HORSEPOWER

Gross: 396 kW 530 HP @ 1800 rpm Net: 393 kW 527 HP @ 1800 rpm

BUCKET CAPACITY 6.4-7.0 m³ 8.4-9.2 yd³

KOMATSU®

WA600-6

ecot3





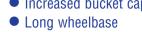
WHEEL LOADER

Photo may include optional equipment.

WALK-AROUND

Excellent Operator Environment

- Automatic transmission with ECMV
- Low-noise designed cab
- Electronic controlled transmission lever





Increased Reliability

- Reliable Komatsu designed and manufactured components
- Sturdy main frame
- Maintenance-free, fully hydraulic, wet disc service and parking brakes
- Hydraulic hoses use flat face O-ring seals
- Cathion electrodeposition process is used to apply primer paint
- Powder coating process is used to apply main structure paint
- Sealed DT connectors for electrical connections

HORSEPOWER

Gross: 396 kW 530 HP @ 1800 rpm Net: 393 kW 527 HP @ 1800 rpm

> **BUCKET CAPACITY 6.4–7.0 m**³ 8.4-9.2 yd³



Photo may include optional equipment.

Harmony with Environment

- EPA Tier 3 and EU Stage 3A emissions certified
- Low exterior noise
- Low fuel consumption

Easy Maintenance

- "EMMS" (Equipment Management Monitoring System)
- "VHMS" (Vehicle Health Monitoring System) (Optional)

See page 7.

- Ease of radiator cleaning
- Modular radiator core system

3 2

HIGH PRODUCTIVITY AND LOW FUEL CONSUMPTION



High Performance SAA6D170E-5 Engine

Electronic Heavy Duty Common Rail fuel injection system provides optimum combustion of fuel.

This system also provides fast throttle response to match the machine's powerful tractive effort and fast hydraulic response.

Net: 393 kW 527 HP

Low Emission Engine

This engine is EPA Tier 3 and EU Stage 3A emissions certified, without sacrificing power or machine productivity.

Low Fuel Consumption

The fuel consumption is reduced greatly because of the low-noise, high-torque engine and the large-capacity torque converter with maximum efficiency in the low-speed range.

Dual-mode Engine Power Select System

This wheel loader offers two selectable operating modes— E and P. The operator can adjust the machine's performance with the selection switch.

- E Mode: This mode provides maximum fuel efficiency for general loading.
- P Mode: This mode provides maximum power output for hard digging operation or hill climb.



Dual mode engine power selection switch



The eco indicator will help an operator to promote energy saving.

Automatic Transmission with Mode Select System

This operator controlled system allows the operator to select manual shifting or two levels of automatic shifting (low, and high).

Auto L mode is for fuel saving operation with the gear shift timing set at lower speeds than Auto H mode. Therefore Auto L mode keeps the engine in a relatively low rpm range for



fuel conservation while yielding adequate tractive force by depressing the accelerator pedal.

Shift mode selection switch

Lock up clutch switch

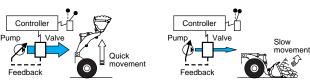
Lock-up Torque Converter

The Komatsu designed lock-up torque converter provides increased production efficiency, reduced cycle times and optimum fuel savings in load & carry or hill-climb operations. This optional feature allows the operator to activate the system on/off with a switch located on the right-side control panel.

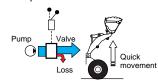
Variable Displacement Piston Pump & CLSS

New design variable displacement piston pump combined with the Closed-center Load Sensing System delivers hydraulic flow just as the job requires preventing wasted hydraulic pressure. Minimized waste loss contributes to better fuel economy.

 New Variable Displacement Piston Pump: The pump delivers only necessary amounts minimizing waste loss.



 Fixed Displacement Piston Pump: The pump delivers the maximum amount at any time and the unused flow is disposed.









