TEN00287-06

Operation & Maintenance Manual

HYDRAULIC
EXCAVATOR

PC88MR-8

SERIAL NUMBERS 5001 and up

ecot3

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 PC88MR-8 Hydraulic Excavator Operation & Maintenance Manual... Order the manual at mid-west-tech.com >

SLIDING DOOR ---- 3- 80
EMERGENCY ESCAPE HAMMER ---- 3- 81
COVER WITH LOCK ---- 3- 82
ENGINE HOOD ---- 3- 83
MUD COVER ---- 3- 85
BATTERY INSPECTION COVER ---- 3- 86
AIR CONDITIONER CONTROLS ---- 3- 87
RADIO ---- 3-100
FUSE ---- 3-105
FUSIBLE LINK ---- 3-106
AUXILIARY ELECTRIC POWER ---- 3-107
CONTROLLERS ---- 3-108
OPERATION MANUAL STORAGE ---- 3-109
CUP HOLDER ---- 3-109
TOOL BOX ---- 3-109
GREASE PUMP HOLDER ---- 3-109
ASHTRAY ---- 3-110
FIRE EXTINGUISHER ---- 3-110
MACHINE OPERATIONS AND CONTROLS ---- 3-111
BEFORE STARTING ENGINE ---- 3-111
STARTING ENGINE ---- 3-130
AFTER STARTING ENGINE ---- 3-135
STOPPING THE ENGINE ---- 3-145
MACHINE OPERATION ---- 3-146
STEERING THE MACHINE ---- 3-150
SWINGING ---- 3-152
WORK EQUIPMENT CONTROLS AND OPERATIONS ---- 3-153
WORKING MODE ---- 3-155
PROHIBITED OPERATIONS ---- 3-157
GENERAL OPERATION INFORMATION ---- 3-160
TRAVELING ON SLOPES ---- 3-162
ESCAPE FROM MUD ---- 3-164
RECOMMENDED APPLICATIONS ---- 3-165
BUCKET REPLACEMENT AND INVERSION ---- 3-167
PARKING MACHINE ---- 3-170
MACHINE INSPECTION AFTER DAILY WORK ---- 3-172
LOCKING ---- 3-172
ROAD LINERS AND RUBBER SHOES ---- 3-173
MACHINE READY FOR ATTACHMENT ---- 3-178
TRANSPORTATION ---- 3-188
TRANSPORTATION PROCEDURE ---- 3-188
LOADING AND UNLOADING WITH TRAILER ---- 3-189
LIFTING MACHINE ---- 3-195
COLD WEATHER OPERATION ---- 3-197
COLD WEATHER OPERATION INFORMATION ---- 3-197
AFTER DAILY WORK COMPLETION ---- 3-199
AFTER COLD WEATHER SEASON ---- 3-199
LONG TERM STORAGE ---- 3-200
BEFORE STORAGE ---- 3-200
DURING STORAGE ---- 3-200

MidWestTech | Komatsu PC88MR-8 Hydraulic Excavator Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

