VIEW MIRRORS 78
17.5 • ADJUSTING THE HEATING AND VENTILATION SYSTEM 79
17.5.1 •• ADJUSTING THE VENTILATION SYSTEM 79
17.5.2 •• ADJUSTING THE HEATING SYSTEM 79
17.6 • PUTTING ON THE SAFETY BELT 80
17.6.1 •• PUTTING ON THE SAFETY BELT 80
17.6.2 •• TAKING OFF THE SAFETY BELT 80
18. STARTING AND SWITCHING OFF THE ENGINE 81
18.1 • STARTING THE ENGINE 81
18.1.1 •• WARMING UP THE ENGINE 82
18.2 • SWITCHING OFF THE ENGINE 83
19. DRIVING 84
19.1 • START-UP 84
19.1.1 •• STARTING THE MACHINE ON SLOPES 85
19.2 • CHANGING THE DRIVING DIRECTION 85
19.3 • REVERSE DRIVING 86
19.4 • TURNING 86
19.4.1 •• TURNING ON SLOPES, EMBANKMENTS OR HILL FLANKS 86
19.5 • BRAKING 87
19.5.1 •• PULLING THE PARKING BRAKE 87
19.5.2 •• RELEASING THE PARKING BRAKE 87
19.5.3 •• BRAKING WITH THE SERVICE BRAKE 87
19.5.4 •• IF THE SERVICE BRAKE BREAKS DOWN 87

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >



Information signs attached to the machine indicate the attachment points. To avoid damage to the machine, attach the eye hooks only to the attachment points.

Machine equipment „X“:

- 2 Brackets, P/N. 42U-98-12A10
- 4 Screws M16 X 40, Strength class 10.9, P/N. 01016-51640

Screws mounted in the rear frame, inside.

Tightening torque: 280 Nm

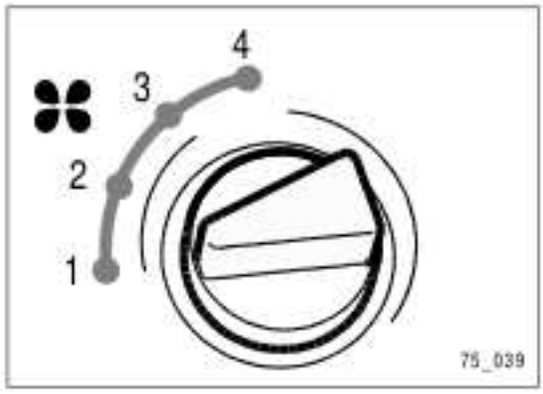
When selecting the lifting equipment, take the operating weight of the machine into account. Insufficient carrying capacities of the lifting equipment may cause severe accidents. Also use carrying wire ropes with appropriate carrying capacities for the operating weight of the machine. Carrying wire ropes with insufficient carrying capacities may tear when the machine is lifted up and cause severe accidents. The operating weight of the machine depends on the attached bucket. You find the operating weights of the machine in the chapter "33. Technical Data".

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

9 - FAN ROTARY SWITCH FOR VENTILATION AND HEATING

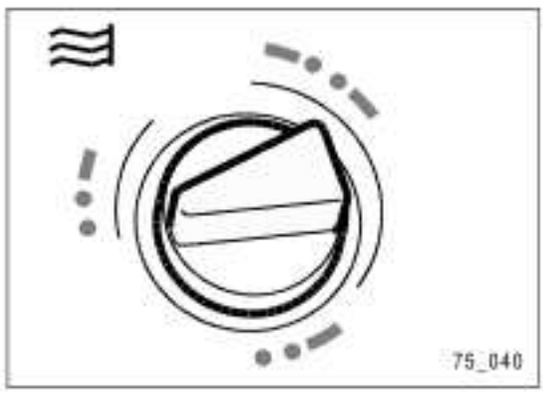
This rotary switch permits to regulate the fan step by step.

Switch setting 1: Fan off
Switch setting 2: Low air flow
Switch setting 3: Medium air flow
Switch setting 4: High air flow



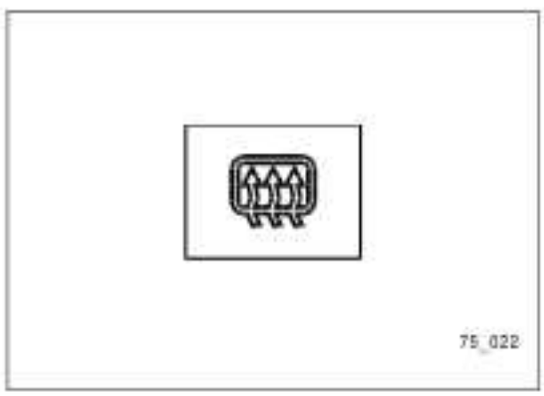
10 - TEMPERATURE ROTARY SWITCH

The temperature rotary switch permits to adjust continuously the capacity of the heating system from 'cold' (heating OFF) to 'warm'.



