TEN00696-00

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC360LC-11

SERIAL NUMBERS 90076 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 PC360LC-11 Hydraulic Excavator Operation & Maintenance Manua... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

FOREWORD 1-1
BEFORE READING THIS MANUAL 1-2
SAFETY INFORMATION 1-3
INTRODUCTION 1-4
MAIN USE OF MACHINE 1-4
DIRECTIONS OF MACHINE 1-4
VISIBILITY FROM OPERATOR'S SEAT 1-5
ENGINE TECHNOLOGY TO CONFORM EXHAUST GAS EMISSION 1-6
PRODUCT INFORMATION 1-7
LOCATION OF PRODUCT IDENTIFICATION NUMBER (PIN)/MACHINE SERIAL NO. PLATE 1-7
LOCATION OF ENGINE NUMBER PLATE 1-7
SERVICE METER LOCATION 1-8
YOUR MACHINE SERIAL NUMBERS AND DISTRIBUTOR 1-8
SAFETY 2-1
SAFETY 2-2
SAFETY LABELS 2-4
LOCATION OF SAFETY LABELS 2-5
CONTENTS OF SAFETY LABELS 2-7
GENERAL PRECAUTIONS COMMON TO OPERATION AND MAINTENANCE 2-15
PRECAUTIONS BEFORE STARTING OPERATION 2-15
PREPARATIONS FOR SAFE OPERATION 2-15
PRECAUTIONS TO PREVENT FIRE 2-17
PRECAUTIONS WHEN GETTING ON OR OFF MACHINE 2-19
DO NOT GET CAUGHT IN WORK EQUIPMENT 2-21
PRECAUTIONS RELATED TO PROTECTIVE STRUCTURES 2-21
PROTECTION AGAINST FALLING, FLYING OR INTRUDING OBJECTS 2-21
UNAUTHORIZED MODIFICATION 2-22
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
START ENGINE 2-26
PRECAUTIONS FOR OPERATION 2-28
PRECAUTIONS FOR TRANSPORTATION 2-36
TOWING AND BEING TOWED 2-37
LIFTING OPERATION BY USING BUCKET WITH HOOK 2-37
PRECAUTIONS FOR MAINTENANCE 2-39
PRECAUTIONS BEFORE STARTING INSPECTION AND MAINTENANCE 2-39
PRECAUTIONS FOR CHECK AND MAINTENANCE 2-43
PRECAUTIONS FOR DEF 2-49
GENERAL CHARACTER AND PRECAUTIONS FOR HANDLING 2-49
PRECAUTIONS FOR ADDING 2-49
PRECAUTIONS FOR STORING 2-49
PRECAUTIONS FOR FIRE HAZARD AND LEAKAGE 2-49
OTHER PRECAUTIONS 2-49
OPERATION 3-1
GENERAL VIEW 3-2
MACHINE EQUIPMENT NAME 3-2
CAB EQUIPMENT NAMES 3-4
CONTROLS AND GAUGES NAMES 3-5
EXPLANATION OF COMPONENTS 3-9
EXPLANATION OF MACHINE MONITOR EQUIPMENT 3-9
SWITCHES 3-92
CONTROL LEVERS AND PEDALS 3-101
OTHER EQUIPMENT 3-104

MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >

MACHINE OPERATIONS AND CONTROLS 3-148
CHECKS AND ADJUSTMENT BEFORE STARTING ENGINE 3-148
METHOD FOR STARTING ENGINE 3-181
METHOD FOR OPERATIONS AND CHECKS AFTER STARTING ENGINE 3-185
METHOD FOR STOPPING ENGINE 3-196
METHOD FOR STARTING MACHINE (TRAVEL FORWARD AND REVERSE) AND STOPPING MACHINE 3-198
METHOD FOR STEERING MACHINE 3-201
METHOD FOR SWINGING MACHINE 3-203
METHOD FOR OPERATING WORK EQUIPMENT 3-204
HANDLE WORKING MODE 3-206
PROHIBITED OPERATIONS 3-208
PRECAUTIONS FOR OPERATION 3-212
PRECAUTIONS FOR WORKING ON SLOPE 3-214
METHOD FOR ESCAPING FROM MUD 3-215
RECOMMENDED APPLICATIONS 3-216
EFFECTIVE USE OF HYDRAULIC EXCAVATOR 3-217
METHOD FOR REPLACING AND INVERTING BUCKET 3-218
METHOD FOR PARKING MACHINE 3-221
METHOD FOR CHECKING AFTER FINISHING WORK 3-222
LOCK 3-223
HANDLE AIR CONDITIONER 3-230
EXPLANATION OF AIR CONDITIONER EQUIPMENT 3-231
METHOD FOR OPERATING AIR CONDITIONER 3-235
HANDLING RADIO 3-244
EXPLANATION OF RADIO EQUIPMENT 3-244
METHOD FOR CONTROLLING RADIO 3-247
STOW ANTENNA 3-249
TRANSPORTATION 3-250
PRECAUTIONS FOR TRANSPORTING MACHINE 3-250
SELECT TRANSPORTATION METHOD 3-250
LOADING AND UNLOADING WITH TRAILER 3-251
METHOD FOR LIFTING MACHINE 3-264
SPREAD AND NARROW TRACK FRAME GAUGE 3-266
COLD WEATHER OPERATION 3-268
COLD WEATHER OPERATION INFORMATION 3-268
PRECAUTIONS AFTER DAILY WORK COMPLETION 3-270
AFTER COLD WEATHER SEASON 3-270
PRECAUTIONS FOR LONG-TERM STORAGE 3-271
PREPARATION FOR LONG-TERM STORAGE 3-271
MAINTENANCE DURING LONG-TERM STORAGE 3-271
STARTING MACHINE AFTER LONG-TERM STORAGE 3-272
TROUBLES AND ACTIONS 3-273
ACTIONS WHEN RUNNING OUT OF FUEL 3-273
PHENOMENA THAT ARE NOT FAILURES 3-274
PRECAUTIONS FOR TOWING MACHINE 3-275
PRECAUTIONS FOR SEVERE JOB CONDITION 3-276
PRECAUTIONS FOR DISCHARGED BATTERY 3-277
OTHER TROUBLE 3-282
MAINTENANCE 4-1
PRECAUTIONS FOR MAINTENANCE 4-2
CHECK SERVICE METER READING 4-2
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
PRECAUTIONS FOR REFILLING OIL OR FUEL 4-2

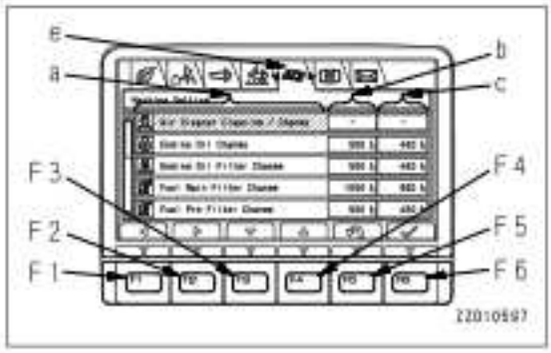
MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >

PRECAUTIONS FOR ADDING DEF 4-2
PRECAUTIONS FOR WELDING 4-2
DO NOT DROP THINGS INSIDE MACHINE 4-2
PRECAUTIONS FOR KDPF 4-2
PRECAUTIONS FOR SCR ASSEMBLY 4-3
DUSTY JOBSITES 4-3
AVOID MIXING OIL 4-3
LOCK 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 4-4
OUTLINE OF MAINTENANCE 4-5
HANDLE OIL, FUEL, COOLANT, AND PERFORMING OIL CLINIC 4-5
HANDLE ELECTRICAL COMPONENTS 4-10
STANDARD TIGHTENING TORQUE FOR BOLTS AND NUTS 4-11
MAINTENANCE SCHEDULE 4-13
MAINTENANCE SCHEDULE TABLE 4-13
MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER 4-15
MAINTENANCE PROCEDURE 4-16
INITIAL 250 HOURS MAINTENANCE (ONLY AFTER THE FIRST 250 HOURS) 4-16
WHEN REQUIRED 4-17
CHECKS BEFORE STARTING 4-47
EVERY 50 HOURS MAINTENANCE 4-48
EVERY 250 HOURS MAINTENANCE 4-49
EVERY 500 HOURS MAINTENANCE 4-53
EVERY 1000 HOURS MAINTENANCE 4-67
EVERY 2000 HOURS MAINTENANCE 4-77
EVERY 4000 HOURS MAINTENANCE 4-89
EVERY 4500 HOURS MAINTENANCE 4-93
EVERY 5000 HOURS MAINTENANCE 4-94
EVERY 8000 HOURS MAINTENANCE 4-96
EVERY 9000 HOURS MAINTENANCE 4-96
SPECIFICATIONS 5-1
SPECIFICATIONS 5-2
SPECIFICATIONS: PC360LC-11 5-2
ATTACHMENTS AND OPTIONS 6-1
PRECAUTIONS FOR USING ATTACHMENT AND OPTIONS 6-2
PRECAUTIONS WHEN SELECTING 6-2
READ THE OPERATION AND MAINTENANCE MANUAL THOROUGHLY 6-2
PRECAUTIONS WHEN REMOVING AND INSTALLING 6-2
PRECAUTIONS FOR USING 6-2
HANDLE BUCKET WITH HOOK 6-4
PRECAUTIONS FOR OPERATION 6-4
HANDLE MACHINE READY FOR INSTALLATION OF ATTACHMENT 6-5
EXPLANATION OF COMPONENTS ON MACHINE EQUIPPED WITH ATTACHMENT 6-5
METHOD FOR CHANGE-OVER AND CONNECT HYDRAULIC CIRCUIT FOR MACHINE READY FOR INSTALLATION OF ATTACHMENT 6-9
METHOD FOR REMOVING AND INSTALLING ATTACHMENT 6-11
METHOD FOR OPERATING ATTACHMENT 6-14
LONG-TERM STORAGE 6-17
MAINTENANCE OF ADDITIONAL FILTER FOR BREAKER 6-17
SPECIFICATIONS 6-21
METHOD FOR CHANGING CONTROL PATTERNS 6-22
CONTROL PATTERNS OTHER THAN STANDARD CONTROL METHOD 6-24
ATTACHMENTS AND OPTIONS 6-25
INSTALL ATTACHMENT 6-25

MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >

MAINTENANCE SCREEN SETTING

Each item of setting menu (e) on "Maintenance" screen is used for displaying and setting the notification relevant to maintenance.



The items on Maintenance display are as follows.

a	b
Air Cleaner Clean or Change	-
Coolant Change	-
Hydraulic Oil Additional Filter Change	-
Hydraulic Oil Pilot Filter Change	-
Engine Oil Change (*1	500
Engine Oil Filter Change (*1	500
Fuel Prefilter Change	500
Fuel Main Filter Change	1000
Hydraulic Tank Breather Change	1000
Hydraulic Oil Filter Change	1000
Damper Case Oil Check/Refilling	1000
Swing Machinery Case Oil Change	1000
DEF Breather Change	1000
Final Drive Case Oil Change	2000
DEF Filter Change	2000
KCCV Filter Change	2000
KDPF Filter Cleaning	4500
DEF Tank Washing	4500
Fuel Doser Cleaning	4500
Hydraulic Oil Change	5000

a: Maintenance items

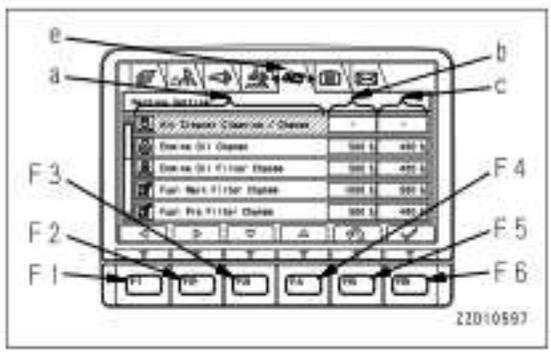
b: Default maintenance interval settings (h)

c: Time remaining until maintenance (h)

*1:

When using engine oil for cold district, the maintenance interval setting must be changed. For details of the oil, see "RECOMMENDED FUEL, COOLANT, AND LUBRICANT (7-5)".