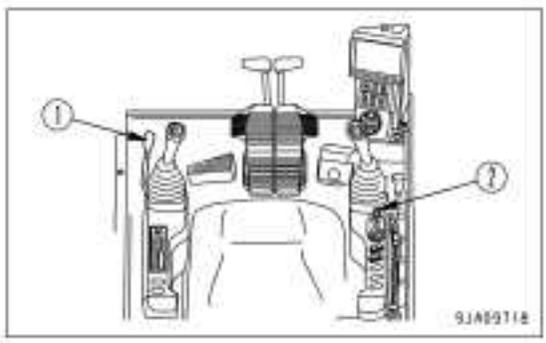
AFTER STORAGE ---- 3-200
STARTING MACHINE AFTER LONG-TERM STORAGE ---- 3-201
TROUBLES AND ACTIONS ---- 3-202
RUNNING OUT OF FUEL ---- 3-202
PHENOMENA THAT ARE NOT FAILURES ---- 3-203
TOWING THE MACHINE ---- 3-204
SEVERE JOB CONDITION ---- 3-204
DISCHARGED BATTERY ---- 3-205
OTHER TROUBLE ---- 3-210
MAINTENANCE ---- 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- 7
WEAR PARTS ---- 4- 8
WEAR PARTS LIST ---- 4- 8
RECOMMENDED FUEL, COOLANT, AND LUBRICANT ---- 4- 10
USE OF FUEL, COOLANT AND LUBRICANTS ACCORDING TO AMBIENT TEMPERATURE ---- 4- 11
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- 14
MAINTENANCE SCHEDULE ---- 4- 16
MAINTENANCE SCHEDULE CHART ---- 4- 16
MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER ---- 4- 18
MAINTENANCE PROCEDURE ---- 4- 19
WHEN REQUIRED ---- 4- 19
CHECK BEFORE STARTING ---- 4- 55
EVERY 100 HOURS MAINTENANCE ---- 4- 56
EVERY 250 HOURS MAINTENANCE ---- 4- 58
EVERY 500 HOURS MAINTENANCE ---- 4- 65
EVERY 1000 HOURS MAINTENANCE ---- 4- 76
EVERY 2000 HOURS MAINTENANCE ---- 4- 86
EVERY 4000 HOURS MAINTENANCE ---- 4- 90
EVERY 5000 HOURS MAINTENANCE ---- 4- 91
SPECIFICATIONS ---- 5- 1
SPECIFICATIONS ---- 5- 2
ATTACHMENTS AND OPTIONS ---- 6- 1
ATTACHMENTS AND OPTIONS - GENERAL INFORMATION ---- 6- 2
SAFETY FIRST ---- 6- 2
ATTACHMENT INSTALLATION ---- 6- 3
BUCKET WITH HOOK ---- 6- 4
HOOK CONDITION ---- 6- 4
PROHIBITED OPERATIONS ---- 6- 4
CHANGING MACHINE CONTROL PATTERN (IF PATTERN CHANGE VALVE EQUIPPED) ---- 6- 5
CONTROL PATTERN CHANGE PROCEDURE ---- 6- 5
MACHINE CONTROL PATTERNS ---- 6- 6
HYDRAULIC QUICK COUPLER PIPING ---- 6- 7

MidWestTech | Komatsu PC88MR-8 Hydraulic Excavator Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

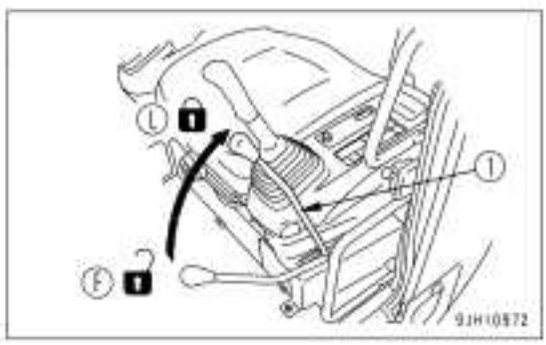
Operations Before Starting Engine

⚠ WARNING

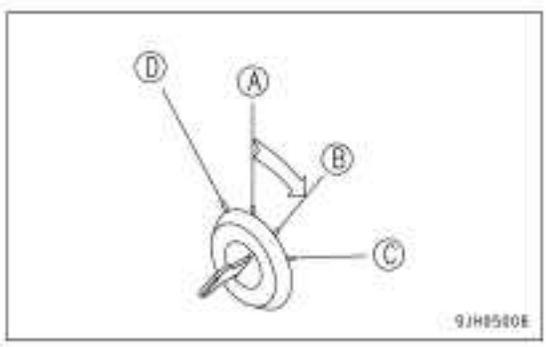
When starting the engine, check that the lock lever is securely at the LOCK position.
If the lock lever is not locked securely and the control levers or control switches are touched when the engine is started, the machine may move unexpectedly, and this may lead to serious personal injury.



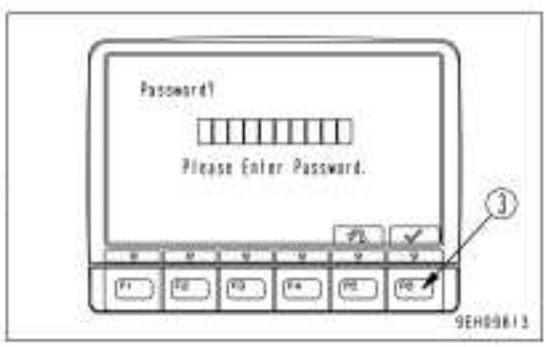
1. Check that lock lever (1) is at the LOCK position (L).
2. Check that control levers and control switch are at the Neutral position.
   If the control levers and control switch are not being touched, they will be at the Neutral position.



