

WA450-3

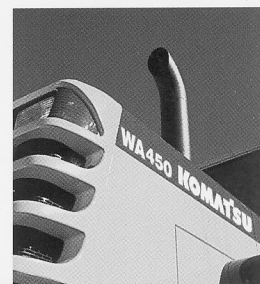
Komatsu Powered-260 HP

BUCKET CAPACITIES

4.7 - 5.5 yd³

3.6 - 4.2 m³

KOMATSU



WA450-3

WHEEL LOADER
WA450-3

Specifications

WA450-3
WHEEL LOADER



ENGINE

- Model Komatsu SA6D125E-2
- Type Direct-Injection
- Aspiration Turbocharged and aftercooled
- No. of cylinders 6
- Bore x Stroke 4.9" 125 mm x 5.9" 150 mm
- Piston displacement 674 in³ 11.04 ltr.
- Governor All-speed mechanical

Horsepower Rating @ 2140 RPM

	HP	kW
Gross power	271	202
Net Power	260	194

SAE J1349

Meets 1996 EPA emission regulations.

Gear pump-driven force-lubrication with full-flow filters. All filters are spin-on type for easy maintenance. Dry type with double elements and dust evacuator plus electronic filter indicator service intervals. 24V/7.5 kW electric starting motor; 24 V/50 A alternator, 2 x 12 V/170 AH batteries.



TRANSMISSION

3-element, single-stage, single-phase torque converter. Full powershift, countershaft type transmission. An auto-shift transmission is standard. A modulating function assures shockless speed and directional changes without braking. An electrically-controlled transmission allows fingertip control with speed and directional change levers. A neutral safety circuit allows starting only when the directional control lever is in neutral. The transmission kickdown switch allows the operator to downshift from second to first gear without taking a hand off the work control levers. The combination of the kickdown switch and the auto-shift allows the best load and carry operations.

Travel Speed*	Forward	Reverse
1st	4.1 MPH 0- 6.6 km/h	4.2 MPH 0- 6.8 km/h
2nd	7.6 MPH 0-12.3 km/h	8.0 MPH 0-12.8 km/h
3rd	13.5 MPH 0-21.8 km/h	14.1 MPH 0-22.7 km/h
4th	21.1 MPH 0-34.0 km/h	22.4 MPH 0-36.0 km/h

*with 26.5-25-20 PR (L3)



AXLES & FINAL DRIVES

Four-wheel drive system. Full-floating front axle is fixed to the front frame. Center-pin supported, full-floating rear axle has 30° oscillation. Spiral bevel gear for reduction and planetary gear for final reduction. Front and rear torque proportioning differentials minimize tire slippage on soft or wet terrain.



BRAKES

Service brakes: Hydraulically actuated, outboard-mounted, wet disc brakes actuate all four wheels. Two brake pedals are provided. Either can be used for normal braking; however, the left pedal can also be used for braking and transmission neutralizing simply by actuating a switch.

Parking brake: Spring applied, hydraulically released, wet disc type, located inside the transmission case (adjustment-free).



STEERING SYSTEM

Center-pivot frame articulation. Full-hydraulic power assisted steering independent of engine RPMs. A wide articulation angle of 40° on each side allows a minimum turning radius of 22'5" 6845 mm at the outside corner of the bucket with bolt-on cutting edge.



BOOM & BUCKET

Z-bar loader linkage is designed for maximum rigidity and offers powerful breakout. Rap-out loader linkage design enables shock dumping for removing sticky materials. Sealed loader linkage pins with dust seals extend greasing intervals. The bucket is made of high-tensile-strength steel.



BUCKET CONTROLS

The use of a PPC hydraulic control valve offers lighter operating effort for the work equipment control levers. The reduction in the lever force and travel makes it easy to operate the work equipment.

Control positions:

Boom	Raise, hold, lower and float
Bucket	Roll-back, hold and dump



HYDRAULIC SYSTEM

The dual hydraulic speed system makes it possible to reduce cycle times.

- Powerful rim pull is maintained when entering the pile, so the digging capacity is increased.
- Boom speed is increased while raising the boom to minimize cycle time.

Capacity (discharge flow) @ engine 2140 RPM

Loader Pump	79.8 gal/min	302 ltr./min
Steering Pump	44.4 gal/min	168 ltr./min
Switch Pump	32.2 gal/min	122 ltr./min
Pilot Pump	16.4 gal/min	62 ltr./min

(Gear Type Pumps)

Relief valve setting:

Loader	3000 PSI 210 kg/cm ²
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Control valves:

A 2-spool type control valve and a steering valve with a demand valve provides the optimum flow.

Hydraulic cylinders

	Number of cylinders	Bore	Stroke
Boom	2	7.1" 180 mm	30.0" 764 mm
Bucket	1	7.9" 200 mm	21.7" 550 mm
Steering	2	3.9" 100 mm	17.3" 440 mm

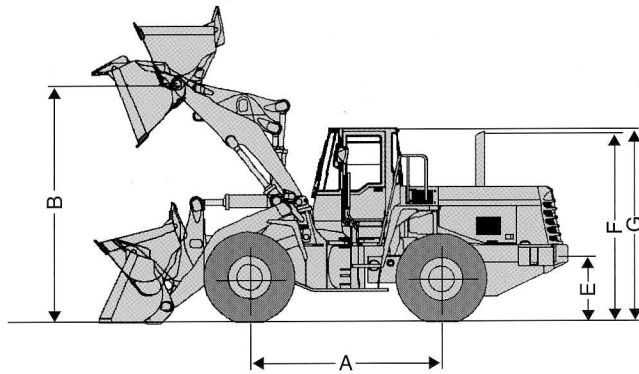
Hydraulic cycle time (rated load in bucket): Total 11.3 sec.
Raise ... 6.2 sec./Dump ... 1.4 sec./Lower (empty) 3.7 sec.



SERVICE REFILL CAPACITIES

Cooling system	18.0 gal	68 ltr.
Fuel tank	106.0 gal	400 ltr.
Engine	18.0 gal	68 ltr.
Hydraulic system	41.0 gal	155 ltr.
Differential, final drive		
(each axle)	17.2 gal	65 ltr.
Torque converter and		
transmission	10.6 gal	40 ltr.

Dimensions



Tires	26.5-25-20PR(L3)
Tread	7'7" 2300 mm
Width over tires	9'10" 3010 mm
A Wheelbase	11'2" 3400 mm
B Hinge pin height, max. height	14'4" 4230 mm
C Hinge pin height, carry position	2'0" 610 mm
D Ground Clearance	1'8" 525 mm
E Hitch Height	4'1" 1240 mm
F Overall Height, top of stack	11'4" 3450 mm
G Overall Height, ROPS Cab	11'4" 3460 mm

Bucket Type		General Purpose w/Bolt-on Cutting Edge		Excavating w/Bolt-on Cutting Edge		Excavating w/Teeth	
Bucket Capacity	SAE Rated	5.5 yd ³	4.2 m ³	5.0 yd ³	3.8 m ³	4.7 yd ³	3.6 m ³
	Struck	4.7 yd ³	3.6 m ³	4.3 yd ³	3.3 m ³	4.1 yd ³	3.1 m ³
Bucket Width		10'5"	3170 mm	10'5"	3170 mm	10'6"	3190mm
Bucket Weight		4,610 lb	2035 kg	4,850 lb	2200 kg	4,700 lb	2130 kg
Static Tipping Loads	Straight	39,303 lb	17865 kg	38,460 lb	17445 kg	38,615 lb	17515 kg
	Full Turn (40°)	34,115 lb	15475 kg	33,255 lb	15085 kg	33,410 lb	15155 kg
Dump Clearance, max. height and 45° dump angle		10'5"	3185 mm	10'7"	3235 mm	10'2"	3110 mm
Reach at 7' 2130 mm and 45° dump angle		6'1"	1850 mm	6'0"	1825 mm	6'1"	1865 mm
Reach at max. height and 45° dump angle		3'11"	1195 mm	3'9"	1145 mm	4'1"	1245 mm
Height to hinge pin		13'11"	4235 mm	13'11"	4235 mm	13'11"	4235 mm
Operating Height Fully raised		19'2"	5835 mm	19'0"	5790 mm	19'0"	5790 mm
Overall Length	Bucket ground	27'6"	8390 mm	27'4"	8340 mm	27'10"	8480 mm
	Bucket at carry	27'4"	8340 mm	27'2"	8290 mm	27'7"	8410 mm
Turning Radius*		22'6"	6832 mm	22'5"	6830 mm	22'7"	6875 mm
Digging Depth	0°	3.3"	85 mm	3.3"	85 mm	3.7"	95 mm
	10°	1'0"	315 mm	11.8"	300 mm	1'2"	345 mm
Breakout Force		42,730 lb	19380 kg	45,190 lb	20500 kg	49,190 lb	22310 kg
Operating Weight		49,350 lb	22385 kg	49,715 lb	22527 kg	49,560 lb	22480 kg

- Static tipping load and operating weight shown include lubricants, coolant, full fuel tank, ROPS cab, front fenders, optional counterweight, 26.5-25-20PR (L3) tubeless tires and operator. Machine stability and operating weight are affected by counterweight, tire size and other attachments. **Do not use tire ballast with optional counterweight.** Add the following weight changes to operating weight and static tipping load.

Weight Changes

Tire & Options	Change in Operating Weight				Change in Static Tipping Load							
					Straight				Full Turn			
	No Ballast		Ballast		No Ballast		Ballast		No Ballast		Ballast	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
23.5-25-20PR(L2)	-1,720	-780	-285	-130	-1,345	-610	-65	-30	-1,190	-540	+35	+15
23.5-25-20PR(L3)	-1,035	-470	+395	+180	-805	-365	+475	+215	-715	-325	+505	+231
26.5-25-20PR(L3)	0	0	+2,160	+980	0	0	+2,380	+1080	0	0	+2,195	+995
26.5-25-20PR(L4)	+575	+260	+2,735	+1240	+460	+210	+2,845	+1290	+405	+185	+2,600	+1180
26.5-25-20PR(L5)	+1,675	+760	+3,835	+1740	+1,320	+600	+3,705	+1680	+1,155	+525	+3,350	+1520
Opt. Cwt. Removed	-880 lb		-400 kg		-2,225 lb		-1010 kg		-1,860 lb		-845 kg	

- All dimensions, weights and performance values based on SAE J-732C and J-742B standards. *Turning radius measured at bucket at carry position, outside corner of bucket.