SEBM001700

SHOP MANUAL

KOMATSU®

WA450-1

MACHINE MODEL SERIAL No.

WA450-1 **20001 and up**

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.

- WA450-1 mount the S6D125-1 engine.
  For details of the engine, see the 6D125 Series Engine Shop Manual.

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WEIGHT TABLE

⚠ This weight table is a guide for use when transporting or handling components.

Unit: kg

Machine model	WA450-1	
Serial No.	20001 and up	
Engine assembly	1,020	
Radiator assembly	165	
Torque converter assembly	195	
Transmission assembly	770	
Damper	62.5	
Upper drive shaft	15	
Center drive shaft	30	
Front drive shaft	45	
Rear drive shaft	31	
Front axle assembly	1,411	
Rear axle assembly	1,306	
Front differential assembly	233	
Rear differential assembly	186	
Planetary carrier assembly (1 piece)	69	
Planetary hub assembly (1 piece)	68	
Axle pivot (Rear axle)	125	
Wheel (1 piece)	215	
Tire (1 piece)	335	
Steering valve	24	
Steering cylinder (1 piece)	38	
Brake (1 piece)	128	
Hydraulic tank	314	
Hydraulic pump	20	
Switch • PPC pump	12	
Steering pump	13	
PPC valve	3.5	
Main control valve	90	

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Unit: kg

Machine model	WA450-1	
Serial No.	20001 and up	
Lift cylinder (1 piece)	190	
Dump cylinder	220	
Engine hood	81	
Front frame	1,749	
Rear frame	1,423	
Bucket link	80	
Tilt lever	440	
Lift arm (with bushing)	1,375	
Bucket (with teeth)	1,840	
Counterweight	1,270	
Fuel tank	238	
Battery (1 piece)	45	
Operator's seat	40	
Floor plate	99	

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TABLE OF OIL AND COOLANT QUANTITIES

RESERVOIR	KIND OF FLUID	AMBIENT TEMPERATURE	CAPACITY (ℓ)	
		−22 −4 14 32 50 68 86 104 122°F −30 −20 −10 0 10 20 30 40 50°C	Specified	Refill
Engine oil pan	Engine oil	SAE30 SAE10W SAE10W-30 SAE 15W-40	32	26
Transmission case (incl. torque converter, transfer and cooler)	Engine oil	SAE30 SAE10W	61	59
Hydraulic system (incl. brake system)	Engine oil	SAE10W	230	140
Axle (incl. differential and planetary gear case)		See NOTE (4)	(Front) 60 (rear) 55	60 55
Fuel tank	Diesel fuel	ASTM D975 No. 2 ASTM D975 No. 1	330	–
Cooling system	Water	Add antifreeze	66	–

ASTM: American Society of Testing and Material
SAE: Society of Automative Engineers
Specified capacity: Total amount of oil including oil for components and oil in piping
Refill capacity: Amount of oil needed to refill system during normal inspection and maintenance.

NOTE:

(1) When fuel sulphur content is less than 0.5%, change oil in the oil pan every periodic maintenance hours described in this manual.
Change oil according to the following table if fuel sulphur content is above 0.5%.

Fuel sulphur content	Change interval of oil in engine oil pan
0.5 to 1.0%	1/2 of regular interval
Above 1.0%	1/4 of regular interval

(2) When starting the engine in an atmospheric temperature of lower than 0°C, be sure to use engine oil of SAE10W, SAE10W-30 and SAE15W-40, even though an atmospheric temperature goes up to 10°C more or less in the day time.

