TEN00643-01

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC228USLC-10

SERIAL NUMBERS 1001 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.

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CONTENTS (PC-0310-001-A-00-A)

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 1-4
PRODUCT INFORMATION 1-5
PRODUCT IDENTIFICATION NUMBER (PIN) / MACHINE SERIAL NO. PLATE 1-5
ENGINE NUMBER PLATE 1-5
SERVICE METER LOCATION 1-6
YOUR MACHINE SERIAL NUMBERS AND DISTRIBUTOR 1-6
CONTENTS 1-7
SAFETY 2-1
SAFETY 2-2
SAFETY LABELS 2-4
LOCATION OF SAFETY LABELS 2-5
SAFETY LABELS 2-6
GENERAL PRECAUTIONS COMMON TO OPERATION AND MAINTENANCE 2-13
PRECAUTIONS BEFORE STARTING OPERATION 2-13
PREPARATIONS FOR SAFE OPERATION 2-14
FIRE PREVENTION 2-16
PRECAUTIONS WHEN GETTING ON OR OFF MACHINE 2-18
DO NOT GET CAUGHT IN WORK EQUIPMENT 2-19
PRECAUTIONS RELATED TO PROTECTIVE STRUCTURES 2-20
PROTECTION AGAINST FALLING, FLYING, OR INTRUDING OBJECTS 2-21
UNAUTHORIZED MODIFICATION 2-21
PRECAUTIONS RELATED TO ATTACHMENTS AND OPTIONS 2-22
PRECAUTIONS RELATED TO CAB GLASS 2-22
PRECAUTIONS WHEN RUNNING ENGINE INSIDE BUILDING 2-22
PRECAUTIONS FOR OPERATION 2-23
PRECAUTIONS FOR JOBSITE 2-23
STARTING ENGINE 2-26
OPERATION 2-29
TRANSPORTATION 2-36
TOWING 2-37
SAFETY RULES FOR LIFTING OPERATIONS 2-38
PRECAUTIONS FOR MAINTENANCE 2-39
PRECAUTIONS BEFORE STARTING INSPECTION AND MAINTENANCE 2-39
PRECAUTIONS FOR INSPECTION AND MAINTENANCE 2-43
OPERATION 3-1
GENERAL VIEW 3-2
GENERAL VIEW OF MACHINE 3-2
GENERAL VIEW OF CONTROLS AND GAUGES 3-4
EXPLANATION OF COMPONENTS 3-6
MACHINE MONITOR 3-6
SWITCHES 3-76
CONTROL LEVERS AND PEDALS 3-84
CEILING WINDOW 3-87
OPEN AND CLOSE CAB FRONT WINDOW 3-88
SLIDE DOOR 3-94
EMERGENCY ESCAPE HAMMER 3-95
OPEN AND CLOSE ENGIEN HOOD 3-96
PUMP ROOM DOOR, BATTERY ROOM DOOR 3-97
VALVE ROOM DOOR 3-98
CAPS AND COVERS WITH LOCK 3-99
MAGAZINE BOX 3-101