Increased Bucket Capacity Matches with One Class Higher Dump Truck



The WA600 can load 60t (70 Short ton) trucks with standard boom. The WA600-3 required an optional high lift boom and 6.4m³ bucket. The WA600-6 maintains good visibility for loading because of increased operator cab height.

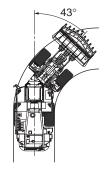
Dumping Clearance: 3995 mm 13'1" Dumping Reach: 1800 mm 5'11"

(6.4 m³ 8.4 yd³ spade nose bucket with tooth)

Long Wheelbase/Articulation Angle of 43°

The widest tread in class and the long wheelbase provide improved machine stability in both longitudinal and lateral directions. Since the articulation angle is 43°, the operator can work efficiently even in the tightest job sites.

Tread	2650 mm	8'8"
Wheelbase	4500 mm	14'9"
Minimum turning radius (center of outside tire)	7075 mm	23'3"



4

INCREASED RELIABILITY

Komatsu Components

Komatsu manufactures the engine, torque converter, transmission, hydraulic units, electric parts, on this wheel loader. Komatsu loaders are manufactured with an integrated production system under a strict quality control system.



Wet Multi-disc Brakes and Fully Hydraulic Braking

System mean lower maintenance costs and higher reliability. Wet disc brakes are fully sealed. Contaminants are kept out, reducing wear and maintenance. Brakes require no adjustments for wear, meaning even lower maintenance. The new parking brake is also an adjustment-free, wet multi-disc for high reliability and long life.

Added reliability is designed into the braking system by the use of two independent hydraulic circuits. Provides hydraulic backup should one of the circuits fail.

Fully hydraulic brakes mean no air system to bleed, or the condensation of water in the system that can lead to contamination, corrosion, and freezing.





Sweeper Wing (Large Size Tire Guard)

To prevent tire damage, the WA600 provides a Sweeper Wing (Large Size Tire Guard) on both sides of bucket.



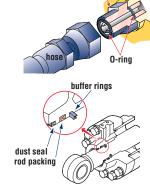


High-rigidity Frames and Loader Linkage

The front and rear frames and the loader linkage have more torsional rigidity to secure resistance against increased stress due to the use of a larger bucket. Frame and loader linkage are designed to accommodate actual working loads, and simulated computer testing proves its strength.

Flat Face-to-face O-ring Seals

Flat face-to-face O-ring seals are used to securely seal hydraulic hose connections and to prevent oil leakage. In addition, buffer rings are installed to the head side of the all-hydraulic cylinders to lower the load on the rod seals and maximize the reliability.



Cathion Electrodeposition Primer Paint/ Powder Coating Final Paint

Cathion electrodeposition paint is applied as a primer paint and powder coating is applied as topcoat to the exterior sheet metal parts. This process results in a beautiful rust-free machine, even in the most severe environments. Some external parts are made of plastic providing long life and high impact resistance.

Sealed DT Connectors

resistance and dust resistance.

Main harnesses and controller connectors are equipped with sealed DT connectors providing high reliability, water



EASY MAINTENANCE



EMMS (Equipment Management Monitoring System)

Monitor is mounted in front of the operator for easy viewing, allowing

the operator to easily check gauges and warning lights. **Maintenance Control**

and Troubleshooting Functions

- Action code display function: If abnormality occurs, the monitor displays action details on the character display at the bottom center of the monitor.
- Monitor function: Controller monitors engine oil level, pressure, coolant temperature, air cleaner clogging, etc. If controller finds abnormalities, the error is displayed on LCD.
- Replacement time notice function: Monitor informs replacement time of oil and filters on LCD when replacement intervals are reached.
- Trouble data memory function: Monitor stores abnormalities for effective troubleshooting.

Modular Radiator Core System

The modular radiator core is easy to replace without removing the entire radiator assembly.



If the machine is operating in adverse conditions, the operator can reverse the hydraulic cooling fan from inside the

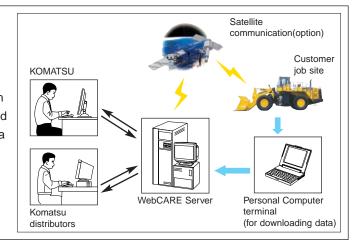
> cab by turning a switch on the control panel.

