TEN00184-03

Operation & Maintenance Manual

HYDRAULIC EXCAVATOR

PC400-8 PC400LC-8
PC450-8 PC450LC-8

SERIAL NUMBERS PC400-70001 and up
PC450-70001

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.

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EMERGENCY ESCAPE HAMMER ---- 3- 84
DOOR LOCK ---- 3- 84
CAP WITH LOCK ---- 3- 85
DRINK BOX ---- 3- 87
MAGAZINE BOX ---- 3- 87
ASHTRAY ---- 3- 87
AIR CONDITIONER CONTROLS ---- 3- 88
RADIO ---- 3-101
AUXILIARY ELECTRIC POWER ---- 3-106
FUSE ---- 3-107
FUSIBLE LINK ---- 3-108
CONTROLLER ---- 3-108
TOOL BOX ---- 3-109
GREASE PUMP HOLDER ---- 3-109
FIRE EXTINGUISHER ---- 3-109
MACHINE OPERATIONS AND CONTROLS ---- 3-110
BEFORE STARTING ENGINE ---- 3-110
STARTING ENGINE ---- 3-129
AFTER STARTING ENGINE ---- 3-132
STOPPING THE ENGINE ---- 3-143
MACHINE OPERATION ---- 3-144
STEERING THE MACHINE ---- 3-148
SWINGING ---- 3-150
WORK EQUIPMENT CONTROLS AND OPERATIONS ---- 3-151
WORKING MODE ---- 3-153
PROHIBITED OPERATIONS ---- 3-155
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 ---- 3-171
MACHINE INSPECTION AFTER DAILY WORK ---- 3-172
LOCKING ---- 3-173
TRANSPORTATION ---- 3-174
TRANSPORTATION PROCEDURE ---- 3-174
LOADING AND UNLOADING WITH TRAILER ---- 3-175
LIFTING MACHINE ---- 3-184
TRANSPORTATION POSTURE ---- 3-186
PROCEDURE FOR INCREASING OR REDUCING TRACK FRAME GAUGE ---- 3-189
COLD WEATHER OPERATION ---- 3-191
COLD WEATHER OPERATION INFORMATION ---- 3-191
AFTER DAILY WORK COMPLETION ---- 3-193
AFTER COLD WEATHER SEASON ---- 3-193
LONG TERM STORAGE ---- 3-194
BEFORE STORAGE ---- 3-194
DURING STORAGE ---- 3-194
AFTER STORAGE ---- 3-195
STARTING MACHINE AFTER LONG-TERM STORAGE ---- 3-195
TROUBLES AND ACTIONS ---- 3-196

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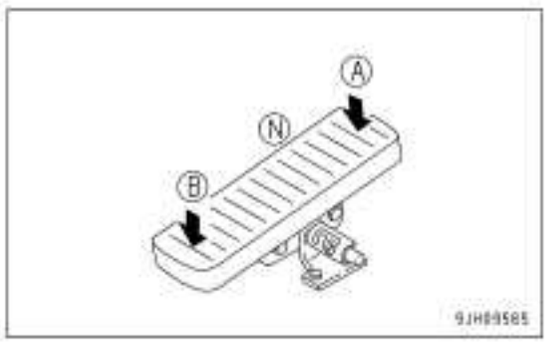
RUNNING OUT OF FUEL ---- 3-196
PHENOMENA THAT ARE NOT FAILURES ---- 3-197
TOWING THE MACHINE ---- 3-198
LIGHTWEIGHT TOWING HOLE ---- 3-199
SEVERE JOB CONDITION ---- 3-199
DISCHARGED BATTERY ---- 3-200
OTHER TROUBLE ---- 3-204
MAINTENANCE ---- 4- 1
MAINTENANCE INFORMATION ---- 4- 2
OUTLINE OF SERVICE ---- 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- 9
RECOMMENDED BRANDS, RECOMMENDED QUALITY FOR PRODUCTS OTHER THAN KOMATSU GENUINE OIL ---- 4- 11
TIGHTENING TORQUE SPECIFICATIONS ---- 4- 12
TIGHTENING TORQUE LIST ---- 4- 12
SAFETY CRITICAL PARTS ---- 4- 13
SAFETY CRITICAL PARTS LIST ---- 4- 14
MAINTENANCE SCHEDULE ---- 4- 15
MAINTENANCE SCHEDULE CHART ---- 4- 15
MAINTENANCE INTERVAL FOR HYDRAULIC BREAKER ---- 4- 17
MAINTENANCE PROCEDURE ---- 4- 18
INITIAL 1000 HOURS MAINTENANCE (ONLY AFTER THE FIRST 1000 HOURS) ---- 4- 18
WHEN REQUIRED ---- 4- 19
CHECK BEFORE STARTING ---- 4- 47
EVERY 50 HOURS MAINTENANCE ---- 4- 48
EVERY 250 HOURS MAINTENANCE ---- 4- 49
EVERY 500 HOURS MAINTENANCE ---- 4- 54
EVERY 1000 HOURS MAINTENANCE ---- 4- 67
EVERY 2000 HOURS MAINTENANCE ---- 4- 75
EVERY 4000 HOURS MAINTENANCE ---- 4- 82
EVERY 5000 HOURS MAINTENANCE ---- 4- 84
EVERY 8000 HOURS MAINTENANCE ---- 4- 86
SPECIFICATIONS ---- 5- 1
SPECIFICATIONS ---- 5- 2
ATTACHMENTS AND OPTIONS ---- 6- 1
GENERAL PRECAUTIONS FOR SAFETY ---- 6- 2
PRECAUTIONS WHEN SELECTING ---- 6- 2
READ THE INSTRUCTION MANUAL THOROUGHLY ---- 6- 2
PRECAUTIONS WHEN REMOVING OR INSTALLING ---- 6- 2
PRECAUTIONS WHEN USING ---- 6- 2
BUCKET WITH HOOK ---- 6- 3
HOOK CONDITION ---- 6- 3
PROHIBITED OPERATIONS ---- 6- 3
MACHINE READY FOR ATTACHMENT ---- 6- 4
LOCATIONS ---- 6- 4
HYDRAULIC CIRCUIT ---- 6- 8

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For attachment operations (if equipped), change the working mode to the attachment mode.

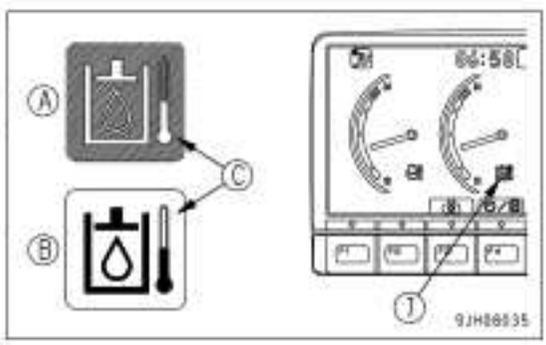


- Attachment operation One way (A) ⟷ Other way (B)



18. Check that hydraulic oil temperature monitor (7) is displaying the correct temperature.
    If the hydraulic oil temperature monitor is not displaying the correct temperature (it is displaying low temperature), repeat Steps 6 to 10 until the display is the correct temperature.

    (A) Display when temperature is correct: Monitor background (C) is blue
    (B) Display when temperature is low: Monitor background (C) is white



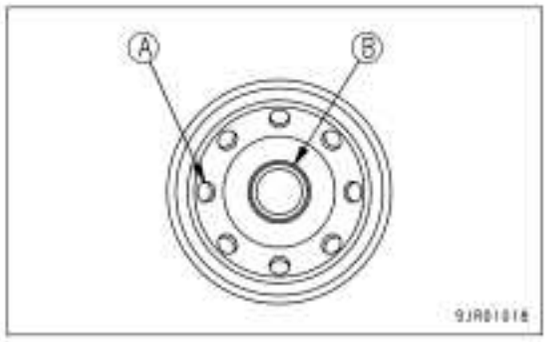
If the hydraulic oil temperature monitor displays the correct temperature, the hydraulic equipment warm-up operation is completed.
After confirming that the hydraulic oil temperature monitor displays the correct temperature, carry out the following procedure.