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CUP HOLDER....3-101
ASHTRAY....3-102
HANDLING AIR CONDITIONER....3-103
HANDLING RADIO....3-115
AUXILIARY ELECTRIC POWER....3-120
FUSE....3-122
FUSIBLE LINK....3-123
TOOLBOX....3-124
GREASE PUMP HOLDER....3-124
FIRE EXTINGUISHER....3-124
BATTERY DISCONNECT SWITCH....3-125
SYSTEM OPERATING LAMP....3-126
HANDLING Komatsu Diesel Particulate Filter (KDPF)....3-127
HANDLING Komatsu Closed Crankcase Ventilation (KCCV)....3-137
HANDLING MACHINES EQUIPPED WITH KOMTRAX....3-138
MACHINE OPERATIONS AND CONTROLS....3-140
CHECKS AND ADJUSTMENT BEFORE STARTING ENGINE....3-140
STARTING ENGINE....3-162
OPERATIONS AND CHECKS AFTER STARTING ENGINE....3-165
STOPPING ENGINE....3-176
MACHINE OPERATION....3-177
STEERING MACHINE....3-181
SWINGING MACHINE....3-183
WORK EQUIPMENT CONTROLS AND OPERATIONS....3-184
WORKING MODE....3-185
PROHIBITED OPERATIONS....3-188
RULES FOR OPERATION....3-191
TRAVELING ON SLOPES....3-193
ESCAPE FROM MUD....3-195
RECOMMENDED APPLICATIONS....3-196
REPLACING AND INVERTING BUCKET....3-198
PARKING MACHINE....3-201
AFTER DAILY WORK COMPLETION....3-202
LOCKING....3-203
TRANSPORTATION....3-204
TRANSPORTATION PROCEDURE....3-204
LOADING AND UNLOADING WITH TRAILER....3-205
LIFTING MACHINE....3-217
COLD WEATHER OPERATION....3-219
COLD WEATHER OPERATION INFORMATION....3-219
AFTER DAILY WORK COMPLETION....3-220
AFTER COLD WEATHER SEASON....3-220
LONG-TERM STORAGE....3-221
BEFORE STORAGE....3-221
DURING STORAGE....3-221
AFTER STORAGE....3-222
STARTING MACHINE AFTER LONG-TERM STORAGE....3-222
TROUBLES AND ACTIONS....3-223
RUNNING OUT OF FUEL....3-223
PHENOMENA THAT ARE NOT FAILURES....3-223
TOWING MACHINE....3-224
LIGHTWEIGHT TOWING HOLE....3-225
SEVERE JOB CONDITION....3-225
DISCHARGED BATTERY....3-226
OTHER TROUBLE....3-231
MAINTENANCE....4-1
RULES FOR MAINTENANCE....4-2
SERVICE METER READING....4-2

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KOMATSU GENUINE REPLACEMENT PARTS....4-2
KOMATSU GENUINE LUBRICANTS....4-2
ALWAYS USE CLEAN WASHER FLUID....4-2
FRESH AND CLEAN LUBRICANTS....4-2
CHECK DRAINED OIL AND USED FILTER....4-2
CAUTION FOR REFILLING OIL OR FUEL....4-2
WELDING INSTRUCTIONS....4-2
DO NOT DROP THINGS INSIDE MACHINE....4-2
DUSTY JOBSITES....4-3
AVOID MIXING OIL....4-3
LOCKING INSPECTION COVERS....4-3
BLEED AIR FROM HYDRAULIC CIRCUIT....4-3
PRECAUTIONS WHEN INSTALLING HYDRAULIC HOSES....4-3
CHECKS AFTER INSPECTION AND MAINTENANCE....4-3
FUEL AND LUBRICANTS TO MATCH THE AMBIENT TEMPERATURE....4-3
CLOSE ENGINE HOOD SECURELY....4-3
OUTLINE OF SERVICE....4-4
HANDLING OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC....4-4
HANDLING ELECTRICAL COMPONENTS....4-8
STANDARD TIGHTENING TORQUE FOR BOLTS AND NUTS....4-9
TIGHTENING TORQUE LIST....4-9
MAINTENANCE SCHEDULE....4-11
MAINTENANCE SCHEDULE TABLE....4-11
MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER....4-13
MAINTENANCE PROCEDURE....4-14
INITIAL 250 HOURS MAINTENANCE (ONLY AFTER THE FIRST 250 HOURS)....4-14
WHEN REQUIRED....4-15
CHECKS BEFORE STARTING....4-44
EVERY 100 HOURS MAINTENANCE....4-45
EVERY 250 HOURS MAINTENANCE....4-46
EVERY 500 HOURS MAINTENANCE....4-51
EVERY 1000 HOURS MAINTENANCE....4-63
EVERY 2000 HOURS MAINTENANCE....4-70
EVERY 4000 HOURS MAINTENANCE....4-79
EVERY 4500 HOURS MAINTENANCE....4-84
EVERY 5000 HOURS MAINTENANCE....4-85
EVERY 8000 HOURS MAINTENANCE....4-87
SPECIFICATIONS....5-1
SPECIFICATIONS....5-2
ATTACHMENTS AND OPTIONS....6-1
GENERAL PRECAUTIONS FOR SAFETY....6-2
PRECAUTIONS WHEN SELECTING....6-2
READ THE OPERATION AND MAINTENANCE MANUAL THOROUGHLY....6-2
PRECAUTIONS WHEN REMOVING OR INSTALLING....6-2
PRECAUTIONS WHEN USING....6-3
BUCKET WITH HOOK....6-4
HOOK CONDITION....6-4
SAFETY RULES FOR OPERATIONS....6-4
MACHINE READY FOR INSTALLATION OF ATTACHMENT....6-5
EXPLANATION OF COMPONENTS....6-5
HYDRAULIC CIRCUIT....6-9
REMOVAL AND INSTALLATION OF ATTACHMENT....6-16
OPERATION....6-19
LONG-TERM STORAGE....6-22
SPECIFICATIONS....6-22
ATTACHMENTS AND OPTIONS....6-23
ATTACHMENT COMBINATIONS....6-23
TRACK SHOES SELECTION....6-24

