Operation & Maintenance Manual

TEN00088-00

GALEO

WA320L-5

WHEEL LOADER

SERIAL NUMBERS WA320L-60001 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 Galeo WA320L-5 Wheel Loader Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD ---- 1- 1
FOREWORD ---- 1- 2
SAFETY INFORMATION ---- 1- 5
INTRODUCTION ---- 1- 7
FRONT/REAR, LEFT/RIGHT DIRECTIONS OF MACHINE ---- 1- 7
NECESSARY INFORMATION ---- 1- 8
PRODUCT IDENTIFICATION NUMBER (PIN)/MACHINE SERIAL NO. PLATE ---- 1- 8
ENGINE SERIAL NO. PLATE ---- 1- 8
POSITION OF SERVICE METER ---- 1- 9
TABLE TO ENTER SERIAL NO. AND DISTRIBUTOR ---- 1- 9
SAFETY ---- 2- 1
SAFETY ---- 2- 2
SAFETY LABELS ---- 2- 5
LOCATION OF SAFETY LABELS ---- 2- 5
SAFETY LABELS ---- 2- 6
GENERAL PRECAUTIONS ---- 2- 11
PRECAUTIONS FOR OPERATION ---- 2- 20
STARTING ENGINE ---- 2- 20
OPERATION ---- 2- 22
TRANSPORTATION ---- 2- 28
BATTERY ---- 2- 29
TOWING ---- 2- 31
PRECAUTIONS FOR MAINTENANCE ---- 2- 32
PRECAUTIONS WITH TIRES ---- 2- 39
OPERATION ---- 3- 1
GENERAL VIEW ---- 3- 2
GENERAL VIEW OF MACHINE ---- 3- 2
GENERAL VIEW OF CONTROLS AND GAUGES ---- 3- 3
EXPLANATION OF COMPONENTS ---- 3- 5
MACHINE MONITOR ---- 3- 5
SWITCHES ---- 3- 32
CONTROL LEVERS, PEDALS ---- 3- 40
STEERING TILT LOCK LEVER ---- 3- 44
CAP AND COVER WITH LOCK ---- 3- 44
FRAME LOCK BAR ---- 3- 45
TOWING PIN ---- 3- 46
GREASE PUMP ---- 3- 46
CAB DOOR INNER LOCK ---- 3- 46
CAB DOOR OPEN LOCK ---- 3- 47
CAB WINDOW OPEN LOCK CANCEL KNOB ---- 3- 47
FUSE ---- 3- 47
SLOW BLOW FUSE ---- 3- 49
POWER OUTLET ---- 3- 49
STORAGE BOX ---- 3- 49
AM/FM RADIO-CASSETTE STEREO ---- 3- 50
AIR CONDITIONER ---- 3- 58
HANDLING CAB WIPER ---- 3- 63
OPERATION ---- 3- 64
CHECK BEFORE STARTING ENGINE, ADJUST ---- 3- 64