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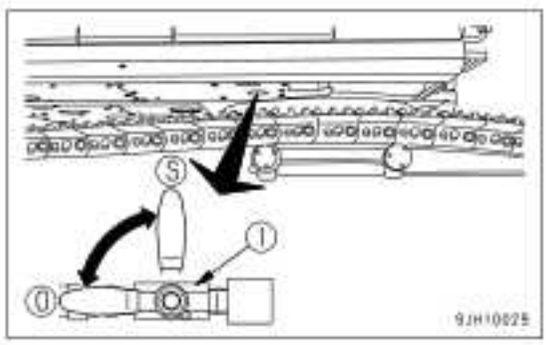
5. Clean the filter holder, coat the packing surface of the new filter cartridge thinly with oil, then install the filter cartridge to the filter holder.

NOTICE

- **Do not fill the new filter cartridge with fuel.**
- **Remove cap (B) and install the filter cartridge.**



6. When installing, tighten until the packing surface contacts the seal surface of the filter holder, then tighten it 3/4 of a turn.
   If the filter cartridge is tightened too far, the packing will be damaged and this will lead to leakage of fuel. If the filter cartridge is too loose, fuel will also leak from the packing, so always tighten the correct amount.
7. Turn the valve (1) at the bottom of the fuel tank to the OPEN position (O).



8. After completing the replacement of filter cartridge (2), bleed the air.

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HYDRAULIC CIRCUIT

NOTICE

- **It is necessary to return the return circuit directly to the return filter when a breaker is used, so use only the B mode. Do not use any other mode.**
- **When the machine is shipped from the factory, the standard set pressure of the safety valve in the service valve is set as follows:**
  When B mode is selected: 21.6 MPa (220 kg/cm², 3,124 PSI)
  When P or E mode is selected: 24.5 MPa (250 kg/cm², 3,550 PSI).
  The set pressure may have to be adjusted depending on the attachment. In such cases, please ask your Komatsu distributor to carry out the adjustment.

Switching Hydraulic Circuit

- Depending on the type of attachment, set the working mode on the monitor as follows.
- The set pressure of the safety valve in the service valve and the hydraulic circuit switch is according to the working mode selected.

Attachment	Working mode	Hydraulic circuit	Set pressure of safety valve in service valve
Breaker or other attachment with one-way circuit	B mode	Return circuit automatically switched so that it does not pass through control valve	When shipped from factory : 21.6 MPa (220 kg/cm², 3124 PSI)
Crusher or other attachment with two-way circuit	P mode or E mode	Return circuit automatically switched so that it passes through control valve	When shipped from factory : 24.5 MPa (250 kg/cm², 3550 PSI)

Adjusting Oil Flow

Depending on the attachment, it is necessary to change the oil flow in the service circuit.
For details of setting the oil flow, see "ATTACHMENT OPERATIONS (PAGE 6-17)".

Switching Between Breaker and General Attachment

- If an attachment is installed as an option, and the mode is set to B mode:
  (1) The system is set to the breaker operation circuit (1-way circuit).
  (2) The hydraulic oil flowing to the breaker circuit flows to the additional filter for the breaker.
  (3) The relief pressure valve is set to low pressure.
  Set pressure when machine is shipped from factory: 21.6 MPa (220 kg/cm², 3,124 PSI)
  (4) It is possible to use the selector mode to adjust the maximum oil flow.

- If an attachment is installed as an option, and the mode is set to P or E mode:
  (1) The system is set to the crusher operation circuit (2-way circuit).
  (2) The hydraulic oil flowing to the crusher circuit does not flow to the additional filter for the breaker.
  (3) The relief pressure valve is set to high pressure.
  Set pressure when machine is shipped from factory: 24.5 MPa (250 kg/cm², 3,550 PSI)
  (4) It is possible to use the selector mode to adjust the maximum oil flow.

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