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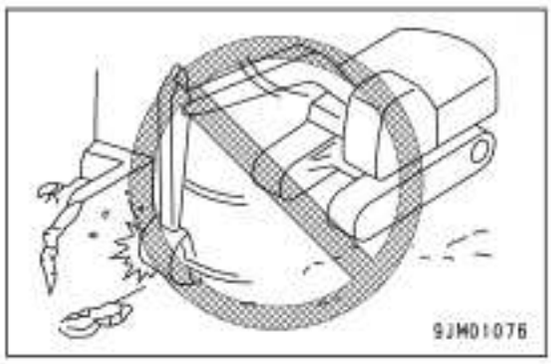
PROHIBITED OPERATIONS (PC-0000-001-K-15-A)

⚠ WARNING

- **Do not operate the work equipment control lever when the machine is traveling.**
- **If any lever is operated when the auto-deceleration is being actuated, the engine speed will suddenly increase, so be careful when operating.**

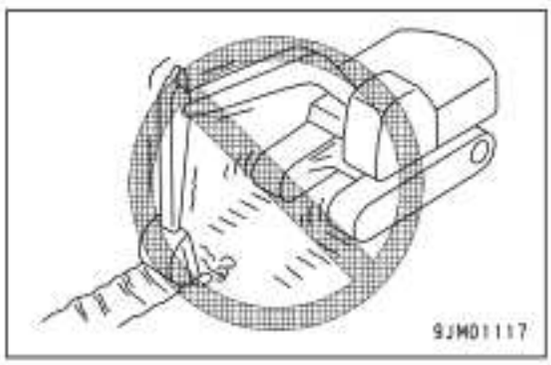
OPERATIONS USING SWING FORCE (PC-0000-189-K-01-A)

Do not use the swing force to compact soil or break objects. This is not only dangerous, but also drastically reduces the life of the machine.



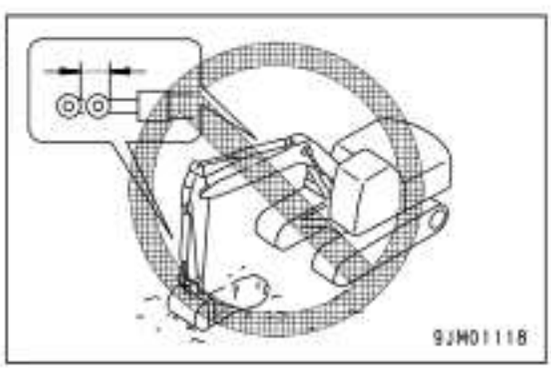
OPERATIONS USING TRAVEL FORCE (PC-0000-189-K-02-A)

Do not use the travel force to carry out excavation by digging the bucket into the ground. This damages the machine or work equipment.



