TEN00366-01

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC2000-8

SERIAL NUMBERS 20186 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 PC2000-8 Hydraulic Excavator Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD ---- 1- 1
BEFORE READING THIS MANUAL ---- 1- 2
SAFETY INFORMATION ---- 1- 3
INTRODUCTION ---- 1- 4
USE OF MACHINE ---- 1- 4
DIRECTIONS OF MACHINE ---- 1- 4
VISIBILITY FROM OPERATOR'S SEAT ---- 1- 5
PRODUCT INFORMATION ---- 1- 6
PRODUCT IDENTIFICATION NUMBER (PIN)/MACHINE SERIAL NO. PLATE ---- 1- 6
EPA REGULATIONS, ENGINE NUMBER PLATE ---- 1- 6
SERVICE METER LOCATION ---- 1- 7
YOUR MACHINE SERIAL NUMBERS AND DISTRIBUTOR ---- 1- 7
SAFETY ---- 2- 1
SAFETY ---- 2- 2
SAFETY LABELS ---- 2- 5
LOCATION OF SAFETY LABELS ---- 2- 6
SAFETY LABELS ---- 2- 7
GENERAL PRECAUTIONS COMMON TO OPERATION AND MAINTENANCE ---- 2- 12
PRECAUTIONS BEFORE STARTING OPERATION ---- 2- 12
PREPARATIONS FOR SAFE OPERATION ---- 2- 12
FIRE PREVENTION ---- 2- 14
PRECAUTIONS WHEN GETTING ON OR OFF MACHINE ---- 2- 15
DO NOT GET CAUGHT IN WORK EQUIPMENT ---- 2- 17
PRECAUTIONS RELATED TO PROTECTIVE STRUCTURES ---- 2- 17
PROTECTION AGAINST FALLING, FLYING, INTRUDING OBJECTS ---- 2- 18
UNAUTHORIZED MODIFICATION ---- 2- 18
PRECAUTIONS RELATED TO ATTACHMENTS AND OPTIONS ---- 2- 19
PRECAUTIONS RELATED TO CAB GLASS ---- 2- 19
PRECAUTIONS WHEN RUNNING ENGINE INSIDE BUILDING ---- 2- 19
PRECAUTIONS FOR OPERATION ---- 2- 20
PRECAUTIONS FOR JOBSITE ---- 2- 20
STARTING ENGINE ---- 2- 22
OPERATION ---- 2- 24
TRANSPORTATION ---- 2- 31
TOWING ---- 2- 32
LIFTING OBJECTS WITH BUCKET ---- 2- 32
PRECAUTIONS FOR MAINTENANCE ---- 2- 33
PRECAUTIONS BEFORE STARTING INSPECTION AND MAINTENANCE ---- 2- 33
PRECAUTIONS FOR INSPECTION AND MAINTENANCE ---- 2- 37
OPERATION ---- 3- 1
MACHINE VIEW ILLUSTRATIONS ---- 3- 2
OVERALL MACHINE VIEW ---- 3- 2
CONTROLS AND GAUGES ---- 3- 3
DETAILED CONTROLS AND GAUGES ---- 3- 7
MONITORING SYSTEM ---- 3- 7
SWITCHES (INSIDE OPERATOR'S CAB) ---- 3- 82
SWITCHES (INSIDE CAB BASE ROOM) ---- 3- 92
SWITCHES (OUTSIDE OF MACHINE) ---- 3- 95
LAMP (INSIDE OPERATOR'S CAB) ---- 3-106

