Operation and Maintenance Manual

VEAM550102

WA65-6
WA70-6
WA80-6
WA90-6
WA100M-6

ORIGINAL INSTRUCTIONS

WHEEL LOADER

SERIAL NUMBERS

WA65-6	H60051 AND UP
WA70-6	H60051 AND UP
WA80-6	H60051 AND UP
WA90-6	H00051 AND UP
WA100M-6	H60051 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 WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Loader Op... Order the manual at mid-west-tech.com >

1.7 Table of contents

1. Foreword 1-1

1.1 Foreword 1-2
1.1.1 EU Directives 1-4

1.2 Safety information 1-5
1.2.1 Signal words 1-5
1.2.2 Safety labels 1-7

1.3 Introduction 1-8
1.3.1 Intended use 1-8

1.4 Key data of the machine 1-10
1.4.1 Product identification number (PIN)/Machine serial no. plate and position 1-10
1.4.2 Engine serial no. plate 1-11
1.4.3 Axle serial no. plate 1-11
1.4.4 Transmission serial no. plate 1-11
1.4.5 ROPS/FOPS cab serial no. plate 1-12
1.4.6 Operator's seat serial no. plate 1-12
1.4.7 Table to enter serial number and distributor 1-13
1.4.8 Declaration of conformity (for machines placed on the market as from 29th December 2009) 1-14

1.5 Emission control warranty 1-15
1.5.1 Emission control warranty statement (Applies to Canada only) 1-15

1.6 Garantie sur le contrôle des émissions 1-16
1.6.1 Énoncé de garantie sur le contrôle des émissions (applicable au Canada seulement) 1-16

1.7 Table of contents 1-17

1.8 Dimensions, weights, and operating data 1-24
1.8.1 WA65-6, WA70-6, WA80-6 1-24
1.8.2 WA90-6, WA100M-6 1-26

1.9 CE-conforming equipment 1-28
1.9.1 CE-conforming equipment - part 1 1-28
1.9.2 CE-conforming equipment - part 2 1-30
1.9.3 Manufacturer-supplied CE-conforming equipment 1-31

2. Safety 2-1

2.1 Safety labels 2-2
2.1.1 Position of the safety labels (for Europe) 2-2
2.1.2 Position of the safety labels (for USA) 2-4

2.2 General precautions 2-7

2.3 Precautions during operation 2-19
2.3.1 Starting the engine 2-19
2.3.2 Operation 2-21
2.3.3 Transport 2-28

MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load... Order the manual at mid-west-tech.com >

2.3.4 Battery 2-29

2.4 Precautions for maintenance 2-31

3. Operation 3-1

3.1 General view 3-2
3.1.1 General view of the machine 3-2
3.1.2 Controls 3-4
General view 3-4
3.1.3 Machine monitor 3-6
3.1.4 Switches 3-8

3.2 Descriptions of the individual elements 3-10
3.2.1 Machine monitor 3-10
Caution lamps 3-11
Pilot lamps 3-14
Gauges 3-20
3.2.2 Switches 3-22
3.2.3 Control levers and pedals 3-32
3.2.4 Steering lock 3-37
3.2.5 Tow hitch 3-37
3.2.6 Power outlet 3-38
3.2.7 Door and window detent release 3-38
3.2.8 Back-up alarm 3-38
3.2.9 Fuses 3-39
3.2.10 Slow-blow fuses 3-41
3.2.11 Adjusting the heating and ventilation system 3-42
3.2.12 Air conditioner 3-43

3.3 Operation 3-45
3.3.1 Checks before starting 3-45
Visual checks 3-45
Checks before starting the engine 3-48
Adjustments before starting 3-58
3.3.2 Starting the engine 3-62
Ambient temperature range for operation and storage 3-63
Checks after starting the engine 3-64
3.3.3 Driving the machine 3-65
Starting 3-65
Limiting the maximum speed 3-66
3.3.4 Changing direction 3-68
3.3.5 Turning and steering 3-69
3.3.6 Braking 3-70
Engaging the parking brake 3-70
Disengaging the parking brake 3-70
Braking with the service brake 3-70
If the service brake fails 3-71
Braking on slopes 3-71
3.3.7 Stopping and parking the machine 3-72
3.3.8 Operating the work equipment 3-73

MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load... Order the manual at mid-west-tech.com >

