SEAM000905

Operation & Maintenance Manual

KOMATSU®

D20A,PL,PLL-7
D21A-7
D20,21P-7A

BULLDOZERS

SERIAL NUMBERS

D20,21A-7 - 80060
D20PL,PLL-7 - 62664 and up
D20,21P-7A - 80228

March 1998

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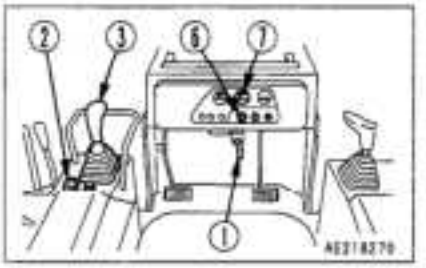
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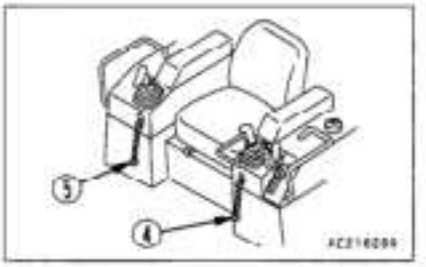
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12B.1.4 OPERATIONS AND CHECKS BEFORE STARTING ENGINE

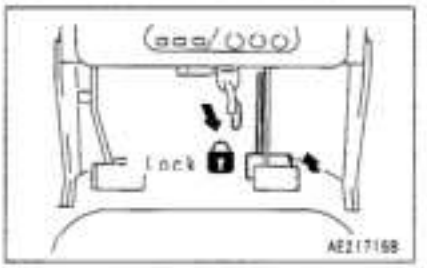
⚠ WARNING

If the control levers are touched by accident, the work equipment or the machine may move suddenly. When leaving the operator's compartment, always set the safety lever securely to the LOCK position.

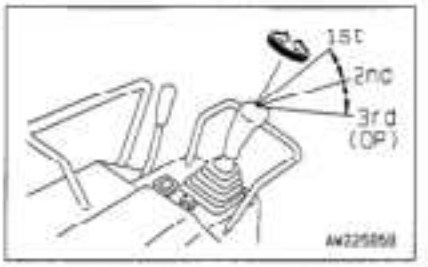




1. Check that the brake pedal is locked with brake lock lever ①.



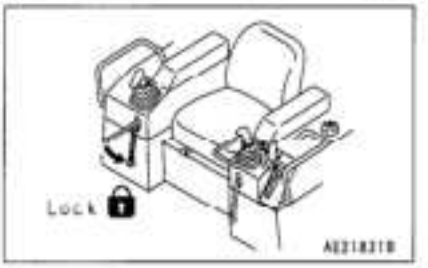
2. Confirm that speed stage indicator window ② indicates the first speed.



3. Check that steering, directional and speed lever ③ is the N (neutral) position and is locked with safety lever ④. When starting the engine, check that the levers are at the N position and that the safety lever is at the LOCK position.
If they are not at these positions the engine will not start.



4. Check that the blade is lowered on the ground and the blade control lever is locked with safety lever ⑤.

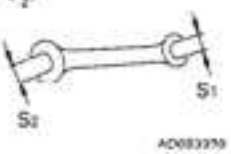


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21. STANDARD TIGHTENING TORQUES FOR BOLTS AND NUTS

21.1 INTRODUCTION OF NECESSARY TOOLS

The following tools are needed when carrying out maintenance.

No.	Name of tool	Part No.	Remarks
1	Wrench set	09000-30006	Applicable width across flats (S_1-S_2) 8mm – 10mm, 12mm – 14mm 13mm – 17mm, 19mm – 22mm 24mm – 27mm, 30mm – 32mm 
2	Socket	09021-01725	Applicable width across flats 17 mm
3	Socket	09021-01928	Applicable width across flats 19 mm
4	Socket	09021-02233	Applicable width across flats 22 mm
5	Extension	09022-00150	
6	Handle	09023-00300	
7	Screwdriver	09033-00190	Interchangeable flat-head and cross-head type
8	Filter wrench	09019-08035	For filter cartridges
9	Grease pump	07952-00002	For greasing work
10	Grease cartridge	07950-90403	(Lithium base grease, 400 g)
11	Body sheet	111-91-13111	

If any of the above tools are broken, please order them from your Komatsu distributor.

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24.6 EVERY 500 HOURS SERVICE

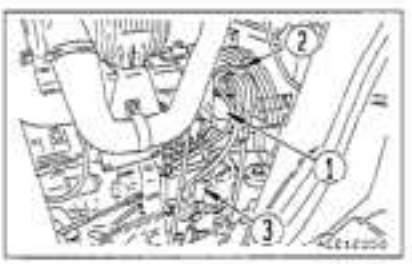
Maintenance for every 50 and 250 hours should be carried out at the same time.

24.6.1 REPLACE FUEL FILTER CARTRIDGE

⚠ WARNING

- **Engine is at high temperature immediately after the machine has been operated. Wait for engine to cool down before replacing the filter.**
- **Do not bring fire or sparks near the fuel.**

Prepare a filter wrench and a container to catch the fuel.



1. Set the container to catch the fuel under the filter cartridge.
2. Using a filter wrench, turn filter cartridge ① counterclockwise to remove it.
3. Clean the filter holder, fill a new filter cartridge with clean fuel, coat the packing surface with engine oil, then install it to the filter holder.
4. When installing, tighten until the packing surface contacts the seal surface of the filter holder, then tighten about 2/3 turns.
   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 to the correct amount.
5. After replacing filter cartridge ①, loosen air bleeding plug ②.
6. Loosen feed pump knob ③ and move the pump up and down to draw off fuel until air ceases to come out of air bleeding plug ②.

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