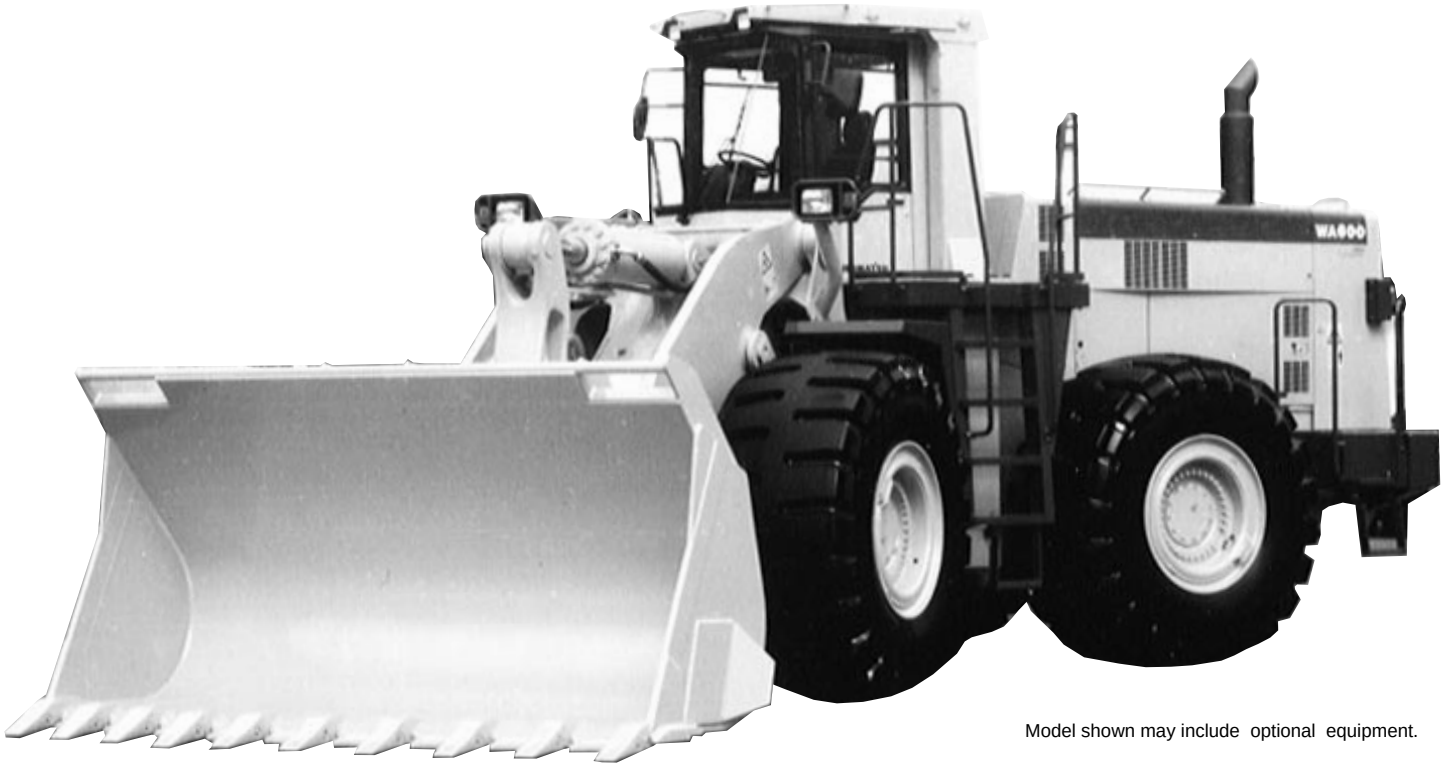
WHEEL LOADER

WA600-3

avance LOADER

FLYWHEEL HORSEPOWER: **328kW** 440 HP @2,000RPM
BUCKET CAPACITIES: **6.1~11.0m³** 8.0~14.4 cu.yd
OPERATING WEIGHT: **43,950 kg** 96,890 lb

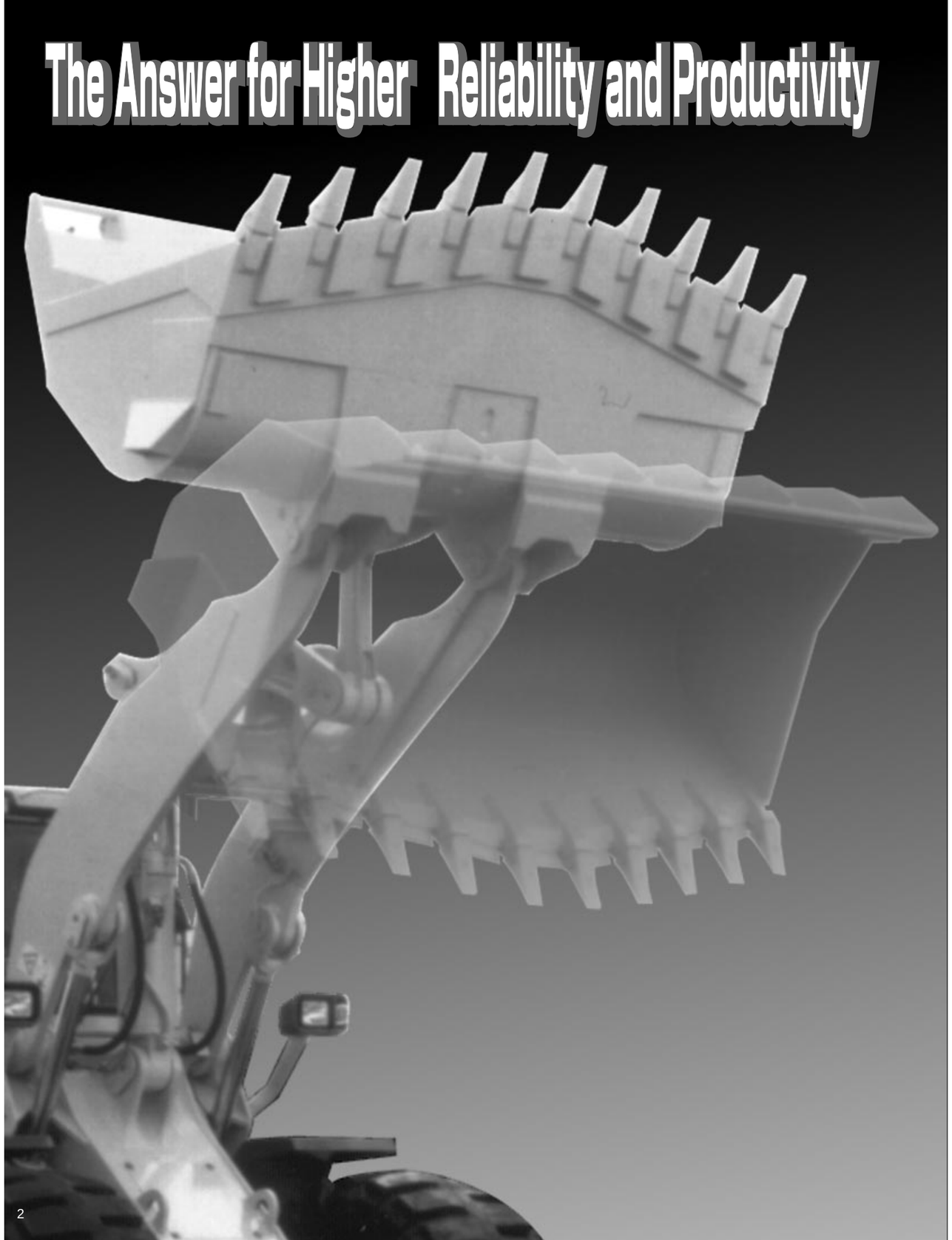


Model shown may include optional equipment.

- *The powerful Komatsu SA6D170E engine provides fuel-efficient operation*
- *Exclusive dual speed hydraulic system ensures shorter cycle time*
- *Roomy, quiet cab with high-capacity air conditioner substantially reduces operator fatigue*
- *Kick-down switch on the boom control lever improves pile penetration and scooping operations*
- *Electrically controlled transmission enables light fingertip control of all direction/gear shift changes*
- *Tiltable steering wheel and adjustable seat provide operator comfort and efficiency*
- *Komatsu viscous damping cab mounts reduce vibration and noise*
- *Adjustment-free service brake accounts for higher performance and reduced downtime*
- *High-quality components are used for superior reliability and availability*

KOMATSU

The Answer for Higher Reliability and Productivity



Proven Power

The world/field-proven Komatsu 6-cylinder, direct-injection turbo-charged SA6D170E low emissionized engine has all the capability needed for today's tough operations.

Flywheel horsepower

328kW 440HP @2000RPM

Reliable Power Train

The engine, torque converter and transmission as well as the hydraulic equipment and electrical parts undergo strict quality control checks for enhanced reliability and durability.

Durable Bucket

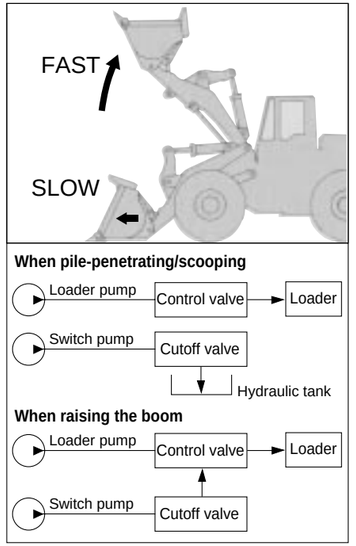
Komatsu buckets are manufactured using high-tensile strength steel with replaceable bolt-on wear plates for extended bucket life. Additional strength has been added to the bucket bottom corners, side edges and spill guard ends for increased durability.

Bucket capacities

6.1~11.0m³ (8.0~14.4cu.yd)

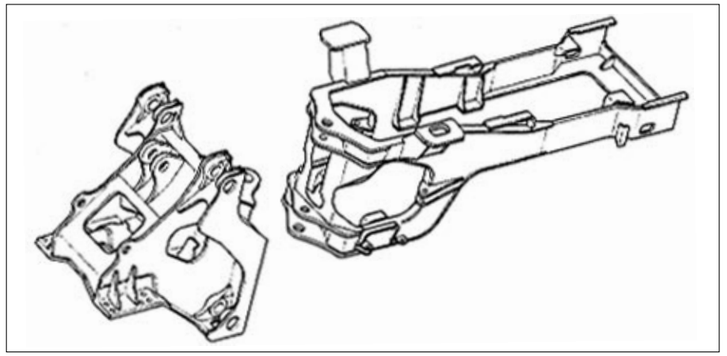
Shortened Cycle Time

The dual speed hydraulic system drastically shortens cycle time. When pile-penetrating and scooping, most of the engine power is applied to the wheels to exert maximum rim pull by turning off the switch pump. Power is also fully applied to the loader through the combination of both switch and loader pumps to give maximum hydraulic power when raising the boom.



High-Rigidity Frames

Front and rear frames are designed for work in the toughest applications to provide high rigidity for the power train and loader equipment. The high-rigidity frames, together with the reinforced loader linkage, resist loading stress and shock.



Large Dumping Clearance

The WA600-3 was designed with ample dumping clearance for dump truck matching.

High Breakout Force

Komatsu wheel loaders have high-tensile steel Z-bar loader linkages for maximum rigidity and maximum breakout force. Sealed loader linkage pins extend greasing intervals.

Excellent Stability

The WA600-3 has the widest tread in its class 2,650mm (8'8") and a long 4,100mm (13'5'') wheelbase, for maximum machine stability.

Comfortable Ride With ECSS (Optional)

Komatsu's ECSS (Electrically Controlled Suspension System) provides excellent traveling and steering stability while keeping operator fatigue to a minimum by reducing low frequency vibration such as pitching and bouncing on rough ground by 40 to 50%. As the speed increases, two high/low-pressure accumulators are automatically turned on. When digging, these functions are turned off automatically, so a busy switching operation is not required, and loading and carrying operations are stable and smooth.

Slip-Preventive LSD (Optional)

The field-proven LSD (Limited-Slip Differential) prevents tire slippage on greasy footing such as soft or sandy ground, so stable travel is always ensured and tire wear is reduced to a minimum for maximum tire life.

Auto-Greasing System (Optional)

The periodic lubrication points, except for drive shaft, are greased automatically according to a preset amount and interval. Quick change grease cartridges make replacement easy and clean.

Focus on Operator Comfort and Easy Maintenance

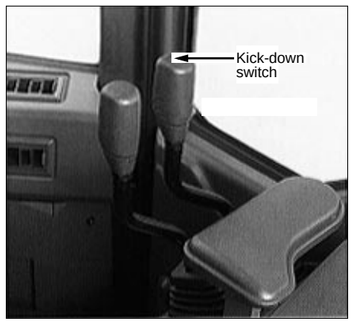
Easy to Use Joystick Steering (Optional)

A joystick steering system has been incorporated to allow steering and forward/reverse selection to be effected by wrist and finger control without the operator having to move his arm from the rest. When transmission gear shifting is set to manual, the boom lever hold and kick-down switches change to up-shift and down-shift switches respectively.

Automatic transmission is used with joystick steering.

Faster Pile-Penetration & Scooping

A kick-down switch down-shifts the transmission from forward 2nd to 1st gear, for increased rim pull and hence improved bucket filling. When the direction control lever is set to reverse, it automatically up-shifts from 1st gear to 2nd, to reduce cycle time.



Ergonomically-Designed Controls

All controls are ergonomically designed to minimize operator fatigue. The steering wheel and instrument panel are similar to those of a car. The bucket and boom controls have PPC valves and short-stroke levers, to reduce operator effort. With the electrically-controlled transmission, direction and gearshift control levers can be finger-operated while holding the steering wheel with the same hand, allowing instant, positive direction and gearshift changes.

Smooth Electronic Automatic Transmission (Optional)

With the electronic automatic transmission, you can always enjoy the optimum speed for the machine travelling conditions. Clutch engagement during gear shifting is so smooth that time lag and shock are small and ride comfort is ensured. When ascending or descending a slope or while operating, the automatic transmission can easily be set to the standard manual transmission by using the manual switch.

Tiltable Steering Column & One-Glance Monitors

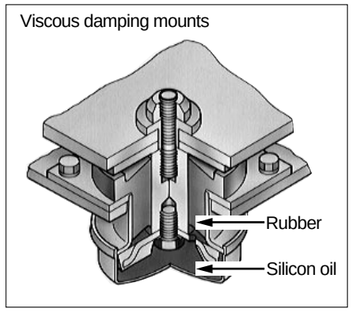
The steering column can be easily tilt-adjusted to the most comfortable position with one lever. Together with the two-spoke design, this guarantees better vision of the monitors.

Roomy, Quiet Cab With Power Windows

The cab is large, with a comfortably spacious interior and power windows. Also, a wide viewing angle is guaranteed because the cab is pillar-less. By adopting a high-capacity air conditioner, Komatsu ensures operator comfort, no matter the exterior conditions. Other features designed with operators in mind include a lunchbox storage space.

Low Vibration & Noise

The cab rests on Komatsu viscous damping mounts (rubber and silicon oil) to reduce vibration and noise. All hydraulic equipment is mounted on high-resistance rubber to further reduce vibration and noise.



Comfortable Operator's Seat

The operator's seat has a reclining/air suspension design with headrest to support the operator comfortably during long operation. Also, it is easy to adjust seat height with air suspension.

Simple Checks, Easy Maintenance

The main monitor and the maintenance monitor (EDIMOS II) are neatly arranged on the instrument panel for a quick, clear reading of machine functions at all times. The main monitor also has a diagnostic function.

High-Quality Paint

Most exterior plates are treated with a cationic electro-deposition undercoat and melamine baked final paint for rust resistance and longer service life.

Maintenance-Free Braking System

Service brakes employ two hydraulically-actuated independent circuits for increased safety and are adjustment-free, fully-sealed, wet disc units, preventing intrusion of dirt and dust. Since the brake system does not use air, it provides many features such as absence of condensation, dependable braking even in cold conditions, no need for drainage, and rust free piping. What's more, charging time after engine starting is drastically shortened and pedal depressing effort is reduced.

SPECIFICATIONS

ENGINE

Model	Komatsu SA6D170E
Type	Water-cooled, 4-cycle
Aspiration	Turbocharged
No. of cylinders	6
Bore × stroke	**170mm × 170mm** 6.7" × 6.7"
Piston displacement	**23.15ltr.** 1,413 cu.in
Performance:	
Flywheel horsepower	**328 kw** 440 HP (SAE J1349) **327 kw** 445 PS (DIN 6270)
Rated RPM	2,000 RPM
Fuel system	Direct injection
Governor	Mechanical, all-speed control
Lubrication system:	
Lubrication method	Gear pump, pressurized lubrication
Filter	Full-flow type
Air cleaner	Dry type with automatic dust ejector and precleaner plus dust indicator

TRANSMISSION

Torque converter:	
Type	3-element, single-stage, single-phase
Transmission:	
Type	Full-powershift, planetary gear type

Travel speed: **km/h** MPH

Measured with 35/65-33-24PR tires

	1st	2nd	3rd	4th
Forward	**7.4** 4.6	**12.7** 7.9	**21.0** 13.0	**33.5** 20.8
Reverse	**8.2** 5.1	**13.9** 8.6	**23.0** 14.3	**35.2** 21.9

Measured with 29.5-29-28PR tires

	1st	2nd	3rd	4th
Forward	**7.1** 4.4	**12.2** 7.6	**20.2** 12.5	**32.5** 20.1
Reverse	**7.9** 4.9	**13.4** 8.3	**22.0** 13.7	**34.2** 21.3

AXLES & FINAL DRIVES

Drive system	Four-wheel drive
Front	Fixed, full-floating
Rear	Center-pin-support, full-floating 26° total oscillation
Reduction gear	Spiral bevel gear
Differential gear	Straight bevel gear
Final reduction gear	Planetary gear, single reduction, oil bath

BRAKES

Service brakes	4-wheel, systematic brake for front/rear wheel, hydraulically actuated, wet disc
Parking brake	Dry-disc type, hydraulic released, spring applied on front axle input shaft
Emergency brake	Uses parking brake

STEERING SYSTEM

Type	Articulated type, full-hydraulic power steering
Steering angle	40° each direction
Minimum turning radius at the center of outside tire	**6,980 mm** 22'11"

HYDRAULIC SYSTEM

Steering system:	
Hydraulic pump	Gear pump
Capacity	**234 ltr./min.** 61.8 U.S. gal/min. at rated RPM
Relief valve setting	**210kg/cm²** 3,000PSI
Hydraulic cylinders:	
Type	Double-acting, piston type
No. of cylinders	2
Bore × stroke	**130 mm × 529 mm** 5.1" × 20.8"
Loader control:	
Hydraulic pump	Gear pump
Capacity	**496 ltr./min.** 131 U.S. gal/min. at rated RPM
Relief valve setting	**210 kg/cm²** 3,000 PSI
Switch pump	Gear pump
Capacity	**187 ltr./min.** 49.4 U.S. gal/min. at rated RPM
Hydraulic cylinders:	
Type	Double-acting, piston type
No. of cylinders-bore × stroke:	
Boom cylinder	**2-225 mm × 1,130 mm** 8.9" × 44.5"
Bucket cylinder	**1-280 mm × 710 mm** 11.0" × 28.0"
Control valve	Spool type
Control positions:	
Boom	Raise, hold lower and float
Bucket	Tilt-back, hold and dump
Hydraulic cycle time (rated load in bucket)	
Raise.....8.2sec. Dump.....2.1sec.	
Lower (Empty).....4.3 sec.	

ROPS & CAB

Structure complies with ISO 3471 and SAE J1040c ROPS (Roll-Over Protective Structure) standards, as well as ISO 3,449 FOPS (Falling Object Protective Structure) standards. The cab is mounted on rubber pads and well insulated.

SERVICE REFILL CAPACITIES

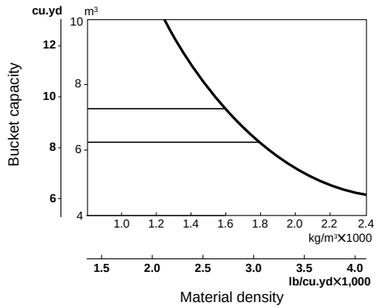
Cooling system	**137 ltr.** 36 U.S.gal
Fuel tank	**670 ltr.** 177 U.S.gal
Engine	**43 ltr.** 11.4 U.S.gal
Hydraulic system	**345 ltr.** 91U.S.gal
Axle (each front and rear)	**124 ltr.** 32.8 U.S.gal
Torque converter and transmission	**110 ltr.** 29.1 U.S.gal

TIRES

Select ideal tires depending on job requirements.

35/65-33-24 PR (L-4) 35/65-33-30 PR (L-5)
35/65-33-24 PR (L-5) 29.5-29-28 PR (L-4)
35/65-33-30 PR (L-4)

BUCKET SELECTION



		Capacity Heaped **m³** cu.yd	Struck	Bucket width **mm** ft.in	Bucket weight **kg** lb	Breakout force **kg** lb
I	Excavating bucket (straight edge) with tipteeth	**6.1** 8.0	**5.1** 6.7	**3,685** 12'1"	**3,890** 8,580	**37,600** 82,890
II	Excavating bucket (spade nose) with tipteeth	**6.1** 8.0	**5.1** 6.7	**3,685** 12'1"	**4,180** 9,215	**43,750** 96,450
III	Coal bucket (straight edge)	**11.0** 14.4	**9.5** 12.4	**4,200** 13'9"	**4,420** 9,740	**31,950** 70,440

	Operating weight **kg** lb			Static tipping load **kg** lb								
				Straight			35° turn			40° full turn		
Tires/Buckets	I	II	III	I	II	III	I	II	III	I	II	III
35/36-33-24PR(L-4)	**43,950** 96,890	**44,240** 97,530	**44,480** 98,060	**31,000** 68,340	**30,710** 67,700	**30,470** 67,170	**28,180** 62,130	**27,890** 61,490	**27,650** 60,960	**27,380** 60,360	**27,090** 59,720	**26,850** 59,190
35/36-33-24PR(L-5)	**45,090** 99,410	**45,380** 100,040	**45,620** 100,570	**31,790** 70,080	**31,500** 69,440	**31,260** 68,920	**28,890** 63,690	**28,600** 63,050	**28,360** 62,520	**28,075** 61,890	**27,785** 61,250	**27,545** 60,730
29.5-29-28PR(L-4)	**43,280** 95,420	**43,570** 96,050	**43,810** 96,583	**30,535** 67,320	**30,245** 66,680	**30,005** 66,150	**27,760** 61,199	**27,470** 60,560	**27,230** 60,030	**26,970** 59,460	**26,680** 58,820	**26,440** 58,290

●All dimensions, weights and perfomance values based on SAE J732c and J742b standards.
●Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, steel cab, ROPS canopy, front half fenders, tip type teeth and operator. Machine stability and operating weight are affected by counterweight, or ballast, tire size and other attachments. Use either either counterweight or ballast, not both. Apply the following weight changes to operating weight and static tipping load.

WEIGHT CHANGES

	Change in operating weight	Change in tipping load Straight	Change in tipping load Full turn
Remove ROPS canopy	**– 800 kg** – 1,760 lb	**– 700 kg** – 1,540 lb	**– 615 kg** – 1,360 lb
Remove steel cab	**– 430 kg** – 950 lb	**– 310 kg** – 680 lb	**– 275 kg** – 610 lb
Remove teeth	**– 372 kg** – 820 lb	**– 475 kg** – 1,050 lb	**– 475 kg** – 1,050 lb
Install additional counterweight	**+ 1,000 kg** + 2,200 lb	**+ 2,300 kg** + 5,070 lb	**+ 2,030 kg** + 4,480 lb

STANDARD EQUIPMENT

440HP/2,000RPM KOMATSU SA6D170E diesel engine, N200 batery, 50A alternator, wet type disc brake, boom kickout, electronic display/monitoring system, electrically controlled transmission, tiltable steering wheel, engine key stop, ROPS bracket, speedometer,
adjustable suspension seat, ladders (right & left), front compartment, head lamps, rear working lights, turn indicators (front & rear), horn, fan guard, counterweight, 4×35/65-33-24PR L4,
rock deep tread type tubeless tire

OPTIONAL EQUIPMENT

Cutting edge (bolt-on type)
Bucket teeth (bolt-on type)
Bucket teeth (tip type)
Bucket corner teeth
Additional counterweight
Hydraulic adapter kit
3-spool valve
Joystick steering
ROPS canopy
Steel cab with front wiper and Windshield washer
Air conditioner
Emergency steering
L.S.D. Limitted slip differential
E.C.S.S.(Electrically Controlled Suspension System)
Front fender
Fire extinguisher
Power train guard
Tool kit
Ordinary spare parts
Floor mat
Heater and defroster
Automatic transmission
Auto-greasing system
Seat belt
Sun visor
Rearview mirror
Air suspension seat

Specifications with High-Lift Boom

		Spade Nose with teeth	Straight Edge with teeth
Bucket capacity	m³	5.6	5.6
Rated Load	kg	10,080	10,080
Bucket width	mm	3,685	3,685
Dumping Clearance (teeth)	mm	3,995	4,180
Dumping Reach (teeth)	mm	1,885	1,690
Tire Size	–	35/65-33	35/65-33

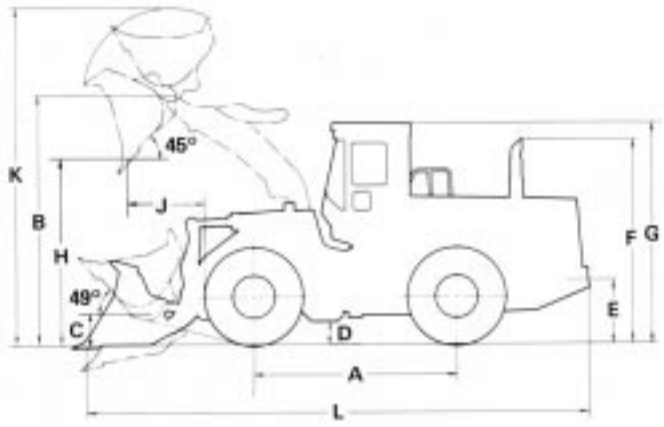
Specifications with Short Boom Load & Carry

		Spade Nose with teeth
Bucket capacity	m³	7.5
Rated Load	kg	13,500
Bucket width	mm	3,685
Dumping Clearance (teeth)	mm	2,920
Dumping Reach (teeth)	mm	2,105
Tire Size	–	35/65-33-42PR

Stone-handling version is applicable with short boom and special front attachment.

DIMENSIONS

(Unit:**mm** ft.in)



		35/65-33 tires	29.5-29 tires
	Tread	**2,650** 8'8"	**2,650** 8'8"
	Width over tires	**3,570** 11'9"	**3,480** 11'5"
A	Wheelbase	**4,100** 13'5"	**4,100** 13'5"
B	Hinge pin height,max. height	**5,155** 16'11"	**5,110** 16'9"
C	Hinge pin height, carry position	**670** 2'2"	**625** 2'11"
D	Ground clearance	**495** 1'7"	**450** 1'6"
E	Hitch height	**1,295** 4'3"	**1,250** 4'1"
F	Overall height, top of the stack	**4,125** 13'6"	**4,080** 13'5"
G	Overall height, ROPS canopy	**4,215** 13'10"	**4,170** 13'8"

Measured with 35/65-33 tires

Buckets		I	II	III (BOC)
H. Dumping clearance, max. height and 45° dump angle		**3,805** 12'6"	**3,620** 11'10"	**3,455** 11'4"
J. Reach at max. height and 45° dump angle		**1,610** 5'3"	**1,800** 5'11"	**1,975** 6'6"
Reach at 2130 mm (7') cut edge clearance and 45° dump angle		**2,470** 8'1"	**2,600** 8'6"	**2,735** 8'12"
Reach with arm horizontal and bucket level		**3,235** 10'7"	**3,500** 11'6"	**3,745** 12'3"
K. Operating height (fully raised)		**7,165** 23'6"	**7,165** 23'6"	**7,440** 24'5"
L. Overall length		**10,445** 34'3"	**10,710** 35'2"	**10,945** 35'11"
Loader clearance circle (bucket at carry, outside corner of bucket)		**16,530** 54'3"	**16,520** 54'2"	**17,180** 56'4"
Digging depth (at teeth or BOC)	0°	**50** 1.9"	**50** 1.9"	**40** 1.6"
	10°	**320** 1'	**360** 1'2"	**395** 1'3"

Measured with 29. 5-29 tires

Buckets		I	II	III (BOC)
H. Dumping clearance, max. height and 45° dump angle		**3,760** 12'4"	**3,575** 11'9"	**3,410** 11'2"
J. Reach at max. height and 45° dump angle		**1,640** 5'5"	**1,830** 6'	**2,005** 6'7"
Reach at 2130 mm (7') cut edge clearance and 45° dump angle		**2,500** 8'2"	**2,630** 8'7"	**2,765** 9'1"
Reach with arm horizontal and bucket level		**3,265** 10'9"	**3,530** 11'7"	**3,775** 12'5"
K. Operating height (fully raised)		**7,120** 23'4"	**7,120** 23'4"	**7,395** 24'3"
L. Overall length		**10,485** 34'5"	**10,750** 35'3"	**10,985** 36'
Loader clearance circle (bucket at carry, outside corner of bucket)		**16,530** 54'3"	**16,520** 54'2"	**17,180** 56'4"
Digging depth (at teeth or BOC)	0°	**95** 3.6"	**95** 3.6"	**85** 3.3"
	10°	**365** 1'2"	**405** 1'4"	**440** 1'5"

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.

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