> > 7



VHMS (Vehicle Health Monitoring System) (Optional)

VHMS is a management system for large equipment for use in mining, which enables detailed monitoring of fleet via satellite communications. Komatsu and distributors can analyze "vehicle health" and other operating conditions and provide the information to job site using the internet from a remote location on a near-real time basis.



OPERATOR ENVIRONMENT

Easy Operation

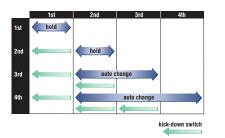
Automatic Transmission with ECMV

Automatic transmission with ECMV automatically selects the proper gear speed based on travel speed, engine speed, and other travel conditions. The ECMV (Electronically Controlled Modulation Valve) system engages the clutch smoothly to prevent lags and shocks when shifting. This system provides efficient machine operation and a comfortable ride.

Kick-down switch: Consider this valuable feature for added productivity. With the touch of

a finger, the

kick-down switch



automatically downshifts from second to first when beginning the digging cycle. It automatically upshifts from first to second when the direction control lever is placed in reverse. This results in increased rim pull for better bucket penetration and reduced cycle times for higher productivity.

• Hold switch: Auto shift is selected and if the operator turns on this switch when the lever is at the 3rd or 4th gear speed position, the transmission is fixed to that gear speed.

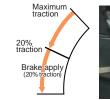
Electronic Controlled Transmission Lever

Easy shifting and directional changes with Komatsu two-lever electronic shifting. Change direction or shift gears with a touch of the fingers without removing the shifting hand from the steering wheel. Solid state electronics and conveniently located direction and gear shift controls make this possible. Automatic shifts in ranges two through four keep production high and manual shifting at a minimum.

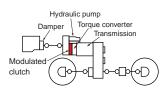
Modulated Clutch System

The Modulated Clutch System controls the tractive effort with left brake pedal from 100% to 20% of the converter output

- Useful for smooth speed reduction when approaching dump trucks for loading.
- Easy control of tire slippage.
- Reduction of shocks in shifting from forward to reverse.







Engine RPM Set System with Auto Decel (Optional)

Engine Low idle RPM can be easily preset using a push button switch. The system provides auto decel for better fuel consumption.



1:ECSS 2:Remote Boom positioner switch 3:Remote bucket digging angle control switch 4:RPM set (On/Off) (option) 5:RPM idle set (option) 6:Semi-auto digging system (option) 7:Boom control 8:Bucket control

Steering Wheel with Telescopic/Tilt Column

The operator can tilt and telescope the steering column to provide a comfortable working position.

EPC (Electronic Pilot Control) Levers

The finger control EPC work equipment levers have light operating effort and short stroke facilitating easy operation. The operator's comfort is further increased by the full large size adjustable arm rests. Combined with CLSS, this system allows the following new functions for easy and efficient operation:

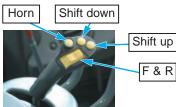
- Remote Boom Positioner with shockless stop function: The highest and lowest position of the bucket can be set from cab to match any truck body. Once the positioner is set, the bucket is smoothly stopped at desired position with no shock.
- Remote bucket digging angle control: The digging bucket angle can be easily set from cab to match of ground condition.
- Semi-auto digging system (optional): Bucket tilt operation can be automatically done when digging.

AJSS (Advanced Joystick Steering System) (Optional)

AJSS is a feedback steering system which has been incorporated to allow steering and forward and reverse selection to be controlled by wrist and finger control.

With the feedback function added, the machine steering angle is defined exactly the same angle as the lever tilt angle.