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >

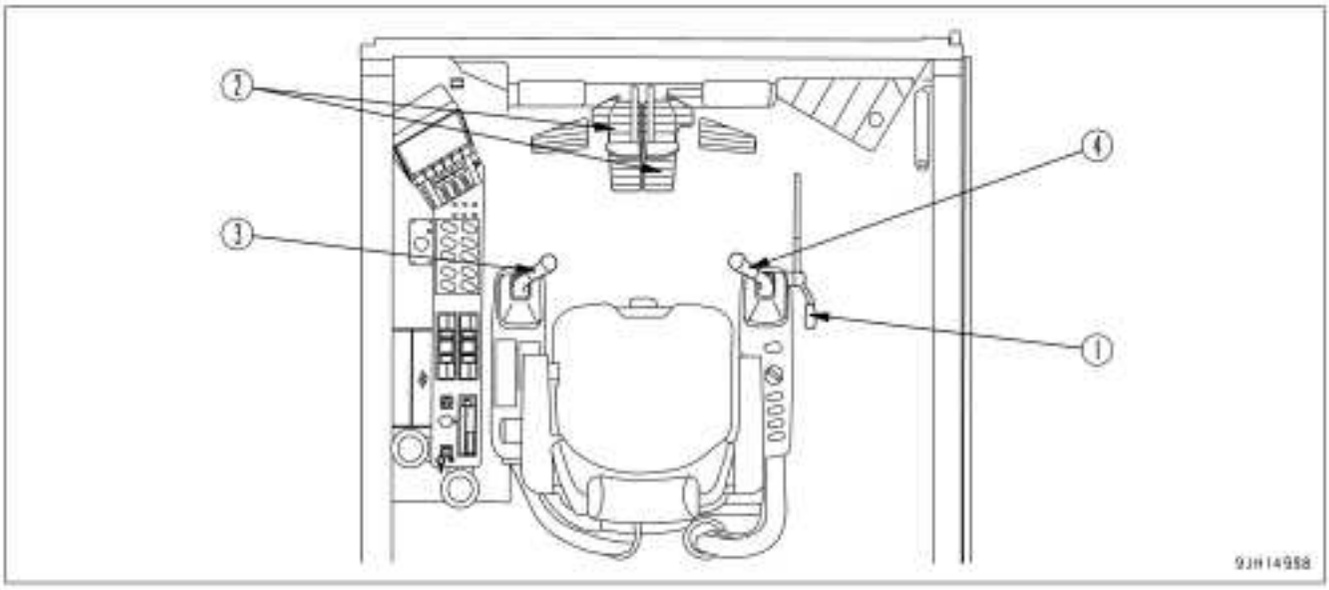
LAMP (OUTSIDE OF MACHINE) 3-110
CONTROL LEVERS AND PEDALS 3-112
DOOR LOCK 3-115
EMERGENCY EXIT FROM OPERATOR'S CAB 3-115
EMERGENCY ESCAPE HAMMER 3-116
HANDLING EMERGENCY LADDER 3-117
FIRE EXTINGUISHER 3-121
CAP WITH LOCK 3-122
ASHTRAY 3-123
CUP HOLDER 3-123
MAGAZINE BOX 3-124
HOOK 3-124
UTILITY BOX 3-125
AIR CONDITIONER CONTROLS 3-126
RADIO 3-144
AUXILIARY ELECTRIC POWER 3-149
FUSE 3-150
CIRCUIT BREAKER 3-152
FUSE (IF EQUIPPED) 3-155
CONTROLLER 3-156
TOOL, CAN STORAGE PLACE 3-157
HANDLING GREASE PUMP AND GREASE GUN 3-157
ACCUMULATOR 3-165
HANDLING HYDRAULIC LADDER 3-167
HANDLING MACHINES EQUIPPED WITH VHMS 3-174
EXTERNAL POWER SOURCE TYPE ENGINE PREHEATING HEATER 3-176
HANDLING PORTABLE COMBUSTION TYPE PREHEATING HEATER 3-186
MACHINE OPERATIONS AND CONTROLS 3-202
BEFORE STARTING ENGINE 3-202
STARTING ENGINE 3-233
AFTER STARTING ENGINE 3-237
STOPPING THE ENGINE 3-249
MACHINE OPERATION 3-258
STEERING THE MACHINE 3-262
SWINGING 3-264
WORK EQUIPMENT CONTROLS AND OPERATIONS 3-265
WORKING MODE 3-267
PROHIBITED OPERATIONS 3-268
GENERAL OPERATION INFORMATION 3-272
TRAVELING ON SLOPES 3-273
ESCAPE FROM MUD 3-275
RECOMMENDED APPLICATIONS 3-276
BUCKET REPLACEMENT 3-277
PARKING MACHINE 3-279
CHECK BEFORE SHUT OFF ENGINE 3-280
MACHINE INSPECTION AFTER DAILY WORK 3-280
LOCKING 3-281
TRANSPORTATION 3-282
TRANSPORTATION PROCEDURE 3-282
PRECAUTIONS FOR TRANSPORTATION 3-282