PROHIBITION OF OPERATIONS USING HYDRAULIC CYLINDERS TO STROKE ENDS (PC-0000-189-K-03-A)

If the work equipment is used with the cylinder rod operated to its stroke end, and given impact by some external force, the hydraulic cylinders may be damaged, causing personal injury. Avoid operations with the hydraulic cylinder fully retracted or fully extended.



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REPLACE FUEL PREFILTER CARTRIDGE (PC228-AEA0-923-K-00-A)

⚠ WARNING

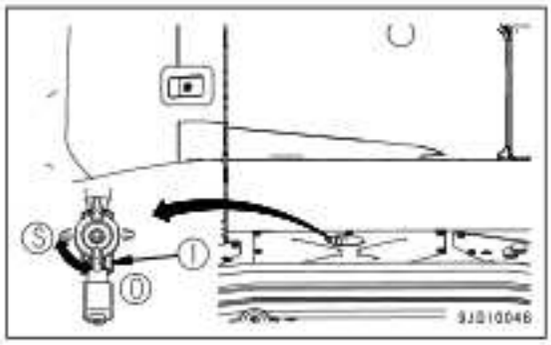
- **Immediately after the engine is stopped, all parts are still hot, so do not replace the filter. Wait until all parts have cooled down before starting the work.**
- **High pressure is generated inside the engine fuel piping when the engine is running. Wait for at least 30 seconds after stopping the engine to let the internal pressure go down before replacing the filter.**
- **Do not bring any fire or flame close.**

NOTICE

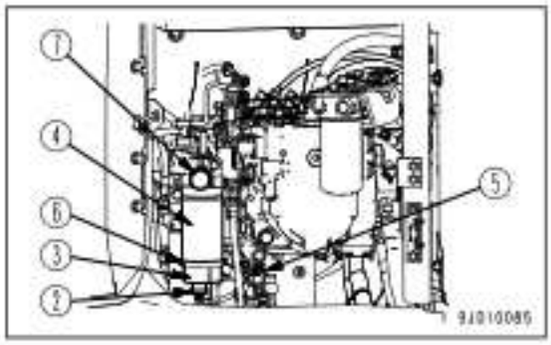
- **Genuine Komatsu fuel filter cartridges use a special filter that has highly efficient filtering performance. When replacing the filter cartridge, Komatsu recommends using a genuine Komatsu part.**
- **The common rail fuel injection system used on this machine consists of more precise parts than the conventional injection pump and nozzles. If any cartridge other than the genuine Komatsu filter cartridge is used, foreign material may get in and cause problems with the injection system. Always avoid using substitute parts.**
- **When carrying out inspection or maintenance of the fuel system, pay more attention than normal to the entry of foreign material. If dirt etc. should stick to the parts in the fuel system, clean them thoroughly by using fuel.**