Comfortable Operation

Low-noise Design

Noise at operator's ear noise level: 76 dB(A) Dynamic noise level (outside): 113 dB(A)

The large cab is mounted with Komatsu's unique ROPS/FOPS viscous mounts. The low-noise engine, hydraulically driven fan, and hydraulic pumps are mounted with rubber cushions, and the cab sealing is improved to provide a quiet, low-vibration, dustproof pressurized, and comfortable operating environment. Also, exterior noise is lowest in this class.



Pillar-less Large Cab

A wide pillar-less flat glass provides excellent front visibility. The wiper arm covers a large area to provide great visibility even on rainy days.

The cab area is the

largest in its class providing maximum space for the operator.

Rear Access Stairs

For the purpose of safely boarding and exiting machine, rear access stairs with safety handrail is provided.

The step width, clearance, and the step angle have been designed for safety climbing both up and down. A step light provides light for night boarding.





SPECIFICATIONS

ENGIN

Model
Piston displacement
Governor
Horsepower
SAE J1995
ISO 9249/SAE J1349* Net 393 kW 527 HP
Rated rpm
Fan drive method for radiator cooling
Fuel system
Lubrication system:
Method
Air cleaner

*Net horsepower at the maximum speed of radiator cooling fan is 374 kW 502 HP.

EPA Tier 3 and EU Stage 3A emissions certified.

TRANSMISSION

Torque converter:	
Type	ment, single-stage, double-phase
Transmission:	
Type	Full-powershift, planetary type
Travel speed: km/h mph	
Measured with 35/65-33 tires	(): Look-up clutch ON

	1st	2nd	3rd	4th		
Forward	6.7 4.2	11.7 7.3	20.3 12.6	33.8 21.0		
	_	(12.4 7.7)	(21.7 13.5)	(37.7 23.4)		
Reverse	7.3 4.5	12.8 8.0	22.0 13.7	37.0 23.0		



AXLES AND FINAL DRIVES

Drive system	
Rear	Center-pin support, full-floating, 26° total oscillation
Reduction gear	



Service brakes	
	wet disc brakes actuate on four wheels
Parking brake	
Emergency brake	Parking brake is commonly used



STEERING SYSTEM

Туре	.Articulated type, full-hydraulic power steering
Steering angle	
Minimum turning radius	at
the center of outside tire	e



YDRAULIC SYSTEM

1	HYDRAULIC SYSTEM
Steering	g system:
Hydra	iulic pump
Capa	city
Hydra	valve setting
Туре	e
	nber of cylinders
BC	ore x stroke
Loader	control:
Hydra	iulic pump
Capa	city
	at rated rpm
	valve setting
,	rulic cylinders:
, ,	e
	nber of cylinders—bore x stroke:
	t cylinder
	ucket cylinder
	ol valve2-spool type ol positions:
	m
	ketTilt-back, hold, and dump
	rulic cycle time (rated load in bucket)
,	se
	np
	ver (Empty)4.1 sec
3	

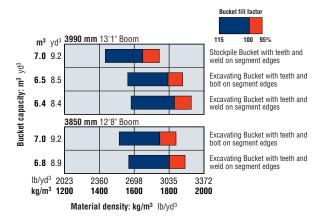


SERVICE REFILL CAPACITIES

Cooling system	
Fuel tank	
Engine	
Hydraulic system	
Axle (each front and rear)	
Torque converter and transmission	

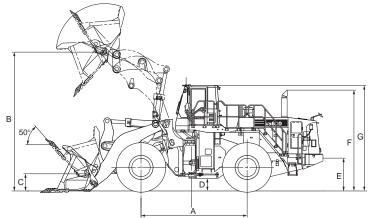


BUCKET SELECTION GUIDE





Measured with 35/65-33-36PR(L-4) tires



		3990 mm 13'1"	3850 mm 12'8'			
		Boom	Boom			
	Tread	2650 n	nm 8'8"			
	Width over tires	3540 m	ı m 11'9"			
Α	Wheelbase	4500 m	nm 14'9"			
В	Hinge pin height, max. height	5885 mm 19'4"	5665 mm 18'7"			
С	Hinge pin height, carry position	720 mm 2'4"	670 mm 2'3"			
D	Ground clearance	525 m	m 1'9"			
Е	Hitch height	1385 mm 4'7" 4270 mm 14'0"				
F	Overall height, top of the stack					
G	Overall height, ROPS cab	4460 mm 14'8"				