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >

METHOD OF LIFTING UNITS FOR TRANSPORTATION ---- 3-282
TRANSPORTATION POSTURE ---- 3-282
COLD WEATHER OPERATION ---- 3-283
COLD WEATHER OPERATION INFORMATION ---- 3-283
AFTER DAILY WORK COMPLETION ---- 3-285
AFTER COLD WEATHER SEASON ---- 3-285
LONG TERM STORAGE ---- 3-286
BEFORE STORAGE ---- 3-286
DURING STORAGE ---- 3-286
AFTER STORAGE ---- 3-287
STARTING MACHINE AFTER LONG-TERM STORAGE ---- 3-287
TROUBLES AND ACTIONS ---- 3-288
RUNNING OUT OF FUEL ---- 3-288
PHENOMENA THAT ARE NOT FAILURES ---- 3-288
TOWING THE MACHINE ---- 3-289
SEVERE JOB CONDITION ---- 3-289
DISCHARGED BATTERY ---- 3-290
OTHER TROUBLE ---- 3-295
MAINTENANCE ---- 4- 1
MAINTENANCE INFORMATION ---- 4- 2
OUTLINE OF SERVICE ---- 4- 4
HANDLING OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC ---- 4- 4
ELECTRIC SYSTEM MAINTENANCE ---- 4- 8
WEAR PARTS ---- 4- 9
WEAR PARTS LIST ---- 4- 9
RECOMMENDED FUEL, COOLANT, AND LUBRICANT ---- 4- 10
RECOMMENDED BRANDS, RECOMMENDED QUALITY FOR PRODUCTS OTHER THAN KOMATSU GENUINE OIL ---- 4- 12
TIGHTENING TORQUE SPECIFICATIONS ---- 4- 13
TIGHTENING TORQUE LIST ---- 4- 13
SAFETY CRITICAL PARTS ---- 4- 14
SAFETY CRITICAL PARTS LIST ---- 4- 15
MAINTENANCE SCHEDULE ---- 4- 16
MAINTENANCE SCHEDULE CHART ---- 4- 16
MAINTENANCE PROCEDURE ---- 4- 18
INITIAL 100 HOURS MAINTENANCE (ONLY AFTER THE FIRST 100 HOURS) ---- 4- 18
INITIAL 500 HOURS MAINTENANCE (ONLY AFTER THE FIRST 500 HOURS) ---- 4- 18
INITIAL 4000 HOURS MAINTENANCE (ONLY AFTER THE FIRST 4000 HOURS) ---- 4- 18
WHEN REQUIRED ---- 4- 19
CHECK BEFORE STARTING ---- 4- 61
EVERY 250 HOURS MAINTENANCE ---- 4- 62
EVERY 500 HOURS MAINTENANCE ---- 4- 71
EVERY 1000 HOURS MAINTENANCE ---- 4- 85
EVERY 2000 HOURS MAINTENANCE ---- 4-104
EVERY 4000 HOURS MAINTENANCE ---- 4-106
EVERY 5000 HOURS MAINTENANCE ---- 4-110
EVERY 8000 HOURS MAINTENANCE ---- 4-114
SPECIFICATIONS ---- 5- 1
SPECIFICATIONS ---- 5- 2
ATTACHMENTS AND OPTIONS ---- 6- 1