MidWestTech | Komatsu Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

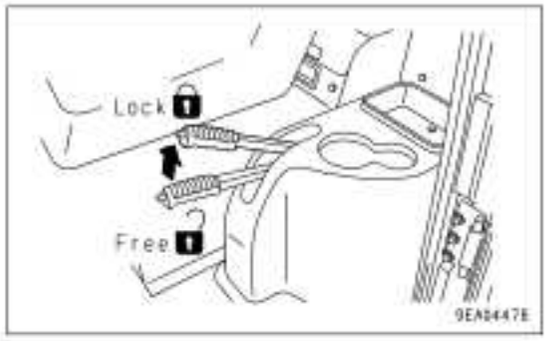
STARTING ENGINE ---- 3- 79
OPERATIONS AND CHECKS AFTER STARTING ENGINE ---- 3- 83
STOPPING ENGINE ---- 3- 85
MOVING THE MACHINE (DIRECTIONAL, SPEED), STOPPING THE MACHINE ---- 3- 86
TURNING ---- 3- 90
OPERATION OF WORK EQUIPMENT ---- 3- 92
WORK POSSIBLE USING WHEEL LOADER ---- 3- 94
PRECAUTIONS FOR OPERATION ---- 3-101
ADJUSTING WORK EQUIPMENT POSTURE ---- 3-103
PARKING MACHINE ---- 3-105
CHECKS AFTER COMPLETION OF OPERATION ---- 3-107
LOCKING ---- 3-107
HANDLING THE TIRES ---- 3-108
TRANSPORTATION ---- 3-110
TRANSPORTATION PROCEDURE ---- 3-110
LOADING, UNLOADING WORK WITH TRAILERS ---- 3-110
LIFTING MACHINE ---- 3-114
COLD WEATHER OPERATION ---- 3-116
PRECAUTIONS FOR LOW TEMPERATURE ---- 3-116
PRECAUTIONS AFTER COMPLETION OF WORK ---- 3-117
AFTER COLD WEATHER ---- 3-117
WARMING-UP OPERATION FOR STEERING HYDRAULIC CIRCUIT IN COLD WEATHER ---- 3-118
LONG-TERM STORAGE ---- 3-119
BEFORE STORAGE ---- 3-119
DURING STORAGE ---- 3-119
AFTER STORAGE ---- 3-119
TROUBLESHOOTING ---- 3-120
WHEN MACHINE RUNS OUT OF FUEL ---- 3-120
METHOD OF TOWING MACHINE ---- 3-120
IF BATTERY IS DISCHARGED ---- 3-122
OTHER TROUBLE ---- 3-125
MAINTENANCE ---- 4- 1
GUIDES TO MAINTENANCE ---- 4- 2
OUTLINES OF SERVICE ---- 4- 4
HANDLING OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC ---- 4- 4
OUTLINE OF ELECTRIC SYSTEM ---- 4- 7
WEAR PARTS ---- 4- 8
WEAR PARTS LIST ---- 4- 8
RECOMMENDED FUEL, COOLANT, AND LUBRICANT ---- 4- 9
USE OF FUEL, COOLANT AND LUBRICANTS ACCORDING TO AMBIENT TEMPERATURE ---- 4- 10
RECOMMENDED BRANDS, RECOMMENDED QUALITY FOR PRODUCTS OTHER THAN KOMATSU GENUINE OIL ---- 4- 11
STANDARD TIGHTENING TORQUES FOR BOLTS AND NUTS ---- 4- 12
TORQUE LIST ---- 4- 12
PERIODIC REPLACEMENT OF SAFETY CRITICAL PARTS ---- 4- 13
MAINTENANCE SCHEDULE CHART ---- 4- 14
MAINTENANCE SCHEDULE CHART ---- 4- 14
SERVICE PROCEDURE ---- 4- 16
INITIAL 250 HOURS SERVICE ---- 4- 16
WHEN REQUIRED ---- 4- 17

MidWestTech | Komatsu Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

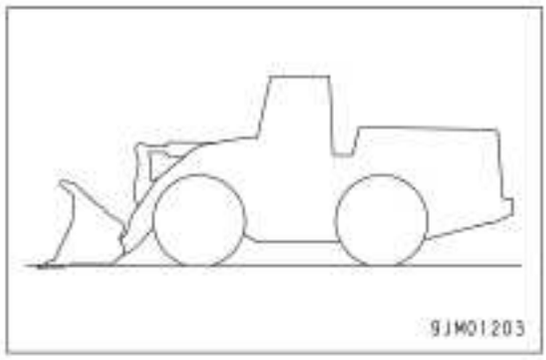
CHECK BEFORE STARTING ---- 4- 35
EVERY 50 HOURS SERVICE ---- 4- 36
EVERY 100 HOURS SERVICE ---- 4- 37
EVERY 250 HOURS SERVICE ---- 4- 39
EVERY 500 HOURS SERVICE ---- 4- 46
EVERY 1000 HOURS SERVICE ---- 4- 49
EVERY 2000 HOURS SERVICE ---- 4- 53
EVERY 4000 HOURS SERVICE ---- 4- 59
SPECIFICATIONS ---- 5- 1
SPECIFICATIONS ---- 5- 2
ATTACHMENTS, OPTIONS ---- 6- 1
SELECTING BUCKET AND TIRES ---- 6- 2
MACHINE MONITOR WITH LOAD METER ---- 6- 3
EXPLANATION OF COMPONENTS ---- 6- 4
MACHINE MONITOR ---- 6- 6
HANDLING MULTI-FUNCTION LEVER ---- 6- 61
EXPLANATION OF COMPONENTS ---- 6- 61
OPERATION ---- 6- 64
INDEX ---- 7- 1

