SEAM006101

Operation & Maintenance Manual

KOMATSU®

WA320-3

WHEEL LOADER

SERIAL NUMBERS **WA320-3 - 50001** and up

February 1998

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SPECIFICATIONS

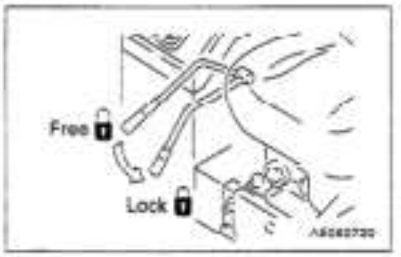
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4. Operate lift arm control lever ⑤ to lower the bucket to the ground.



5. Lock lift arm control lever ⑤ and bucket control lever ⑥ with safety lock ⑦.



12.14 CHECKS AFTER COMPLETION OF OPERATION

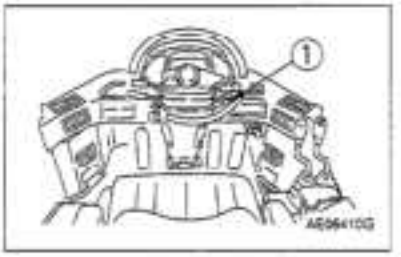
Check the engine water temperature, engine oil pressure, torque converter oil temperature, and fuel level with the meter and lamps. If the engine has overheated, do not stop it suddenly. Run the engine at a midrange speed to allow the engine to cool down before stopping it.

12.15 STOPPING ENGINE

NOTICE

If the engine is abruptly stopped before it has cooled down, engine life may be greatly shortened. Consequently, do not abruptly stop the engine apart from an emergency.

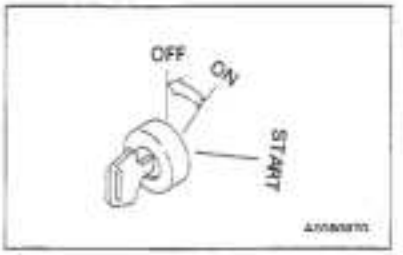
In particular, if the engine has overheated, do not abruptly stop it but run it at medium speed to allow it to cool gradually, then stop it.



1. Run the engine at low idling speed for about 5 minutes to allow it to gradually cool down.

2. Turn the key in starting switch ① to the OFF position and stop the engine.

3. Remove the key from starting switch ①.

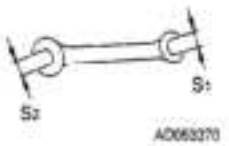


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21. STANDARD TIGHTENING TORQUES FOR BOLTS AND NUTS

21.1 INTRODUCTION OF NECESSARY TOOLS

The following tools are provided with the machine.

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 wrench set	09020-10284	
3	Screwdriver	09033-00190	Crosshead/flat head interchangeable type
4	Wrench	09014-10200	
5	Pliers	09036-00150	
6	Wrench	09001-03600	36 jaw
7	Tire wrench	417-98-11121	
8	Filter wrench	09019-08035	For filter cartridge
9	Bar	417-98-11110	
10	Tire gauge	09289-00000	
11	Grease pump	07952-70004	For greasing work
12	Nozzle	07951-41017	Hose nozzle for grease pump
13	Grease cartridge	07950-90403	(Lithium base grease: 400 g)
14	Thickness gauge	09054-00009	
15	Hammer	09039-00150	
16	Plate	09963-03000	Warning tag

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

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24.7 EVERY 500 HOURS SERVICE

Maintenance for every 50, 100 and 250 hours should be carried out at the same time.

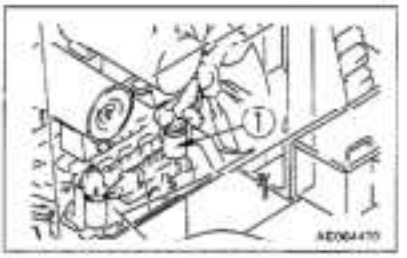
24.7.1 REPLACE FUEL FILTER CARTRIDGE

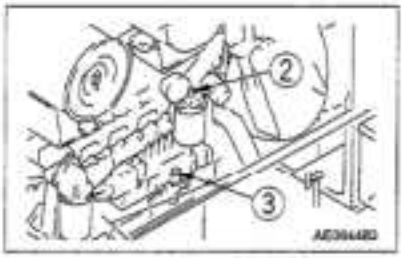
⚠WARNING

- **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. Open the side cover located on the left of the machine.
2. Set the container to catch the fuel under the filter cartridge.
3. Using a filter wrench, turn filter cartridge ① counterclockwise to remove it.
4. 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.
5. When installing, tighten until the packing surface contacts the seal surface of the filter holder, then tighten approx. 2/3 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 to the correct amount.
6. After replacing filter cartridge ①, loosen air bleed plug ②.
7. Loosen feed pump knob ③ and move the pump up and down to draw off fuel until air ceases to come out of air bleed plug ②.
8. After bleeding the air, tighten air bleed plug ②, then push in the knob of feed pump ③ and tighten it.





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