Multi-function lever . . . 3-73
3.3.9 Return to dig . . . 3-74
3.3.10 Working with the wheel loader . . . 3-75
Saving the tyres . . . 3-75
Switching on the 100 % differential lock . . . 3-76
Loading . . . 3-77
Digging . . . 3-77
Excavating . . . 3-79
Levelling . . . 3-80
Carrying . . . 3-81
Loading . . . 3-82
Working with the forklift attachment . . . 3-83
3.3.11 Operating precautions . . . 3-85
Permissible water depth . . . 3-85
Working on snow . . . 3-85
Dumping on steep slopes . . . 3-85
Working near high-voltage cables . . . 3-85
Working on road shoulders . . . 3-85
Working on loose ground . . . 3-85
If the service brake fails . . . 3-85
Precautions for driving uphill or downhill . . . 3-86
Precautions when driving . . . 3-86
3.3.12 Adjusting the work equipment . . . 3-87
Selecting the work equipment . . . 3-87
Attaching the work equipment . . . 3-87
Removing the work equipment . . . 3-90
Removing the multi-purpose bucket . . . 3-91
Bucket level indicator . . . 3-91
3.3.13 Switching off the engine . . . 3-92
3.3.14 Checks after switching off the engine . . . 3-92
3.3.15 Locking . . . 3-92
3.3.16 Handling tyres . . . 3-93
Precautions when handling tyres . . . 3-93
Tyre pressure . . . 3-93
Standard tyres . . . 3-94

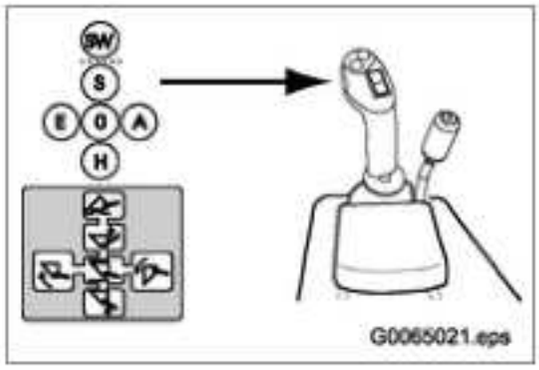
3.4 Transport . . . 3-95
3.4.1 Transporting procedure . . . 3-95
Ensure machine stability . . . 3-95
3.4.2 Loading the machine . . . 3-95
Loading the machine . . . 3-96
Securing the machine . . . 3-97
Unloading the machine . . . 3-99
3.4.3 Lifting the machine . . . 3-100
Lifting procedure . . . 3-103

3.5 Operation in cold weather . . . 3-104
3.5.1 Precautions for operation in cold weather . . . 3-104
3.5.2 Precautions after work . . . 3-105
3.5.3 After the cold weather period . . . 3-105

MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load... Order the manual at mid-west-tech.com >

5. Multi-function lever

The multi-function lever controls the work equipment. The multi-function lever has 6 positions to control the work equipment as follows:



SW	Floating position		The multi-function lever remains in this position. The floating position is used for levelling (drawing off). In this switching position, the work equipment lowers under its own weight and moves freely due to external force.
S	Lower		This switch position lowers the boom. When the engine is not running, you can lower the work unit by setting the multi-function lever to this position (in emergencies).
0	Hold		The boom is held in position.
H	Lift		The boom is raised.
E	Tilt		This position causes the bucket to tilt.
A	Dump		This position causes the bucket to dump.

MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load... Order the manual at mid-west-tech.com >

5.8.5 Maintenance every 10 service hours

Lubrication - articulated steering

DANGER

- Performing maintenance on a machine that is not properly parked and secured may cause severe accidents!
- Park the machine on solid, level ground. Secure the machine before beginning maintenance work.

1. For maintenance work, park the machine as described in chapter 5.1 "Maintenance guide" on page 5-2.
2. Clean the grease nipples indicated by the arrows.

   Articulated steering (2 points)
3. Use a grease pump to press a sufficient amount of grease into the grease nipples.
4. Remove any excess old grease that is pushed out at the bearings.

NOTE
Shorten the maintenance intervals if working continuously in wet or salty environments.



MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load...
Order the manual at mid-west-tech.com >

6.1 Technical data

6.1.1 WA65-6

	Performance	
Engine	Type	KOMATSU 4D95LWE-5
	Engine power	41 kW (ISO 14396)
	Torque, max.	190 Nm
	Starter motor	12 V - 2.2 kW
	Alternator	12 V - 90 A
	Battery	100 Ah
Driving speed forward and reverse: Standard version	1nd speed range 2nd speed range	0 - 5 km/h 0 - 20 km/h
Max tractive force		3,985 daN
Min. turn radius	Outer edge of bucket	4,095 mm
	Outer edge of tyre	3,680 mm
Bucket, standard		0.7 m³

6.1.2 WA70-6

	Performance	
Engine	Type	KOMATSU 4D95LWE-5
	Engine power	45 kW (ISO 14396)
	Torque, max.	210 Nm
	Starter motor	12 V - 2.2 kW
	Alternator	12 V - 90 A
	Battery	100 Ah
Driving speed forward and reverse: Standard version	1nd speed range 2nd speed range	0 - 7 km/h 0 - 20 km/h
Max tractive force		3,750 daN
Min. turn radius	Outer edge of bucket	4,175 mm
	Outer edge of tyre	3,680 mm
Bucket, standard		0.85 m³

MidWestTech | Komatsu WA65-6, WA70-6, WA80-6, WA90-6, WA100M-6 Wheel Load... Order the manual at mid-west-tech.com >