MidWestTech | Komatsu Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

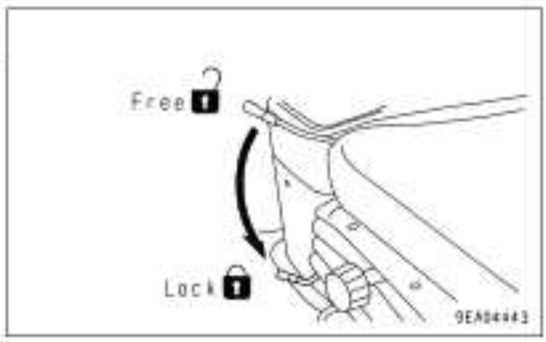
3. Pull parking brake lever (4) and set it to the LOCK position.



4. Operate lift arm control lever (5) to lower the bucket to the ground.



5. Check that the lift arm control lever (5) and bucket control lever (6) is at the HOLD position, then set the work equipment lock lever (7) to the LOCK position.



MidWestTech | Komatsu Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

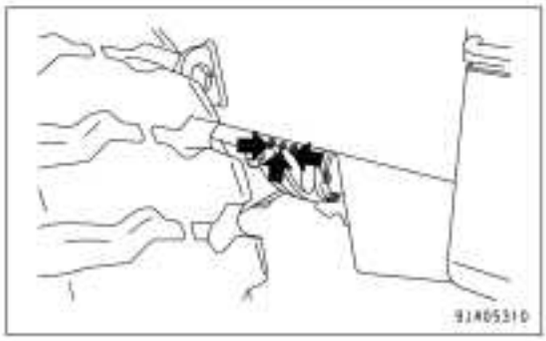
EVERY 100 HOURS SERVICE

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

LUBRICATE REAR AXLE PIVOT PIN

(3 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.



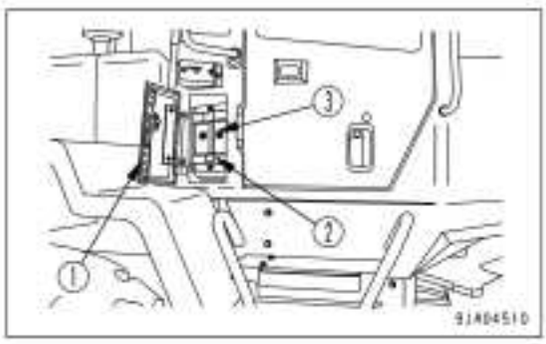
CLEAN ELEMENT IN AIR CONDITIONER FRESH AIR FILTER

⚠ WARNING

If compressed air is used, there is danger that dirt may fly and cause personal injury.
Always wear protective 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.