		3990 mm 13'1" Boom		3850 mm	12'8" Boom
	Excavatin	g Buckets	Stockpile Bucket	Excavatin	g Buckets
	Spade nose	Straight edge	Spade nose	Spade nose	Straight edge
	Teeth and WSE*1	Teeth and BSE*2	Teeth and WSE*1	Teeth and WSE*1	Teeth and BSE*2
Bucket capacity: heaped	6.4 m³	6.5 m³	7.0 m³	7.0 m³	7.0 m³
	8.4 yd³	8.5 yd³	9.2 yd³	9.2 yd³	9.2 yd³
struck	5.3 m³	5.4 m³	5.8 m³	5.8 m³	5.8 m³
	6.9 yd³	7.1 yd³	7.6 yd³	7.6 yd³	7.6 yd³
Bucket width	3685 mm				
	12'1"	12'1"	12'1"	12'1"	12'1"
Bucket weight	5115 kg	4735 kg	5255 kg	5245 kg	4865 kg
	11,280 lb	10,440 lb	11,590 lb	11,570 lb	10,730 lb
Dumping clearance, max. height and 45° dump angle*3	3995 mm	4180 mm	3945 mm	3730 mm	3905 mm
	13'1"	13'9"	12'11"	12'3"	12'10"
Reach at max. height and 45° dump angle *3	1800 mm 5'11"	1610 mm 5'3"	1850 mm 6'1"	1885 mm 6'2"	1690 mm 5'7"
Reach at 2130 mm (7') clearance	3015 mm	2875 mm	3050 mm	2900 mm	2775 mm
and 45° dump angle	9'11"	9'5"	10'0"	9'6"	9'1"
Reach with arm horizontal and bucket level	4135 mm	3870 mm	4205 mm	4065 mm	3800 mm
	13'7"	12'8"	13'9"	13'4"	12'6"
Operating height (fully raised)	7925 mm 26'0"	7925 mm 26'0"	7995 mm 26'3"	7775 mm 25'6"	7775 mm 25'6"
Overall length	11985 mm	11725 mm	12055 mm	11870 mm	11610 mm
	39'4"	38'6"	39'7"	38'11"	38'1"
Loader clearance circle (bucket at carry, outside corner of bucket)	17000 mm 55'9"	17060 mm 56'0"	17040 mm 55'11"	16875 mm 55'4"	16920 mm 55'6"
Digging depth: 0°	130 mm	135 mm	130 mm	130 mm	140 mm
	5.1"	5.3"	5.1"	5.1"	5.5"
10°	515 mm	480 mm	530 mm	530 mm	495 mm
	1'8"	1'7"	1'9"	1'9"	1'7"
Static tipping load: straight	34200 kg	34580 kg	34060 kg	35400 kg	35780 kg
	75,400 lb	76,240 lb	75,090 lb	78,040 lb	78,880 lb
43° full turn	28500 kg 62,830 lb	28880 kg 63,670 lb	28360 kg 62,520 lb	29500 kg 65,040 lb	29880 kg 65,870 lb
Breakout force	387 kN	448 kN	375 kN	378 kN	433 kN
	39500 kgf	45680 kgf	38200 kgf	38600 kgf	44150 kgf
	87,080 lb	100,710 lb	84,220 lb	85,100 lb	97,340 lb
Operating weight	52700 kg 116,180 lb	52320 kg 115,340 lb	52840 kg 116,490 lb	52900 kg 116,620 lb	52500 kg 115,740 lb

^{*1} Weld on segment edges. *2 Bolt on segment edges. *3 At the end of tooth or B.O.C.

Static tipping load and operating weight shown include lubricant, coolant, full fuel tank, ROPS cab, and operator. Machine stability and operating weight affected by counterweight, tire size, and other attachments.