On "Maintenance" menu screen, it is possible to perform the following operations with switches F1 to F6.



F1, F2: Moves to the right and left menus.

F3: Moves to the next item (1 line below). When on the last line, it moves to the first line.

F4: Moves to the previous item (1 line above). When on the first line, it moves to the last line.

F5: Returns the screen to the standard screen.

F6: If this switch is kept pressed, the screen changes to the screen for resetting the remaining time to the maintenance for the selected item.

MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >

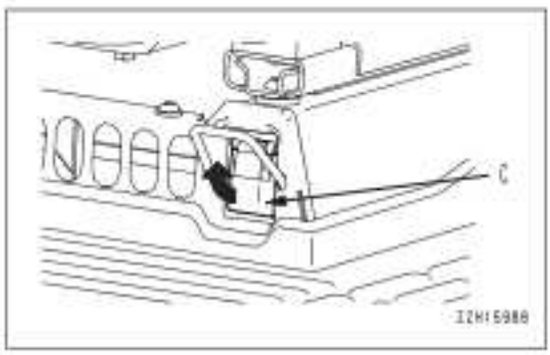
ENGINE SHUTDOWN SECONDARY SWITCH

NOTICE

The engine shutdown secondary switch is used to stop the engine when the starting switch is turned to OFF position but the engine does not stop.

- **Use the engine shutdown secondary switch only in an emergency.**
  Contact your Komatsu distributor for repair immediately when there is any abnormality on this switch.
- **If the engine shutdown secondary switch is moved to the "stop engine" position by mistake while the machine is operating normally, "Engine Shutdown Secondary SW In Operation" is displayed on the machine monitor.**
  If "Engine Shutdown Secondary SW In Operation" is displayed on the machine monitor, check that the switch cover is closed and the switch is in the "normal" position. If not, set it to the "normal" position.

1. Raise cover (C) and open it.



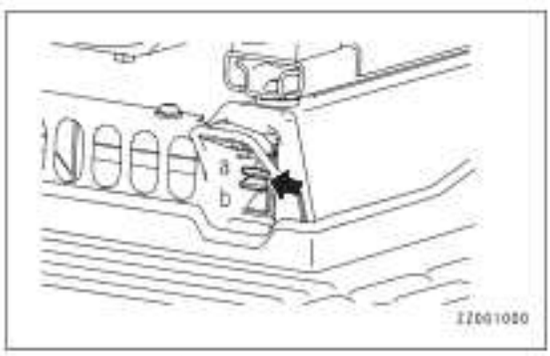
2. Turn the engine shutdown secondary switch to upper position (a) and the engine stops.

   (a) Engine stopped

   When abnormal (switch is set to upper position)

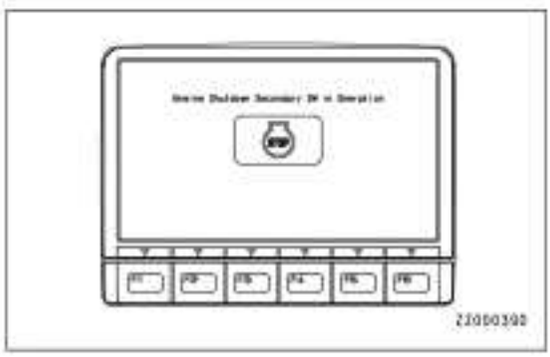
   (b) Normal

   When normal (switch is set to lower position)



- When cover (C) is closed, the engine shutdown secondary switch automatically returns to the normal position (b).
- When the starting switch is turned to ON position while the engine shutdown secondary switch is in the engine stopped position (a), "Engine Shutdown Secondary SW In Operation" is displayed on the machine monitor.

  If this screen is displayed, return the engine shutdown secondary switch to the normal position (b).