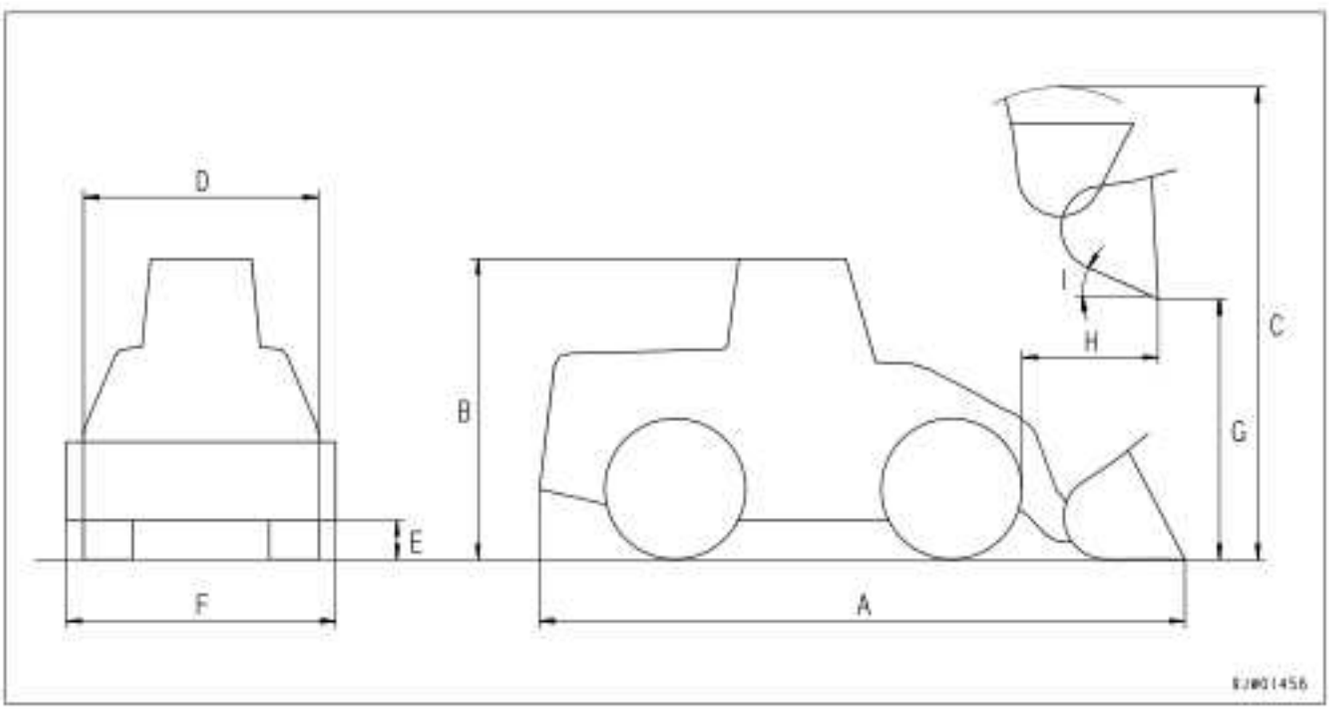
1. Open cover (1).
2. Remove bracket (2) and filter (3) as one unit.
3. Direct dry compressed air (less than 0.69 MPa (7 kgf/ cm^2, 99.4 PSI)) to the element from inside along its folds, then direct it from outside along its folds and again from inside.
4. When installing, fit filter (3) into bracket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



MidWestTech | Komatsu Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

SPECIFICATIONS

	Item			Unit	
	Operating weight (including 1 operator: 75 kg (165 lb).)(With bolt on cutting edge)			kg(lb)	13,880(30,605)
	Normal load			kg(lb)	4,480(9,878)
	Bucket capacity	Heaped		m³(cu.yd)	2.8(3.7)
	Engine model			-	Komatsu SAA6D102E diesel engine
	Flywheel horsepower			kW(HP)/rpm	124(166)/2000
A	Overall length			mm(ft in)	7,450(24'5")
B	Overall height			mm(ft in)	3,200(10'6")
C	Max. dimension when shaking bucket			mm(ft in)	5,325(17'6")
D	Overall width			mm(ft in)	2,585(8'6")
E	Min. ground clearance			mm(ft in)	425(1'5")
F	Bucket width			mm(ft in)	2,740(8'12")
G	Clearance	Cutting edge [BOC tip]		mm(ft in)	2,850(9'4")
H	Reach	Cutting edge [BOC tip]		mm(ft in)	1,035(3'5")
I	Dump angle			degrees	45
	Min. turning radius	Out of chassis		mm(ft in)	6,090(19'12")
		Center of outside tire		mm(ft in)	5,160(16'11")
	Permissible towing load			kg(N)	10,200(100,000)
	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 Galeo WA320L-5 Wheel Loader Operation & Maintenance Ma... Order the manual at mid-west-tech.com >