Apply the following weight changes to operating weight and static tipping load.

10 11

All dimensions, weights, and performance values based on SAE J732c and J742b standards.

Tires or attachments		ating ight	Tipping strai 3990 mm Boom (ght	Tipping load full turn m) 3990 mm Boom (3850 mm Boom)			Width over tires		Ground clearance		Change in vertical dimensions	
	kg	lb	kg	lb	kg	lb	mm	ft in	mm	ft in	mm	ft in	
35/65-33-36PR(L-4)	0	0	0 (0)	0 (0)	0 (0)	0 (0)	3540	11'7"	525	1'9"	0	0'0"	
35/65-33-36PR(L-5)	+1000	+2,205	+715 (+745)	+1,575 (+1,640)	+595 (+620)	+1,310(+1,365)	3540	11'7"	525	1'9"	0	0'0"	
35/65-33-42PR(L-4)	+20	+45	+15 (+15)	+30 (+35)	+10 (+15)	+25 (+30)	3555	11'8"	525	1'9"	0	0'0"	
35/65-R33 ★(L-4)	-780	-1,720	-555 (-580)	-1230 (-1280)	-465 (-485)	-1025 (-1065)	3565	11'8"	460	1'6"	-65	-2'6"	
35/65-R33 ★(L-5)	-235	-520	-170 (-175)	-375 (-390)	-140 (-145)	-310 (-320)	3565	11'8"	460	1'6"	-65	-2'6"	
STD counterweight	0	0	0 (0)	0 (0)	0 (0)	0 (0)		•			•		
OPT counterweight	+1000	+2,205	+2380 (+2480)	+5,245 (+5,465)	+1985 (+2065)	+4,370(+4,555)							

S		EQUIPMENT
-0-04	STANDARD	EQUIPMENT

- 2-spool valve for boom and bucket controls
- 3990 mm 13'1" boom
- Alternator, 90 A/24 V
- Auto air conditioner
- Auto shift transmission with mode select system
- Back-up alarm
- Back-up lamp
- Batteries, 200 Ah/12 V x 2
- Boom kick-out
- Bucket positioner
- Directional signal
- Emergency steering (SAE)
- Engine, Komatsu SAA6D170E-5 diesel

- EPC fingertip control levers with automatic leveler and positioner
- Floormat
- Front fender
- Hard water area arrangement (corrosion resister)
- Hydraulic-driven fan with reverse rotation
- Lift cylinders and bucket cylinder
- Lock-up clutch torque converter
- Main monitor panel with EMMS (Equipment Management Monitoring System)
- Radiator mask, lattice type
- Rear access stairs
- Rear defroster (electric)

- Rear under view mirror
- Rearview mirrors
- Rear window washer and wiper
- ROPS/FOPS cab
- Seat belt
- Seat, suspension type with reclining
- Service brakes, wet disc type
- Standard counterweight
- Starting motor, 11.0 kW/24 V x 2
- Steering wheel, tiltable
- Sun visor
- Tires (35/65-33-36PR L4 tubeless) and rims
- Transmission, 4 forward and 4 reverse
- Water separator



- 3850 mm 12'8" boom
- 3-spool valve
- AJSS (advanced Joystick Steering System)
- AM/FM radio
- AM/FM stereo radio cassette
- Automatic greasing
- Battery disconnect switch
- Brake cooling system

- Bucket teeth (bolt-on type)
- Bucket teeth (tip type)
- Counterweight for log
- Cutting edge (bolt-on type)
- ECSS (Electronically Controlled Suspension System)
- Fire extinguisher
- Limited slip differential (F&R)
- Load meter

- Log grapple
- Optional counterweight
- Ordinary spare parts
- Power train guard
- Rear fender
- Segment edges
- Semi-auto digging system
- Tool kit
- VHMS (Vehicle Health Monitoring System)

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Printed in Japan 201303 IP.SIN