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >

CONTROL LEVERS AND PEDALS

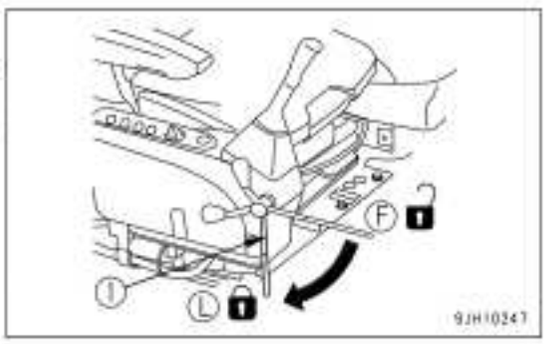


(1) Lock lever
(2) Travel levers (with a pedal and auto-deceleration system)
(3) Left work equipment control lever (with auto-deceleration system)
(4) Right work equipment control lever (with auto-deceleration system)

Lock Lever

WARNING

- **When standing up from the operator's seat, push lock lever (1) down securely to set it to LOCK position (L). If lock lever (1) is not in LOCK position (L) and the control levers are touched by mistake, it may lead to serious personal injury.**
- **Check lock lever (1) is placed securely at LOCK position (L).**
- **Be careful not to touch the work equipment control levers when pulling lock lever (1) up or pushing it down.**



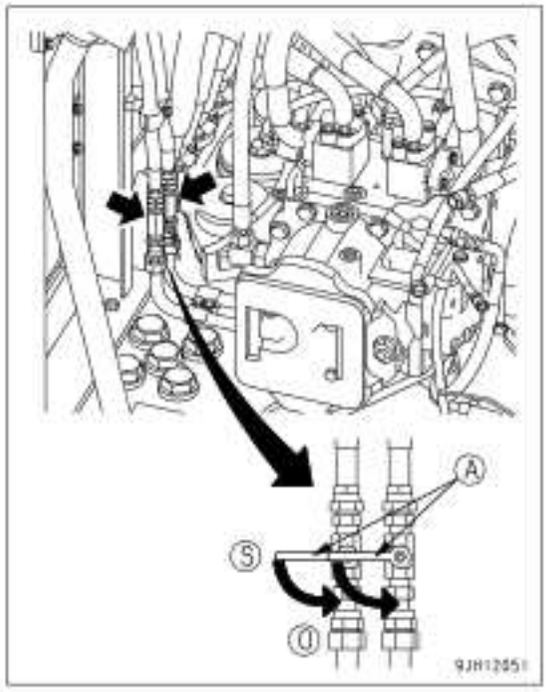
This lever (1) is a device to lock the work equipment, swing, travel, and attachment (if equipped) control levers. Push the lever (1) down to apply the lock.
This lock lever (1) is a hydraulic lock, even if it is in the lock position (L), the work equipment control lever and travel lever will move, but the work equipment, travel motor, and swing motor will not work.

REMARK
On machines equipped with an attachment, if this lock lever (1) is set to the LOCK position (L), the attachment will not move even when the attachment control levers or control pedals are operated.

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >

11. Replace the filter cartridge and bleed the air. When replacing the fuel main filter cartridge (every 1000 hours), see "REPLACE FUEL MAIN FILTER CARTRIDGE (PAGE 4-85)".
12. Push down fuel shut-off lever (A) installed to the front of the main pump inside the pump room so that it can supply fuel.

