VEAM290100

Operation & Maintenance Manual

WA250PT-5H

WHEEL LOADER

SERIAL NUMBERS WA250H60051 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 WA250PT-5H Wheel Loader Operation & Maintenance Manual | P... Order the manual at mid-west-tech.com >

Contents

FOREWORD

Foreword 1-2
Safety information 1-4
Introduction 1-6
Directions of machine 1-6
Necessary information 1-7
Machine serial No. plate and position 1-7
Engine serial No. plate and position 1-7
Position of service meter 1-8
Table to enter serial No. and distributor 1-8
Contents 1-9
..... 1-9
Dimensions, weights and operating data 1-15
WA250PT-5H: Dimensions, weights and operating data 1-15
CE-conforming equipment 1-16
CE-conforming equipment 1-16
Manufacturer-supplied CE-conforming equipment, according to document 421-93-H1900 1-17

SAFETY

Safety labels 2-3
Location of safety labels 2-3
Presentation of safety labels 2-4
General precautions 2-7
Safety rules 2-7
Precautions for operation 2-16
Starting engine 2-16
Operation 2-17
Transportation 2-24
Battery 2-25
Towing 2-27
Precautions for maintenance 2-28
Safety instructions 2-28
Precautions with tires 2-35
Handling tires 2-35
Precautions when storing tires 2-35

OPERATION

General view 3-3
General view of machine 3-3
General view of controls and gauges 3-4
Explanation of components 3-6
Machine monitor 3-6
Monitor system 3-7
Types of warning 3-8
Central warning lamp 3-9

MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

Character display portion 3-10
Emergency stop item 3-14
Caution items 3-16
Warning/limit functions for travel speed 3-18
Inspection and maintenance item 3-19
Pilot display portion 3-21
Meter display portion 3-24
Other functions of machine monitor 3-26
Switches 3-30
Control levers, pedals 3-38
Steering tilt lock lever 3-41
Cap and cover with lock 3-42
Safety bar 3-43
Towing pin 3-43
Grease pump 3-43
Cab door inner lock 3-44
Cab door open lock 3-44
Cab window open lock cancel knob 3-44
Fuse 3-45
Fuse capacity and name of circuit 3-45
Slow blow fuse 3-46
Power outlet 3-47
Air conditioner 3-48
General locations and function of control panel 3-48
Method of operation 3-51
Precautions when using 3-52
Handling cab wiper 3-53
Preventing damage to wiper arm bracket 3-53
Operation 3-54
Check before starting engine, adjust 3-54
Walk-around check 3-54
Check before starting 3-57
Adjustment 3-62
Operations and checks before starting engine 3-66
Starting engine 3-68
Operations and checks after starting engine 3-70
Breaking-in the machine 3-70
Normal operation 3-70
Stopping engine 3-72
Moving the machine (Directional, speed), stopping the machine 3-73
Moving the machine 3-73
Changing direction 3-75
Stopping the machine 3-78
Turning 3-79
Emergency steering 3-79
Operation of work equipment 3-80
Handling hydraulic quick coupler 3-81
Installing the attachment 3-81
Removal and installation of the attachment 3-83
Precautions for use 3-83
Precautions when removing the attachment 3-83
Work possible using wheel loader 3-84
Digging operations 3-84
Leveling operations 3-86
Pushing operation 3-86
Load and carry operations 3-86
Loading operations 3-87
Precautions for operation 3-89
Permissible water depth 3-89

MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

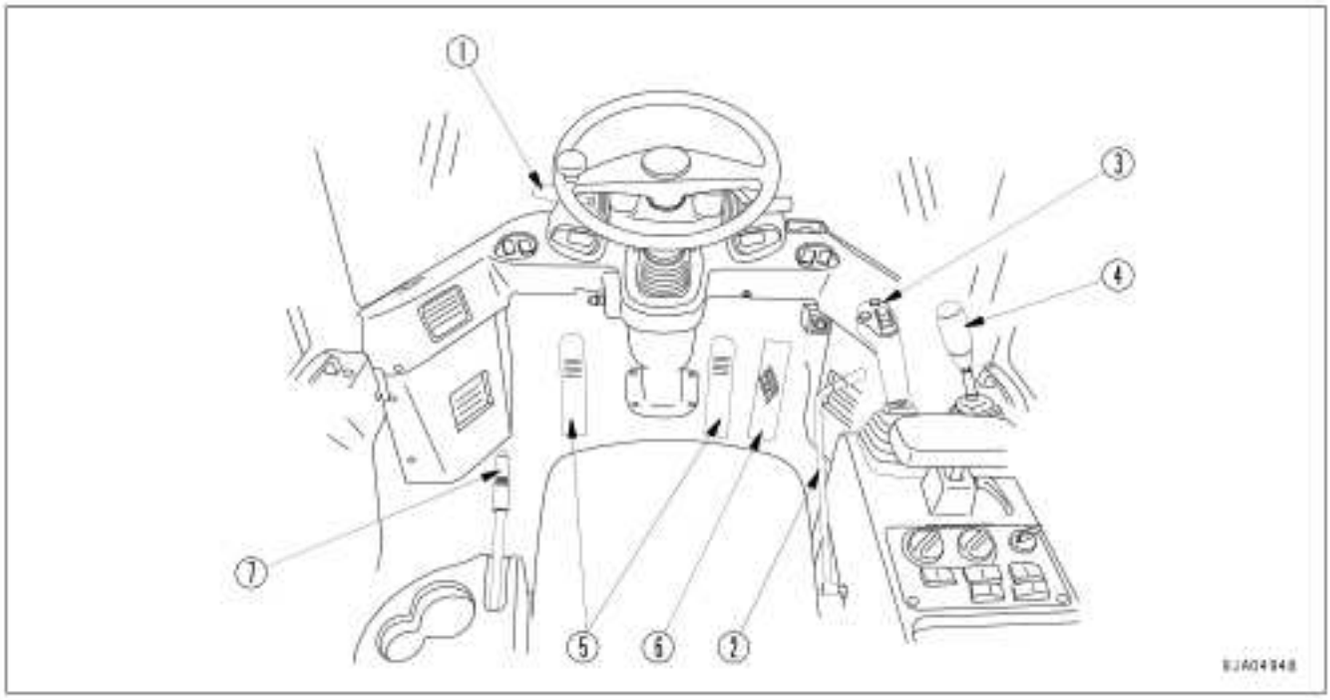
If wheel brake does not work ... 3-89
Precautions when driving up or down slopes ... 3-89
Adjusting work equipment posture ... 3-90
Adjusting boom kickout ... 3-90
Adjusting bucket positioner ... 3-91
Adjusting fork positioner ... 3-92
Bucket level indicator ... 3-92
Parking machine ... 3-93
Check after stopping engine ... 3-95
Checks after completion of operation ... 3-95
Locking ... 3-95
Handling the tires ... 3-96
Precautions when handling tires ... 3-96
Tire pressure ... 3-96
Precautions for using load and car method ... 3-97
Transportation ... 3-98
Transportation procedure ... 3-98
Loading, unloading work with trailers ... 3-98
Loading ... 3-98
Securing machine ... 3-99
Unloading ... 3-99
Lifting machine ... 3-100
Location of lifting position mark ... 3-101
Weight table ... 3-101
Lifting procedure ... 3-102
Cold weather operation ... 3-103
Precautions for low temperature ... 3-103
Fuel and lubricants ... 3-103
Coolant ... 3-103
Battery ... 3-104
Precautions after completion of work ... 3-105
After cold weather ... 3-105
Warming-up operation for steering hydraulic circuit in cold weather ... 3-105
Long-term storage ... 3-106
Before storage ... 3-106
During storage ... 3-106
After storage ... 3-106
Troubleshooting ... 3-107
When machine runs out of fuel ... 3-107
Towing the machine ... 3-107
When engine can be used ... 3-108
When engine cannot be used ... 3-108
If battery is discharged ... 3-109
Removal and installation of battery ... 3-109
Precautions for charging battery ... 3-110
Starting engine with booster cable ... 3-110
Other trouble ... 3-112
Electrical system ... 3-112
Chassis ... 3-113
Engine ... 3-115

MAINTENANCE

Guides to maintenance ... 4-2
Outlines of service ... 4-4
Handling oil, fuel, coolant and performing oil clinic ... 4-4
Oil ... 4-4

MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

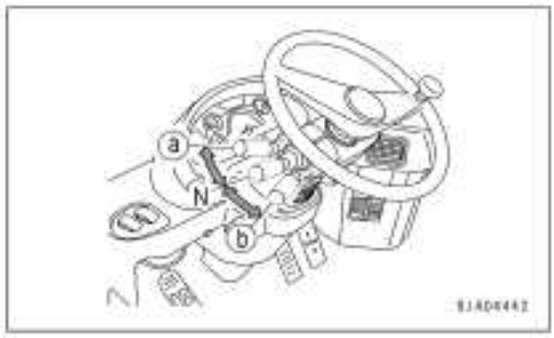
Control levers, pedals



(1) Directional lever	(5) Brake pedal
(2) Safety lock lever (for work equipment lever)	(6) Accelerator pedal
(3) Work equipment lever	(7) Parking brake lever
(4) Auxiliary control lever	

DIRECTIONAL LEVER

This lever (1) is used to switch the direction of travel of the machine between forward and reverse.
When starting the engine, if the directional lever is not at the N position, the engine will not start.
Position (a): FORWARD
Position N: NEUTRAL
Position (b): REVERSE



REMARK
When the starting switch is turned to the ON position, if the directional lever is not at the N position, the central warning lamp lights up and the alarm buzzer sounds intermittently.
When the directional lever is set to the N position, the central warning lamp goes out and the alarm buzzer stops.

MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

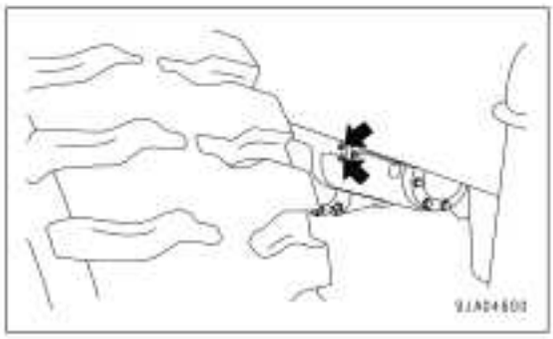
Every 100 hours service

Maintenance for every 50 hours service should be carried out at the same time.

Lubricate rear axle pivot pin

(2 places)

1. Using a grease pump, pump in grease through the grease fittings marked by the arrows.
2. After greasing, wipe off any old grease that was pushed out.



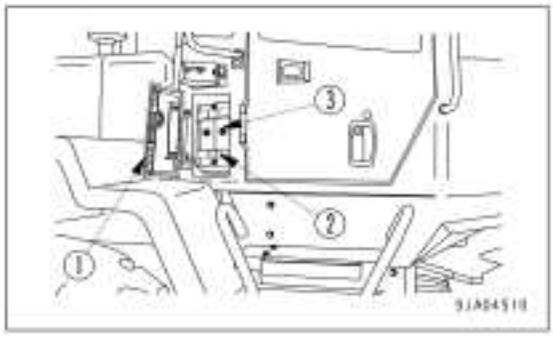
Clean element in air conditioner fresh air filter

⚠ WARNING

If compressed air is used, there is danger that dirt may fly and cause personal injury.
Always wear safety glasses, dust mask, and other protective equipment.

If the air conditioner has been used, the air filter should be cleaned.
Stop the air conditioner before cleaning the element.

1. Open cover (1).
2. Remove bracket (2) and filter (3) as one unit.
3. Direct dry compressed air (less than 0.69 MPa (7 kgf/ cm2, 99.4 PSI)) to the element from inside along its folds, then direct it from outside along its folds and again from inside.
4. When installing, fit filter (3) into bracket (2), then install.



MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

Technical data

	Item			Unit	
	Operating weight (including 1 operator: 75 kg (165 lb).)			kg (lb)	12,525 (27,618)
	Normal load			kg (lb)	3,540 (7,806)
	Bucket capacity	Heaped		m³ (cu.yd)	2.0 (2.6)
	Engine model			-	Komatsu SAA6D102E diesel engine
	Flywheel horsepower			kW (HP)/rpm	101kw (135)/2000
A	Overall length			mm (ft in)	7,575 (24'10")
B	Overall height			mm (ft in)	3,200 (10'6")
C	Max. dimension when shaking bucket			mm (ft in)	5,400 (17'9")
D	Overall width			mm (ft in)	2,470 (8'1")
E	Min. ground clearance			mm (ft in)	465 (1'6")
F	Bucket width			mm (ft in)	2,560 (8'5")
G	Clearance	Cutting edge		mm (ft in)	2,730 (8'11")
H	Reach	Cutting edge		mm (ft in)	1,230 (4'0")
I	Dump angle			degrees	45
	Min. turning radius	Out of chassis		mm (ft in)	5,920 (19'5")
		Center of outside tire		mm (ft in)	4,950 (16'3")
	Travel speed	Forward	1st	km/h (MPH)	4.0 - 13.0 (2.5 - 8.1)
			2nd	km/h (MPH)	13.0 (8.1)
			3rd	km/h (MPH)	18.0 (11.2)
			4th	km/h (MPH)	38.0 (23.6)
		Reverse	1st	km/h (MPH)	4.0 - 13.0 (2.5 - 8.1)
			2nd	km/h (MPH)	13.0 (8.1)
			3rd	km/h (MPH)	18.0 (11.2)
			4th	km/h (MPH)	38.0 (23.6)

MidWestTech | Komatsu WA250PT-5H Wheel Loader Operation & Maintenance Manua... Order the manual at mid-west-tech.com >