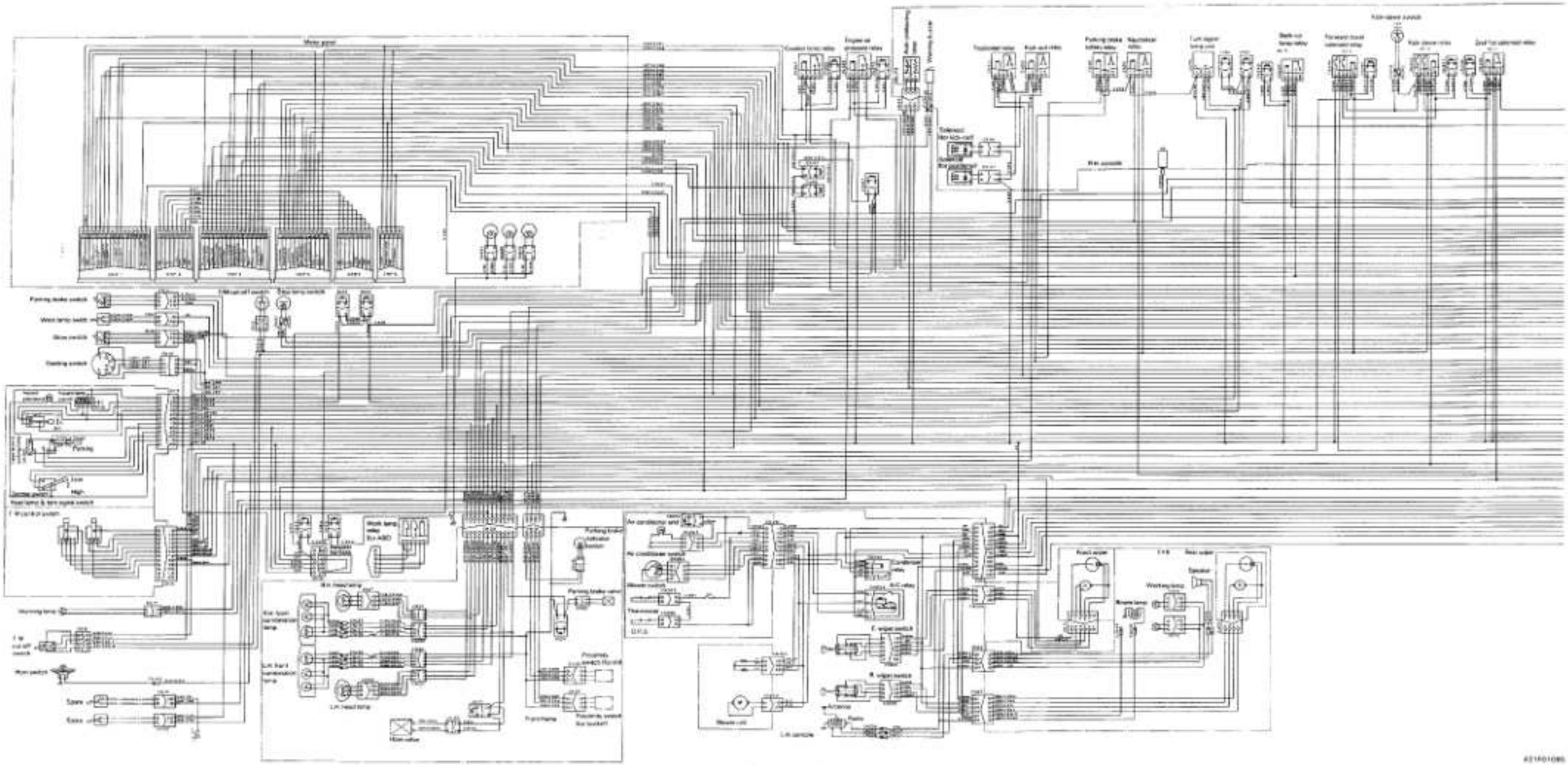
(3) Use API classification CD as engine oil and if API classification CC, reduce the engine oil change interval to half.

(4) For axle oil, use only recommended oil as follows.
SHELL: DONAX TT OR TD
CALTEX: RPM TRACTOR HYDRAULIC FLUID
CHEVRON: TRACTOR HYDRAULIC FLUID
TEXACO: TDH OIL
MOBIL: MOBILAND SUPER UNIVERSAL

★ It is possible to substitute engine oil CLASS-CD SAE30 for axle oil.
If noise comes from the brake, it is no problem of durability.

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ELECTRICAL WIRING DIAGRAM CIRCUIT



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