VEAM980600

Operation & Maintenance Manual

WA95-3

WHEEL LOADER
(20 km/hr and 30 km/hr)

SERIAL NUMBERS WA95-3 HA980376 - HA980668
WA95-3 H20651 - H20671

December 2004

KOMATSU

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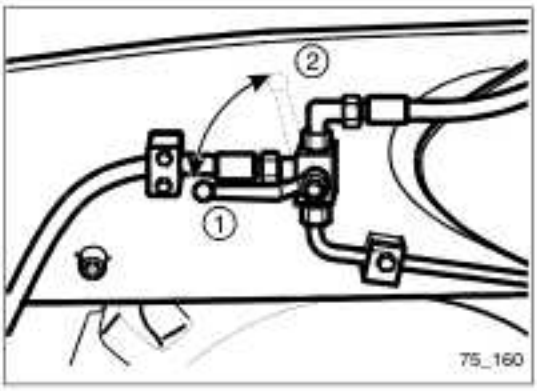
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8. SWITCHING LEVER OF BUCKET

If you have the multi-purpose bucket attached to the machine, you can use this switching lever to change the function assignment of the control lever for special equipment (see "(7) Control lever for special equipment").

Position '1': the control lever for special equipment operates the multi-purpose bucket.

Position '2': the control lever for special equipment operates the quick-change unit.



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TABLE OF LUBRICANTS AND OPERATING AGENTS

WA95-3	LUBRICANTS AND OPERATING AGENTS BI-CODES*), SPECIFICATIONS, AND FILLING VOLUMES					
	Lubricants and Service Fluids	**BI-Codes**	**Quality Classes**	**Temperature Ranges**	**Viscosity Classes**	**Filling Volume in Litres approx.**
Engine	Engine Oil EO	EO 1540 A EO 1030 A NRS	CCMC D4 or, if not available: API CE or API CF-4[2])	-15° to 45° C -20° to 30° C -15° to 20° C	SAE 15W-40 [1]) SAE 10W-30 SAE 05W-30	12.5
Transfer Gear Box: Standard Type High Speed Version	Gear Oil GO	GO 90 LS	API-GL5 +LS or MIL-L-2105D+LS	-	SAE 90LS	 1.5 3.0
Front Axle	Gear Oil GO	GO 90 LS	API-GL5 +LS or MIL-L-2105D+LS	-	SAE 90 LS [3]) SAE 85W-90LS SAE 80W-90LS	Planet Gear: 2 x 1.0 Differential: 4.5
Rear Axle	Gear Oil GO	GO 90 LS	API-GL5 +LS or MIL-L-2105D+LS	-	SAE 90 LS [3]) SAE 85W-90LS SAE 80W-90LS	Planet Gear: 2 x 0.9 Differential: 4.7
Hydraulic System, Steering	Hydraulic Oil HYD	HYD 0530 HYD 1030 HYD 1540	HVLP HVLP D	15° to 20° C -20° to 30° C -15° to 45° C	ISO VG 46 [1]) ISO VG 68 ISO VG 100	94
	or Engine Oil EO	EO 1540 A EO 1030 A NRS	CCMC D4 or, if not available: API CE or API CF -4[2])	-15° to 45° C -20° to 30° C -15° to 20° C	SAE 15W-40 [1]) SAE 10W-30 SAE 05W-30	
	or Hydraulic Oil BIO-E-HYD	BIO-E-HYD 0530	HEES (acc. to VDMA fluid technology)	-15° to 20° C	ISO VG 46	
Service Brake	Automatic Transmission Gear Oil	ATF	ATF, Type A, Suffix A	-	-	0.6
Cooling System	Long-Time Coolant	SP-C	Antifreeze and Corrosion Protection	Proportion of Mixture: 50% Coolant: 50% Water Min. Freeze Proofing: -34° C		17
Fuel Tank	Diesel Fuel[3])	CFPP Class B CFPP Class D CFPP Class E CFPP Class F	DIN-EN 590	up to 0°C up to -10°C up to -15°C up to -20°C		130
Grease Nipple	Lithiumsoap-Based Multi-Purpose Grease	MPG-A	KP2N-20	-	NLGI 2	
Air conditioning	Coolant Refrigerating machine oil	NRS NRS	R134a (CFC-free) PAG (Polyalkyleneglycol)			1200 g 180 cm³

The specified filling volumes represent approximate values; the testing devices are binding. The selection of a viscosity class depends on the ambient temperature prevailing over a longer period of time. The temperature limits are to be regarded as guiding values; for a brief period, the actual temperature may be higher or lower than these guiding values.

