JEBM000200

SHOP MANUAL

KOMATSU®

WA420-1

MACHINE MODEL	SERIAL No.
WA420-1	H20001 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.

- WA420-1 mount the Cummins 6CTA8.3 engine.
  For details of the engine, see the Cummins C 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	WA420-1
Serial No.	H20001 and up
Engine assembly	655
Radiator assembly	166
Torque converter assembly	165
Transmission assembly	718
Center drive shaft	30
Front drive shaft	40
Rear drive shaft	20
Front axle assembly	1,173
Rear axle assembly	1,186
Front differential assembly	210
Rear differential assembly	185
Wheel hub assembly (1 piece)	69
Planetary hub assembly (1 piece)	68
Axle pivot (Rear axle)	106
Wheel (1 piece)	216
Tire (1 piece)	243
Steering valve	24
Steering cylinder (1 piece)	28
Brake (1 piece)	128
Hydraulic tank	270
Hydraulic pump	45
Main control valve	57

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Unit: kg

Machine model	WA420-1
Serial No.	H20001 and up
Lift cylinder (1 piece)	170
Dump cylinder	200
Engine hood	128
Front frame	1,470
Rear frame	1,220
Bucket link	56
Tilt lever	333
Lift arm with bushing	1,145
Bucket	1,502
Counterweight	885
Fuel tank	215
Battery (1 piece)	45
Cab	305
Air conditioner unit	40
Operator's seat	37
Floor plate	115

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TABLE OF OIL AND COOLANT QUANTITIES

PROPER SELECTION OF FUEL, COOLANT AND LUBRICANTS

RESERVOR	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	See NOTE (1) 20W-40 SAE 15W-40/15W-50 SAE 10W-30 SAE 5W-30 SAE 5W-20	22.4	18.9
Transmission case		SAE 30 SAE 10W	54	47
Hydraulic system (incl. brake system)		SAE 10W	185	103
Axle (Front and rear)		See NOTE (2)	each 55	each 55
Fuel tank	Diesel fuel	See NOTE (3)	305	—
Cooling system	Coolant	See NOTE (4)	50	—

NOTE:

(1) Engine oil for cummins engine

The use of quality engine lubricating oils combined with appropriate oil drain and filter change intervals is a critical factor in maintaining engine performance and durability.

Cummins Engine Company, Inc. recommends the use of a high quality SAE 15W-40 heavy duty engine oil (such as Cummins Premium Blue) which meets the American Petroleum Institute (API) performance classification CE.

★ CC/CD or CD/SF engine oils can be used in areas where CE oil is not yet available.

A sulfated ash limit of 1.0 mass percent is suggested for optimum valve and piston deposit and oil consumption control. The sulfated ash must not exceed 1.85 mass percent.

For futher details and discussion of engine lubricating oils for Cummins engines, refer to Bullein No. 3810340, Cummins Engine Oil Recommendations.

★ Limited use of low viscosity oils, such as 10W-30 may be used to aid in starting the engine and providing sufficient oil flow at ambient temperatures below −5°C [23°F]. However, continuous use of low viscosity oils can decrease engine life due to wear. Refer to the accompanying chart.

Arctic Operation

If an engine is operated in ambient temperature consistently below −23°C [−10°F] and there are no provisions to keep the engine warm when it is not in operation, use a synthetic CC/CD engine oil with adequate low temperature properties such as; 5W-20 or 5W-30.