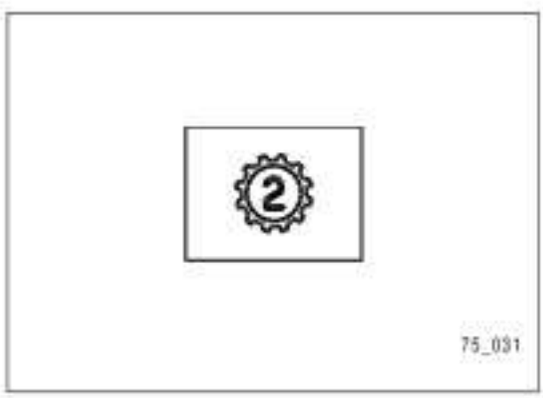
11 - HEATED REAR WINDSCREEN SWITCH

This rotary switch is used to switch on/off the heated rear windscreen.



12 - SWITCH FOR DRIVING RANGE UP TO 12.43 mph (20 km/h)

This switch is used to change between the machine's two speed ranges. If you operate the switch, the machine will drive in speed range 2 (up to 12.43 mph (20 km/h)). If the switch is set to OFF, the machine drives in speed range 1 (up to 4.66 mph (7,5 km/h)).



MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

32. MAINTENANCE EVERY 2000 OPERATING HOURS

All maintenance operations to be performed after 10, 50, 100, 250, 500 and 1000 hours of operation also fall into this maintenance category.

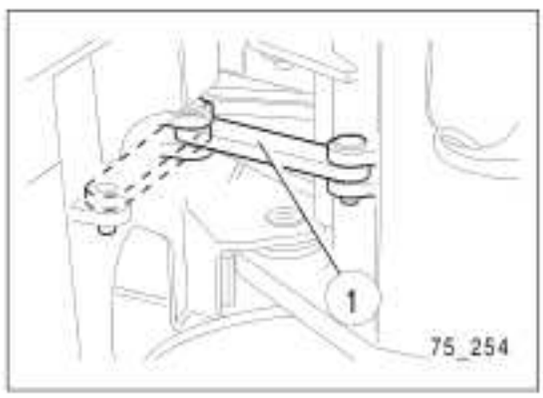
32.1 HYDRAULIC SYSTEM, OIL CHANGE

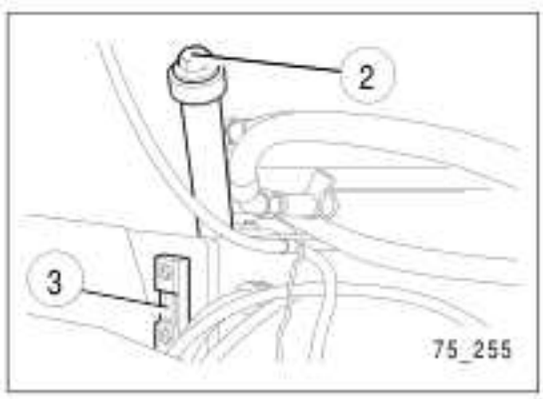
WARNING

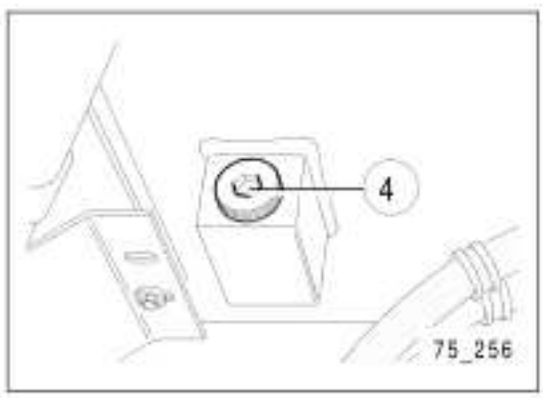
- **Frequent skin contact with used hydraulic oil may cause skin damages and other injuries!**
  Use rubber gloves for exchanging the filter. Wash any spilled hydraulic oil thoroughly from your skin.
- **Danger of being burnt! The hydraulics tank is under pressure. Hot hydraulic oil may squirt out and cause injuries!**
  Use rubber gloves and hold the oil trough under the discharge hole in such a way that you cannot come into contact with the extruding oil.

Keep a collecting container with sufficient capacity ready.

1 - Park the machine on level ground.
2 - Lower the work unit onto the ground.
3 - Switch off the engine.
4 - Secure the articulated steering with the articulated steering lock (1).
5 - Unlock the feeding and ventilation screw (2) by turning it slowly to let the pressure escape.
6 - Loosen the screw plug (4) of the hydraulic oil tank and let the oil run off.
7 - Re-tighten the screw plug with its seal being in perfect condition.
8 - Unscrew the feeding and ventilation screw.
9 - Fill up oil until the oil level is between the center and top edge of the inspection glass (3).
10 - Start up the engine.
11 - Raise and lower the work equipment several times, while operating the bucket at the same time.
12 - Lower the bucket onto the ground and bring it into mining position.
13 - Check the oil level with the engine running idle in its low speed position.
14 - Ventilate the hydraulic oil tank (see section "32.2 Bleeding the Hydraulic Oil Tank").







NOTE

- **Do not fill up with too much hydraulic oil! Otherwise, the pressure in the hydraulic oil container increases to very dangerous levels.**

MidWestTech | Komatsu WA65-3 Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >