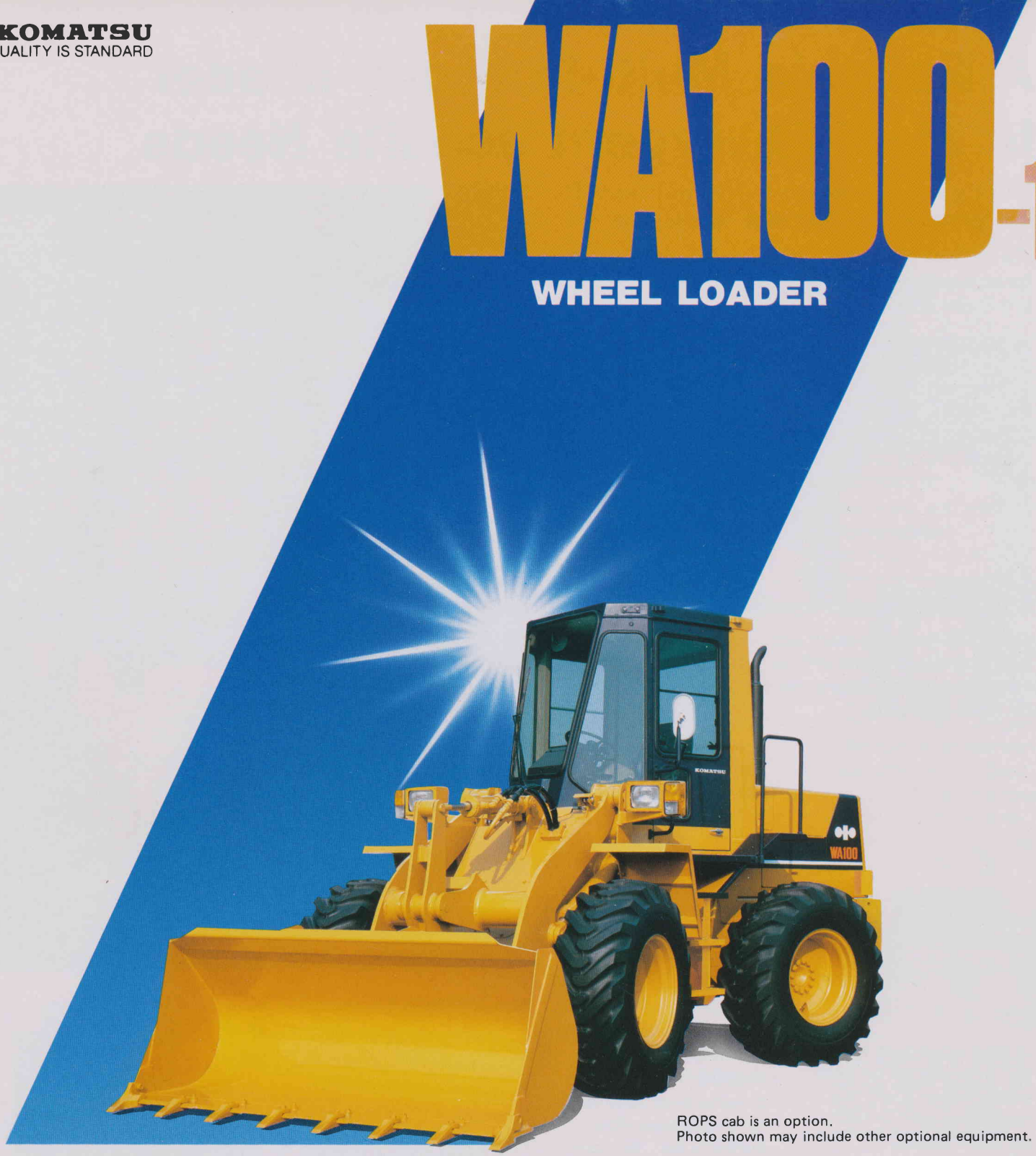
KOMATSU
THE QUALITY IS STANDARD

WA100-1

WHEEL LOADER



ROPS cab is an option.
Photo shown may include other optional equipment.

KOMATSU VANGUARD SERIES

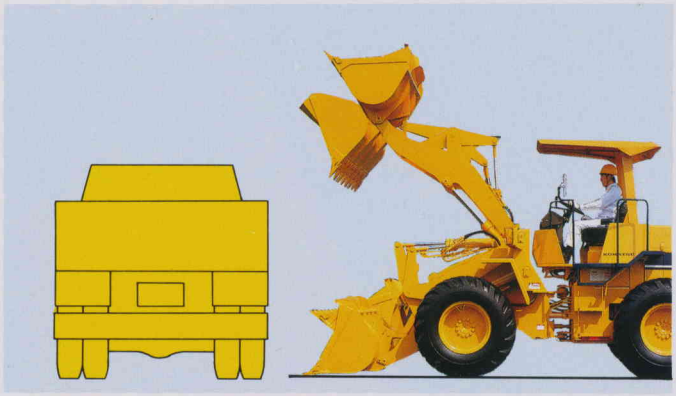
- *Space-efficient, comfortable work area keeps operator productivity high.*
- *Powerful, fuel efficient Komatsu 6D95L engine.*
- *Z-bar loader linkage provides superior performance of work equipment.*
- *Torque proportioning differentials, 40° articulation, ±12° rear axle oscillation and long wheel base provide stability and maneuverability on any terrain.*
- *Wet disc brakes and sealed loader linkage pins provide high performance with minimal maintenance.*
- *All components are Komatsu made for superior reliability and availability.*

Flywheel horsepower: 73 HP (54 kW) @ 2400RPM
Bucket capacities: 1.0—1.4 m^3 (1.3—1.8 yd^3)
Operating weight: 6955 kg (15340 lb)

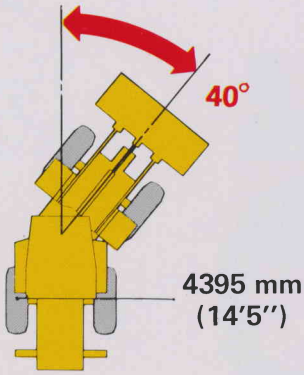
A Reliable Multi-Purpose Loader to Meet Divergent Jobsite Needs

High performance for greater production

The Komatsu WA100-1 Wheel Loader was designed for superior production with outstanding bucket and loader performance.



Extended dumping reach and clearance allow the operator to easily and efficiently load trucks and elevated hoppers. Sticky materials can be removed by shock dumping.



A long wheelbase with a 40° articulation on both sides enables sharp maneuvering even in limited work spaces.

A center pin-supported rear axle with a ±12° oscillation range, extra-long wheel base, wide tread and a 40° articulation angle assure stability over even the roughest terrain.

The large bucket penetrating force is properly balanced with the WA100-1's weight and drawbar pull for powerful excavation. The bucket's 48° roll back angle assures full buckets and prevents spillage of material.

Three forward and three reverse transmission speeds assure fast and efficient operations.

Spacious, comfortable cab

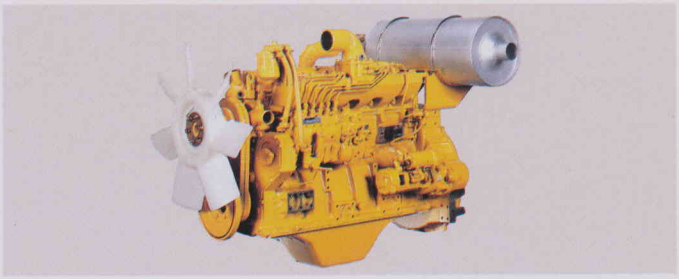
The optional cab is designed and laid out for maximum comfort and efficiency. The compartment features a wide field of vision, roomy work space and ergonomically arranged instruments, levers and pedals. Vibration and noise levels are kept at a minimum.

The speed and directional levers require only slight finger movements while the priority valve steering system guarantees smooth, constant steering.

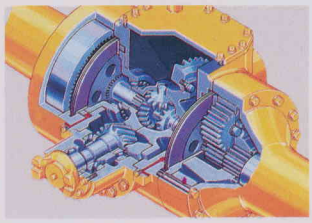
The single, stick-type, equipment control lever is located within easy reach for nonstrenuous operation.

The compact cluster gauges are conveniently located for easy checks.

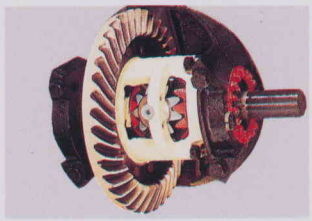
Simplified maintenance for minimum downtime



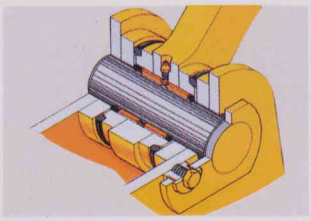
The extremely economical Komatsu 6D95L diesel engine delivers a powerful 73 HP (54 kW) and is rubber-cushion mounted to suppress noise and vibration. Engine starts and cutoffs are key-operated.



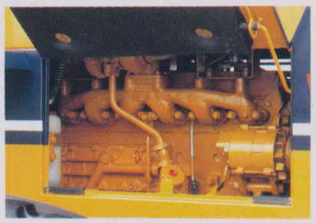
Adjustment-free, wet disc brakes assure braking performance even on muddy terrain. Fully enclosed, they are free from dirt and other contaminants.



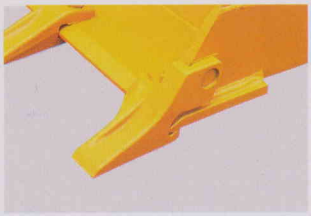
The torque proportioning differentials minimize slippage, improve traction and increase the service life of tires.



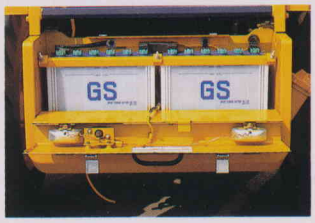
Sealed loader linkage pins require less maintenance.



The functional engine hoods open widely on both sides for easy access to the engine.



All components are designed and manufactured by Komatsu for maximum quality and reliability.



The batteries are located in the counterweight and are serviceable from ground level.

SPECIFICATIONS

ENGINE

The Komatsu 6D95L is a 4-stroke, water-cooled, overhead valve, direct-injection diesel engine. It includes six cylinders with a 95 mm (3.7") bore x 115 mm (4.5") stroke and a 4.89 ltr. (298 cu.in) piston displacement.
Flywheel horsepower:
73 HP (54 kW) at 2400 RPM (SAE J1349)
74 PS at 2400 RPM (DIN 6270 NET)
Direct-injection fuel system. All-speed mechanical governor. Gear-pump-driven force-lubrication with full-flow filters.
All filters are spin-on type for easy maintenance. Dry, cyclo-pack air cleaner with dust evacuation valve for longer element service. 24 V/5.5 kW electric starting motor. 24 V/25 A alternator. 24 V (2 x 12 V)/110 Ah batteries.

TRANSMISSION

3-element, single-stage, single-phase torque converter. Full powershift, countershaft type transmission. A modulating function assures shockless speed and directional changes without braking. A neutral safety circuit allows starting only when the directional control lever is in neutral.

Travel speed km/h (MPH)

	Forward	Reverse
1st	0–7.2 (4.5)	0–7.5 (4.7)
2nd	0–13.6 (8.5)	0–14.0 (8.7)
3rd	0–34.5 (21.4)	0–35.0 (21.7)

AXLES & FINAL DRIVES

Four-wheel drive system. A semi-floating front axle is fixed to the front frame. Center-pin-supported, semi-floating rear axle with a large oscillation of ±12°. A spiral bevel gear for reduction and a planetary gear, single reduction final drive. Front and rear torque proportioning differentials minimize tire slippage on soft or wet terrain.

BRAKES

Service brakes: Hydraulically actuated, inboard-mounted, wet, disc brakes actuate all four-wheels. Two pedals provided. The right for normal braking; the left offers braking + transmission neutralizing.
Parking brake: Dry disc type applied on front output coupling of transmission.

TIRES

Front and rear: 16.9-24-10PR (L-2)
Rims: W15L x 24

STEERING SYSTEM

Center-pivot frame articulation. Full-hydraulic power assisted steering independent of engine RPMs. A wide articulation angle of 40° on each side for a minimum turning radius of 5050 mm (16'7") at the outside corner of the bucket.

BOOM & BUCKET

Z-bar loader linkage is designed for maximum rigidity and fast cycle times. Rap-out loader linkage design enables shock dumping to remove sticky materials. Sealed loader linkage pins with dust seals extend greasing intervals. Bucket corner teeth (optional) not only minimize bucket wear but also increase penetrating force.

BUCKET CONTROLS

Little effort is required to operate the bucket/boom control levers, assuring smooth, responsive bucket/boom action. In addition, the bucket positioner and the boom kickout device (optional) facilitate repeated digging/loading operations.

Control positions:
Boom . . . . . Raise, hold, lower and float
Bucket . . . . . .Tilt-back, hold and dump

HYDRAULIC SYSTEM

A gear pump for steering and loader control.
Capacity (discharge flow) at engine 2400 RPM
Loader . . . . . 110 ltr. (29.1 U.S. gal)/min.
Relief valve setting:
Loader . . . . . 210 kg/cm^2 (2990 PSI/20.6 MPa)
Steering. . . . . .190 kg/cm^2 (2700 PSI/18.6 MPa)
Control valves:
A 2-spool type control valve.

Hydraulic cylinders	Number of cylinders	Bore	Stroke
Boom	2	100 mm (3.94")	585 mm (1'11")
Bucket	1	100 mm (3.94")	424 mm (1'5")

Hydraulic cycle time (rated load in bucket):
Raise...5.2 sec./Dump...1.1 sec./Lower (empty)...3.0 sec.

SERVICE REFILL CAPACITIES

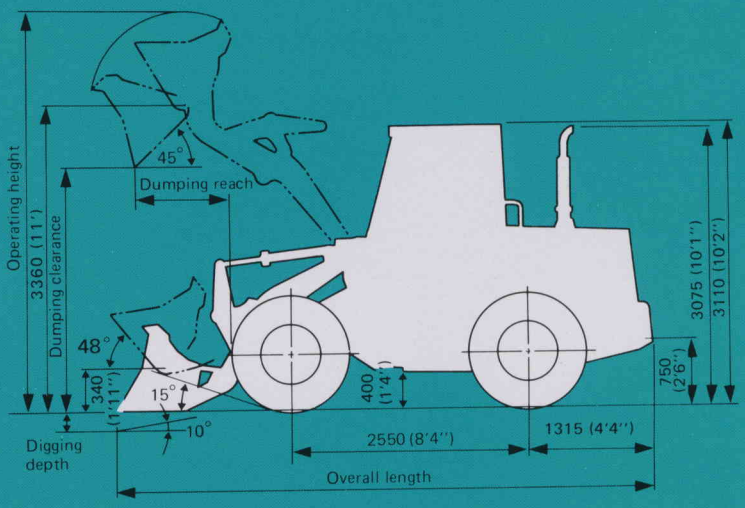
Cooling system . . . . . 19 ltr. (5.0 U.S. gal)
Fuel tank. . . . . 120 ltr. (31.7 U.S. gal)
Engine. . . . . 10.5 ltr. (2.8 U.S. gal)
Brake oil tank. . . . . 1 ltr. (0.3 U.S. gal)
Hydraulic system. . . . . 38 ltr. (10.0 U.S. gal)
Differential and final drive case (each side) . . . . . 14 ltr. (3.7 U.S. gal)
Torque converter and transmission . . . . . 18.5 ltr. (4.9 U.S. gal)

DIMENSIONS

Unit: mm(ft.in)

Dimensions vary with tires

Tire size	16.9-24	15.5-25
Tread	1780 mm (5'10")	1780 mm (5'10")
Width over tires	2250 mm (7'5")	2200 mm (7'3")
Change in vertical dimension	0	–10 mm (0.4")
Change in reach	0	+10 mm (0.4")
Change in digging depth		
0°	0	+10 mm (0.4")
10°	0	+10 mm (0.4")
Change in overall length		
Bucket on ground	0	+10 mm (0.4")
Bucket at carry	0	+10 mm (0.4")



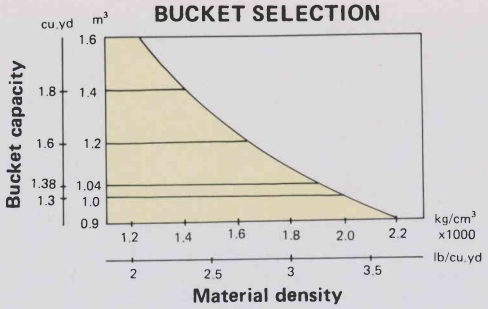
Bucket type		Loose material	Excavating	
		Bolt-on cutting edge	Bolt-on teeth	Bolt-on cutting edge
Bucket capacity	SAE rated	1.2 m³ (1.6 cu.yd)	1.0 m³ (1.3 cu.yd)	1.04 m³ (1.38 cu.yd)
	Struck	1.0m³ (1.3 cu.yd)	0.8 m³ (1.0 cu.yd)	0.86 m³ (1.12 cu.yd)
Bucket width		2340 mm (7'8")	2340 mm (7'8")	2340 mm (7'8")
Bucket weight		555 kg (1220 lb)	485 kg (1070 lb)	525 kg (1160 lb)
Static tipping load	Straight	5050 kg (11140 lb)	5140 kg (11330 lb)	5090 kg (11220 lb)
	Full turn	4370 kg (9640 lb)	4470 kg (9860 lb)	4430 kg (9770 lb)
Dumping clearance, max. height and 45° dump angle		2620 mm (8'7")	2610 mm (8'7")	2670 mm (8'9")
Reach at 2130 mm (7') cut edge clearance and 45° dump angle		1330 mm (4'4")	1325 mm (4'4")	1405 mm (4'7")
Reach at max. height and 45° dump angle		1010 mm (3'4")	1010 mm (3'4")	1060 mm (3'6")
Reach with arm horizontal and bucket level		1950 mm (6'5")	1955 mm (6'5")	1879 mm (6'2")
Operating height (fully raised)		4350 mm (14'3")	4265 mm (14')	4265 mm (14')
Overall length	Bucket on ground	5815 mm (19'1")	5805 mm (19'1")	5745 mm (18'10")
	Bucket at carry	5790 mm (19')	5805 mm (19'1")	5745 mm (18'10")
Turning radius (bucket at carry, outside corner of bucket)		5050 mm (16'7")	5060 mm (16'7")	5035 mm (16'6")
Digging depth	0°	80 mm (3.1")	90 mm (3.5")	80 mm (3.1")
	10°	235 mm (9.3")	245 mm (9.6")	220 mm (8.7")
Breakout force (bucket cylinder)		6270 kg (13830 lb)	7500 kg (16540 lb)	6855 kg (15120 lb)
Operating weight		6955 kg (15340 lb)	6885 kg (15180 lb)	6930 kg (15280 lb)

- All dimensions, weights and performance values based on SAE J-732C and J742b standards.
- Concerning increases or decreases according to tire size, refer to the table in DIMENSIONS.
- Static tipping load and operating weight shown inlcude 16.9-24-10PR (L-2) tires, lubricants, coolant, full fuel tank, ROPS cab and operator. Machine stability and operating weight are affected by counterweight, tire size and other attachments. Add the following weight changes to operating weight and static tipping load.

Weight changes

Tires and options	Change in operating weight	Change in tipping load	
		Straight	Full turn
15.5-25-8PR (L-2) tubeless tires	+50 kg (110 lb)	+35 kg (77 lb)	+30 kg (66 lb)
15.5-25-12PR (L-2) tubeless tires	+70 kg (154 lb)	+50 kg (110 lb)	+40 kg (88 lb)
Remove ROPS cab	–430 kg (948 lb)	–340 kg (750 lb)	–295 kg (650 lb)
Install ROPS canopy	–185 kg (408 lb)	–130 kg (287 lb)	–115 kg (254 lb)
Additional counterweight	+280 kg (617 lb)	+540 kg (1191 lb)	+460 kg (1014 lb)

BUCKET SELECTION



1.2 m³ (1.6 cu.yd)	**Loose material bucket with bolt-on cutting edge** (Loading and excavating soil, sand and a variety of other commonly handled materials.)
1.04 m³ (1.38 cu.yd)	**Excavating bucket with bolt-on cutting edge.**
1.0 m³ (1.3 cu.yd)	**Excavating bucket with bolt-on teeth** (Loading and excavating crushed rock and blasted rock.)
1.4 m³ (1.8 cu.yd)	**Light material bucket with bolt-on cutting edge** (A lighter-weight, large capacity bucket.)

STANDARD EQUIPMENT

KOMATSU 6D95L diesel engine, battery, electric starting system, alternator, 3 forward & 3 reverse powershift transmission, torque proportioning type differential, hydraulic power steering, wet type disc brakes, automatic bucket positioner, engine key stop, fan guard, adjustable seat, hitch, rops brackets, lighting system (head lights, rear working lights, stop & tail lights, turn indicators), ladders (right & left), 16.9-24-10PR (L2) tires.

OPTIONAL EQUIPMENT

Work equipment:
Cutting edge (Bolt-on type)
Bucket teeth (Bolt-on type)
Bucket teeth (Tip type)
Additional counterweight
Hydraulic adapter kit
3-spool valve
Back hoe

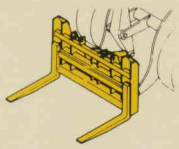
Operator's compartment:
Canvas canopy
ROPS canopy
ROPS cab
Steel cab
Air conditioner
Car radio
Floor mat
Heater and defroster
Rear wiper
Rear window washer
Seat belt
Sun visor
Suspension seat

Electric fan
Rear view mirror

Tires:
16.9-24-10PR (L-2)
15.5-25-8PR (L-2)
15.5-25-8PR (L-3)
13.00-24-8PR (L-2)
13.00-24-8PR (L-3)
16.9-24-10PR (L-3)

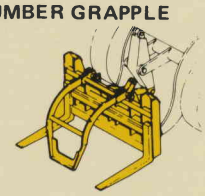
Others:
Backup alarm
Backup lamp
Yellow warning lamp
Speedometer
Emergency steering
Vandalism protection kit
Instrument panel cover
Front fender
Rear frame side cover
Mud guards
Boom kickout
Tool kit
Ordinary spare parts

LUMBER FORK



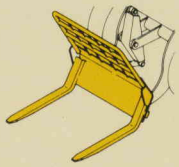
Ideal for loading square and other processed timber.

LUMBER GRAPPLE



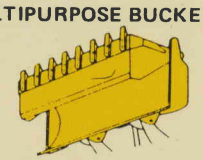
Ideal for loading/hauling logs and square lumber.

DUMPING FORK



Suitable for handling small-diameter/short-length logs.

MULTIPURPOSE BUCKET



A bucket/blade combination usable as a bucket, blade, scraper or clamshell for all-around loading, topsoil stripping and debris cleaning.

This specification sheet 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.

KOMATSU

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