3. Insert the key in starting switch (2), turn the key to the ON position (B), then carry out the following checks.



- If a password has been set, the input display screen will be displayed on the monitor screen.
  After inputting the password, press Enter switch F6 (3).



REMARK
Contact your Komatsu distributor for details of the method of setting, changing, or cancelling the password.

MidWestTech | Komatsu PC88MR-8 Hydraulic Excavator Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

TRANSPORTATION

When transporting the machine, observe all related laws and regulations, and be careful to assure safety.

TRANSPORTATION PROCEDURE

Select the method of transportation to match the weight and dimensions given in "SPECIFICATIONS (PAGE 5-2)". Note that the weight and dimensions given in SPECIFICATIONS may differ according to the type of shoe or arm, or other attachments.

MidWestTech | Komatsu PC88MR-8 Hydraulic Excavator Operation & Maintenance Ma... Order the manual at mid-west-tech.com >

MAINTENANCE SCHEDULE

If the machine is equipped with a hydraulic breaker, the maintenance schedule for some parts will be different. For details, see "MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER (PAGE 4-18)" to confirm the correct maintenance schedule when carrying out maintenance.

MAINTENANCE SCHEDULE CHART

WHEN REQUIRED
CHECK, CLEAN AND REPLACE AIR CLEANER ELEMENT ---- 4- 19
CLEAN INSIDE OF COOLING SYSTEM ---- 4- 23
CHECK AND TIGHTEN TRACK SHOE BOLTS ---- 4- 26
CHECK AND ADJUST TRACK TENSION ---- 4- 27
CHECK ROAD LINERS OR RUBBER SHOES ---- 4- 29
CHECK AND ADJUST RUBBER SHOE TENSION ---- 4- 31
REPLACE ROAD LINERS ---- 4- 32
REPLACE RUBBER SHOES ---- 4- 33
CHANGE STEEL SHOES OR ROAD LINER TO RUBBER SHOES ---- 4- 35
REPLACE BUCKET TEETH (VERTICAL PIN TYPE) ---- 4- 36
REPLACE BUCKET TEETH (HORIZONTAL PIN TYPE) ---- 4- 39
ADJUST BUCKET CREARANCE ---- 4- 41
CHECK WINDOW WASHER FLUID LEVEL, ADD FLUID ---- 4- 42
CHECK AND MAINTENANCE AIR CONDITIONER ---- 4- 43
CHECK, CLEAN AND LUBRICATE CAB SLIDE DOOR RAIL AND ROLLER ---- 4- 44
REPLACE BREAKER CIRCUIT ADDITIONAL OIL FILTER ELEMENT (IF EQUIPPED) ---- 4- 45
WASHING WASHABLE FLOOR ---- 4- 46
CHECK GAS SPRING ---- 4- 49
BLEEDING AIR FROM HYDRAULIC SYSTEM ---- 4- 50
INSPECTION OF ADDITIONAL WATER SEPARATOR AND CLEANING OF CASING INTERIOR ---- 4- 53

CHECKS BEFORE STARTING

EVERY 100 HOURS MAINTENANCE
LUBRICATING ---- 4- 56
CHECK SWING MACHINERY CASE OIL, ADD OIL ---- 4- 57

EVERY 250 HOURS MAINTENANCE
CHECK OIL LEVEL IN FINAL DRIVE CASE, ADD OIL ---- 4- 58
CHECK LEVEL OF BATTERY ELECTROLYTE ---- 4- 59
CHECK AND ADJUST COOLING FAN BELT TENSION ---- 4- 61
CHECK AIR CONDITIONER COMPRESSOR BELT TENSION, ADJUST ---- 4- 63

EVERY 500 HOURS MAINTENANCE
LUBRICATING ---- 4- 65
CHANGE OIL IN ENGINE OIL PAN, REPLACE ENGINE OIL FILTER CARTRIDGE ---- 4- 67
REPLACE FUEL PRE-FILTER CARTRIDGE ---- 4- 68
REPLACE FUEL PRE-FILTER CARTRIDGE (MACHINE OF POOR FUEL ARRANGEMENT SPECIFICATION) ---- 4- 70
CHECK SWING PINION GREASE LEVEL, ADD GREASE ---- 4- 72
LUBRICATE SWING CIRCLE ---- 4- 72

MidWestTech | Komatsu PC88MR-8 Hydraulic Excavator Operation & Maintenance Ma... Order the manual at mid-west-tech.com >