- Prepare a container to catch drain oil.
- Prepare a filter wrench

1. Turn the valve (1) at the bottom of the fuel tank to CLOSE position (S).



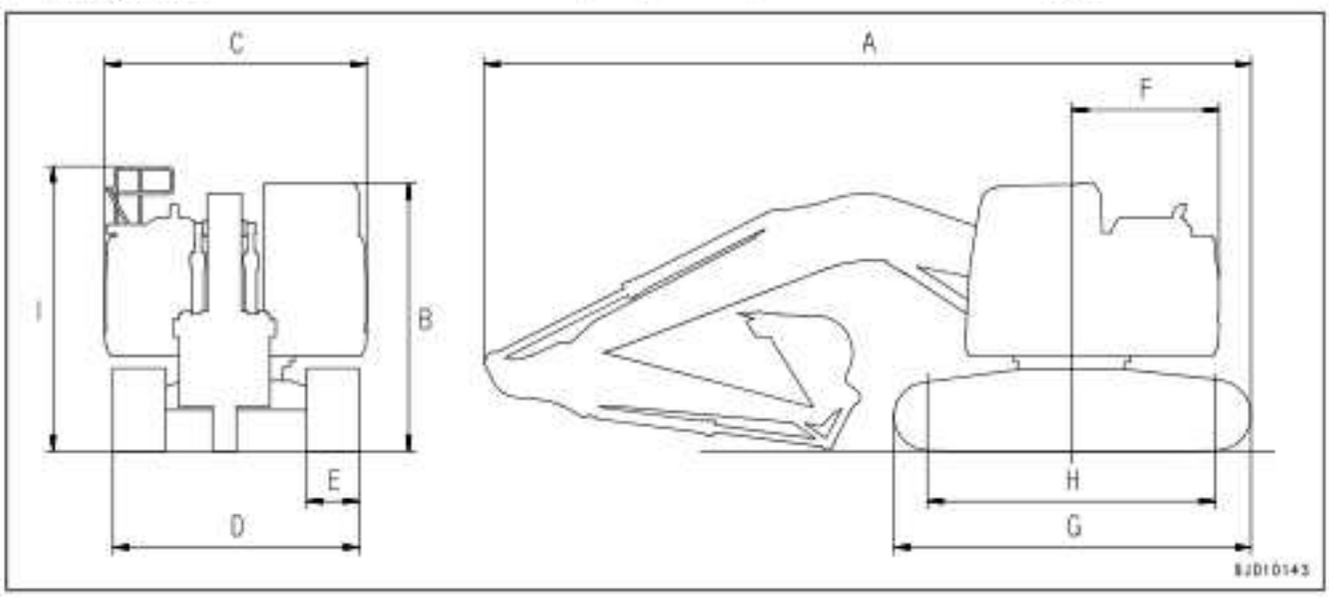
2. Open the cover on the right side of the machine.
3. Place the container to catch the fuel under the prefilter cartridge.
4. Loosen drain valve (2), then drain all the water and sediment in transparent cup (3) and also the fuel accumulated in filter cartridge (4).
5. Remove connector (5). Wrap the removed connector with a vinyl bag to prevent fuel, oil or water from being splashed on it.
6. Using a filter wrench, turn transparent cup (3) counterclockwise to remove it. (This cap is used again.)
7. Using a filter wrench, turn filter cartridge (4) counterclockwise to remove it.
8. Install transparent cup (3), which has been removed in the above step, to the bottom of the new filter cartridge. (When doing this, always replace O-ring (6) with a new one.)
9. When installing, apply oil lightly to the packing surface and bring the packing surface into contact with the seal surface of filter cartridge (4) and then tighten it further by 1/4 to 1/2 turns.
   If the transparent cup is tightened too much, the O-ring will be damaged and this will cause leakage of fuel; if it is not tightened enough, fuel will leak through the gap at the O-ring. To



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SPECIFICATIONS (PC228-2110-930-A-00-A)

	Item		Unit	PC228USLC-10
	Operating weight		kg (lb)	25,000 (55,115)
	Bucket capacity		m^3 (cu/yd)	0.8 (1.05)
	Engine model		-	Komatsu SAA6D107E-2 diesel engine
	Rated horsepower	SAE J1995 (gross)	kW {HP}/min^{-1}(rpm)	123.2 {165}/ 2,000 {2,000}
		ISO9249/ SAE J1349 (net)		116.1 {156}/ 2,000 {2,000}
A	Overall length		mm (ft in)	8,920 (29' 3")
B	Overall height (cab)		mm (ft in)	3,065 (10' 1")
	Overall width		mm (ft in)	3,180 (10' 5")
C	Upper structure width		mm (ft in)	2,980 (9' 9")
D	Overall width of track		mm (ft in)	3,180 (10' 5")
E	Shoe width		mm (ft in)	800 (2' 7")
F	Tail swing radius		mm (ft in)	1,810 (5' 11")
G	Overall length of track		mm (ft in)	4,450 (14' 7")
H	Distance between tumbler centers		mm (ft in)	3,655 (12' 0")
I	Height of handrail		mm (ft in)	3,255 (10' 8")
	Min. ground clearance		mm (ft in)	440 (1' 5")
	Travel speed (Lo/Mi/Hi)		km/h (MPH)	3.0/4.1/5.5 (1.9/2.6/3.4)
	Swing speed		rpm	11.0



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