    (S): Shut off
    (O): Open



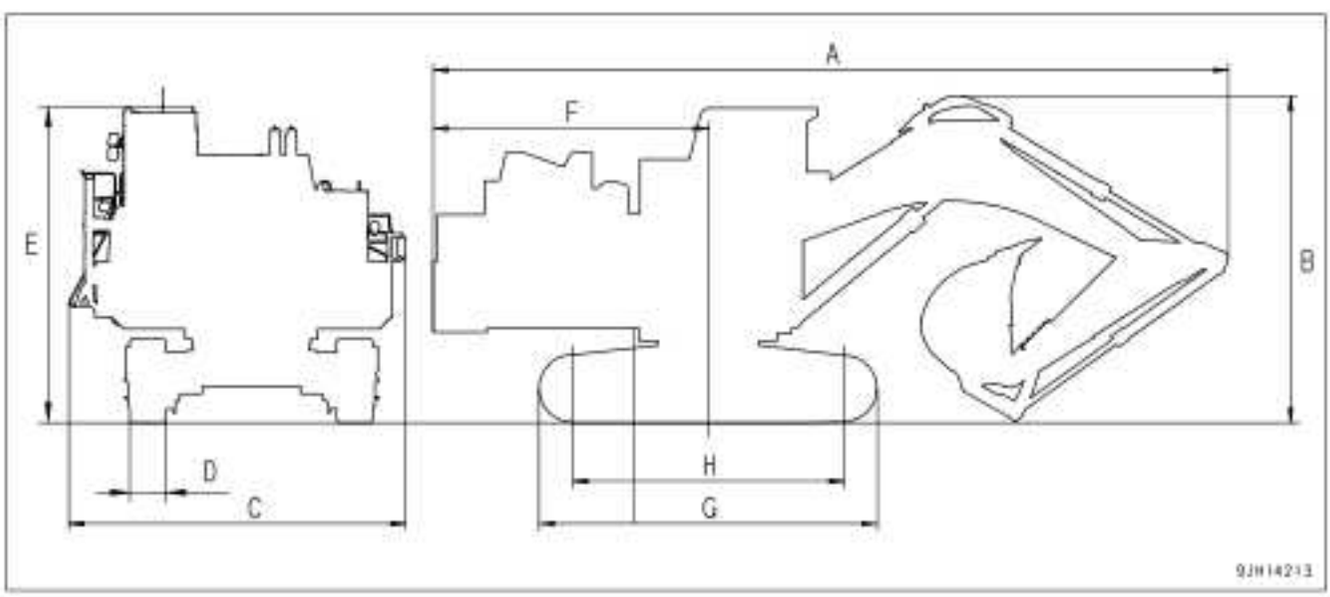
13. Start the engine, check that there is no leakage of fuel from the filter seal surface or water separator mounting surface, then run for approx. 10 minutes at low idling.

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >

SPECIFICATIONS

	Item	Unit	PC2000-8
	Operating weight [including 1 operator, 80 kg (176 lb)]	kg (lb)	200,000 (441,000)
	Bucket capacity	m^3 (cu.yd)	12.0 (15.7)
	Name of engine	-	Komatsu SAA12V140E-3 diezel engine
	Engine horsepower (GROSS)	kW (HP) / rpm	728 (976) / 1,800
A	Overall length	mm (ft in)	17,030 (55'10")
B	Overall height	mm (ft in)	7,135 (23'5")
C	Overall width (*1)	mm (ft in)	7,490 (24'7")
D	Track width	mm (ft in)	810 (2'8")
E	Height of cab	mm (ft in)	7,030 (23'1")
F	Tail swing radius	mm (ft in)	5,980 (19'8")
G	Length of track	mm (ft in)	7,445 (24'5")
H	Tumbler center distance	mm (ft in)	5,780 (18'12")
	Min. ground distance	mm (ft in)	825 (2'7")
	Travel speed	km/h (MPH)	2.7 (1.7)
	Swing speed	rpm	4.8

(*1): Equipped with a hydraulic ladder



NOTICE

For details of the loading specification machine, see "SPECIFICATION (PAGE 7-19)".

MidWestTech | Komatsu PC2000-8 Hydraulic Excavator Operation & Maintenance Man... Order the manual at mid-west-tech.com >