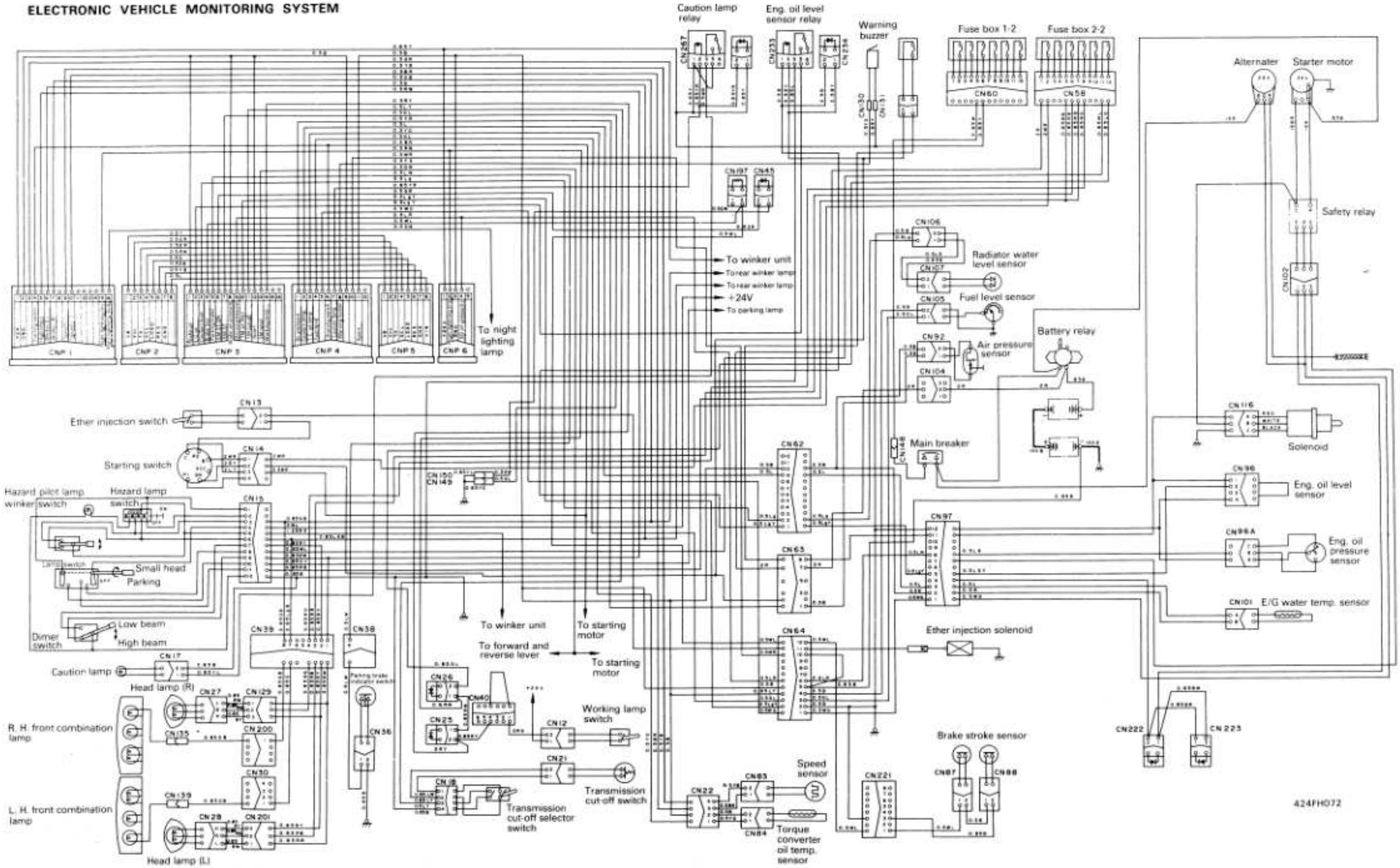
The oil supplier must be responsible for meeting the performance service specifications.

★ The use of a synthetic base oil does not justify extended oil change intervals. Extended oil change intervals can decrease engine life due to factors such as; corrosion, deposits and wear.

Special "break in" engine lubricating oils are not recommended for new or rebuilt Cummins engines. Use the same type oil during the "break in" as that which is used in normal operation.

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ELECTRONIC VEHICLE MONITORING SYSTEM



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