[1])Factory filling

[2]) If engine oil of either the API CE or the API CF - 4 specification is not available, engine oil of either the API CC or the API CD specification may be used. In these cases, the oil change intervals must be cut in halves.

[3]) If fuels with a sulphur content between 0.5 and 1.0 % are used, the oil change intervals for the engine must be cut in halves; if the sulphur content exceeds 1.0 %, the oil change intervals must be quartered.

*) BI-codes are the "standard lubricants" (Regelschmierstoffe) for construction machinery and vehicles of the Hauptverband der Deutschen Bauindustrie e.V. (BI) (head association of the German construction industry). The brochure "Regelschmierstoffe für Baumaschinen- und Fahrzeuge" (standard lubricants for construction machinery and vehicles" can be obtained from bookstores or the German Bauverlag GmbH Wiesbaden und Berlin under the ISBN-No. 3-7625-3102-1.

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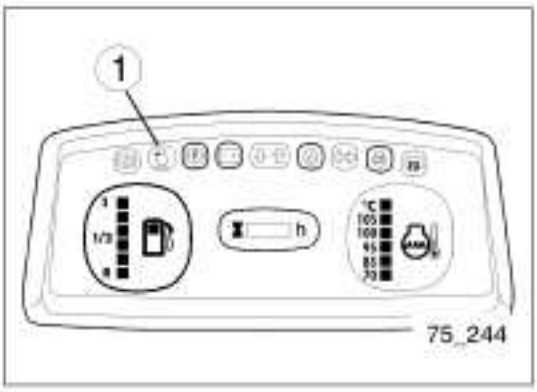
AIR FILTER, REMOVING/RE-INSTALLING AND CHECKING/CLEANING THE FILTER INSERT

STRUCTURE OF THE AIR FILTER

The air filter consists of the air filter housing, the dust exhaust valve, the filter cartridge and the safety filter.

MAINTENANCE DEMAND

If the air filter warning indicator (1) lights up, the air filter cartridge is dirty. You must clean or exchange it immediately.



The filter insert has to be checked for perfect condition and be cleaned every 250 operating hours, no matter whether the control light is lit or not. If the filter insert is damaged or deformed, it must be exchanged.

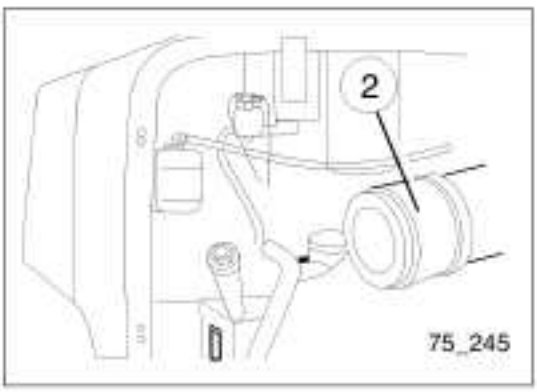
A dirty safety filter indicates that the filter cartridge is damaged. In this case, both - filter cartridge and safety filter - must be exchanged.

REMOVING THE FILTER CARTRIDGE

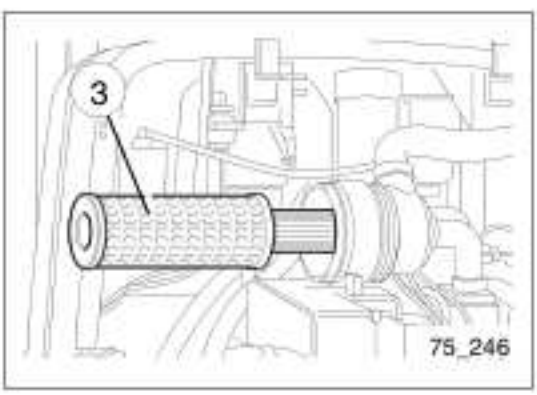
WARNING

- **Danger of injury! When the engine is running, you may hurt yourself on the movable components inside the engine room!**
  Do not perform any operation in the engine room with the engine running!

1. For maintenance operations, park and secure machine as described in chapter "Preparing the Machine for Maintenance".
2. Open the twistlocks on the cover of the air filter housing (2).
3. Remove the cover of air filter housing.
4. Pull out the filter cartridge (3).



Clean thoroughly the interior of the filter housing with a cloth.



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