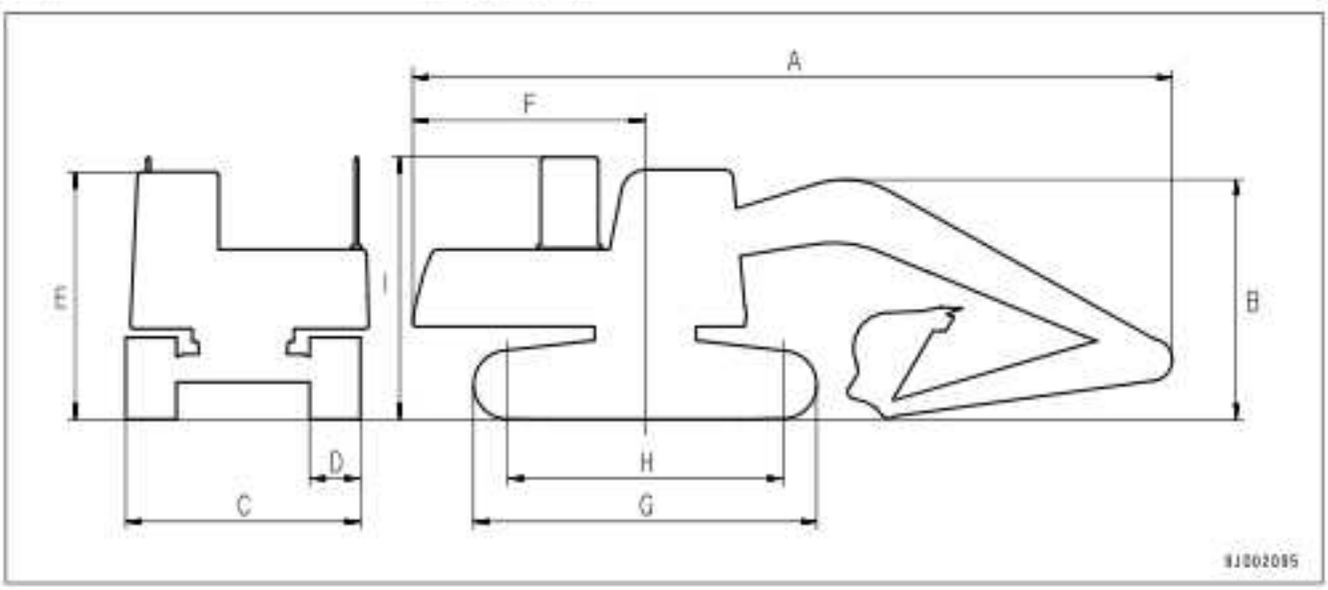


MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >

SPECIFICATIONS

SPECIFICATIONS: PC360LC-11

	Item		Unit	PC360LC-11
	Operating weight		kg {lb}	35540 {78366}
	Bucket capacity		m^3 {cu/yd}	1.4 {1.8}
	Engine model		-	Komatsu SAA6D114E-6 diesel engine
	Rated horse-power	SAE J1995 (gross)	kW {HP} / min^{-1} {rpm}	202 {271} / 1950 {1950}
		ISO 9249 /SAE J1349 (net)		192 {257} / 1950 {1950}
A	Overall length		mm {ft in}	11450 {37' 7"}
B	Overall height (work equipment)		mm {ft in}	3285 {10' 9"}
C	Overall width		mm {ft in}	3440 {11' 3"}
D	Shoe width		mm {ft in}	850 {2' 9"}
E	Cab height		mm {ft in}	3360 {11' 0"}
F	Tail swing radius		mm {ft in}	3445 {11' 4"}
G	Overall length of track		mm {ft in}	4955 {16' 3"}
H	Distance between tumbler centers		mm {ft in}	4030 {13' 3"}
I	Height of handrail		mm {ft in}	3255 {10' 8"}
	Min. ground clearance		mm {ft in}	498 {1' 8"}
	Travel speed (Lo/Mi/Hi)		km/h {MPH}	3.2 / 4.5 / 5.5 {2.0 / 2.8 / 3.4}
	Swing speed		min^{-1} {rpm}	9.5 {9.5}



MidWestTech | Komatsu PC360LC-11 Hydraulic Excavator Operation & Maintenance M... Order the manual at mid-west-tech.com >